CoolMasterNet
CooLinkNet
CooLinkHub

Modbus Integration Guidelines

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1 Connection

CoolAutomation devices support Modbus RTU and Modbus IP protocols with accordance to the Modbus Organization specifications listed below:

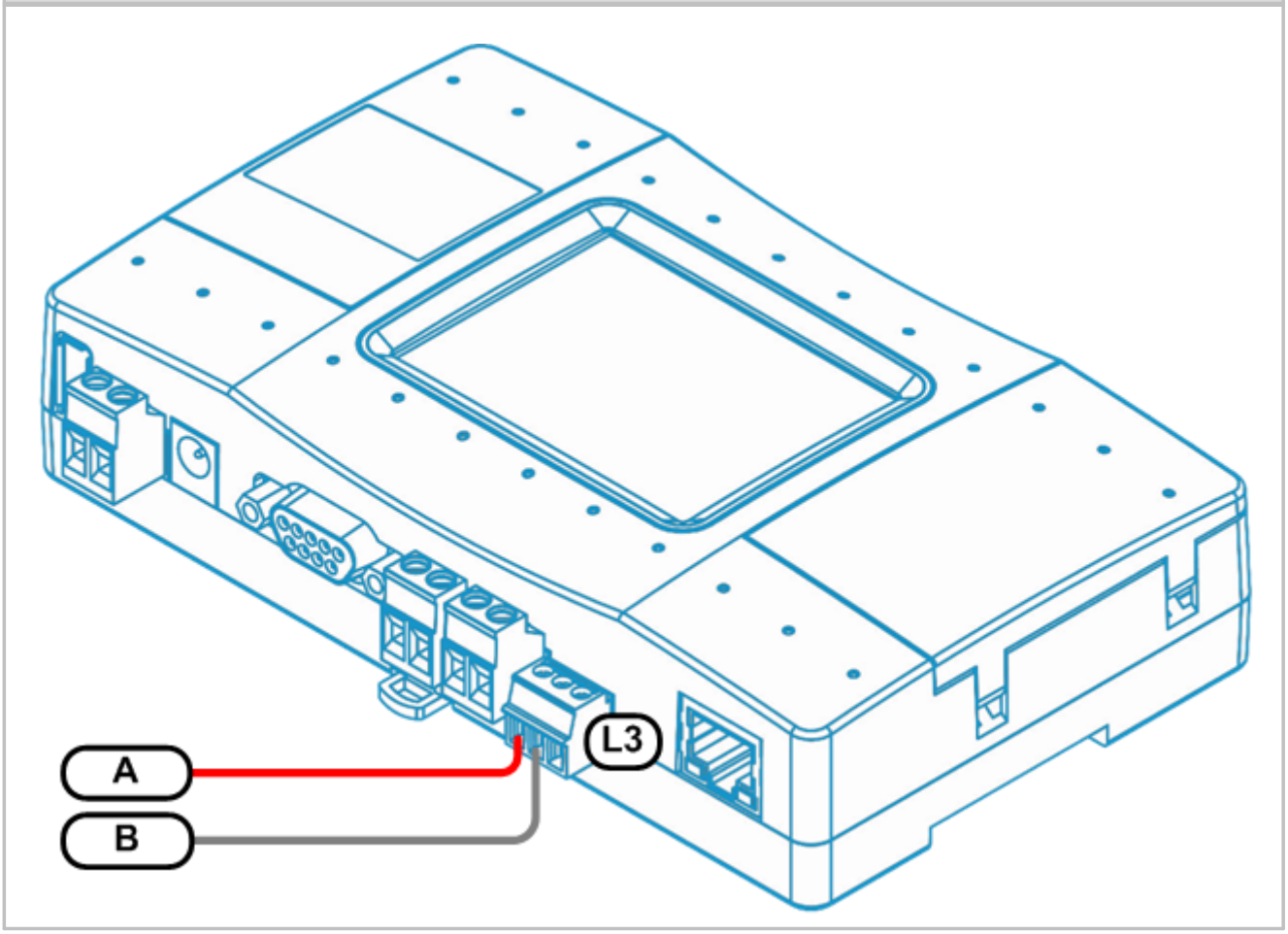
- MODBUS Application Protocol Specification
- MODBUS over Serial Line Specification and Implementation Guide
- MODBUS Messaging on TCP/IP Implementation Guide

Modbus RTU is supported by CoolMasterNet, CooLinkNet and CooLinkHub, Modbus IP is supported by CoolMasterNet and CooLinkHub.

1.1 Modbus RTU Connection

In Modbus RTU mode physical connection of the CoolAutomation devices is done over “Two-Wire” electrical interface in accordance with EIA/TIA-485 standard. Connection is made via 485-A and 485-B terminals. Ground wire connection is not mandatory but highly recommended.

CoolMasterNet Modbus RTU Connection



In CoolMasterNet Line L3 is recommended for Modbus RTU connection, although Lines L4, L5, L6 and L7 can also be used for that purpose. Picture above shows connection to Line L3.

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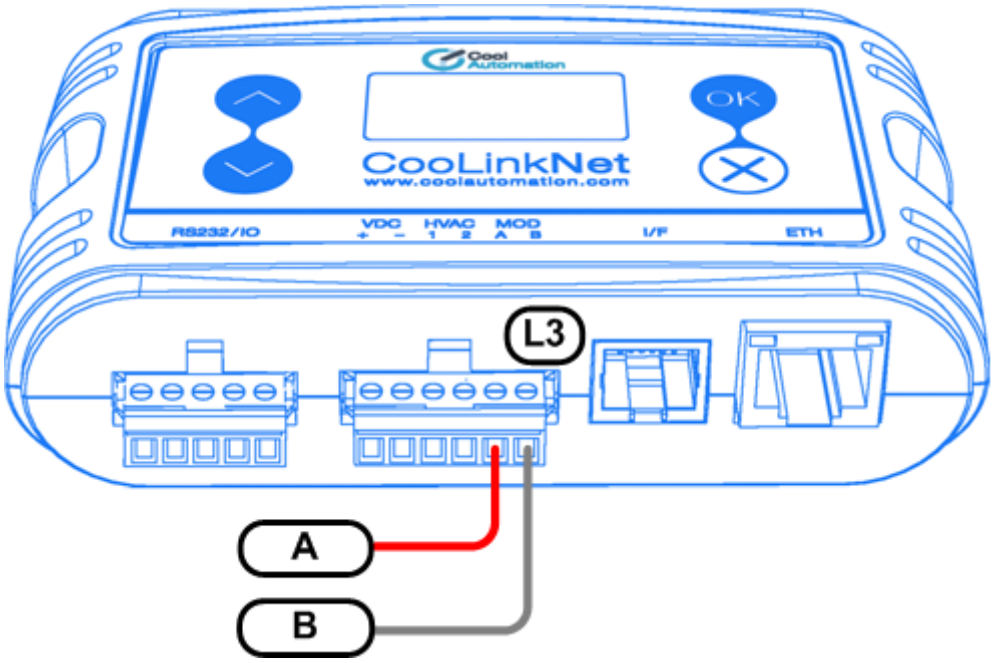
CooLinkNet/CooLinkHub Modbus RTU Connection



In CooLinkNet/CooLinkHub **only** Line L3 can be used for Modbus RTU connection.

1.2 Modbus IP Connection

Modbus IP is supported in CoolMasterNet and CooLinkHub devices. Device acts as a Modbus Server, communicating on the Ethernet TCP/IP network. Physical connection in this case is made via RJ45 Ethernet connector.

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2 Configuration

CoolAutomation device must be properly configured to support Modbus functionality. Configuration is made via CoolAutomation's proprietary ASCII_IF interface described in details in Programmer Reference Manual (PRM) document for the corresponding device.
It is allowed to have a number of simultaneous Modbus RTU and Modbus IP connections to the same device.

2.1 Modbus RTU Configuration

Modbus RTU interface module of the CoolAutomation device has to be activated by assigning appropriate communication Line. In CoolMasterNet it is highly recommended to use Line L3, although it is possible to use any of the L4, L5, L6, L7 lines. In CooLinkNet and CooLinkHub Line L3 usage for Modbus RTU is mandatory.

CoolMasterNet Modbus RTU activation:

```
>line type L3 CG5
OK, Boot Required!
```

CooLinkNet/CooLinkHub Modbus RTU activation:

```
>line type L3 CLMB
OK, Boot Required!
```

To check if Modbus RTU module is already activated and read it 's parameters, including Slave Address, **line** command should be used:

CoolMasterNet:

```
>line
  L1: DK Master U00/G00 myid:0B
   Tx:2/2 Rx:2/2 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L2: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L3: CG5 Modbus Address:0x50(80) 9600_8N1
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L4: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L5: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L6: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L7: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L8: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
OK
```

CooLinkNet/CooLinkHub:

```
>line
  L1: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L2: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L3: CLMB Address:0x50(80) 9600_8N1
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L4: M1M2 Slave U00/G00 Not Connected
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
  L5: Unused
   Tx:0/0 Rx:0/0 TO:0/0 CS:0/0 Col:0/0 NAK:0/0
OK
```

Next: For CoolMasterNet and CooLinkHub VA's have to be configured to use Modbus RTU module. See: VA's Configuration.

2.1.1 Modbus Slave Address

Modbus Slave Address can be queried with **line** command or changed with **line myid** command. In the example below the new Slave Address will become 0x51 (81 decimal) after power reset:

```
>line myid L3 51
OK, Boot Required!
```

The default (factory set) Modbus Slave Address for CoolAutomation devices is 0x50 hexadecimal (80 decimal).

2.1.2 Modbus RTU Frame Format

The default Modbus RTU frame format in CoolAutomation devices is 9600_8N1:

Baud Rate	9600 bps
Data Bits	8
Parity	None
Stop Bits	1

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Frame format parameters are configurable with **line baud** command:

```
>line baud L3 19200_8N2
OK, Boot Required!
```

New frame format will be 19200 bps, 8 data bits, no parity, 2 stop bits.

2.2 Modbus IP Configuration

Modbus IP is supported in CoolMasterNet and CooLinkHub devices. CooLinkNet has no Modbus IP support.
Modbus IP module is activated with below command:

```
>modbus IP enable
OK, Boot Required!
```

Modbus IP server is started by device only after it establishes an Ethernet link and gets proper IP address (dynamic via DHCP or static). Ethernet and IP management is done with **ifconfig** command that is out of the spec of this document.

To query Modbus IP status use **modbus** command without parameters:

```
>modbus
ModBus IP     : enabled
server port   : 502
server idle TO: 0 sec
CG4/5 ignore  : none
OK
```

The default TCP/IP port number used by Modbus IP Server is 502. This is "well-known" Ethernet port assigned for the Modbus TCP/IP protocol. If required port number can be changed (new port number will be 503):

```
>modbus server port 503
OK, Boot Required!
```

Next: VA's have to be configured to use Modbus IP Server. See: VA's Configuration.

2.3 VA's Configuration

VA's are used in CoolMasterNet and CooLinkHub devices. For CooLinkNet device this chapter is not applicable.
VA's -Virtual Addresses are used in order to simplify translation of the Indoor Unit identifier/number - UID into addresses of related Modbus objects: holding registers, input registers, coils and discrete inputs.

UID is a string in format **Ln.XYY**. For Example:
L1.102 - Indoor Unit 102 on line L1
L2.003 - Indoor Unit 003 on line L2
List of UID's detected (visible) by CoolAutomation device can be retrieved with **ls** command.

```
>ls
L1.100 ON  19C 30C High Fan  OK   # 0
L1.101 OFF 28C 23C High Cool OK   - 0
```

Each UID can have none, one or a number of associated VA's. VA's are plain numbers starting from 1. Device can automatically allocate and associate VA's with existing (visible by **ls** command) UID's:

```
>va auto
OK
```

To query allocated VA's use **va** command without parameters:

```
>va
INDOORS
L1.100 --> 0001 [Hex: 0x0011 | Dec: 00017]
L1.101 --> 0002 [Hex: 0x0021 | Dec: 00033]
OK
```


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VA reporting string has following fields:

UID	Associated VA	Base Address Hex	Base Address Decimal
L1.100	0001	0x0011	00017

Base Address is a starting address of the Modbus objects block related to VA and it's UID. Any operations with Indoor Unit referenced by UID (query or change status) are made with Modbus objects from that block. Size of the Modbus objects block for Indoor Unit is 16 adresses. Content of the Modbus objects block is described in CoolMasterNet Tables. Base Address is calculated as: `Base Address = VA*16 +1`

Below example shows relation between UID, VA, Base Address and Modbus objects

UID	VA	Base Address	Modbus Objects Block			
			Discrete Inputs	Coils	Input Registers	Holding Registers
L1.100	0001	0x0011 --->	0x0011	0x0011	0x0011	0x0011
			...	...	...	...
			0x0020	0x0020	0x0020	0x0020
L1.101	0002	0x0021 --->	0x0021	0x0021	0x0021	0x0021
			...	...	...	...
			0x0030	0x0030	0x0030	0x0030

VA's can be allocated or deallocated (deleted) all together or separately. As shown above for automatic VA's allocation **`va auto`** command is used. It is possible to allocate VA for specific UID. For example, allocate VA 0004 for UID L1.102:

```
>va + L1.102 0004
OK
```

In this case UID does not have to be detected (visible) by CoolAutomation device at the VA allocation time. It is allowed to allocate a number of VA's for any given UID.

To delete all allocated VA's:

```
>va delall
OK
```

Specific VA can also be deleted (below command will delete VA 0004):

```
>va - 0004
OK
```

Alternatively all VA's associated with specific UID can be deleted (below command will delete all VA's associated with UID L1.102):

```
>va - L1.102
OK
```

Once VA's are allocated Modbus RTU and Modbus IP can be properly used to access Indoor Unit parameters via associated VA's.

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3 Modbus Tables

Supported Modbus Exception Codes

Exception Code	Exception Name
0x01 (01)	Illegal Function
0x02 (02)	Illegal Data Address
0x03 (03)	Illegal Data Value
0x04 (04)	Server Device Failure
0x05 (05)	Acknowledgment
0x06 (06)	Server Device Busy
0x0A (10)	Gateway Path Unavailable

3.1 CoolMasterNet Modbus Tables

Supported Modbus functions

Function Code		Function Definition
Dec	Hex	
1	0x01	Read Coils
2	0x02	Read Discrete Inputs
3	0x03	Read Holding Registers
4	0x04	Read Input Register
5	0x05	Write Single Coil
6	0x06	Write Single Register
15	0x0F	Write Single Coil
16	0x10	Write Multiple Registers

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Indoor Unit Modbus objects block

Base Address	Holding Registers	Input Registers	Coils	Discrete Inputs
+0	Operation Mode 0-Cool 1-Heat 2-Auto 3-Dry 4-HAUX 5-Fan 6-HH 8-VAM Auto 9-VAM Bypass 10-VAM Heat Exc 11-VAM Normal	UID Ln.XYY Bits 15..12 Ln; Bits 11..8 X; Bits 7..0 YY	On/Off 0-OFF 1-ON	Therm_ON/Demand Status
+1	Fan Speed 0-Low 1-Med 2-High 3-Auto 4-Top 5-Very Lo 7-VAM Super Hi 8-VAM Lo FreshUp 9-VAM Hi FreshUp	Room Temperature x10 °C	Filter Sign	Indoor Communication Failure (Indoor disconnected)
+2	Set Temperature x10 °C	HVAC Malfunction Code String[2] First two characters	External Terminals Status (Read Only) 0-Open, 1-Closed (short)	Reserved
+3	On/Off 0-OFF 1-ON	HVAC Malfunction Code String[2] Last two characters	Inhibit[4]	
+4	Filter Sign	Set Temperature x10 ° C	Buzzer Disable v0.9.5 (Samsung)	
+5	Swing 0-Vertical 1-30 deg 5-Auto 4-Horizontal 2-45 deg 6-OFF 3-60 deg	Reserved	Reserved	
+6	Room Temperature x10 °C (Read Only[5]) Water In Temperature x10 °C			
+7	HVAC Malfunction Code (Read Only)			
+8	Local Wall Controller Lock Bits[3] LSB Bit 0 - Inhibit On/Off control Bit 1 - Inhibit Mode control Bit 2 - Inhibit Set Temperature control Bit 7 - Inhibit All control operations			
+9	Set Temperature Limits[1] v0.4.4		Digital Output 1	Digital Input 1
+10 0xA	Set Temperature Limits for Cool mode[1] v0.9.4		Digital Output 2	Digital Input 2
+11 0xB	Set Temperature Limits for Heat mode[1] v0.9.4		Digital Output 3	Digital Input 3
+12 0xC	Reserved		Digital Output 4	Digital Input 4
+13 0xD	Water Out Temperature x10 °C	Analog Input 1	Digital Output 5	Digital Input 5
+14 0xE	Reserved	Analog Input 2	Digital Output 6	Digital Input 6
+15 0xF	Reserved	Reserved	Reserved	Reserved

[1] Set Temperature Limits Encoding

MSB	LSB

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Bits 15..8	Bits 7..0
High Limit x2	Low Limit x2

For example, 0x4020 means
High Limit = 0x40/2 = 32(decimal)
Low Limit = 0x20/2 = 16(decimal)
Zero value of High Limit or Low Limit means that corresponding limit is not in use.

2 HVAC Malfunction Code String Encoding

This parameter is a HVAC malfunction code in string format, same as reported by **`ls`** command. Here are some examples:

Malfunction Code	String	Input Register Values
0	"OK␣␣"	0x4F4B, 0x2020
6608	"6608"	0x3636, 0x3038

3 Locks compatibility

Lock type	Compatible HVAC Model	Notes
Inhibit On/Off control	DK, SA, TO, PN	
Inhibit Mode control	DK, SA, TO, PN, MD, TR, KT, CG	v 0.4.9
Inhibit Set Temperature control	DK, SA, TO, PN	
Inhibit All control operations	HT, MD, TR, KT, CG	v 0.4.7

4 Inhibit

Writing this coil activates or deactivates (according to value 1 or 0) inhibit of the indoor unit ON operation. Upon inhibit activation current ON/OFF status of the indoor unit is stored and indoor unit is unconditionally turned OFF after about 8s delay. Indoor unit will be forced OFF until inhibit deactivation. On inhibit deactivation indoor unit will be turned ON if ON status was previously stored at inhibit activation. This function is oriented to work with window sensor to prevent HVAC operation while window is open.

5 Writing Room Temperature Holding Register

For some HVAC models (ME,SI,CH,EL,GRNS) it is possible to write this holding register to suggest room temperature to related indoor unit. This functionality is similar to **`feed`** command described in PRM document.

3.1.1 Special Devices

- **PAC YG66**

This device supports Digital Inputs 1..6 and Digital Outputs 1..6 accessed via corresponding Coils and Discrete Inputs listed in "**Indoor Unit Modbus objects block**" table.

- **PAC YG63**

This device supports Analog Inputs 1,2 accessed via corresponding Inputs Registers listed in "**Indoor Unit Modbus objects block**" table. The actual Analog Input value should be calculated as

```
Analog Input Value = Input Register Value / 10
```

For example if temperature sensor is connected to Analog Input 1 of PAC YG63 and Analog Input 1 Input Register is read as 275 the temperature is 275/10 = 27.5

- **GRNS-IO Sensors**

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Base Address	Holding Registers	Input Registers	Coils	Discrete Inputs
+0	Analog Output #1 0..100%	Temperature Sensor #1 x10°C	Binary Output #1	Dry Contact #1
+1	Analog Output #2 0..100%	Temperature Sensor #2 x10°C	Binary Output #2	Dry Contact #2
+2		Temperature Sensor #3 x10°C	Binary Output #3	Dry Contact #3
+3		Temperature Sensor #4 x10°C	Binary Output #4	Dry Contact #4
+4		Temperature Sensor #5 x10°C	Binary Output #5	Dry Contact #5
+5		Temperature Sensor #6 x10°C	Binary Output #6	Dry Contact #6
+6		Temperature Sensor #7 x10°C	Binary Output #7	Dry Contact #7
+7		Temperature Sensor #8 x10°C	Binary Output #8	Dry Contact #8
+8		Analog Input #1 0..10 x10V	Binary Output #9	
+9		Analog Input #2 0..10 x10V	Binary Output #10	
+10 0xA		Analog Input #3 0..10 x10V		
+11 0xB		Analog Input #4 0..10 x10V		
+12 0xC		Analog Input #5 0..10 x10V		
+13 0xD		Analog Input #6 0..10 x10V		
+14 0xE		Analog Input #7 0..10 x10V		
+15 0xF		Analog Input #8 0..10 x10V		

3.2 CooLinkNet Modbus Tables

Supported Modbus functions

Function Code		Function Definition
Dec	Hex	
3	0x03	Read Holding Registers
6	0x06	Write Single Register
16	0x10	Write Multiple Registers

Holding Reg Address*		Description	Read Write	Required**		Notes
Hex	Dec			Version	Model	
CooLinkNet Internals						
0001	1	CooLinkNet Version	R			Major*100 + Minor*10 + SubMinor
0002	2	CooLinkNet S/N	R			Lower 16 bit
0003	3	CooLinkNet Model	R			Two ASCII characters
0004	4	Modbus Address	R W			Modbus Address change is effective only after reset
0005	5	Reset	W			1 - Enter Boot mode CooLinkNet does not respond to the write request to this register 2 - Reset
0010	16	Internal State • 0 - Not Connected to RC line • 1 - Connecting • 2 - Connected as single RC • 3 - Connected as Master RC. Detected Slave RC • 4 - Connected as Slave RC	R			

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0011	17	0 - Master Mode (default) 1 - Slave Mode	R W	0.0.4		
0021	33	UID	R			MSB - X, LSB - YY
Indoor Status and Control						
0100	256	On/Off 0-Off, 1-On	R W			
0101	257	Operation Mode 0-Cool 3-Dry 1-Heat 4-HAUX 2-Auto 5-Fan	R W			
0102	258	Fan Speed 0-Low 3-Auto 1-Med 4-Top 2-High	R W			
0103	259	Set Point °C	R W			
0104	260	Failure Code	R			
0105	261	Indoor Ambient Temperature °C	R			MSB - Integer Part LSB - Fraction Part * 0.01
0110	272	Feed Temperature °C	R W	0.2.4		0xFFFF - disable feed

* If Version or Model is not specified, it means that register is supported in any CooLinkNet version and/or model.

3.3 HVAC Malfunction Codes

The value read from "HVAC Malfunction Code" holding register can be translated into native malfunction code applicable for specific HVAC manufacturer. In most cases that value and native code are equal but for some HVAC models translation to alphanumeric representation required. Following tables can be used for such translation.

- Zero value (0x0000) means that there is no HVAC malfunction.
- 0xFFFF hexadecimal (65535 decimal) value indicates that communication with indoor unit was lost.

HVAC Type	Native Malfunction Code Format
DK	XX (see DK type HVAC malfunction codes translation table)
PN, SA, TO	Xnn (see PN, SA, TO type HVAC malfunction codes translation table)
ME	nnnn decimal
GR	HH hexadecimal (low nibble or high nibble)
LG	nn decimal
MG,TR,KT,CG	EH if code == 0x1H PH if code == 0x2H H# if code == 0x3H
SM	nnn decimal
Others	HH hexadecimal

DK type HVAC malfunction codes translation table

```
000 (0x00) - OK    001 (0x01) - 01    002 (0x02) - 02    003 (0x03) - 03
004 (0x04) - 04    005 (0x05) - 05    006 (0x06) - 06    007 (0x07) - 07
008 (0x08) - 08    009 (0x09) - 09    010 (0x0A) - 0A    011 (0x0B) - 0H
012 (0x0C) - 0C    013 (0x0D) - 0J    014 (0x0E) - 0E    015 (0x0F) - 0F

016 (0x10) - A0    017 (0x11) - A1    018 (0x12) - A2    019 (0x13) - A3
020 (0x14) - A4    021 (0x15) - A5    022 (0x16) - A6    023 (0x17) - A7
024 (0x18) - A8    025 (0x19) - A9    026 (0x1A) - AA    027 (0x1B) - AH
028 (0x1C) - AC    029 (0x1D) - AJ    030 (0x1E) - AE    031 (0x1F) - AF

032 (0x20) - C0    033 (0x21) - C1    034 (0x22) - C2    035 (0x23) - C3
036 (0x24) - C4    037 (0x25) - C5    038 (0x26) - C6    039 (0x27) - C7
```


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```
040 (0x28) - C8    041 (0x29) - C9    042 (0x2A) - CA    043 (0x2B) - CH
044 (0x2C) - CC    045 (0x2D) - CJ    046 (0x2E) - CE    047 (0x2F) - CF

048 (0x30) - E0    049 (0x31) - E1    050 (0x32) - E2    051 (0x33) - E3
052 (0x34) - E4    053 (0x35) - E5    054 (0x36) - E6    055 (0x37) - E7
056 (0x38) - E8    057 (0x39) - E9    058 (0x3A) - EA    059 (0x3B) - EH
060 (0x3C) - EC    061 (0x3D) - EJ    062 (0x3E) - EE    063 (0x3F) - EF

064 (0x40) - H0    065 (0x41) - H1    066 (0x42) - H2    067 (0x43) - H3
068 (0x44) - H4    069 (0x45) - H5    070 (0x46) - H6    071 (0x47) - H7
072 (0x48) - H8    073 (0x49) - H9    074 (0x4A) - HA    075 (0x4B) - HH
076 (0x4C) - HC    077 (0x4D) - HJ    078 (0x4E) - HE    079 (0x4F) - HF

080 (0x50) - F0    081 (0x51) - F1    082 (0x52) - F2    083 (0x53) - F3
084 (0x54) - F4    085 (0x55) - F5    086 (0x56) - F6    087 (0x57) - F7
088 (0x58) - F8    089 (0x59) - F9    090 (0x5A) - FA    091 (0x5B) - FH
092 (0x5C) - FC    093 (0x5D) - FJ    094 (0x5E) - FE    095 (0x5F) - FF

096 (0x60) - J0    097 (0x61) - J1    098 (0x62) - J2    099 (0x63) - J3
100 (0x64) - J4    101 (0x65) - J5    102 (0x66) - J6    103 (0x67) - J7
104 (0x68) - J8    105 (0x69) - J9    106 (0x6A) - JA    107 (0x6B) - JH
108 (0x6C) - JC    109 (0x6D) - JJ    110 (0x6E) - JE    111 (0x6F) - JF

112 (0x70) - L0    113 (0x71) - L1    114 (0x72) - L2    115 (0x73) - L3
116 (0x74) - L4    117 (0x75) - L5    118 (0x76) - L6    119 (0x77) - L7
120 (0x78) - L8    121 (0x79) - L9    122 (0x7A) - LA    123 (0x7B) - LH
124 (0x7C) - LC    125 (0x7D) - LJ    126 (0x7E) - LE    127 (0x7F) - LF

128 (0x80) - P0    129 (0x81) - P1    130 (0x82) - P2    131 (0x83) - P3
132 (0x84) - P4    133 (0x85) - P5    134 (0x86) - P6    135 (0x87) - P7
136 (0x88) - P8    137 (0x89) - P9    138 (0x8A) - PA    139 (0x8B) - PH
140 (0x8C) - PC    141 (0x8D) - PJ    142 (0x8E) - PE    143 (0x8F) - PF

144 (0x90) - U0    145 (0x91) - U1    146 (0x92) - U2    147 (0x93) - U3
148 (0x94) - U4    149 (0x95) - U5    150 (0x96) - U6    151 (0x97) - U7
152 (0x98) - U8    153 (0x99) - U9    154 (0x9A) - UA    155 (0x9B) - UH
156 (0x9C) - UC    157 (0x9D) - UJ    158 (0x9E) - UE    159 (0x9F) - UF

160 (0xA0) - M0    161 (0xA1) - M1    162 (0xA2) - M2    163 (0xA3) - M3
164 (0xA4) - M4    165 (0xA5) - M5    166 (0xA6) - M6    167 (0xA7) - M7
168 (0xA8) - M8    169 (0xA9) - M9    170 (0xAA) - MA    171 (0xAB) - MH
172 (0xAC) - MC    173 (0xAD) - MJ    174 (0xAE) - ME    175 (0xAF) - MF

176 (0xB0) - 30    177 (0xB1) - 31    178 (0xB2) - 32    179 (0xB3) - 33
180 (0xB4) - 34    181 (0xB5) - 35    182 (0xB6) - 36    183 (0xB7) - 37
184 (0xB8) - 38    185 (0xB9) - 39    186 (0xBA) - 3A    187 (0xBB) - 3H
188 (0xBC) - 3C    189 (0xBD) - 3J    190 (0xBE) - 3E    191 (0xBF) - 3F

192 (0xC0) - 40    193 (0xC1) - 41    194 (0xC2) - 42    195 (0xC3) - 43
196 (0xC4) - 44    197 (0xC5) - 45    198 (0xC6) - 46    199 (0xC7) - 47
200 (0xC8) - 48    201 (0xC9) - 49    202 (0xCA) - 4A    203 (0xCB) - 4H
204 (0xCC) - 4C    205 (0xCD) - 4J    206 (0xCE) - 4E    207 (0xCF) - 4F
```


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```
208 (0xD0) - 50    209 (0xD1) - 51    210 (0xD2) - 52    211 (0xD3) - 53
212 (0xD4) - 54    213 (0xD5) - 55    214 (0xD6) - 56    215 (0xD7) - 57
216 (0xD8) - 58    217 (0xD9) - 59    218 (0xDA) - 5A    219 (0xDB) - 5H
220 (0xDC) - 5C    221 (0xDD) - 5J    222 (0xDE) - 5E    223 (0xDF) - 5F

224 (0xE0) - 60    225 (0xE1) - 61    226 (0xE2) - 62    227 (0xE3) - 63
228 (0xE4) - 64    229 (0xE5) - 65    230 (0xE6) - 66    231 (0xE7) - 67
232 (0xE8) - 68    233 (0xE9) - 69    234 (0xEA) - 6A    235 (0xEB) - 6H
236 (0xEC) - 6C    237 (0xED) - 6J    238 (0xEE) - 6E    239 (0xEF) - 6F

240 (0xF0) - ?0    241 (0xF1) - ?1    242 (0xF2) - ?2    243 (0xF3) - ?3
244 (0xF4) - ?4    245 (0xF5) - ?5    246 (0xF6) - ?6    247 (0xF7) - ?7
248 (0xF8) - ?8    249 (0xF9) - ?9    250 (0xFA) - ?A    251 (0xFB) - ?H
252 (0xFC) - ?C    253 (0xFD) - ?J    254 (0xFE) - ?E    255 (0xFF) - ?F
```

PN, SA, TO type HVAC malfunction codes translation table

```
000 (0x00) - OK     001 (0x01) - A01    002 (0x02) - A02    003 (0x03) - A03
004 (0x04) - A04    005 (0x05) - A05    006 (0x06) - A06    007 (0x07) - A07
008 (0x08) - A08    009 (0x09) - A09    010 (0x0A) - A10    011 (0x0B) - A11
012 (0x0C) - A12    013 (0x0D) - A13    014 (0x0E) - A14    015 (0x0F) - A15

016 (0x10) - A16    017 (0x11) - A17    018 (0x12) - A18    019 (0x13) - A19
020 (0x14) - A20    021 (0x15) - A21    022 (0x16) - A22    023 (0x17) - A23
024 (0x18) - A24    025 (0x19) - A25    026 (0x1A) - A26    027 (0x1B) - A27
028 (0x1C) - A28    029 (0x1D) - A29    030 (0x1E) - A30    031 (0x1F) - A31

032 (0x20) - C00    033 (0x21) - C01    034 (0x22) - C02    035 (0x23) - C03
036 (0x24) - C04    037 (0x25) - C05    038 (0x26) - C06    039 (0x27) - C07
040 (0x28) - C08    041 (0x29) - C09    042 (0x2A) - C10    043 (0x2B) - C11
044 (0x2C) - C12    045 (0x2D) - C13    046 (0x2E) - C14    047 (0x2F) - C15

048 (0x30) - C16    049 (0x31) - C17    050 (0x32) - C18    051 (0x33) - C19
052 (0x34) - C20    053 (0x35) - C21    054 (0x36) - C22    055 (0x37) - C23
056 (0x38) - C24    057 (0x39) - C25    058 (0x3A) - C26    059 (0x3B) - C27
060 (0x3C) - C28    061 (0x3D) - C29    062 (0x3E) - C30    063 (0x3F) - C31

064 (0x40) - E00    065 (0x41) - E01    066 (0x42) - E02    067 (0x43) - E03
068 (0x44) - E04    069 (0x45) - E05    070 (0x46) - E06    071 (0x47) - E07
072 (0x48) - E08    073 (0x49) - E09    074 (0x4A) - E10    075 (0x4B) - E11
076 (0x4C) - E12    077 (0x4D) - E13    078 (0x4E) - E14    079 (0x4F) - E15

080 (0x50) - E16    081 (0x51) - E17    082 (0x52) - E18    083 (0x53) - E19
084 (0x54) - E20    085 (0x55) - E21    086 (0x56) - E22    087 (0x57) - E23
088 (0x58) - E24    089 (0x59) - E25    090 (0x5A) - E26    091 (0x5B) - E27
092 (0x5C) - E28    093 (0x5D) - E29    094 (0x5E) - E30    095 (0x5F) - E31

096 (0x60) - F00    097 (0x61) - F01    098 (0x62) - F02    099 (0x63) - F03
100 (0x64) - F04    101 (0x65) - F05    102 (0x66) - F06    103 (0x67) - F07
104 (0x68) - F08    105 (0x69) - F09    106 (0x6A) - F10    107 (0x6B) - F11
108 (0x6C) - F12    109 (0x6D) - F13    110 (0x6E) - F14    111 (0x6F) - F15

112 (0x70) - F16    113 (0x71) - F17    114 (0x72) - F18    115 (0x73) - F19
```


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```
116 (0x74) - F20    117 (0x75) - F21    118 (0x76) - F22    119 (0x77) - F23
120 (0x78) - F24    121 (0x79) - F25    122 (0x7A) - F26    123 (0x7B) - F27
124 (0x7C) - F28    125 (0x7D) - F29    126 (0x7E) - F30    127 (0x7F) - F31

128 (0x80) - H00    129 (0x81) - H01    130 (0x82) - H02    131 (0x83) - H03
132 (0x84) - H04    133 (0x85) - H05    134 (0x86) - H06    135 (0x87) - H07
136 (0x88) - H08    137 (0x89) - H09    138 (0x8A) - H10    139 (0x8B) - H11
140 (0x8C) - H12    141 (0x8D) - H13    142 (0x8E) - H14    143 (0x8F) - H15

144 (0x90) - H16    145 (0x91) - H17    146 (0x92) - H18    147 (0x93) - H19
148 (0x94) - H20    149 (0x95) - H21    150 (0x96) - H22    151 (0x97) - H23
152 (0x98) - H24    153 (0x99) - H25    154 (0x9A) - H26    155 (0x9B) - H27
156 (0x9C) - H28    157 (0x9D) - H29    158 (0x9E) - H30    159 (0x9F) - H31

160 (0xA0) - J00    161 (0xA1) - J01    162 (0xA2) - J02    163 (0xA3) - J03
164 (0xA4) - J04    165 (0xA5) - J05    166 (0xA6) - J06    167 (0xA7) - J07
168 (0xA8) - J08    169 (0xA9) - J09    170 (0xAA) - J10    171 (0xAB) - J11
172 (0xAC) - J12    173 (0xAD) - J13    174 (0xAE) - J14    175 (0xAF) - J15

176 (0xB0) - J16    177 (0xB1) - J17    178 (0xB2) - J18    179 (0xB3) - J19
180 (0xB4) - J20    181 (0xB5) - J21    182 (0xB6) - J22    183 (0xB7) - J23
184 (0xB8) - J24    185 (0xB9) - J25    186 (0xBA) - J26    187 (0xBB) - J27
188 (0xBC) - J28    189 (0xBD) - J29    190 (0xBE) - J30    191 (0xBF) - J31

192 (0xC0) - L00    193 (0xC1) - L01    194 (0xC2) - L02    195 (0xC3) - L03
196 (0xC4) - L04    197 (0xC5) - L05    198 (0xC6) - L06    199 (0xC7) - L07
200 (0xC8) - L08    201 (0xC9) - L09    202 (0xCA) - L10    203 (0xCB) - L11
204 (0xCC) - L12    205 (0xCD) - L13    206 (0xCE) - L14    207 (0xCF) - L15

208 (0xD0) - L16    209 (0xD1) - L17    210 (0xD2) - L18    211 (0xD3) - L19
212 (0xD4) - L20    213 (0xD5) - L21    214 (0xD6) - L22    215 (0xD7) - L23
216 (0xD8) - L24    217 (0xD9) - L25    218 (0xDA) - L26    219 (0xDB) - L27
220 (0xDC) - L28    221 (0xDD) - L29    222 (0xDE) - L30    223 (0xDF) - L31

224 (0xE0) - P00    225 (0xE1) - P01    226 (0xE2) - P02    227 (0xE3) - P03
228 (0xE4) - P04    229 (0xE5) - P05    230 (0xE6) - P06    231 (0xE7) - P07
232 (0xE8) - P08    233 (0xE9) - P09    234 (0xEA) - P10    235 (0xEB) - P11
236 (0xEC) - P12    237 (0xED) - P13    238 (0xEE) - P14    239 (0xEF) - P15

240 (0xF0) - P16    241 (0xF1) - P17    242 (0xF2) - P18    243 (0xF3) - P19
244 (0xF4) - P20    245 (0xF5) - P21    246 (0xF6) - P22    247 (0xF7) - P23
248 (0xF8) - P24    249 (0xF9) - P25    250 (0xFA) - P26    251 (0xFB) - P27
252 (0xFC) - P28    253 (0xFD) - P29    254 (0xFE) - P30    255 (0xFF) - P31
```


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4 PRO Functionality

- PRO Indoor Units Base Address calculation:
  `Base Address = VA * 16 +1`

- PRO Outdoor Systems and Outdoor Units Base Address calculation:
  `Base Address = 16401 + ((VA-1025) * 64)`

4.1 PRO Modbus Tables

Supported Modbus functions

Function Code		Function Definition
Dec	Hex	
4	0x04	Read Input Register

4.1.1 DK

4.1.1.1 DK PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+0	Suction T°	Suction Temperature x10 °C
+1	Liquid T°	Liquid Pipe Temperature x10 °C
+2	Gas Pipe T°	Gas Pipe Temperature x10 °C
+3	EV Opening	EV Opening
+4		HVAC Malfunction Code
+5		Set Temperature °C
+6	 Onoff TstatOn	Bitfields: LSB Bit 0 - 0-OFF, 1-ON Bit 1 - Thermostat ON (demand)
+7	AirNet Addr.	Airnet Address

4.1.1.2 DK PRO Outdoor Systems

- **VRV4S1, VRV4S2, VRV3DENV(RXYRQ8-18P7W1B), mini-VRV, VRV-3S, VRV4S-US(RXTQ), VRV-M, VRV-2MA, VRV-3P**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1 - VRV-3P Type Code = 4 - VRV-3S Type Code = 8 - VRV4S1 Type Code = 9 - VRV4S2 Type Code = 11 - VRV-M Type Code = 13 - mini-VRV Type Code = 14 - VRV4S-US(RXTQ) Type Code = 22 - VRV3DENV(RXYRQ8-18P7W1B) Type Code = 25 - VRV-2MA
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**

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Base Address	Input Registers	
	Short Name	**Description**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	BkpOp	Bit 7 - Backup ope.
+8	DmndState	Demand state

- **VRV4S3, VRVX, VRV4-EU, VRV4Q-EU (RXYQQ8-20T7Y1B)**

Base Address	Input Registers	
	Short Name	**Description**
+0	Type	Type Code = 6 - VRVX Type Code = 7 - VRV4-EU Type Code = 10 - VRV4S3 Type Code = 32 - VRV4Q-EU (RXYQQ8-20T7Y1B)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	Dfrst	Bit 5 - Defrost
	StrtupCtl	Bit 6 - Startup control
	BkpOp	Bit 7 - Backup ope.
	OiRtrn	Bit 9 - Oil return
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode
+10	TstatOnCap	I/U thermostat ON capacity x 0.1

- **VRV6HP(RXYQ8-60BYM), VRV6-A/X(F) (RXYP224-1500F), VRV6-Q/QX(F) (RQYP224-1180F)**

Base Address	Input Registers	
	Short Name	**Description**
+0	Type	Type Code = 29 - VRV6-A/X(F) (RXYP224-1500F) Type Code = 36 - VRV6HP(RXYQ8-60BYM) Type Code = 38 - VRV6-Q/QX(F) (RQYP224-1180F)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	Dfrst	Bit 5 - Defrost
	StrtupCtl	Bit 6 - Startup control
	BkpOp	Bit 7 - Backup ope.
	OiRtrn	Bit 9 - Oil return
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode

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Base Address	Input Registers	
	Short Name	Description
+10	TstatOnCap	I/U thermostat ON capacity x 0.1

- **MiniVRV5S-EU(RXYSA-A7V1B,A7Y1B)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 24 - MiniVRV5S-EU(RXYSA-A7V1B,A7Y1B)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	Dfrst	Bit 5 - Defrost
	StrtupCtl	Bit 6 - Startup control
	BkpOp	Bit 7 - Backup ope.
	CoolHeatPrll	Bit 8 - Cool/Heat parallel ope.
	OiRtrn	Bit 9 - Oil return
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode
+10	TstatOnCap	I/U thermostat ON capacity x 0.1
+13	PwrCons	Outdoor unit power consumption x 0.1 [kW]
+14	CoolCap	Outdoor unit cooling capacity x 0.1 [kW]
+15	HeatCap	Outdoor unit heating capacity x 0.1 [kW]

- **VRV-K(RSEYP8-10KJ)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 17 - VRV-K(RSEYP8-10KJ)
+1	AirNet	AirNet Addr.
+2	ErrCode	Error code
+3	AmbT	Ambient temperature [°C]
+4	HexT1	Heat exchanger temp. 1 [°C]
+5	HexT2	Heat exchanger temp. 2 [°C]
+7	DschTInv	Disch. temp.(INV) [°C]
+8	DschTStd	Disch. temp.(STD) [°C]
+10	SuctPipT1	Suction pipe temp. 1 [°C]
+11	SuctPipT2	Suction pipe temp. 2 [°C]
+13	OiT	Oil temp. [°C]
+14	EvT	Evaporating Temperature [°C]
+15	CndT	Condensing Temperature [°C]
+16	InvFrq	Inverter frequency [Hz]
+17	InvCur	Inverter current [A]
+18	InvT	Inverter temp. [°C]
+19	EVOp1	EV opening 1 [pls]
+20	EVOp2	EV opening 2 [pls]
+22		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	CoolHeatPrll	Bit 3 - Cool/Heat parallel ope.
	TstatOn	Bit 4 - Thermostat ON
	ResrtStby	Bit 5 - Restart stand-by
	Dfrst	Bit 6 - Defrost

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Base Address	Input Registers	
	Short Name	Description
	SoftStrt	Bit 7 - Soft start
	OiRtrn	Bit 8 - Oil return
	OiEqOp	Bit 9 - Oil equalizing ope.
+23		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std	Bit 1 - Compressor2(STD)
	BypEq	Bit 3 - Bypass for equalizer
	HotGasByp	Bit 4 - Hot gas bypass
	Injct1	Bit 5 - Injection 1
	Injct2	Bit 6 - Injection 2
	DschGas	Bit 8 - Disch. gas
	LiqP	Bit 9 - Liquid pres.
	4WayVlv1	Bit 10 - 4WayVlv1
	4WayVlv2	Bit 11 - 4-way valve 2
+24		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	InvStby	Bit 3 - INV stand-by
	HiPDroCtl	Bit 4 - High pres. drooping cntl.
	LoPDroCtl	Bit 5 - Low pres. drooping cntl.
	DschDroCtl	Bit 6 - Disch. pipe drooping cntl.
	InvCurDroCtl	Bit 7 - INV current drooping cntl.
	Fan1H	Bit 12 - FAN-1H
	Fan1L	Bit 13 - FAN-1L
	Fan2	Bit 14 - FAN-2

- **VRV_PLUS(RSEYP16-30KJY1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 34 - VRV_PLUS(RSEYP16-30KJY1)
+1	AirNet	AirNet Addr.
+2	ErrCode	Error code
+3	AmbT	Ambient temperature [°C]
+7	DschTInv	Disch. temp.(INV) [°C]
+8	DschTStd1	Disch. temp.(STD1) [°C]
+9	DschTStd2	Disch. temp.(STD2) [°C]
+10	SuctT	Suction Temperature [°C]
+14	EvT	Evaporating Temperature [°C]
+15	CndT	Condensing Temperature [°C]
+16	InvFrq	Inverter frequency [Hz]
+17	InvCur	Inverter current [A]
+18	InvT	Inverter temp. [°C]
+19	EVOp1	EV opening 1 [pls]
+20	EVOp2	EV opening 2 [pls]
+22		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	CoolHeatPrll	Bit 3 - Cool/Heat parallel ope.
	TstatOn	Bit 4 - Thermostat ON
	ResrtStby	Bit 5 - Restart stand-by
	Dfrst	Bit 6 - Defrost
	SoftStrt	Bit 7 - Soft start
	OiRtrn	Bit 8 - Oil return
	OiEqOp	Bit 9 - Oil equalizing ope.
	CcH	Bit 10 - CcH
	AuxCond	Bit 13 - AuxCond
	Rcvr	Bit 14 - Rcvr
+23		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)
	HotGasByp	Bit 4 - Hot gas bypass
	InjctInv	Bit 5 - InjctInv
	InjctStd1	Bit 6 - InjctStd1
	InjctStd2	Bit 7 - InjctStd2
	LiqP	Bit 9 - Liquid pres.
	4WayVlv1	Bit 10 - 4WayVlv1
	4WayVlv2	Bit 11 - 4-way valve 2
	4WayVlv3	Bit 12 - 4WayVlv3
+24		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	InvStby	Bit 3 - INV stand-by
	HiPDroCtl	Bit 4 - High pres. drooping cntl.
	LoPDroCtl	Bit 5 - Low pres. drooping cntl.
	DschDroCtl	Bit 6 - Disch. pipe drooping cntl.
	InvCurDroCtl	Bit 7 - INV current drooping cntl.
	Fan11L	Bit 11 - Fan11L
	Fan11H	Bit 12 - Fan11H
	Fan12	Bit 13 - Fan12
	Fan21	Bit 14 - Fan21
	Fan22	Bit 15 - Fan22
+25		**Bitfields:**
	Fan3	Bit 0 - Fan3
	Fan4	Bit 2 - Fan4
	HtOvld1	Bit 8 - HtOvld1
	HtOvld1	Bit 9 - HtOvld1
	HtOvld1	Bit 10 - HtOvld1
	HtOvld1	Bit 11 - HtOvld1
	ClLwAmbT1	Bit 12 - ClLwAmbT1
	ClLwAmbT1	Bit 13 - ClLwAmbT1
	ClLwAmbT1	Bit 14 - ClLwAmbT1
	ClLwAmbT1	Bit 15 - ClLwAmbT1
+27	Cil1T	Cil1T
+28	Cil2T	Cil2T
+29	Cil3T	Cil3T
+30	Hdr1T	Hdr1T
+31	Hdr2T	Hdr2T
+32	Hdr3T	Hdr3T
+33	LiqT	LiqT
+34	HP	HP [hp]

- **VRV-M(REYQ8-48M)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 12 - VRV-M(REYQ8-48M)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON

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Base Address	Input Registers	
	Short Name	Description
	ResrtStby	Bit 4 - Restart stand-by
	BkpOp	Bit 7 - Backup ope.
	CoolHeatPrll	Bit 8 - Cool/Heat parallel ope.
+8	DmndState	Demand state

- **VRV6-R/RX(F) (REYP*F,REUP*F), VRV6-R/RX(F) (REYQ8-60BY)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 30 - VRV6-R/RX(F) (REYP*F,REUP*F) Type Code = 30 - VRV6-R/RX(F) (REYQ8-60BY)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	Dfrst	Bit 5 - Defrost
	StrtupCtl	Bit 6 - Startup control
	BkpOp	Bit 7 - Backup ope.
	CoolHeatPrll	Bit 8 - Cool/Heat parallel ope.
	OiRtrn	Bit 9 - Oil return
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode
+10	TstatOnCap	I/U thermostat ON capacity x 0.1

- **VRV4-us(RELQ,RXLQ), VRV-5R(REYQ**TAY1), VRV-4R, VRV5-A/X (RXYP140-1500D), VRV5C-DIT(RXQ12AYM), VRV5-Q/QX (RQYP140-1180D)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3 - VRV-4R Type Code = 15 - VRV4-us(RELQ,RXLQ) Type Code = 16 - VRV5C-DIT(RXQ12AYM) Type Code = 19 - VRV-5R(REYQ**TAY1) Type Code = 31 - VRV5-A/X (RXYP140-1500D) Type Code = 37 - VRV5-Q/QX (RQYP140-1180D)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	Dfrst	Bit 5 - Defrost
	StrtupCtl	Bit 6 - Startup control
	BkpOp	Bit 7 - Backup ope.
	CoolHeatPrll	Bit 8 - Cool/Heat parallel ope.
	OiRtrn	Bit 9 - Oil return
+8	DmndState	Demand state

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Base Address	Input Registers	
	Short Name	Description
+9	OpCtlMod	Operation control mode
+10	TstatOnCap	I/U thermostat ON capacity x 0.1

- **VRV-3R, VRV3C, VRV-3W-WATER(RWEYQ8-30P), VRV3C2-WATER(RWEYP***PCTJ), VRV-3Wx-WATER(RWEYQ8-30P), VRV-4W-WATER(RWEYQ8-10T7Y1B), ALT-MG(EMRQ8-16AAY1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2 - VRV3C Type Code = 5 - VRV-3R Type Code = 18 - ALT-MG(EMRQ8-16AAY1) Type Code = 21 - VRV3C2-WATER(RWEYP***PCTJ) Type Code = 26 - VRV-4W-WATER(RWEYQ8-10T7Y1B) Type Code = 28 - VRV-3W-WATER(RWEYQ8-30P) Type Code = 31 - VRV-3Wx-WATER(RWEYQ8-30P)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7	 Cool Heat Vent TstatOn ResrtStby BkpOp CoolHeatPrll	**Bitfields:** Bit 0 - Cooling Bit 1 - Heating Bit 2 - Ventilation Bit 3 - Thermostat ON Bit 4 - Restart stand-by Bit 7 - Backup ope. Bit 8 - Cool/Heat parallel ope.
+8	DmndState	Demand state

- **Ve-up3b (RXUP280-1000B), VRV-3B**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 33 - Ve-up3b (RXUP280-1000B) Type Code = 35 - VRV-3B
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7	 Cool Heat Vent TstatOn ResrtStby Dfrst StrtupCtl BkpOp OiRtrn	**Bitfields:** Bit 0 - Cooling Bit 1 - Heating Bit 2 - Ventilation Bit 3 - Thermostat ON Bit 4 - Restart stand-by Bit 5 - Defrost Bit 6 - Startup control Bit 7 - Backup ope. Bit 9 - Oil return
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode
+10	TstatOnCap	I/U thermostat ON capacity x 0.1
+13	PwrCons	Outdoor unit power consumption x 0.1 [kW]
+14	CoolCap	Outdoor unit cooling capacity x 0.1 [kW]
+15	HeatCap	Outdoor unit heating capacity x 0.1 [kW]

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- **VRV-2-WATER(RWEYQ10-30MY1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 20 - VRV-2-WATER(RWEYQ10-30MY1)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	BkpOp	Bit 7 - Backup ope.
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode

- **VRV-4W3-WATER(RWEYQ8-14T9Y1B)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 27 - VRV-4W3-WATER(RWEYQ8-14T9Y1B)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Vent	Bit 2 - Ventilation
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	BkpOp	Bit 7 - Backup ope.
	CoolHeatPrll	Bit 8 - Cool/Heat parallel ope.
+8	DmndState	Demand state
+9	OpCtlMod	Operation control mode
+10	TstatOnCap	I/U thermostat ON capacity x 0.1

- **Ve-up3Q(RQYP140-900A)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 23 - Ve-up3Q(RQYP140-900A)
+1	AirNet	AirNet Addr.
+2	SysHP	System HP [hp]
+3	SysCur	System Current x 0.1 [A]
+4	TrgtEvT	Target Evaporation T x 0.1 [°C]
+5	TrgtCndT	Target Condensing T [°C]
+6	ErrCode	Error code
+7		**Bitfields:**
	Cool	Bit 0 - Cooling
	Heat	Bit 1 - Heating
	Fan	Bit 2 - FAN
	TstatOn	Bit 3 - Thermostat ON
	ResrtStby	Bit 4 - Restart stand-by
	BkpOp	Bit 7 - Backup ope.
+8	DmndState	Demand state

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Base Address	Input Registers	
	Short Name	Description
+11		**Bitfields:**
	Bypass1	Bit 0 - 1-Y2S:Bypass
	InltMixUn1	Bit 1 - 1-Y4S:Inlet Of Mixing Unit
	LiqLvlRsvr1	Bit 2 - 1-Y7S:Liquid Level Of Receiver
	ToReqRefReg1	Bit 3 - 1-Y14S:Take Out Requid From Refrigerant Regulator
	SupGasRefReg1	Bit 4 - 1-Y13S: Supply Gas Into Refrigerant Regulator
	SupReqRfrgReg1	Bit 5 - 1-Y12S:Supply Requid Into Refrigerant Regulator
	GasPrgRfrgReg1	Bit 6 - 1-Y11S:Gas Purge Of Refrigerant Regulator
	BypElExpVlv1	Bit 7 - 1-Y10S:Bypass Of Main Electronic Expansion Valve
	OutlOilReg1	Bit 8 - 1-Y9S:Outlet Of Oil Regulator
+12		**Bitfields:**
	Bypass2	Bit 0 - 2-Y2S:Bypass
	InltMixUn2	Bit 1 - 2-Y4S:Inlet Of Mixing Unit
	LiqLvlRsvr2	Bit 2 - 2-Y7S:Liquid Level Of Receiver
	ToReqRefReg2	Bit 3 - 2-Y14S:Take Out Requid From Refrigerant Regulator
	SupGasRefReg2	Bit 4 - 2-Y13S: Supply Gas Into Refrigerant Regulator
	SupReqRfrgReg2	Bit 5 - 2-Y12S:Supply Requid Into Refrigerant Regulator
	GasPrgRfrgReg2	Bit 6 - 2-Y11S:Gas Purge Of Refrigerant Regulator
	BypElExpVlv2	Bit 7 - 2-Y10S:Bypass Of Main Electronic Expansion Valve
	OutlOilReg2	Bit 8 - 2-Y9S:Outlet Of Oil Regulator

4.1.1.3 DK PRO Outdoor Units

- **VRV4S1, VRV4S2, VRV3DENV(RXYRQ8-18P7W1B), VRV-3S, VRV4S-US(RXTQ), VRV-3P**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	InvRS	Inverter Revolution Speed [rps]
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+12	CTSTD1	CT1 (STD1) [A]
+13	CTSTD2	CT2 (STD2) [A]
+14	FanStp	Fan step
+15	CoilT	R4T :Coil temp. [°C]
+16	ScCilExtT	Subcooling Coil exit Temp. [°C]
+17	DschTInv	Disch. temp.(INV) [°C]
+18	DschTStd1	Disch. temp.(STD1) [°C]
+19	DschTStd2	Disch. temp.(STD2) [°C]
+20	AccEntrT	Accumulator Entrance Temp. [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvT	Inverter temp. [°C]
+23	InvCur	Inverter current [A]
+24	InvFanCur	INV FAN current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater
	CcH2	Bit 6 - CH2:Crankcase Heater
	CcH3	Bit 7 - CH3:Crankcase Heater
	SoftStrt	Bit 8 - Soft start
	ResrtStby	Bit 9 - Restart stand-by

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Base Address	Input Registers	
	Short Name	Description
	MulOi	Bit 10 - Multi oil
	ErrState	Bit 11 - Unit Error stat
	EnrgyCutOutp	Bit 12 - Energy cut output
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv	Bit 0 - 4 way valve
	Injct	Bit 2 - Injection
	Dfrst	Bit 3 - Defrost
	HiPStpDnCtl	Bit 4 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 5 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 6 - Demand stepping down cntl
	InvRtry	Bit 7 - INV retry
	InvDschStpDnCtl	Bit 8 - INV Disch. stepping down cntl
	InvOCStpDnCtl	Bit 9 - INV OC stepping down cntl
	InvFinStpDnCtl	Bit 10 - INV Fin stepping down cntl
	Std1DschStpDnCtl	Bit 11 - STD1 Disch. stepping down cntl
	Std1OCStpDnCtl	Bit 12 - STD1 OC stepping down cntl
	Std2DschStpDnCtl	Bit 13 - STD2 Disch. stepping down cntl
	Std2OCStpDnCtl	Bit 14 - STD2 OC stepping down cntl

- **VRV4S3, VRVX, VRV4-EU, VRV4Q-EU (RXYQQ8-20T7Y1B)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+5	Fan1RotAmnt	Fan 1 rotation amount [rpm]
+6	Fan2RotAmnt	Fan 2 rotation amount [rpm]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+10	EVOp3	EV opening 3 [pls]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	4WayVlvHeat	Bit 8 - 4 way valve(Heating)
	ErrState	Bit 9 - Unit Error stat
	DrnPanHtr	Bit 13 - Drain pan heater
	EnrgyCutOutp	Bit 14 - Energy cut output
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1DschStpDnCtl	Bit 9 - Comp.1 Disch. stepping down cntl
	Comp2DschStpDnCtl	Bit 10 - Comp.2 Disch. stepping down cntl
	Comp1OCStpDnCtl	Bit 11 - Comp.1 OC stepping down cntl

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Base Address	Input Registers	
	Short Name	Description
	Comp2OCStpDnCtl	Bit 12 - Comp.2 OC stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl

- **VRV4S3, VRVX, VRV4-EU, VRV4Q-EU (RXYQQ8-20T7Y1B)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	HexT	Heat exchanger temp. [°C]
+8	HexLiqT	Heat exchanger liquid pipe temp. [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+17	CompSrfT	Compressor surface temp. [°C]
+18	AccInltT	Accumulator inlet temp. [°C]
+21	Comp1Cur	Comp.1 current [A]
+22	Comp2Cur	Comp.2 current [A]
+23	Inv1FinT	INV1 fin temp. [°C]
+24	Inv2FinT	INV2 fin temp. [°C]
+25	InvFanCur	INV FAN current [A]

- **VRV6HP(RXYQ8-60BYM)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+7	FanStp	Fan step
+8	HexMain	HexMain
+9	ScHex	ScHex
+12	HexLeft	HexLeft
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	ErrState	Bit 9 - Unit Error stat
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1DschStpDnCtl	Bit 9 - Comp.1 Disch. stepping down cntl
	Comp2DschStpDnCtl	Bit 10 - Comp.2 Disch. stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl

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Base Address	Input Registers	
	Short Name	Description
	Comp2InvStpDnCtl	Bit 12 - Comp.2 INV stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl
+16		**Bitfields:**
	Injct	Bit 3 - Injection
	HotGasByp	Bit 8 - Hot gas bypass
+17	Comp1Cur	Comp.1 current [A]
+18	Comp2Cur	Comp.2 current [A]
+22	InvFanSecCur	INV fan secondary current [A]
+24	Inv1T	INV1 temperatute [°C]
+25	Inv2T	INV2 temperatute [°C]
+26	RfrgCoolIPM	RfrgCoolIPM
+27	RfrgCoolAir	RfrgCoolAir
+28	RfrgAutoCh	RfrgAutoCh

- **VRV6HP(RXYQ8-60BYM)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+10	HexGasTRight	HexGasTRight
+12	HexLiqTRight	HexLiqTRight
+13	ScGasT	ScGasT
+14	ScLiqT	ScLiqT
+18	SuctBAccT	SuctBAccT
+26	Inv1BodyT	INV1 comp. body temp [°C]
+27	Inv2BodyT	INV2 comp. body temp [°C]
+28	HexDeiTRight	HexDeiTRight
+34	ScInjctT	ScInjctT
+35	HexLiqTLeft	HexLiqTLeft
+36	HexGasTLeft	HexGasTLeft
+38	HexDeiTLeft	HexDeiTLeft
+39	BoxAirT	BoxAirT
+40	BoxAirOutlT	BoxAirOutlT

- **MiniVRV5S-EU(RXYSA-A7V1B,A7Y1B)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+7	FanStp	Fan step
+8	EVM	EV (Main) x 0.1 [%]
+9	EVT	EV (Subcool) x 0.1 [%]
+11	EVM2	EV (Main2) x 0.1 [%]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CcH1	Bit 2 - CH1:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	ErrState	Bit 9 - Unit Error stat
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	OHStby	Bit 3 - Overheating stand-by

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Base Address	Input Registers	
	Short Name	Description
	Inv1Stby	Bit 4 - INV1 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Inv1DschStpDnCtl	Bit 9 - Inv1 Disch. stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	DschPipStby	Bit 15 - Disch. pipe stand-by
+16		**Bitfields:**
	LkSensOutp	Bit 2 - Leak sensor output
+17	Comp1Cur	Comp.1 current [A]
+19	Inv1FinT	INV1 fin temp. [°C]
+22	InvFanSecCur	INV fan secondary current [A]
+23	InvPredCur	INV predicted current [A]

- **MiniVRV5S-EU(RXYSA-A7V1B,A7Y1B)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTInv1	Discharge pipe temp.(INV1) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+8	HexLiqT	Heat exchanger liquid pipe temp. x 0.1 [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+16	SuctPipT	Suction pipe temp. x 0.1 [°C]
+28	DeiT	Deicer temp [°C]

- **mini-VRV, VRV-M**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+12	CTSTD1	CT1 (STD1) [A]
+13	CTSTD2	CT2 (STD2) [A]
+14	FanStp	Fan step
+15	CoilT	R4T :Coil temp. [°C]
+16	ScCilExtT	Subcooling Coil exit Temp. [°C]
+17	DschTInv	Disch. temp.(INV) [°C]
+18	DschTStd1	Disch. temp.(STD1) [°C]
+19	DschTStd2	Disch. temp.(STD2) [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvT	Inverter temp. [°C]
+23	InvCur	Inverter current [A]
+24	InvFanCur	INV FAN current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater

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Base Address	Input Registers	
	Short Name	Description
	CcH2	Bit 6 - CH2:Crankcase Heater
	CcH3	Bit 7 - CH3:Crankcase Heater
	SoftStrt	Bit 8 - Soft start
	ResrtStby	Bit 9 - Restart stand-by
	MulOi	Bit 10 - Multi oil
	ErrState	Bit 11 - Unit Error stat
	EnrgyCutOutp	Bit 12 - Energy cut output
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv	Bit 0 - 4 way valve
	Injct	Bit 2 - Injection
	Dfrst	Bit 3 - Defrost
	HiPDroCtl	Bit 4 - High pres. drooping cntl.
	LoPDroCtl	Bit 5 - Low pres. drooping cntl.
	InvDschDroCtl	Bit 8 - INV Disch. pipe drooping cntl.
	InvCurDroCtl	Bit 9 - INV current drooping cntl.
	InvFinDroCtl	Bit 10 - INV fin drooping cntl.
	Std1DschDroCtl	Bit 11 - Std1DschDroCtl
	Std1OCDroCtl	Bit 12 - Std1OCDroCtl
	Std2DschDroCtl	Bit 13 - Std2DschDroCtl
	Std2OCDroCtl	Bit 14 - Std2OCDroCtl
+27		**Bitfields:**
	InvStby	Bit 5 - INV stand-by
	RcvrGasIn	Bit 6 - SVL:Receiver gas in
	RcvrGasOut	Bit 7 - SVG:Receiver gas out
	StpUnGasOut	Bit 8 - SVSG:StopUnit Gas out
	StpUnLiqPipCls	Bit 9 - SVSL:StopUnit Liquid pipe close
+35	OiPEqT	Oil Pres. equalizer Temp. [°C]
+36	InvFrq	Inverter frequency [Hz]

- **VRV-M(REYQ8-48M)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+10	EVOp3	EV opening 3 [pls]
+12	CTSTD1	CT1 (STD1) [A]
+13	CTSTD2	CT2 (STD2) [A]
+14	FanStp	Fan step
+15	CoilT	R4T :Coil temp. [°C]
+16	ScCilExtT	Subcooling Coil exit Temp. [°C]
+17	DschTInv	Disch. temp.(INV) [°C]
+18	DschTStd1	Disch. temp.(STD1) [°C]
+19	DschTStd2	Disch. temp.(STD2) [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvT	Inverter temp. [°C]
+23	InvCur	Inverter current [A]
+24	InvFanCur	INV FAN current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)

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Base Address	Input Registers	
	Short Name	Description
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater
	CcH2	Bit 6 - CH2:Crankcase Heater
	CcH3	Bit 7 - CH3:Crankcase Heater
	SoftStrt	Bit 8 - Soft start
	ResrtStby	Bit 9 - Restart stand-by
	MulOi	Bit 10 - Multi oil
	ErrState	Bit 11 - Unit Error stat
	EnrgyCutOutp	Bit 12 - Energy cut output
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv1	Bit 0 - 4WayVlv1
	4WayVlv2	Bit 1 - 4-way valve 2
	Dfrst	Bit 3 - Defrost
	HiPDroCtl	Bit 4 - High pres. drooping cntl.
	LoPDroCtl	Bit 5 - Low pres. drooping cntl.
	InvDschDroCtl	Bit 8 - INV Disch. pipe drooping cntl.
	InvCurDroCtl	Bit 9 - INV current drooping cntl.
	InvFinDroCtl	Bit 10 - INV fin drooping cntl.
	Std1DschDroCtl	Bit 11 - Std1DschDroCtl
	Std1OCDroCtl	Bit 12 - Std1OCDroCtl
	Std2DschDroCtl	Bit 13 - Std2DschDroCtl
	Std2OCDroCtl	Bit 14 - Std2OCDroCtl
+27		**Bitfields:**
	InvStby	Bit 5 - INV stand-by
	RcvrGasIn	Bit 6 - SVL:Receiver gas in
	RcvrGasOut	Bit 7 - SVG:Receiver gas out
	StpUnGasOut	Bit 8 - SVSG:StopUnit Gas out
	StpUnLiqPipCls	Bit 9 - SVSL:StopUnit Liquid pipe close
	HiPRduVlv	Bit 10 - Y7S:High pressure reducing valve
+35	OiPEqT	Oil Pres. equalizer Temp. [°C]
+36	InvFrq	Inverter frequency [Hz]
+37	CilGas1T	R81T:Coil gas 1 temp. [°C]
+38	CilGas2T	R81T:Coil gas 2 temp. [°C]

- **VRV6-R/RX(F) (REYP*F,REUP*F)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 x 0.1 [%]
+9	EVOp2	EV opening 2 x 0.1 [%]
+10	EVOp3	EV opening 3 x 0.1 [%]
+11	EVOp4	EV opening 4 x 0.1 [%]
+12	EVOp5	EV opening 5 x 0.1 [%]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlvHiLoP	Bit 4 - 4 way valve (HP/LP gas pipe)
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	4WayVlvAdd	Bit 8 - 4 way valve (additional heat exchanger)

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Base Address	Input Registers	
	Short Name	Description
	ErrState 4WayVlvUpr 4WayVlvUndr LiqShOff	Bit 9 - Unit Error stat Bit 10 - 4-way valve(upper heat exchanger) Bit 11 - 4-way valve(under heat exchanger) Bit 12 - Liquid pipe shutoff/cutoff
+15	 DmndStpDnCtl Comp1InvStpDnCtl Comp2InvStpDnCtl	**Bitfields:** Bit 8 - Demand stepping down cntl Bit 11 - Comp.1 INV stepping down cntl Bit 12 - Comp.2 INV stepping down cntl
+16	 InvRtry Rtry	**Bitfields:** Bit 5 - INV retry Bit 6 - Retry
+17	Comp1Cur	Comp.1 current [A]
+18	Comp2Cur	Comp.2 current [A]
+22	InvFanSecCur	INV fan secondary current [A]
+24	Inv1T	INV1 temperatute [°C]
+25	Inv2T	INV2 temperatute [°C]

- **VRV6-R/RX(F) (REYP*F,REUP*F)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+9	HexGasTUpr	Heat exchanger gas pipe temp.(upper) [°C]
+10	HexGasTLo	Heat exchanger gas pipe temp.(low) [°C]
+11	HexLiqTUpr	Heat exchanger liquid pipe temp.(upper) x 0.1 [°C]
+12	HexLiqTLo	Heat exchanger liquid pipe temp.(low) x 0.1 [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. x 0.1 [°C]
+15	SuctT	Suction Temperature x 0.1 [°C]
+17	Comp1SrfT	Compressor 1 surface temp. [°C]
+18	AccInltT	Accumulator inlet temp. [°C]
+19	RcvrInltT	Receiver inlet temp. [°C]
+20	RcvrGasPrgT	Receiver gas purge temp. [°C]
+28	DeiT	Deicer temp [°C]
+35	HexLiqTAdd	Heat exchanger liquid pipe temp. (additional heat exchanger) [°C]
+36	HexGasTAdd	Heat exchanger gas pipe temp. (additional heat exchanger) [°C]
+37	Comp2SrfT	Compressor 2 surface temp. [°C]
+38	DeiTAdd	Deicer temp (additional) [°C]

- **VRV6-R/RX(F) (REYQ8-60BY)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+7	FanStp	Fan step
+8	HexUprRight	HexUprRight
+9	ScHex	ScHex
+10	HexLoRight	HexLoRight
+11	RcvrGasPrg	RcvrGasPrg
+12	HexLeft	HexLeft
+14	 CompInv1	**Bitfields:** Bit 0 - Compressor 1(INV1)

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Base Address	Input Registers	
	Short Name	Description
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlvHiLoP	Bit 4 - 4 way valve (HP/LP gas pipe)
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	4WayVlvAdd	Bit 8 - 4 way valve (additional heat exchanger)
	ErrState	Bit 9 - Unit Error stat
	4WayVlvUpr	Bit 10 - 4-way valve(upper heat exchanger)
	4WayVlvUndr	Bit 11 - 4-way valve(under heat exchanger)
	LiqShOff	Bit 12 - Liquid pipe shutoff/cutoff
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1DschStpDnCtl	Bit 9 - Comp.1 Disch. stepping down cntl
	Comp2DschStpDnCtl	Bit 10 - Comp.2 Disch. stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl
	Comp2InvStpDnCtl	Bit 12 - Comp.2 INV stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl
+16		**Bitfields:**
	Injct	Bit 3 - Injection
	RfrgAdj	Bit 7 - RfrgAdj
+17	Comp1Cur	Comp.1 current [A]
+18	Comp2Cur	Comp.2 current [A]
+22	InvFanSecCur	INV fan secondary current [A]
+24	Inv1T	INV1 temperatute [°C]
+25	Inv2T	INV2 temperatute [°C]
+26	RfrgCoolIPM	RfrgCoolIPM
+27	RfrgCoolAir	RfrgCoolAir
+28	RfrgAutoCh	RfrgAutoCh

- **VRV6-R/RX(F) (REYQ8-60BY)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+9	HexGasT1	Heat exchanger gas pipe temp. 1 [°C]
+10	HexGasTRight	HexGasTRight
+11	HexLiqTUprRight	HexLiqTUprRight
+12	HexLiqTLoRight	HexLiqTLoRight
+13	ScGasT	ScGasT
+14	ScLiqT	ScLiqT
+15	SuctT	Suction Temperature x 0.1 [°C]
+17	Comp1SrfT	Compressor 1 surface temp. [°C]
+18	AccInltT	Accumulator inlet temp. [°C]
+19	RcvrInltT	Receiver inlet temp. [°C]
+20	RcvrGasPrgT	Receiver gas purge temp. [°C]

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Base Address	Input Registers	
	Short Name	Description
+28	HexDeiTRight	HexDeiTRight
+34	ScInjctT	ScInjctT
+35	HexLiqTLeft	HexLiqTLeft
+36	HexGasTLeft	HexGasTLeft
+37	Comp2SrfT	Compressor 2 surface temp. [°C]
+38	HexDeiTLeft	HexDeiTLeft
+39	BoxAirT	BoxAirT
+40	BoxAirOutlT	BoxAirOutlT

- **VRV4-us(RELQ,RXLQ), VRV-5R(REYQ**TAY1), VRV-4R**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+5	Fan1RotAmnt	Fan 1 rotation amount [rpm]
+6	Fan2RotAmnt	Fan 2 rotation amount [rpm]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+10	EVOp3	EV opening 3 [pls]
+11	EVOp4	EV4 pls.(receiver gas purge) [pls]
+12	EVOp5	EV5 pls.(cooling refrigant) [pls]
+13	EVOp6	EV6 pls.(leak detection) [pls]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	OiRtrn2	Bit 7 - Oil return 2
	ErrState	Bit 9 - Unit Error stat
	4WayVlvUpr	Bit 10 - 4-way valve(upper heat exchanger)
	4WayVlvUndr	Bit 11 - 4-way valve(under heat exchanger)
	SolVlv	Bit 12 - Sol. valve(shutoff liquid pipe)
	DrnPanHtr	Bit 13 - Drain pan heater
	EnrgyCutOutp	Bit 14 - Energy cut output
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1DschStpDnCtl	Bit 9 - Comp.1 Disch. stepping down cntl
	Comp2DschStpDnCtl	Bit 10 - Comp.2 Disch. stepping down cntl
	Comp1OCStpDnCtl	Bit 11 - Comp.1 OC stepping down cntl
	Comp2OCStpDnCtl	Bit 12 - Comp.2 OC stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl

- **VRV4-us(RELQ,RXLQ), VRV-5R(REYQ**TAY1), VRV-4R**

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Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	HexT	Heat exchanger temp. [°C]
+8	HexLiqT	Heat exchanger liquid pipe temp. [°C]
+9	HexGasTUpr	Heat exchanger gas pipe temp.(upper) [°C]
+10	HexGasTLo	Heat exchanger gas pipe temp.(low) [°C]
+11	HexLiqTUpr	Heat exchanger liquid pipe temp.(upper) [°C]
+12	HexLiqTLo	Heat exchanger liquid pipe temp.(low) [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+15	SuctT	Suction Temperature [°C]
+16	CompSuctPipT	Comp. suction pipe temp. [°C]
+17	CompSrfT	Compressor surface temp. [°C]
+19	RcvrInltT	Receiver inlet temp. [°C]
+20	RcvrGasPrgT	Receiver gas purge temp. [°C]
+21	Comp1Cur	Comp.1 current [A]
+22	Comp2Cur	Comp.2 current [A]
+23	Inv1FinT	INV1 fin temp. [°C]
+24	Inv2FinT	INV2 fin temp. [°C]
+25	InvFanCur	INV FAN current [A]

- **VRV-3R, VRV3C, ALT-MG(EMRQ8-16AAY1)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	InvRS	Inverter Revolution Speed [rps]
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+11	EVOp	EV opening [pls]
+12	CTSTD1	CT1 (STD1) [A]
+13	CTSTD2	CT2 (STD2) [A]
+14	FanStp	Fan step
+17	DschTInv	Disch. temp.(INV) [°C]
+18	DschTStd1	Disch. temp.(STD1) [°C]
+19	DschTStd2	Disch. temp.(STD2) [°C]
+22	InvT	Inverter temp. [°C]
+23	InvCur	Inverter current [A]
+24	InvFanCur	INV FAN current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater
	CcH2	Bit 6 - CH2:Crankcase Heater
	CcH3	Bit 7 - CH3:Crankcase Heater
	SoftStrt	Bit 8 - Soft start
	ResrtStby	Bit 9 - Restart stand-by
	ErrState	Bit 11 - Unit Error stat

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Base Address	Input Registers	
	Short Name	Description
	EnrgyCutOutp	Bit 12 - Energy cut output
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv	Bit 0 - 4 way valve
	4WayVlv2	Bit 1 - 4-way valve 2
	Dfrst	Bit 3 - Defrost
	HiPStpDnCtl	Bit 4 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 5 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 6 - Demand stepping down cntl
	InvRtry	Bit 7 - INV retry
	InvDschStpDnCtl	Bit 8 - INV Disch. stepping down cntl
	InvOCStpDnCtl	Bit 9 - INV OC stepping down cntl
	InvFinStpDnCtl	Bit 10 - INV Fin stepping down cntl
	Std1DschStpDnCtl	Bit 11 - STD1 Disch. stepping down cntl
	Std1OCStpDnCtl	Bit 12 - STD1 OC stepping down cntl
	Std2DschStpDnCtl	Bit 13 - STD2 Disch. stepping down cntl
	Std2OCStpDnCtl	Bit 14 - STD2 OC stepping down cntl
	EVByp	Bit 15 - EV bypass
+27		**Bitfields:**
	RfrgGasPrg	Bit 0 - Refrigerant regu. gas purging
	RfrgLiq	Bit 1 - Refrigerant regu. liquid
	RfrgDsching	Bit 2 - Refrigerant regu. discharging
	RfrgDsch	Bit 3 - Refrigerant regu. discharge
	OpOutp	Bit 4 - Operation output
+29	HexT	Heat exchanger temp. [°C]
+30	HexGasT	Heat Ex. Gas temp. [°C]
+31	HexLiqT	Heat exchanger liquid pipe temp. [°C]
+32	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+33	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+34	EVLiqT	EV liquid pipe temp. [°C]

- **VRV5-A/X (RXYP140-1500D)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+5	Fan1RotAmnt	Fan 1 rotation amount [rpm]
+6	Fan2RotAmnt	Fan 2 rotation amount [rpm]
+7	FanStp	Fan step
+8	EVM	EVM (Main) [pls]
+9	EVT	EVT (subcooling heat xchanger) [pls]
+12	EVClRfrg	EVClRfrg
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CcH1	Bit 2 - CH1:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	ErrState	Bit 9 - Unit Error stat
	DrnPanHtr	Bit 13 - Drain pan heater
+15		**Bitfields:**
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl
	Comp2InvStpDnCtl	Bit 12 - Comp.2 INV stepping down cntl
+16		**Bitfields:**
	InvRtry	Bit 5 - INV retry

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Base Address	Input Registers	
	Short Name	Description
	Rtry	Bit 6 - Retry

- **VRV5-A/X (RXYP140-1500D)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTInv1	Discharge pipe temp.(INV1) [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	HexT	Heat exchanger temp. [°C]
+8	HexLiqT	Heat exchanger liquid pipe temp. [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+17	CompSrfT	Compressor surface temp. [°C]
+18	AccInltT	Accumulator inlet temp. [°C]
+21	Inv1Cur	Inv1Cur
+23	Inv1FinT	INV1 fin temp. [°C]
+34	ScHexInjctT	Subcooling heat exchanger injection [°C]

- **VRV6-A/X(F) (RXYP224-1500F)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 x 0.1 [%]
+9	EVOp2	EV opening 2 x 0.1 [%]
+10	EVOp3	EV opening 3 x 0.1 [%]
+11	EVOp4	EV opening 4 x 0.1 [%]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	ErrState	Bit 9 - Unit Error stat
+15		**Bitfields:**
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl
	Comp2InvStpDnCtl	Bit 12 - Comp.2 INV stepping down cntl
+16		**Bitfields:**
	Injct	Bit 3 - Injection
	DschByp	Bit 4 - Discharge bypass
	InvRtry	Bit 5 - INV retry
	Rtry	Bit 6 - Retry
+17	Comp1Cur	Comp.1 current [A]
+18	Comp2Cur	Comp.2 current [A]
+24	Inv1T	INV1 temperatute [°C]
+25	Inv2T	INV2 temperatute [°C]

- **VRV6-A/X(F) (RXYP224-1500F)**

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Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+7	HexT1	Standard heat exchanget temp. 1 [°C]
+9	HexGasT1	Heat exchanger gas pipe temp. 1 [°C]
+10	HexGasT2	Heat exchanger gas pipe temp. 2 [°C]
+11	HexLiqT1	Heat exchanger liquid pipe temp. 1 x 0.1 [°C]
+12	HexLiqT2	Heat exchanger liquid pipe temp. 2 x 0.1 [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. x 0.1 [°C]
+15	SuctT	Suction Temperature x 0.1 [°C]
+29	HexT2	Standard heat exchanget temp. 2 [°C]
+30	HexTAdd1	Additional heat exchanger temp 1 [°C]
+31	HexTAdd2	Additional heat exchanger temp 2 [°C]
+32	Inv1OvhtPrtT	Compressor 1 overheat protection [°C]
+33	Inv2OvhtPrtT	Compressor 2 overheat protection [°C]
+34	ScHexInjctT	Subcooling heat exchanger injection [°C]

- **VRV-2MA**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+11	EVOp	EV opening [pls]
+12	CTSTD1	CT1 (STD1) [A]
+13	CTSTD2	CT2 (STD2) [A]
+14	FanStp	Fan step
+15	CoilT	R4T :Coil temp. [°C]
+16	ScCilExtT	Subcooling Coil exit Temp. [°C]
+17	DschTInv	Disch. temp.(INV) [°C]
+18	DschTStd1	Disch. temp.(STD1) [°C]
+19	DschTStd2	Disch. temp.(STD2) [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvT	Inverter temp. [°C]
+23	InvCur	Inverter current [A]
+24	InvFanCur	INV FAN current [A]
+25	**Bitfields:**	
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater
	CcH2	Bit 6 - CH2:Crankcase Heater
	CcH3	Bit 7 - CH3:Crankcase Heater
	ResrtStby	Bit 9 - Restart stand-by
	MulOi	Bit 10 - Multi oil
	ErrState	Bit 11 - Unit Error stat
	EnrgyCutOutp	Bit 12 - Energy cut output
	HiPRtry	Bit 13 - High pressure retry

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Base Address	Input Registers	
	Short Name	Description
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv	Bit 0 - 4 way valve
	4WayVlv2	Bit 1 - 4-way valve 2
	Injct	Bit 2 - Injection
	Dfrst	Bit 3 - Defrost
	HiPDroCtl	Bit 4 - High pres. drooping cntl.
	LoPDroCtl	Bit 5 - Low pres. drooping cntl.
	InvDschDroCtl	Bit 8 - INV Disch. pipe drooping cntl.
	InvCurDroCtl	Bit 9 - INV current drooping cntl.
	InvFinDroCtl	Bit 10 - INV fin drooping cntl.
	Std1DschDroCtl	Bit 11 - Std1DschDroCtl
	Std1OCDroCtl	Bit 12 - Std1OCDroCtl
	Std2DschDroCtl	Bit 13 - Std2DschDroCtl
	Std2OCDroCtl	Bit 14 - Std2OCDroCtl
+27		**Bitfields:**
	InvStby	Bit 5 - INV stand-by
	RcvrGasOut	Bit 7 - SVG:Receiver gas out
	StpUnLiqPipCls	Bit 9 - SVSL:StopUnit Liquid pipe close
+36	InvFrq	Inverter frequency [Hz]
+37	CilGasMnT	Main coil gas temp [°C]
+38	CilGasSbT	Sub coil gas temp [°C]

- **Ve-up3b (RXUP280-1000B), VRV-3B**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	ErrState	Bit 9 - Unit Error stat
	DrnPanHtr	Bit 13 - Drain pan heater
	EnrgyCutOutp	Bit 14 - Energy cut output
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Inv1DschStpDnCtl	Bit 9 - Inv1 Disch. stepping down cntl
	Inv2DschStpDnCtl	Bit 10 - Inv2DschStpDnCtl
	Inv1OCStpDnCtl	Bit 11 - Inv1OCStpDnCtl
	Inv2OCStpDnCtl	Bit 12 - Inv2OCStpDnCtl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl

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Base Address	Input Registers	
	Short Name	Description
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl

- **Ve-up3b (RXUP280-1000B), VRV-3B**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTInv1	Discharge pipe temp.(INV1) [°C]
+4	DschTInv2	DschTInv2
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	HexT	Heat exchanger temp. [°C]
+8	HexLiqT	Heat exchanger liquid pipe temp. [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+17	CompSrfT	Compressor surface temp. [°C]
+18	AccInltT	Accumulator inlet temp. [°C]
+21	Inv1Cur	Inv1Cur
+22	Inv2Cur	Inv2Cur
+23	Inv1FinT	INV1 fin temp. [°C]
+24	Inv2FinT	INV2 fin temp. [°C]
+25	InvFanCur	INV FAN current [A]

- **VRV5C-DIT(RXQ12AYM)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+5	Fan1RotAmnt	Fan 1 rotation amount [rpm]
+6	Fan2RotAmnt	Fan 2 rotation amount [rpm]
+7	FanStp	Fan step
+8	EVM	EVM (Main) [pls]
+9	EVT	EVT (subcooling heat xchanger) [pls]
+10	EVJ	EVJ (refrigerant injection) [pls]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	ErrState	Bit 9 - Unit Error stat
	OpOutp	Bit 15 - Operation output
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1DschStpDnCtl	Bit 9 - Comp.1 Disch. stepping down cntl
	Comp2DschStpDnCtl	Bit 10 - Comp.2 Disch. stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl
	Comp2InvStpDnCtl	Bit 12 - Comp.2 INV stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl
+16		**Bitfields:**
	Inv1OiSepBlw	Bit 0 - INV1 oil separator below

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Base Address	Input Registers	
	Short Name	Description
	Inv2OiSepBlw	Bit 1 - INV2 oil separator below

- **VRV5C-DIT(RXQ12AYM)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+8	HexLiqT	Heat exchanger liquid pipe temp. [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+16	CompSuctPipT	Comp. suction pipe temp. [°C]
+21	Comp1Cur	Comp.1 current [A]
+22	Comp2Cur	Comp.2 current [A]
+23	Inv1FinT	INV1 fin temp. [°C]
+24	Inv2FinT	INV2 fin temp. [°C]
+25	InvFanCur	INV FAN current [A]
+26	Inv1BodyT	INV1 comp. body temp [°C]
+27	Inv2BodyT	INV2 comp. body temp [°C]

- **VRV-2-WATER(RWEYQ10-30MY1)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+15	CoilT	R4T :Coil temp. [°C]
+16	ScCilExtT	Subcooling Coil exit Temp. [°C]
+17	DschTInv	Disch. temp.(INV) [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvFinT	Inverter fin temp. [°C]
+23	InvCur	Inverter current [A]
+25	 Comp1Inv OiRtrn HotGas CcH1 SoftStrt ResrtStby ErrState HiPRtry LoPRtry DschPipRtry	**Bitfields:** Bit 0 - Compressor1(INV) Bit 3 - Oil return Bit 4 - Hot Gas Bit 5 - CH1:Crankcase Heater Bit 8 - Soft start Bit 9 - Restart stand-by Bit 11 - Unit Error stat Bit 13 - High pressure retry Bit 14 - Low pressure retry Bit 15 - Disch. pipe retry
+26	 4WayVlv 4WayVlv2 HiPStpDnCtl LoPStpDnCtl InvDschStpDnCtl InvOCStpDnCtl InvFinStpDnCtl	**Bitfields:** Bit 0 - 4 way valve Bit 1 - 4-way valve 2 Bit 4 - H.P. stepping down cntl Bit 5 - L.P. stepping down cntl Bit 8 - INV Disch. stepping down cntl Bit 9 - INV OC stepping down cntl Bit 10 - INV Fin stepping down cntl
+27		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	RcvrGasIn	Bit 6 - SVL:Receiver gas in
	RcvrGasOut	Bit 7 - SVG:Receiver gas out
	StpUnLiqPipCls	Bit 9 - SVSL:StopUnit Liquid pipe close
	Pump	Bit 10 - Y2M:Pump
	InvFinCool	Bit 11 - M1F:INV_fin_cool
	OilRecover	Bit 12 - Y2S:Oil_recovery
+36	InvFrq	Inverter frequency [Hz]

- **VRV-3W-WATER(RWEYQ8-30P), VRV3C2-WATER(RWEYP***PCTJ), VRV-3Wx-WATER(RWEYQ8-30P), VRV-4W-WATER(RWEYQ8-10T7Y1B)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+4	SuctT	Suction Temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	InvRS	Inverter Revolution Speed [rps]
+8	EVOp1	EV opening 1 [pls]
+10	EVOp3	EV opening 3 [pls]
+14	FanStp	Fan step
+15	CoilT	R4T :Coil temp. [°C]
+16	ScCilExtT	Subcooling Coil exit Temp. [°C]
+17	DschTInv	Disch. temp.(INV) [°C]
+22	InvFinT	Inverter fin temp. [°C]
+23	InvCur	Inverter current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater
	SoftStrt	Bit 8 - Soft start
	ResrtStby	Bit 9 - Restart stand-by
	ErrState	Bit 11 - Unit Error stat
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv	Bit 0 - 4 way valve
	4WayVlv2	Bit 1 - 4-way valve 2
	HiPStpDnCtl	Bit 4 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 5 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 6 - Demand stepping down cntl
	InvRtry	Bit 7 - INV retry
	InvDschStpDnCtl	Bit 8 - INV Disch. stepping down cntl
	InvOCStpDnCtl	Bit 9 - INV OC stepping down cntl
	InvFinStpDnCtl	Bit 10 - INV Fin stepping down cntl
+27		**Bitfields:**
	RcvrGasIn	Bit 6 - SVL:Receiver gas in
	RcvrGasOut	Bit 7 - SVG:Receiver gas out
	StpUnLiqPipCls	Bit 9 - SVSL:StopUnit Liquid pipe close
	Pump	Bit 10 - Y2M:Pump
	OilRecover	Bit 12 - Y2S:Oil_recovery
	InvCoolFan	Bit 13 - M1F:INV_cool_fan
+34	EVLiqT	EV liquid pipe temp. [°C]

- **VRV-4W3-WATER(RWEYQ8-14T9Y1B)**

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Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+5	EvT	Evaporating Temperature [°C]
+6	CndT	Condensing Temperature [°C]
+7	InvRotAmnt	Inverter Rotation Amount [rps]
+8	EVMnLiq	Expansion valve main liquid [pls]
+9	EVSc	Expansion valve sub-cool [pls]
+10	EVPrg	Expansion valve purge [pls]
+17	DschTInv	Disch. temp.(INV) [°C]
+20	AccInltT	Accumulator Inlet Temp VRV3 [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvFinT	Inverter fin temp. [°C]
+23	InvCur	Inverter current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	OiRtrn	Bit 3 - Oil return
	CcH1	Bit 5 - CH1:Crankcase Heater
	ResrtStby	Bit 9 - Restart stand-by
	ErrState	Bit 11 - Unit Error stat
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlvDualP	Bit 0 - 4 way valve dual pressure
	4WayVlvPHE	Bit 1 - 4 way valve PHE
	HotGasLiqInjct	Bit 2 - Hot gas liquid injection
	HiPStpDnCtl	Bit 4 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 5 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 6 - Demand stepping down cntl
	InvDschStpDnCtl	Bit 8 - INV Disch. stepping down cntl
	InvOCStpDnCtl	Bit 9 - INV OC stepping down cntl
	InvFinStpDnCtl	Bit 10 - INV Fin stepping down cntl
+27		**Bitfields:**
	InvStby	Bit 5 - INV stand-by
	Pump	Bit 10 - Y2M:Pump
	InvCoolFan	Bit 13 - M1F:INV_cool_fan
	StrtupCtl	Bit 14 - Startup control
+28		**Bitfields:**
	OiRtrnAcc	Bit 0 - Oil return accumulator
	GasScPrg	Bit 1 - Gas SC and purge
	MainLiq	Bit 2 - Main liquid
	OiRtrnLiqPHE	Bit 3 - Liquid oil return PHE
	OiRtrnHotGas	Bit 4 - Hot gas oil return
	LiqInvCool	Bit 5 - Liquid inverter cooling
+41	InvGasOutltCoolT	Gas outlet inverter cooling temp [°C]
+42	GasH20PHET	Gas PHE H20 temp [°C]
+43	GasOutltScPrgT	Gas outlet SC and purge temp [°C]
+44	LiqH20PHET	Liquid PHE H20 temp [°C]
+45	LiqStpVlvT	Liquid stop valve temp [°C]
+46	H20InPHET	H20 in PHE temp [°C]
+47	H20OutPHET	H20 out PHE temp [°C]
+48	LiqEvtScPHET	Liquid EVT SC PHE temp [°C]
+49	InvBodyT	Body compressor temp [°C]
+50	WtrFlowCtl	Water flow control [%]

- **VRV5-Q/QX (RQYP140-1180D)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.

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Base Address	Input Registers	
	Short Name	Description
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+5	Fan1RotAmnt	Fan 1 rotation amount [rpm]
+6	Fan2RotAmnt	Fan 2 rotation amount [rpm]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+10	EVOp3	EV opening 3 [pls]
+11	EVOp4	EV4 pls.(receiver gas purge) [pls]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CcH1	Bit 2 - CH1:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	4WayVlvHeat	Bit 8 - 4 way valve(Heating)
	ErrState	Bit 9 - Unit Error stat
	LiqShOff	Bit 12 - Liquid pipe shutoff/cutoff
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Inv1DschStpDnCtl	Bit 9 - Inv1 Disch. stepping down cntl
	Inv1OCStpDnCtl	Bit 11 - Inv1OCStpDnCtl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
+16		**Bitfields:**
	RfrgAdjHotGas	Bit 9 - RfrgAdjHotGas
	OiAdjHotGas	Bit 10 - OiAdjHotGas

- **VRV5-Q/QX (RQYP140-1180D)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+7	HexT	Heat exchanger temp. [°C]
+11	HexLiqT1	HexLiqT1
+12	HexLiqT2	HexLiqT2
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+15	SuctT	Suction Temperature [°C]
+17	CompSrfT	Compressor surface temp. [°C]
+18	AccInltT	Accumulator inlet temp. [°C]
+21	Comp1Cur	Comp.1 current [A]
+23	Inv1FinT	INV1 fin temp. [°C]
+25	InvFanCur	INV FAN current [A]
+41	RfrgChT	RfrgChT

- **VRV6-Q/QX(F) (RQYP224-1180F)**

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Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	Inv1RotAmnt	INV 1 rotation amount [rps]
+4	Inv2RotAmnt	INV 2 rotation amount [rps]
+7	FanStp	Fan step
+8	EVOp1	EV opening 1 x 0.1 [%]
+9	EVOp2	EV opening 2 x 0.1 [%]
+10	EVOp3	EV opening 3 x 0.1 [%]
+11	EVOp4	EV opening 4 x 0.1 [%]
+14		**Bitfields:**
	CompInv1	Bit 0 - Compressor 1(INV1)
	CompInv2	Bit 1 - Compressor 2(INV2)
	CcH1	Bit 2 - CH1:Crankcase Heater
	CcH2	Bit 3 - CH2:Crankcase Heater
	4WayVlv	Bit 4 - 4 way valve
	OiRtrn1	Bit 5 - Oil return 1
	AccOiRtrn	Bit 6 - Accumulator oil return
	OiRtrn2	Bit 7 - Oil return 2
	ErrState	Bit 9 - Unit Error stat
+15		**Bitfields:**
	HiPRtry	Bit 0 - High pressure retry
	LoPRtry	Bit 1 - Low pressure retry
	DschPipRtry	Bit 2 - Disch. pipe retry
	OHStby	Bit 3 - Overheating stand-by
	Inv1Stby	Bit 4 - INV1 stand-by
	Inv2Stby	Bit 5 - INV2 stand-by
	HiPStpDnCtl	Bit 6 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 7 - L.P. stepping down cntl
	DmndStpDnCtl	Bit 8 - Demand stepping down cntl
	Comp1DschStpDnCtl	Bit 9 - Comp.1 Disch. stepping down cntl
	Comp2DschStpDnCtl	Bit 10 - Comp.2 Disch. stepping down cntl
	Comp1InvStpDnCtl	Bit 11 - Comp.1 INV stepping down cntl
	Comp2InvStpDnCtl	Bit 12 - Comp.2 INV stepping down cntl
	Inv1FinStpDnCtl	Bit 13 - INV1 Fin stepping down cntl
	Inv2FinStpDnCtl	Bit 14 - INV2 Fin stepping down cntl
+16		**Bitfields:**
	Injct	Bit 3 - Injection
	RfrgAdjGasInlt	Bit 11 - RfrgAdjGasInlt
+17	Comp1Cur	Comp.1 current [A]
+18	Comp2Cur	Comp.2 current [A]
+22	InvFanSecCur	INV fan secondary current [A]
+24	Inv1T	INV1 temperatute [°C]
+25	Inv2T	INV2 temperatute [°C]

- **VRV6-Q/QX(F) (RQYP224-1180F)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	AmbT	Ambient temperature [°C]
+3	DschTComp1	Discharge pipe temp.(Comp.1) [°C]
+4	DschTComp2	Discharge pipe temp.(Comp.2) [°C]
+5	EvT	Evaporating temp x 0.1 [°C]
+6	CndT	Condensing temp x 0.1 [°C]
+7	HexT1	Standard heat exchanget temp. 1 [°C]
+9	HexGasT1	Heat exchanger gas pipe temp. 1 [°C]
+10	HexGasT2	Heat exchanger gas pipe temp. 2 [°C]
+11	HexLiqT1	Heat exchanger liquid pipe temp. 1 x 0.1 [°C]
+12	HexLiqT2	Heat exchanger liquid pipe temp. 2 x 0.1 [°C]
+13	ScHexGasT	Subcooling heat exchanger gas temp. [°C]
+14	ScHexLiqT	Subcooling heat exchanger liquid temp. x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+15	SuctT	Suction Temperature x 0.1 [°C]
+29	HexT2	Standard heat exchanget temp. 2 [°C]
+30	HexTAdd1	Additional heat exchanger temp 1 [°C]
+31	HexTAdd2	Additional heat exchanger temp 2 [°C]
+32	Inv1OvhtPrtT	Compressor 1 overheat protection [°C]
+33	Inv2OvhtPrtT	Compressor 2 overheat protection [°C]
+34	ScHexInjctT	Subcooling heat exchanger injection [°C]
+41	RfrgChT	RfrgChT
+42	EVMOutlLiqT	EVMOutlLiqT

- **Ve-up3Q(RQYP140-900A)**

Base Address	Input Registers	
	Short Name	Description
+1	AirNet	AirNet Addr.
+2	HP	HP [hp]
+3	AmbT	Ambient temperature [°C]
+4	SuctT	Suction Temperature [°C]
+7		**Bitfields:**
	InvRS	Bit 0 - Inverter Revolution Speed [rps]
	StrtupCtl	Bit 6 - Startup control
+8	EVOp1	EV opening 1 [pls]
+9	EVOp2	EV opening 2 [pls]
+12	CTSTD1	CT1 (STD1) [A]
+13	CTSTD2	CT2 (STD2) [A]
+14	FanStp	Fan step
+17	DschTInv	Disch. temp.(INV) [°C]
+18	DschTStd1	Disch. temp.(STD1) [°C]
+19	DschTStd2	Disch. temp.(STD2) [°C]
+21	RcvrLiqT	Receiver Liquid Temp. [°C]
+22	InvFinT	Inverter fin temp. [°C]
+23	InvCur	Inverter current [A]
+24	InvFanCur	INV FAN current [A]
+25		**Bitfields:**
	Comp1Inv	Bit 0 - Compressor1(INV)
	Comp2Std1	Bit 1 - Compressor2(STD1)
	Comp3Std2	Bit 2 - Compressor3(STD2)
	OiRtrn	Bit 3 - Oil return
	HotGas	Bit 4 - Hot Gas
	CcH1	Bit 5 - CH1:Crankcase Heater
	CcH2	Bit 6 - CH2:Crankcase Heater
	CcH3	Bit 7 - CH3:Crankcase Heater
	ResrtStby	Bit 9 - Restart stand-by
	ErrState	Bit 11 - Unit Error stat
	EnrgyCutOutp	Bit 12 - Energy cut output
	HiPRtry	Bit 13 - High pressure retry
	LoPRtry	Bit 14 - Low pressure retry
	DschPipRtry	Bit 15 - Disch. pipe retry
+26		**Bitfields:**
	4WayVlv	Bit 0 - 4 way valve
	4WayVlv2	Bit 1 - 4-way valve 2
	Dfrst	Bit 3 - Defrost
	HiPStpDnCtl	Bit 4 - H.P. stepping down cntl
	LoPStpDnCtl	Bit 5 - L.P. stepping down cntl
	InvRtry	Bit 7 - INV retry
	InvDschStpDnCtl	Bit 8 - INV Disch. stepping down cntl
	InvCurDroCtl	Bit 9 - INV current drooping cntl.
	InvFinStpDnCtl	Bit 10 - INV Fin stepping down cntl
	Std1DschStpDnCtl	Bit 11 - STD1 Disch. stepping down cntl
	Std1OCStpDnCtl	Bit 12 - STD1 OC stepping down cntl
	Std2DschStpDnCtl	Bit 13 - STD2 Disch. stepping down cntl

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Base Address	Input Registers	
	Short Name	Description
	Std2OCStpDnCtl	Bit 14 - STD2 OC stepping down cntl
+27	 RcvrGasOut StpUnLiqPipCls	**Bitfields:** Bit 7 - SVG:Receiver gas out Bit 9 - SVSL:StopUnit Liquid pipe close
+29	HexT	Heat exchanger temp. [°C]
+33	ScHexLiqT	Subcooling heat exchanger liquid temp. [°C]
+34	EVLiqT	EV liquid pipe temp. [°C]
+39	HPrsGasTmp	H.Pres. gas Temp [°C]
+40	LPrsGasTmp	L.Pres. gas Temp [°C]
+41	LiqPipRefReg	LIQUID PIPE TEMPERATURE OF REFRIGERANT REGULATOR

4.1.1.4 DK PRO Enumerated Parameters

- **Demand state (DmndState)**

Value	Description
0	OFF
1	DEMAND1
2	DEMAND2
3	DEMAND3

4.1.2 Fujitsu

4.1.2.1 Fujitsu PRO Outdoor Units

- **AJT[40/45/54]LCLAH, AJY[40/45/54]LCLAH, AJCLCTAH, AJHLCLAH, AJQLCLAH, AOURLAVS**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2	 Op Md Dfrst OiRcvr Cmp1 BH	**Bitfields:** Bit 0 - Operation Bit 1 - Mode Bit 4 - Defrost Bit 5 - Oil Recovery Bit 6 - CMP1 Bit 8 - BH
+3	 4WV1 SV2 CCH1 FnSt1	**Bitfields:** Bit 0 - 4WV1 Bit 4 - SV2 Bit 12 - CCH1 Bit 14 - Fan State 1
+5	TH1	TH1 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+14	TH10	TH10 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+37	EEV1	EEV1 [Pls]

- **AJY[72/90/108/126/144/162]LALBH, AOULBV1, AJGLNLBH, AJHLALBH, AJHLATBH,**

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AJHLNLBH, AJHLNTBH, AJHLNTCH, AJHLALCH, AJQLALBH, AJYLATBH, AJYLNLBH, AJYLNTBH, AJYLNTCH, AJYLALCH, AOULCV

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	4WV2	Bit 1 - 4WV2
	4WV3	Bit 2 - 4WV3
	SV1	Bit 3 - SV1
	SV2	Bit 4 - SV2
	SV3	Bit 5 - SV3
	CCH1	Bit 12 - CCH1
	CCH2	Bit 13 - CCH2
	FnSt1	Bit 14 - Fan State 1
+5	TH1	TH1 [°C]
+6	TH2	TH2 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+10	TH6	TH6 [°C]
+11	TH7	TH7 [°C]
+12	TH8	TH8 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+15	TH11	TH11 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]
+39	EEV3	EEV3 [Pls]

- **AJY[72/90/108]LELAH, AJYuLALH, AJYLELBH, AJHLELBH, AJYLELDH, AJHuLALH, AJQLALH, AJALBLAH, AJHLBLAH, AJHLBTAHN, AJHLELAH, AJHLETAHN, AJYLBLAH, AOURLAVM**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save

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Base Address	Input Registers	
	Short Name	Description
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	SV2	Bit 4 - SV2
	CCH1	Bit 12 - CCH1
	FnSt1	Bit 14 - Fan State 1
	FnSt2	Bit 15 - Fan State 2
+5	TH1	TH1 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+11	TH7	TH7 [°C]
+12	TH8	TH8 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+36	FnFreq2	Fan Frequency 2 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]

- **AJY[72/90/108]LELAH, AJYLELBH, AJHLELBH, AJYLELDH, AJHLELAH, AJCLETAH, AJQLELAH, AJULELAH**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	CCH1	Bit 12 - CCH1
	FnSt1	Bit 14 - Fan State 1
	FnSt2	Bit 15 - Fan State 2
+5	TH1	TH1 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+11	TH7	TH7 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]

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Base Address	Input Registers	
	Short Name	Description
+35	FnFreq1	Fan Frequency 1 [RPM]
+36	FnFreq2	Fan Frequency 2 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]

- **AJY[72/90/108]LELAH, AJYLELDH, AJHLELAH**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	SV1	Bit 3 - SV1
	CCH1	Bit 12 - CCH1
	CCH2	Bit 13 - CCH2
	FnSt1	Bit 14 - Fan State 1
	FnSt2	Bit 15 - Fan State 2
+5	TH1	TH1 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+11	TH7	TH7 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+36	FnFreq2	Fan Frequency 2 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]

- **AJYuLALH, AOUuRLBV, AJHuLALH, AJHuLATH, AJQLALH, AJYuLATH, AJHLNLAH, AJHLNLAHU, AJHLNTAH, AJQLBLH, AJYLNLAH, AJYLNTAH**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	Cmp2	Bit 7 - CMP2
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1

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Base Address	Input Registers	
	Short Name	Description
	HPSW2	Bit 11 - HPSW2
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	SV1	Bit 3 - SV1
	SV2	Bit 4 - SV2
	SV3	Bit 5 - SV3
	SV4	Bit 6 - SV4
	SV5	Bit 7 - SV5
	SV6	Bit 8 - SV6
	SV7	Bit 9 - SV7
	CCH1	Bit 12 - CCH1
	CCH2	Bit 13 - CCH2
	FnSt1	Bit 14 - Fan State 1
+5	TH1	TH1 [°C]
+6	TH2	TH2 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+10	TH6	TH6 [°C]
+11	TH7	TH7 [°C]
+12	TH8	TH8 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+15	TH11	TH11 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+34	Cmp2C	CMP2 (Constant speed) Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]

- **AJYLALH, AJHLALH, AJHLATH, AJQLALH, AJYLATH**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	Cmp2	Bit 7 - CMP2
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
	HPSW2	Bit 11 - HPSW2
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	SV1	Bit 3 - SV1
	SV2	Bit 4 - SV2
	SV3	Bit 5 - SV3

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Base Address	Input Registers	
	Short Name	Description
	SV4	Bit 6 - SV4
	SV5	Bit 7 - SV5
	SV6	Bit 8 - SV6
	SV7	Bit 9 - SV7
	CCH1	Bit 12 - CCH1
	CCH2	Bit 13 - CCH2
	FnSt1	Bit 14 - Fan State 1
+5	TH1	TH1 [°C]
+6	TH2	TH2 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+10	TH6	TH6 [°C]
+11	TH7	TH7 [°C]
+12	TH8	TH8 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+15	TH11	TH11 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]

- **AJYLALH, AJHLALH, AJHLATH, AJQLALH, AJYLATH, AJHLNLAH, AJHLNLAHU, AJHLNTAH, AJQLBLH, AJYLNLAH, AJYLNTAH**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	Cmp2	Bit 7 - CMP2
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
	HPSW2	Bit 11 - HPSW2
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	SV1	Bit 3 - SV1
	SV2	Bit 4 - SV2
	SV3	Bit 5 - SV3
	SV4	Bit 6 - SV4
	SV5	Bit 7 - SV5
	SV6	Bit 8 - SV6
	SV7	Bit 9 - SV7
	CCH1	Bit 12 - CCH1
	CCH2	Bit 13 - CCH2
	FnSt1	Bit 14 - Fan State 1
+5	TH1	TH1 [°C]
+6	TH2	TH2 [°C]

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Base Address	Input Registers	
	Short Name	Description
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+10	TH6	TH6 [°C]
+11	TH7	TH7 [°C]
+12	TH8	TH8 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+15	TH11	TH11 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+34	Cmp2C	CMP2 (Constant speed) Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]

- **AJHuGALH, AJHGALH, AOULBV, AJHGALBH, AJYGALBH, AJQGALAH, AJTuGALH, AJTGALH, AJTGBLH, AJYuGALH, AJYGALH, AOULCV**

Base Address	Input Registers	
	Short Name	Description
+1	Cap	Capacity [HP]
+2		**Bitfields:**
	Op	Bit 0 - Operation
	Md	Bit 1 - Mode
	Dfrst	Bit 4 - Defrost
	OiRcvr	Bit 5 - Oil Recovery
	Cmp1	Bit 6 - CMP1
	BH	Bit 8 - BH
	HPSW1	Bit 10 - HPSW1
	LoNoise	Bit 12 - Low Noise
	FrcdOff	Bit 14 - Forced Off
	CapSv	Bit 15 - Capacity Save
+3		**Bitfields:**
	4WV1	Bit 0 - 4WV1
	4WV2	Bit 1 - 4WV2
	SV1	Bit 3 - SV1
	SV2	Bit 4 - SV2
	SV3	Bit 5 - SV3
	SV4	Bit 6 - SV4
	CCH1	Bit 12 - CCH1
	CCH2	Bit 13 - CCH2
	FnSt1	Bit 14 - Fan State 1
+5	TH1	TH1 [°C]
+6	TH2	TH2 [°C]
+7	TH3	TH3 [°C]
+8	TH4	TH4 [°C]
+9	TH5	TH5 [°C]
+10	TH6	TH6 [°C]
+11	TH7	TH7 [°C]
+12	TH8	TH8 [°C]
+13	TH9	TH9 [°C]
+14	TH10	TH10 [°C]
+15	TH11	TH11 [°C]
+20	HPS	HPS [MPa]
+23	LPS	LPS [MPa]

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Base Address	Input Registers	
	Short Name	Description
+25	Cmp1F	CMP1 Drive Frequency [RPS]
+26	Cmp1T	CMP1 Inverter Temperature [°C]
+27	Cmp1V	CMP1 DC Voltage [V]
+29	Cmp1C	CMP1 CT Current x 0.1 [A]
+35	FnFreq1	Fan Frequency 1 [RPM]
+37	EEV1	EEV1 [Pls]
+38	EEV2	EEV2 [Pls]
+39	EEV3	EEV3 [Pls]

4.1.2.2 Fujitsu PRO Enumerated Parameters

- **Mode (Md)**

Value	Description
0	Idling
1	Cool
2	Heat
3	-
4	Idling
5	Cool(Main)
6	Heat(Main)
7	-

4.1.3 Gree GMV5

4.1.3.1 Gree GMV5 PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+0	GenVer	General Protocol Version
+1	UnitVer	Unit Protocol Version
+2	PwrTp	Power Type
+3	RatedCap	Rated Capacity
+4	InPipT	Inlet Pipe Temp
+5	OutPipT	Outlet Pipe Temp
+6	OutAirT	Outlet Air Temp
+7	EXV	EXV Status
+8	**Bitfields:** Bit 0 - AuxE-htr Bit 1 - Ms/Sl Bit 2 - SolVlvHt Bit 3 - LoPrsSolVlv Bit 4 - BpsSolVlv	 Aux E-heater Master IDU Solenoid valve of heating Low pressure of solenoid valve By-pass solenoid valve

4.1.3.2 Gree GMV5 PRO Outdoor Systems

- **GMV5C**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+1	RefgnTp	Refrigerant type
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status

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Base Address	Input Registers	
	Short Name	Description
	OiRt HtHiTPrvnt	Bit 3 - Oil return status Bit 7 - HtHiTPrvnt
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority

- **GMV5**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+1	RefgnTp	Refrigerant type
+2	TotCap	Total capacity x 0.1 [kW]
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs OiRt	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status Bit 3 - Oil return status
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+12	DfrsCyc	Defrosting cycle [min]
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority

- **GMV5 mini**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3 Type Code = 6
+1	RefgnTp	Refrigerant type
+2	TotCap	Total capacity x 0.1 [kW]
+4	Cl&Ht	Setting of cooling and heating
+5	 Dfrs OiRt AuxOiRt	**Bitfields:** Bit 2 - Defrosting status Bit 3 - Oil return status Bit 5 - Auxiliary oil return
+16	RunMd	Running mode
+17	ClDmnd	Cooling demand x 0.1 [kW]
+18	HtDmnd	Heating demand x 0.1 [kW]
+19	ClTgtLoPrsCrn	Target low presuure correction of cooling [°C]
+20	HtTgtHiPrsCrn	Heating target high pressure correction [°C]

- **VRF Home(S)**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	RefgnTp	Refrigerant type
+4	Cl&Ht	Setting of cooling and heating
+5		**Bitfields:**
	Dfrs	Bit 2 - Defrosting status
	OiRt	Bit 3 - Oil return status
	AuxOiRt	Bit 5 - Auxiliary oil return
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority
+16	RunMd	Running mode
+17	ClDmnd	Cooling demand x 0.1 [kW]
+18	HtDmnd	Heating demand x 0.1 [kW]
+19	ClTgtLoPrsCrn	Target low presuure correction of cooling [°C]
+20	HtTgtHiPrsCrn	Heating target high pressure correction [°C]
+29	HtWtrMd	HtWtrMd
+30	OpPr	OpPr
+31	HtWtrDmnd	HtWtrDmnd
+32	FlHtDmnd	FlHtDmnd

- **GMV5 HR**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+1	RefgnTp	Refrigerant type
+2	TotCap	Total capacity x 0.1 [kW]
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5		**Bitfields:**
	4WayVlv	Bit 0 - 4-way valve status
	Comp	Bit 1 - Compressor status
	Dfrs	Bit 2 - Defrosting status
	OiRt	Bit 3 - Oil return status
	NonContHt	Bit 4 - Flag of non-continous heating
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+12	DfrsCyc	Defrosting cycle [min]
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority
+16	RunMd	Running mode

- **VRF6**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+1	RefgnTp	Refrigerant type
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5		**Bitfields:**
	4WayVlv	Bit 0 - 4-way valve status
	Comp	Bit 1 - Compressor status
	Dfrs	Bit 2 - Defrosting status
	OiRt	Bit 3 - Oil return status

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Base Address	Input Registers	
	Short Name	Description
	GprsWxParamEn	Bit 6 - GPRS weather parameter enabled
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcw	Refrigerant recovery setting
+10	Rcw	Recovery status
+11	EnrgSv	System energy saving
+13	CapCfgRio	Capacity configuration ratio setting [%]
+21	FanEmergOpMd	Fan emergency operation mode
+22	CompEmergOpMd	Compressor emergency operation mode
+23	MdlEmergOpMd	Module emergency operation mode
+24	MinT4Hr	Min temperature in the next 4 hours [°C]
+25	MaxT4Hr	Max temperature in the next 4 hours [°C]
+26	MaxT24Hr	Max temperature in the next 24 hours [°C]
+27	AvgRltvHum4Hr	Average relative humidity in the next 4 hours [%]
+28	WndLvl	Wind level

- **VRF6 HR**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+1	RefgnTp	Refrigerant type
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs OiRt	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status Bit 3 - Oil return status
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcw	Refrigerant recovery setting
+10	Rcw	Recovery status
+11	EnrgSv	System energy saving
+12	DfrsCyc	Defrosting cycle [min]
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority
+21	FanEmergOpMd	Fan emergency operation mode
+22	CompEmergOpMd	Compressor emergency operation mode
+23	MdlEmergOpMd	Module emergency operation mode

4.1.3.3 Gree GMV5 PRO Outdoor Units

- **GMV5C**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+1	RatedCap	Rated capacity x 0.1 [kW]
+2	MsSl	Master-Slave status
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+6	FanTp	Fan type
+7	FanEmerg	Fan emergency status
+8	AmbT	Outdoor ambient temperature [°C]

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Base Address	Input Registers	
	Short Name	Description
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+10	Comp2OpFreq	Compressor 2 operation frequency [Hz]
+11	Fan1OpFreq	Fan1 operation frequency [Hz]
+12	Fan2OpFreq	Fan2 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+16	Comp1TpCvrT	Compressor 1 top cover temperature [°C]
+17	Comp2DisT	Compressor 2 discharge temperature [°C]
+18	Comp2TpCvrT	Compressor 2 top cover temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+25	FanStcPrsMd	Outdoor fan static pressure mode
+26	Comp1 Comp2 4WayVlv1 LoPrsMsrVlv	**Bitfields:** Bit 0 - Compressor 1 status Bit 1 - Compressor 2 status Bit 2 - 4-way valve1 status Bit 3 - Low pressure measure valve
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+30	Fan1Cur	Fan1 current [A]
+31	Fan1BsbV	Fan1 busbar voltage [V]
+32	Fan1MdlT	Fan1 module temperature [°C]
+33	Comp2Cur	Comp2Cur
+36	Fan2Cur	Fan2 current [A]
+37	Fan2BsbV	Fan2 busbar voltage [V]
+38	Fan2MdlT	Fan2 module temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]

- **GMV5**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+1	RatedCap	Rated capacity x 0.1 [kW]
+2	MsSl	Master-Slave status
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+6	FanTp	Fan type
+7	FanEmerg	Fan emergency status
+8	AmbT	Outdoor ambient temperature [°C]
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+10	Comp2OpFreq	Compressor 2 operation frequency [Hz]
+11	Fan1OpFreq	Fan1 operation frequency [Hz]
+12	Fan2OpFreq	Fan2 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+16	Comp1TpCvrT	Compressor 1 top cover temperature [°C]
+17	Comp2DisT	Compressor 2 discharge temperature [°C]
+18	Comp2TpCvrT	Compressor 2 top cover temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]

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Base Address	Input Registers	
	Short Name	Description
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+25	FanStcPrsMd	Outdoor fan static pressure mode
+26		**Bitfields:**
	Comp1	Bit 0 - Compressor 1 status
	Comp2	Bit 1 - Compressor 2 status
	4WayVlv1	Bit 2 - 4-way valve1 status
	LoPrsMsrVlv	Bit 3 - Low pressure measure valve
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+30	Fan1Cur	Fan1 current [A]
+31	Fan1BsbV	Fan1 busbar voltage [V]
+32	Fan1MdlT	Fan1 module temperature [°C]
+33	Comp2Cur	Compressor 2 current [A]
+34	Comp2BsbV	Compressor 2 busbar voltage [V]
+35	Comp2MdlT	Compressor 2 module temperature [°C]
+36	Fan2Cur	Fan2 current [A]
+37	Fan2BsbV	Fan2 busbar voltage [V]
+38	Fan2MdlT	Fan2 module temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]

- **GMV5 mini**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3 Type Code = 6
+1	RatedCap	Rated capacity x 0.1 [kW]
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+8	AmbT	Outdoor ambient temperature [°C]
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+26		**Bitfields:**
	Comp1	Bit 0 - Compressor 1 status
	4WayVlv1	Bit 2 - 4-way valve1 status
	OiRtVlv1	Bit 5 - Oil return valve 1
	RefgnRcvy	Bit 7 - Refrigerant recovering
	GsBpsVlv	Bit 8 - Gas bypass valve status
	SolVlvA	Bit 9 - Solenoid valve A
	SolVlvB	Bit 10 - Solenoid valve B
	Comp1E-Ht	Bit 11 - Compressor 1 e-heater
	ChasE-Ht	Bit 12 - Chassis e-heater
	RstCompl	Bit 13 - Reset completed
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]

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Base Address	Input Registers	
	Short Name	Description
+42		**Bitfields:**
	Comp1WkMg	Bit 0 - Compressor 1 weak magnetism
	Comp1LimFreq	Bit 1 - Compressor 1 drive module limited frequency
	Comp1LoFreq	Bit 2 - Compressor 1 drive module lower frequency
	Comp1PwrSrc	Bit 3 - Compressor 1 drive AC input power source
+43	DistCab	Distribution capability x 0.1 [kW]
+44	Comp1TgtFreq	Comp1 target frequency [Hz]
+45	Fan1TgtFreq	Fan1 target frequency [Hz]
+46	Fan2TgtFreq	Fan2 target frequency [Hz]
+47	MdlAbsHp	Module absolute high pressure [kPa]
+48	MdlAbsLp	Module absolute low pressure [kPa]
+49	HtExGsOutT	Heat exchanger gas outlet temperature [°C]
+50	Comp1InCur	Comp1 input current [A]
+51	Comp1UCur	Comp1 U phase current [A]
+52	Comp1VCur	Comp1 V phase current [A]
+53	Comp1PfcT	Compressor 1 drive PFC temperature [°C]
+54	Comp1EBoxT	Compressor 1 drive electric box temperature [°C]
+55	Comp1Dev	Compressor 1 device status
+56	Comp1Wrk	Compressor 1 work status

- **VRF Home(S)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	RatedCap	Rated capacity x 0.1 [kW]
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+8	AmbT	Outdoor ambient temperature [°C]
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+26		**Bitfields:**
	Comp1	Bit 0 - Compressor 1 status
	4WayVlv1	Bit 2 - 4-way valve1 status
	OiRtVlv1	Bit 5 - Oil return valve 1
	RefgnRcvy	Bit 7 - Refrigerant recovering
	GsBpsVlv	Bit 8 - Gas bypass valve status
	Comp1E-Ht	Bit 11 - Compressor 1 e-heater
	ChasE-Ht	Bit 12 - Chassis e-heater
	RstCompl	Bit 13 - Reset completed
	2WayVlv	Bit 14 - 2WayVlv
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]
+42		**Bitfields:**
	Comp1WkMg	Bit 0 - Compressor 1 weak magnetism
	Comp1LimFreq	Bit 1 - Compressor 1 drive module limited frequency
	Comp1LoFreq	Bit 2 - Compressor 1 drive module lower frequency
	Comp1PwrSrc	Bit 3 - Compressor 1 drive AC input power source
+43	DistCab	Distribution capability x 0.1 [kW]

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Base Address	Input Registers	
	Short Name	Description
+44	Comp1TgtFreq	Comp1 target frequency [Hz]
+45	Fan1TgtFreq	Fan1 target frequency [Hz]
+46	Fan2TgtFreq	Fan2 target frequency [Hz]
+47	MdlAbsHp	Module absolute high pressure [kPa]
+48	MdlAbsLp	Module absolute low pressure [kPa]
+49	HtExGsOutT	Heat exchanger gas outlet temperature [°C]
+50	Comp1InCur	Comp1 input current [A]
+51	Comp1UCur	Comp1 U phase current [A]
+52	Comp1VCur	Comp1 V phase current [A]
+53	Comp1PfcT	Compressor 1 drive PFC temperature [°C]
+54	Comp1EBoxT	Compressor 1 drive electric box temperature [°C]
+55	Comp1Dev	Compressor 1 device status
+56	Comp1Wrk	Compressor 1 work status

- **GMV5 HR**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+1	RatedCap	Rated capacity x 0.1 [kW]
+2	MsSl	Master-Slave status
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+6	FanTp	Fan type
+7	FanEmerg	Fan emergency status
+8	AmbT	Outdoor ambient temperature [°C]
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+10	Comp2OpFreq	Compressor 2 operation frequency [Hz]
+11	Fan1OpFreq	Fan1 operation frequency [Hz]
+12	Fan2OpFreq	Fan2 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+16	Comp1TpCvrT	Compressor 1 top cover temperature [°C]
+17	Comp2DisT	Compressor 2 discharge temperature [°C]
+18	Comp2TpCvrT	Compressor 2 top cover temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+25	FanStcPrsMd	Outdoor fan static pressure mode
+26	Comp1 Comp2 4WayVlv1 LoPrsMsrVlv 4WayVlv2 OiRtVlv1 OiRtVlv2	**Bitfields:** Bit 0 - Compressor 1 status Bit 1 - Compressor 2 status Bit 2 - 4-way valve1 status Bit 3 - Low pressure measure valve Bit 4 - 4-way valve2 status Bit 5 - Oil return valve 1 Bit 6 - Oil return valve 2
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+30	Fan1Cur	Fan1 current [A]
+31	Fan1BsbV	Fan1 busbar voltage [V]
+32	Fan1MdlT	Fan1 module temperature [°C]
+33	Comp2Cur	Compressor 2 current [A]

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Base Address	Input Registers	
	Short Name	Description
+34	Comp2BsbV	Compressor 2 busbar voltage [V]
+35	Comp2MdlT	Compressor 2 module temperature [°C]
+36	Fan2Cur	Fan2 current [A]
+37	Fan2BsbV	Fan2 busbar voltage [V]
+38	Fan2MdlT	Fan2 module temperature [°C]
+39	Comp1OiRtT	Compressor 1 oil return temperature [°C]
+40	Comp2OiRtT	Compressor 2 oil return temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]

- **VRF6**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+1	RatedCap	Rated capacity x 0.1 [kW]
+2	MsSl	Master-Slave status
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+6	FanTp	Fan type
+7	FanEmerg	Fan emergency status
+8	AmbT	Outdoor ambient temperature [°C]
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+10	Comp2OpFreq	Compressor 2 operation frequency [Hz]
+11	Fan1OpFreq	Fan1 operation frequency [Hz]
+12	Fan2OpFreq	Fan2 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+16	Comp1TpCvrT	Compressor 1 top cover temperature [°C]
+17	Comp2DisT	Compressor 2 discharge temperature [°C]
+18	Comp2TpCvrT	Compressor 2 top cover temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+25	FanStcPrsMd	Outdoor fan static pressure mode
+26	Comp1 Comp2 4WayVlv1 OiRtVlv1 OiRtVlv2	**Bitfields:** Bit 0 - Compressor 1 status Bit 1 - Compressor 2 status Bit 2 - 4-way valve1 status Bit 5 - Oil return valve 1 Bit 6 - Oil return valve 2
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+30	Fan1Cur	Fan1 current [A]
+31	Fan1BsbV	Fan1 busbar voltage [V]
+32	Fan1MdlT	Fan1 module temperature [°C]
+33	Comp2Cur	Compressor 2 current [A]
+34	Comp2BsbV	Compressor 2 busbar voltage [V]
+35	Comp2MdlT	Compressor 2 module temperature [°C]
+36	Fan2Cur	Fan2 current [A]
+37	Fan2BsbV	Fan2 busbar voltage [V]
+38	Fan2MdlT	Fan2 module temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]
+42		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	AuxOiRtVlv1	Bit 4 - Auxiliary oil return valve 1
	SbclSolVlv	Bit 5 - Subcooler solenoid valve
	HtGsBpsVlv	Bit 6 - Hot-gas by-pass valve
+57	SbclGsInT	Subcooler gas inlet temperature [°C]

- **VRF6 HR**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+1	RatedCap	Rated capacity x 0.1 [kW]
+2	MsSl	Master-Slave status
+3	GenVer	General protocol version
+4	UnitVer	Unit protocol version
+5	PwrTp	Power type
+6	FanTp	Fan type
+7	FanEmerg	Fan emergency status
+8	AmbT	Outdoor ambient temperature [°C]
+9	Comp1OpFreq	Compressor 1 operation frequency [Hz]
+10	Comp2OpFreq	Compressor 2 operation frequency [Hz]
+11	Fan1OpFreq	Fan1 operation frequency [Hz]
+12	Fan2OpFreq	Fan2 operation frequency [Hz]
+13	MdlHiPrs	Module high pressure [°C]
+14	MdlLoPrs	Module low pressure [°C]
+15	Comp1DisT	Compressor 1 discharge temperature [°C]
+16	Comp1TpCvrT	Compressor 1 top cover temperature [°C]
+17	Comp2DisT	Compressor 2 discharge temperature [°C]
+18	Comp2TpCvrT	Compressor 2 top cover temperature [°C]
+19	DfrsT1	Defrosting temperature 1 [°C]
+20	SbclLiqOutT	Subcooler liquid outlet temperature [°C]
+21	SbclGsOutT	Subcooler gas outlet temperature [°C]
+22	GsSepInTubT	Gas separator inlet tube temperature [°C]
+23	GsSepOutTubT	Gas separator outlet tube temperature [°C]
+24	HtEXV	ODU heating EXV [Pls]
+25	FanStcPrsMd	Outdoor fan static pressure mode
+26		**Bitfields:**
	Comp1	Bit 0 - Compressor 1 status
	Comp2	Bit 1 - Compressor 2 status
	4WayVlv1	Bit 2 - 4-way valve1 status
	4WayVlv2	Bit 3 - 4-way valve2 status
	OiRtVlv1	Bit 5 - Oil return valve 1
	OiRtVlv2	Bit 6 - Oil return valve 2
+27	Comp1Cur	Compressor 1 current [A]
+28	Comp1BsbV	Compressor 1 busbar voltage [V]
+29	Comp1MdlT	Compressor 1 module temperature [°C]
+30	Fan1Cur	Fan1 current [A]
+31	Fan1BsbV	Fan1 busbar voltage [V]
+32	Fan1MdlT	Fan1 module temperature [°C]
+33	Comp2Cur	Compressor 2 current [A]
+34	Comp2BsbV	Compressor 2 busbar voltage [V]
+35	Comp2MdlT	Compressor 2 module temperature [°C]
+36	Fan2Cur	Fan2 current [A]
+37	Fan2BsbV	Fan2 busbar voltage [V]
+38	Fan2MdlT	Fan2 module temperature [°C]
+41	SbclEXV	Subcooler EXV [Pls]
+42		**Bitfields:**
	AuxOiRtVlv1	Bit 4 - Auxiliary oil return valve 1
	SbclSolVlv	Bit 5 - Subcooler solenoid valve
	HtGsBpsVlv	Bit 6 - Hot-gas by-pass valve
	HiPrsSolVlv	Bit 7 - HiPrsSolVlv

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Base Address	Input Registers	
	Short Name	Description
	LoPrsSolVlv LPBpsSolVlv LiqInVlv GsBlncVlv PrsVlv HiPrsBpsVlv	Bit 8 - LoPrsSolVlv Bit 9 - LPBpsSolVlv Bit 10 - LiqInVlv Bit 11 - GsBlncVlv Bit 12 - PrsVlv Bit 13 - HiPrsBpsVlv
+57	SbclGsInT	Subcooler gas inlet temperature [°C]
+58	DfrsT2	DfrsT2
+59	MdlHiPrsR410A	MdlHiPrsR410A
+60	MdlLoPrsR410A	MdlLoPrsR410A

- **GMV5C**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+1	RefgnTp	Refrigerant type
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs OiRt HtHiTPrvnt	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status Bit 3 - Oil return status Bit 7 - HtHiTPrvnt
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority

- **GMV5**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+1	RefgnTp	Refrigerant type
+2	TotCap	Total capacity x 0.1 [kW]
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs OiRt	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status Bit 3 - Oil return status
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+12	DfrsCyc	Defrosting cycle [min]
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority

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- **GMV5 mini**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3 Type Code = 6
+1	RefgnTp	Refrigerant type
+2	TotCap	Total capacity x 0.1 [kW]
+4	Cl&Ht	Setting of cooling and heating
+5		**Bitfields:**
	Dfrs	Bit 2 - Defrosting status
	OiRt	Bit 3 - Oil return status
	AuxOiRt	Bit 5 - Auxiliary oil return
+16	RunMd	Running mode
+17	ClDmnd	Cooling demand x 0.1 [kW]
+18	HtDmnd	Heating demand x 0.1 [kW]
+19	ClTgtLoPrsCrn	Target low presuure correction of cooling [°C]
+20	HtTgtHiPrsCrn	Heating target high pressure correction [°C]

- **VRF Home(S)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	RefgnTp	Refrigerant type
+4	Cl&Ht	Setting of cooling and heating
+5		**Bitfields:**
	Dfrs	Bit 2 - Defrosting status
	OiRt	Bit 3 - Oil return status
	AuxOiRt	Bit 5 - Auxiliary oil return
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority
+16	RunMd	Running mode
+17	ClDmnd	Cooling demand x 0.1 [kW]
+18	HtDmnd	Heating demand x 0.1 [kW]
+19	ClTgtLoPrsCrn	Target low presuure correction of cooling [°C]
+20	HtTgtHiPrsCrn	Heating target high pressure correction [°C]
+29	HtWtrMd	HtWtrMd
+30	OpPr	OpPr
+31	HtWtrDmnd	HtWtrDmnd
+32	FlHtDmnd	FlHtDmnd

- **GMV5 HR**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+1	RefgnTp	Refrigerant type
+2	TotCap	Total capacity x 0.1 [kW]
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5		**Bitfields:**
	4WayVlv	Bit 0 - 4-way valve status
	Comp	Bit 1 - Compressor status
	Dfrs	Bit 2 - Defrosting status
	OiRt	Bit 3 - Oil return status
	NonContHt	Bit 4 - Flag of non-continous heating
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcw	Refrigerant recovery setting
+10	Rcw	Recovery status

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Base Address	Input Registers	
	Short Name	Description
+11	EnrgSv	System energy saving
+12	DfrsCyc	Defrosting cycle [min]
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority
+16	RunMd	Running mode

- **VRF6**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+1	RefgnTp	Refrigerant type
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs OiRt GprsWxParamEn	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status Bit 3 - Oil return status Bit 6 - GPRS weather parameter enabled
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+13	CapCfgRio	Capacity configuration ratio setting [%]
+21	FanEmergOpMd	Fan emergency operation mode
+22	CompEmergOpMd	Compressor emergency operation mode
+23	MdlEmergOpMd	Module emergency operation mode
+24	MinT4Hr	Min temperature in the next 4 hours [°C]
+25	MaxT4Hr	Max temperature in the next 4 hours [°C]
+26	MaxT24Hr	Max temperature in the next 24 hours [°C]
+27	AvgRltvHum4Hr	Average relative humidity in the next 4 hours [%]
+28	WndLvl	Wind level

- **VRF6 HR**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+1	RefgnTp	Refrigerant type
+3	CapUpLim	Setting of capacity upper limit [%]
+4	Cl&Ht	Setting of cooling and heating
+5	 4WayVlv Comp Dfrs OiRt	**Bitfields:** Bit 0 - 4-way valve status Bit 1 - Compressor status Bit 2 - Defrosting status Bit 3 - Oil return status
+6	CompPrhtTm	Compressor preheating time [h]
+7	QtFunc	Quiet function setting
+8	VacPmp	Vacuum pumping
+9	RefgnRcvy	Refrigerant recovery setting
+10	Rcvy	Recovery status
+11	EnrgSv	System energy saving
+12	DfrsCyc	Defrosting cycle [min]
+13	CapCfgRio	Capacity configuration ratio setting [%]
+14	EmergRunMd	Emergency running mode
+15	IduMdPr	IDU mode priority

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Base Address	Input Registers	
	Short Name	Description
+21	FanEmergOpMd	Fan emergency operation mode
+22	CompEmergOpMd	Compressor emergency operation mode
+23	MdlEmergOpMd	Module emergency operation mode

4.1.3.4 Gree GMV5 PRO Enumerated Parameters

- **Master-Slave status (MsSl)**

Value	Description
0	Null
1	Master
2	Slave 1
3	Slave 2
4	Slave 3

- **Power type (PwrTp)**

Value	Description
0	Null
1	100~115V
2	200~240V
9	50Hz 100~115V
10	50Hz 200~240V
17	60Hz 100~115V
18	60Hz 200~240V
25	??50Hz?60Hz, 100~115V
27	??50Hz?60Hz, 200~240V

- **Fan type (FanTp)**

Value	Description
0	Null
1	PG motor
16	DC motor
17	Tap motor

- **Fan emergency status (FanEmerg)**

Value	Description
0	Null
1	No emergency
2	Fan1 error
3	Fan2 error
4	All fans have errors

- **Outdoor fan static pressure mode (FanStcPrsMd)**

Value	Description
0	Null
1	0 static pressure
2	Static pressure1
3	Static pressure2
4	Static pressure3
5	Static pressure4

- **Compressor 1 drive AC input power source (Comp1PwrSrc)**

Value	Description
0	Single phase
1	Three phase

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- **Compressor 1 device status (Comp1Dev)**

Value	Description
0	Stop
1	Running
2	Fault

- **Compressor 1 work status (Comp1Wrk)**

Value	Description
0	Reset
1	Sampling
2	Wait
3	Input
4	Locate
5	Start
6	Running

- **Refrigerant type (RefgnTp)**

Value	Description
0	Null
1	R410A

- **Setting of cooling and heating (Cl&Ht)**

Value	Description
1	Cool only
2	Heating only
3	Cooling and heating
4	Fan only

- **Quiet function setting (QtFunc)**

Value	Description
0	Null
1	Mode0
2	Mode1
3	Mode2
4	Mode3
5	Mode4
6	Mode5
7	Mode6
8	Mode7
9	Mode8
10	Mode9
11	Mode10
12	Mode11
13	Mode12

- **Refrigerant recovery setting (RefgnRcvy)**

Value	Description
1	Indoor regrigerant
2	Module refrigerant

- **Recovery status (Rcvy)**

Value	Description
0	Null
1	Refrigerant recovery
2	Refrigerant recovery completed

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- **System energy saving (EnrgSv)**

Value	Description
1	Comfort
2	Energy saving

- **Emergency running mode (EmergRunMd)**

Value	Description
1	None
2	Compressor
3	Fan
4	Module

- **IDU mode priority (IduMdPr)**

Value	Description
0	Null
1	Power-off enabled
2	Power-off disabled
3	First-on priority
4	Priority given to cooling
5	Priority given to heating

- **Flag of non-continous heating (NonContHt)**

Value	Description
0	Continous heating
1	Non-continous heating

- **Running mode (RunMd)**

Value	Description
0	Null
1	Power off
2	Cooling
3	Drying
4	Fan only
5	Heating
6	Master cooling
7	Master heating
8	Complete heat recovery

- **Fan emergency operation mode (FanEmergOpMd)**

Value	Description
0	None
1	Fan 1
2	Fan 2

- **Compressor emergency operation mode (CompEmergOpMd)**

Value	Description
0	None
1	Compressor 1
2	Compressor 2

- **Module emergency operation mode (MdlEmergOpMd)**

Value	Description
0	None
1	Module 1
2	Module 2
3	Module 3

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Value	Description
4	Module 4

- **HtWtrMd (HtWtrMd)**

Value	Description
0	Null
1	Power off
2	Hot water
3	Floor heating
4	Hot water and floor heat

- **OpPr (OpPr)**

Value	Description
0	Invalid data
1	Factory default
2	Priority given to air conditioner
3	Priority given to water heating
4	Priority given to floor heating

- **HtHiTPrvnt (HtHiTPrvnt)**

Value	Description
0	Normal
1	High temperature prevention

4.1.4 Haier

4.1.4.1 Haier PRO Outdoor Units

- **MRV-S2, MRV-S**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1 Type Code = 7
+1	HP	HP x 0.1 [hp]
+2	Err	Error Code
+3	Mode 4WV1 4WV2 SV1 SV2 CHi CHa SVx Man Aux4WV AuxSV	**Bitfields:** Bit 0 - Mode Bit 2 - Four Way Valve 1 Bit 3 - Four Way Valve 2 Bit 4 - Solenoid Valve 1 Bit 5 - Solenoid Valve 2 Bit 6 - CHi Bit 7 - Liquid Refrigerant Heater Bit 8 - SVx Bit 9 - Man Bit 10 - Aux4WV Bit 11 - AuxSV
+6	Run	Run
+7	Dfrst	Defrost [%]
+8	Pd	Heating Pressure Sensor [bar]
+9	Pd_t	Heating Pressure Sensor Temp x 0.1 [°C]
+12	Ps	Cooling Pressure Sensor [bar]
+13	Ps_t	Cooling Pressure Sensor Temp x 0.1 [°C]
+14	Tdi	Tdi x 0.1 [°C]
+15	Tsi	Tsi x 0.1 [°C]
+16	Tdef	Frosting Heat Exchanger Temp x 0.1 [°C]
+17	Tao	Ambient Temperature x 0.1 [°C]
+18	Toili	Oil Temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+19	CT	CT x 0.1 [A]
+20	COMPiVal	COMPi Value x 0.1 [rps]
+21	COMPiTar	COMPi Target Value x 0.1 [rps]
+22	Fan1Val	Fan1 Value [rpm]
+23	Fan1Tar	Fan1 Target Value [rpm]
+24	Fan2Val	Fan2 Value [rpm]
+25	Fan2Tar	Fan2 Target Value [rpm]
+26	LEVaVal	LEVa Value [pls]
+27	LEVaTar	LEVa Target Value [pls]
+28	Tc2AveVal	Avg Liquid Pipe Temp x 0.1 [°C]
+29	Tc2AveTar	Avg Liquid Pipe Target Temp x 0.1 [°C]
+32	P tar	P tar [bar]
+33	Te2/Tc	Te2/Tc x 0.1 [°C]
+36	DCBUS	DCBUS [V]
+37	INVTemp	INV Temp x 0.1 [°C]
+38	Icm	Icm x 0.1 [A]
+39	RunSts	RunSts
+40	StopFctr	Stop Factor
+41	AuxLEV	AuxLEV [pls]
+42	AuxErr	AuxError
+43	AuxTc1	AuxTc1 x 0.1 [°C]
+44	AuxTc2	AuxTc2 x 0.1 [°C]

- **MRV3-RC**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+1	HP	HP [hp]
+2	Err	Error Code
+3		**Bitfields:**
	Mode	Bit 0 - Mode
	4WV	Bit 2 - Four Way Valve
	4WV2	Bit 3 - Four Way Valve 2
	SV1	Bit 4 - Solenoid Valve 1
	CHi	Bit 6 - CHi
	CHa	Bit 7 - Liquid Refrigerant Heater
	Man	Bit 9 - Man
	COMP1	Bit 12 - COMP1
	COMP2	Bit 13 - COMP2
	SV9	Bit 14 - Oil Balance Solenoid Valve
	SV10	Bit 15 - Pressure Relief Solenoid Valve
+4		**Bitfields:**
	Pri	Bit 0 - Priority
	Type	Bit 2 - Type
	SV3i	Bit 6 - SV3i
	SV31	Bit 7 - SV31/Pump
	SV18i	Bit 8 - SV18i
	SV181	Bit 9 - Aux Oil Return Solenoid Valve
	SV21	Bit 10 - SV21
	CH1	Bit 11 - Compressor Oil Heater
+6	Run	Run
+7	Dfrst	Defrost Ratio [%]
+8	Pd	Heating Pressure Sensor [bar]
+9	Pd t	Heating Pressure Sensor Temp [°C]
+12	Ps	Cooling Pressure Sensor [bar]
+13	Ps t	Cooling Pressure Sensor Temp [°C]
+14	Tdi	Tdi [°C]
+15	Tsi	Tsi [°C]
+16	Tdef1	Frost Outdoor Heat Exch Temp 1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+17	Tao	Ambient Temperature [°C]
+18	Toili	Toili [°C]
+19	CT1	CT1 x 0.1 [A]
+20	INV_FCur	INV_F Current x 0.1 [rps]
+21	INV_FTar	INV_F Target x 0.1 [rps]
+22	Fan1Cur	Fan1 Current [rpm]
+23	Fan1Tar	Fan1 Target [rpm]
+24	Fan2Cur	Fan2 Current [rpm]
+25	Fan2Tar	Fan2 Target [rpm]
+26	LEVa1Cur	Electronic Expans Valve a1 Cur [step]
+27	LEVa1Tar	Electronic Expans Valve a1 Targ [step]
+30	LEVa2Cur	Electronic Expans Valve a2 Cur [step]
+31	LEVa2Tar	Electronic Expans Valve a2 Targ [step]
+34	LEVbCur	Electronic Expans Valve b Cur [step]
+35	LEVbTar	Electronic Expans Valve b Targ [step]
+36	InvV	INV Information: Voltage [V]
+37	InvT	INV Information: Temp [°C]
+38	InvCTi	INV Information: CTi x 0.1 [A]
+39	InvState	INV Information: State
+40	InvStop	INV Information: Stop
+41	LEVcCur	Electronic Expans Valve b Cur [step]
+42	LEVcTar	Electronic Expans Valve b Targ [step]
+45	Pl	Pl [bar]
+46	Pl_t	Pl_t [°C]
+47	Td1	Inverter Compressor Top Temp 1 [°C]
+48	Td2	Inverter Compressor Top Temp 2 [°C]
+49	Tsuc	Gas Return Pipe Temperature [°C]
+50	Tsacc	Gas Liquied Seperator Inlet Temp [°C]
+51	Toilp	Toilp [°C]
+52	Toci1	Condenser Main GasPipe Temp1 [°C]
+53	Toci2	Condenser Main GasPipe Temp2 [°C]
+54	Tliqsc	Regen Main Outlet Pipe Temp [°C]
+55	Tsco	Regenerator Outlet Pipe Temp [°C]
+56	Tdef2	Frost Outdoor Heat Exch Temp 2 [°C]
+57	CT2	CT2 x 0.1 [A]
+58	PdPsCur	PdPs Current [°C]
+59	PdPsTar	PdPs Target [°C]

- **BS**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3
+1	ConQty	Connected Quantity
+2	SoftVer	Software Version x 0.1
+3	Mode 4WV SV1 SV2 SV3	**Bitfields:** Bit 0 - Mode Bit 2 - Four Way Valve Bit 3 - Solenoid Valve 1 Bit 4 - Solenoid Valve 2 Bit 5 - Solenoid Valve 3
+4	Err	Error Code

- **MRV4-C**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+1	HP	HP [hp]
+2	Err	Error Code

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Base Address	Input Registers	
	Short Name	Description
+3		**Bitfields:**
	Mode	Bit 0 - Mode
	4WV	Bit 2 - Four Way Valve
	SV1	Bit 4 - Solenoid Valve 1
	CHa	Bit 7 - Liquid Refrigerant Heater
	SVx	Bit 8 - SVx
	Man	Bit 9 - Man
	SV9	Bit 14 - Oil Balance Solenoid Valve
	SV10	Bit 15 - Pressure Relief Solenoid Valve
+4		**Bitfields:**
	Pri	Bit 0 - Priority
	SV31	Bit 7 - SV31/Pump
	SV181	Bit 9 - Aux Oil Return Solenoid Valve
	SV21	Bit 10 - SV21
	CH1	Bit 11 - Compressor Oil Heater
	CH2	Bit 12 - CH2
	SV32	Bit 13 - Too High Solenoid valve Temp
	SV182	Bit 14 - Aux Oil Rtrn Capillary Solen Vlv
	SV11	Bit 15 - Prevent Liq Rtrn Solenoid Vlv
+5	SV6	SV6
+6	Run	Run
+7	Dfrst	Defrost Ratio [%]
+8	Pd1	Heating Pressure Sensor 1 [bar]
+9	Pd1_t	Heating Pressure Sensor Temp 1 [°C]
+10	Pd2	Heating Pressure Sensor 2 [bar]
+11	Pd2_t	Heating Pressure Sensor Temp 2 [°C]
+12	Ps	Cooling Pressure Sensor [bar]
+13	Ps_t	Cooling Pressure Sensor Temp [°C]
+14	Ts1	Suction Compressor Temp 1 [°C]
+15	Ts2	Suction Compressor Temp 1 [°C]
+16	Tdef1	Frost Outdoor Heat Exch Temp 1 [°C]
+17	Tao	Ambient Temperature [°C]
+19	Inv1CT	INV1 Information: CT x 0.1 [A]
+20	INV1_FCur	INV1_F Current x 0.1 [rps]
+21	INV1_FTar	INV1_F Target x 0.1 [rps]
+22	Fan1Cur	Fan1 Current [rpm]
+23	Fan1Tar	Fan1 Target [rpm]
+24	Fan2Cur	Fan2 Current [rpm]
+25	Fan2Tar	Fan2 Target [rpm]
+26	LEVa1Cur	Electronic Expans Valve a1 Cur [step]
+27	LEVa1Tar	Electronic Expans Valve a1 Targ [step]
+28	Toil1	Refrigeration Lubricant 1 [°C]
+29	Toil2	Refrigeration Lubricant 2 [°C]
+30	LEVa2Cur	Electronic Expans Valve a2 Cur [step]
+31	LEVa2Tar	Electronic Expans Valve a2 Targ [step]
+34	LEVbCur	Electronic Expans Valve b Cur [step]
+35	LEVbTar	Electronic Expans Valve b Targ [step]
+36	Inv1V	INV1 Information: Voltage [V]
+37	Inv1T	INV1 Information: Temp [°C]
+39	Inv1State	INV1 Information: State
+40	Inv1Stop	INV1 Information: Stop
+41	LEVcCur	Electronic Expans Valve b Cur [step]
+42	LEVcTar	Electronic Expans Valve b Targ [step]
+43	INV2_FCur	INV2_F Current x 0.1 [rps]
+44	INV2_FTar	INV2_F Target x 0.1 [rps]
+45	Pl	Pl [bar]
+46	Pl_t	Pl_t [°C]
+47	Td1	Inverter Compressor Top Temp 1 [°C]
+48	Td2	Inverter Compressor Top Temp 2 [°C]
+49	Tsuc	Gas Return Pipe Temperature [°C]

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Base Address	Input Registers	
	Short Name	Description
+50	Tsacc	Gas Liquied Seperator Inlet Temp [°C]
+51	Toilp	Toilp [°C]
+52	Toci1	Condenser Main GasPipe Temp1 [°C]
+53	Toci2	Condenser Main GasPipe Temp2 [°C]
+54	Tliqsc	Regen Main Outlet Pipe Temp [°C]
+55	Tsco	Regenerator Outlet Pipe Temp [°C]
+56	Tdef2	Frost Outdoor Heat Exch Temp 2 [°C]
+57	Inv2CT	INV2 Information: CT x 0.1 [A]
+58	PdPsCur	PdPs Current [°C]
+59	PdPsTar	PdPs Target [°C]
+60	Inv2V	INV2 Information: Voltage [V]
+61	Inv2T	INV2 Information: Temp [°C]
+62	Inv2State	INV2 Information: State
+63	Inv2Stop	INV2 Information: Stop

- **MRV5**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	HP	HP [hp]
+2	Err	Error Code
+3		**Bitfields:**
	Mode	Bit 0 - Mode
	4WV	Bit 2 - Four Way Valve
	4WV2	Bit 3 - Four Way Valve 2
	SV1	Bit 4 - Solenoid Valve 1
	CHa	Bit 7 - Liquid Refrigerant Heater
	Man	Bit 9 - Man
	SV9	Bit 14 - Oil Balance Solenoid Valve
	SV10	Bit 15 - Pressure Relief Solenoid Valve
+4		**Bitfields:**
	Pri	Bit 0 - Priority
	SV31	Bit 7 - SV31/Pump
	SV181	Bit 9 - Aux Oil Return Solenoid Valve
	SV21	Bit 10 - SV21
	CH1	Bit 11 - Compressor Oil Heater
	CH2	Bit 12 - CH2
	SV32	Bit 13 - Too High Solenoid valve Temp
	SV182	Bit 14 - Aux Oil Rtrn Capillary Solen Vlv
	SV11	Bit 15 - Prevent Liq Rtrn Solenoid Vlv
+5		**Bitfields:**
	SV6	Bit 0 - SV6
	SV23	Bit 1 - SV23
	SV4	Bit 2 - SV4
	SV5	Bit 3 - SV5
	SV7	Bit 4 - SV7
	SV8	Bit 5 - SV8
	SV14	Bit 6 - SV14
	SV22	Bit 7 - SV22
	4WV3	Bit 8 - 4WV3
+6	Run	Run
+7	Dfrst	Defrost Ratio [%]
+8	Pd1	Heating Pressure Sensor 1 [bar]
+9	Pd1_t	Heating Pressure Sensor Temp 1 [°C]
+10	Pd2	Heating Pressure Sensor 2 [bar]
+11	Pd2_t	Heating Pressure Sensor Temp 2 [°C]
+12	Ps	Cooling Pressure Sensor [bar]
+13	Ps_t	Cooling Pressure Sensor Temp [°C]
+14	Ts1	Suction Compressor Temp 1 [°C]
+15	Ts2	Suction Compressor Temp 1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+16	Tdef1	Frost Outdoor Heat Exch Temp 1 [°C]
+17	Tao	Ambient Temperature [°C]
+19	Inv1CT	INV1 Information: CT x 0.1 [A]
+20	INV1_FCur	INV1_F Current x 0.1 [rps]
+21	INV1_FTar	INV1_F Target x 0.1 [rps]
+22	Fan1Cur	Fan1 Current [rpm]
+23	Fan1Tar	Fan1 Target [rpm]
+24	Fan2Cur	Fan2 Current [rpm]
+25	Fan2Tar	Fan2 Target [rpm]
+26	LEVa1Cur	Electronic Expans Valve a1 Cur [step]
+27	LEVa1Tar	Electronic Expans Valve a1 Targ [step]
+28	Toil1	Refrigeration Lubricant 1 [°C]
+29	Toil2	Refrigeration Lubricant 2 [°C]
+30	LEVa2Cur	Electronic Expans Valve a2 Cur [step]
+31	LEVa2Tar	Electronic Expans Valve a2 Targ [step]
+34	LEVbCur	Electronic Expans Valve b Cur [step]
+35	LEVbTar	Electronic Expans Valve b Targ [step]
+36	Inv1V	INV1 Information: Voltage [V]
+37	Inv1T	INV1 Information: Temp [°C]
+39	Inv1State	INV1 Information: State
+40	Inv1Stop	INV1 Information: Stop
+41	LEVcCur	Electronic Expans Valve b Cur [step]
+42	LEVcTar	Electronic Expans Valve b Targ [step]
+43	INV2_FCur	INV2_F Current x 0.1 [rps]
+44	INV2_FTar	INV2_F Target x 0.1 [rps]
+45	PI	PI [bar]
+46	PI_t	PI_t [°C]
+47	Td1	Inverter Compressor Top Temp 1 [°C]
+48	Td2	Inverter Compressor Top Temp 2 [°C]
+49	Tsuc	Gas Return Pipe Temperature [°C]
+50	Tsacc	Gas Liquied Seperator Inlet Temp [°C]
+51	Toilp	Toilp [°C]
+52	Toci1	Condenser Main GasPipe Temp1 [°C]
+53	Toci2	Condenser Main GasPipe Temp2 [°C]
+54	Tligsc	Regen Main Outlet Pipe Temp [°C]
+55	Tsco	Regenerator Outlet Pipe Temp [°C]
+56	Tdef2	Frost Outdoor Heat Exch Temp 2 [°C]
+57	Inv2CT	INV2 Information: CT x 0.1 [A]
+58	PdPsCur	PdPs Current [°C]
+59	PdPsTar	PdPs Target [°C]
+60	Inv2V	INV2 Information: Voltage [V]
+61	Inv2T	INV2 Information: Temp [°C]
+62	Inv2State	INV2 Information: State
+63	Inv2Stop	INV2 Information: Stop

- **BS**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 6
+1	IUCnt	Indoor Count
+2	SoftVer	Software Version x 0.1
+3	Mode 4WV SV1 SV2 SV3	**Bitfields:** Bit 0 - Mode Bit 2 - Four Way Valve Bit 3 - Solenoid Valve 1 Bit 4 - Solenoid Valve 2 Bit 5 - Solenoid Valve 3
+4	Err	Error Code

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Base Address	Input Registers	
	Short Name	Description
+5	LEV1	LEV1 [step]
+6	LEV2	LEV2 [step]
+7	LEV3	LEV3 [step]
+8	TC1	TC1 x 0.1 [°C]
+9	TC2	TC2 x 0.1 [°C]

4.1.4.2 Haier PRO Enumerated Parameters

- **Mode (Mode)**

Value	Description
0	Stop
1	Cool
2	Heat
3	Defrost

- **Run (Run)**

Value	Description
0	Stop
1	Err
2	Stop
3	Start
4	Normal
5	Reoil
6	Defrost
7	OilAve
8	PumpDown
9	Liquid
10	Reserv
11	Reserv
12	Reserv
13	Reserv
14	Reserv
15	Reserv

- **Mode (Mode)**

Value	Description
0	Off
1	Cool
2	Heat
3	Auto

- **Run (Run)**

Value	Description
0	Stop
1	Error
2	Stop
3	Start
4	Normal
5	RtnOil
6	Defrost
7	EquOil
8	PumpDn
9	LqdSeal
10	Reserv
11	Reserv

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Value	Description
12	Reserv
13	Reserv
14	Reserv
15	Reserv

- **Model (Model)**

Value	Description
0	Indoor
1	Wall
2	FreshAir
3	TotalHeat
4	Floor
5	ValveBox
6	ValveBox
7	Indoor
8	PlateHeat
9	ValveBox
10	Cassette
11	Duct
12	Indoor
13	Indoor
14	Indoor
15	Indoor

- **Mode (Mode)**

Value	Description
0	Off
1	Cool
2	Heat
3	Auto

- **Fan (Fan)**

Value	Description
0	Off
1	Low
2	Medium
3	High

- **PMV Status (PMVSts)**

Value	Description
0	Init
1	Rst
2	Thof
3	Start
4	Normal
5	Oil
6	Defrost
7	Normal
8	Pmpl
9	FcOp
10	FcCl
11	Wtsr
12	Fix
13	Per.
14	Undefined
15	Undefined

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- **Type (Type)**

Value	Description
0	Indoor
1	WallMounted
2	Fresh
3	AllHeat
4	Indoor
5	Indoor
6	Indoor
7	Indoor
8	Board
9	Board
10	Board
11	Board
12	Board
13	Board
14	Board
15	Board

4.1.5 Hitachi

4.1.5.1 Hitachi PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+7	Hp	Capacity x 0.1 [hp]
+8		**Bitfields:**
	TH	Bit 0 - Indoor therm ON status
	C8	Bit 1 - C8
	Ed	Bit 3 - Ed
+9	iE	Exp. V Opening [%]
+10	Tl	Liquid Pipe Temperature [°C]
+11	Tg	Gas Pipe Temperature [°C]
+12	Ti	Intake Air Temperature [°C]
+13	To	Outdoor calculated mode
+14	fd	Requested Frequency [Hz]
+15	Tr	Remote Sensor Temperature [°C]

4.1.5.2 Hitachi PRO Outdoor Units

- **Type Code = 9**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 9
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	Run	Bit 0 - Run/Stop
	ForDfrst	Bit 1 - For Defrost
	TstRun	Bit 3 - Test Run
	Dfrst	Bit 4 - Defrost
	EnFOff	Bit 5 - Enforced Fan Off
	EnThOff	Bit 6 - Enforced Thermo Off
+3		**Bitfields:**
	RunSt	Bit 0 - Run State
	Cyc	Bit 4 - Cycle Condition
	ProtLvl	Bit 8 - Protection Level
	ProtCd	Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	Inverter run state

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Base Address	Input Registers	
	Short Name	Description
+6	FANCD	Fan Con Code
+7	FANSt	FANSt
+8	Comp1RunTm	Comp1 Run Time [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	oEB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+17	TdSH	Discharge Gas Superheat [°C]
+19	Te1	Evaporating Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	YFAN1	Bit 6 - Relay for FAN 1
	YFAN3	Bit 8 - Relay for FAN 3
	YFAN4	Bit 9 - Relay for FAN 4
	YCH	Bit 10 - Relay for Crank Case Heater 1
	Y211	Bit 12 - Relay for 4Way-Valve 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
	Y20A2	Bit 15 - Y20A2
+28		**Bitfields:**
	Y20F1	Bit 2 - Solenoid valve F1/Relay for Oil Back 1
	Y20F2	Bit 3 - Relay for Oil Back 2
	Y20G	Bit 4 - Solenoid valve G/Relay for Refrigerant Recovery
	Y52C1	Bit 6 - Relay for Inverter Compressor
	Y52C2	Bit 7 - Relay for Compressor2
	Y52C3	Bit 10 - Relay for Compressor3
	Y52C4	Bit 11 - Relay for Compressor4
	Y52C5	Bit 12 - Relay for Compressor5
+29	Comp2RunTm	Comp2 Run Time [Hr]
+31	H2	Total Frequency [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+36	A2	Compressor2 Current [A]
+37	Comp3RunTm	Comp3 Run Time [Hr]
+38	Comp4RunTm	Comp4 Run Time [Hr]
+39	Comp5RunTm	Comp5 Run Time [Hr]
+41	A3	Compressor3 Current [A]
+42	A4	Compressor4 Current [A]
+43	A5	Compressor5 Current [A]
+45	Te2	Evaporating Temp2 [°C]
+46	Te3	Evaporating Temp3 [°C]
+47	Td3	Compressor 3 Top Temperature [°C]
+48	Td4	Compressor 4 Top Temperature [°C]
+49	Td5	Compressor 5 Top Temperature [°C]
+51	cc	Run Compressor Quantity
+52	oE2	Expansion Valve 2 Opening [%]
+53	oE3	Expansion Valve 3 Opening [%]
+62		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	Y20A3	Bit 0 - Y20A3
	Y20A4	Bit 1 - Y20A4
	Y20A5	Bit 2 - Y20A5
	Y20D1	Bit 3 - Y20D1
	Y20D2	Bit 4 - Y20D2
	Y20E1	Bit 5 - Y20E1
	Y20E2	Bit 6 - Y20E2

- **Type Code = 3**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	Run	Bit 0 - Run/Stop
	ForDfrst	Bit 1 - For Defrost
	TstRun	Bit 3 - Test Run
	Dfrst	Bit 4 - Defrost
	EnFOff	Bit 5 - Enforced Fan Off
	EnThOff	Bit 6 - Enforced Thermo Off
+3		**Bitfields:**
	RunSt	Bit 0 - Run State
	Cyc	Bit 4 - Cycle Condition
	ProtLvl	Bit 8 - Protection Level
	ProtCd	Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	Inverter run state
+6	FANCD	Fan Con Code
+7	FANSt	Fan Con State
+8	Comp1RunTm	Comp1 Run Time [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	oEB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Low Pressure x 0.1 [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+19	Te1	Evaporating Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	YFAN1	Bit 6 - Relay for FAN 1
	YFAN3	Bit 8 - Relay for FAN 3
	YCH	Bit 10 - Relay for Crank Case Heater 1
	Y211	Bit 12 - Relay for 4Way-Valve 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
+28		**Bitfields:**
	Y20F1	Bit 2 - Solenoid valve F1/Relay for Oil Back 1
	Y20G	Bit 4 - Solenoid valve G/Relay for Refrigerant Recovery
	Y52C1	Bit 6 - Relay for Inverter Compressor
	Y52C2	Bit 7 - Relay for Compressor2

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Base Address	Input Registers	
	Short Name	Description
	Y52C3 Y52C4 Y52C5 Y52C6 Y213	Bit 10 - Relay for Compressor3 Bit 11 - Relay for Compressor4 Bit 12 - Relay for Compressor5 Bit 13 - Relay for Compressor6 Bit 14 - Relay for 4Way-Valve 3
+29	Comp2RunTm	Comp2 Run Time [Hr]
+31	H2	Total Frequency [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+36	A2	Compressor2 Current [A]
+37	Comp3RunTm	Comp3 Run Time [Hr]
+38	Comp4RunTm	Comp4 Run Time [Hr]
+39	Comp5RunTm	Comp5 Run Time [Hr]
+40	Comp6RunTm	Comp6 Run Time [Hr]
+41	A3	Compressor3 Current [A]
+42	A4	Compressor4 Current [A]
+43	A5	Compressor5 Current [A]
+44	A6	Compressor6 Current [A]
+45	Te2	Evaporating Temp2 [°C]
+46	Te3	Evaporating Temp3 [°C]
+47	Td3	Compressor 3 Top Temperature [°C]
+48	Td4	Compressor 4 Top Temperature [°C]
+49	Td5	Compressor 5 Top Temperature [°C]
+50	Td6	Compressor 6 Top Temperature [°C]
+51	cc	Run Compressor Quantity
+52	oE2	Expansion Valve 2 Opening [%]
+53	oE3	Expansion Valve 3 Opening [%]

- **Type Code = 6**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 6
+1	ROMno	Outdoor Control PCB ROM number
+2	 Run ForDfrst TstRun Dfrst EnFOff EnThOff	**Bitfields:** Bit 0 - Run/Stop Bit 1 - For Defrost Bit 3 - Test Run Bit 4 - Defrost Bit 5 - Enforced Fan Off Bit 6 - Enforced Thermo Off
+3	 RunSt Cyc ProtLvl ProtCd	**Bitfields:** Bit 0 - Run State Bit 4 - Cycle Condition Bit 8 - Protection Level Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	Inverter run state
+6	FANCD	Fan Con Code
+7	FANSt	Fan Con State
+8	Comp1RunTm	Comp1 Run Time [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	oEB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+17	TdSH	Discharge Gas Superheat [°C]
+19	Te1	Evaporating Temp1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+25	Info	Info
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	YFAN1	Bit 6 - Relay for FAN 1
	YFAN3	Bit 8 - Relay for FAN 3
	YCH	Bit 10 - Relay for Crank Case Heater 1
	Y211	Bit 12 - Relay for 4Way-Valve 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
	Y20A2	Bit 15 - Y20A2
+28		**Bitfields:**
	Y20B	Bit 0 - Y20B
	Y20C	Bit 1 - Y20C
	Y20F1	Bit 2 - Solenoid valve F1/Relay for Oil Back 1
	Y20G	Bit 4 - Solenoid valve G/Relay for Refrigerant Recovery
	Y52C1	Bit 6 - Relay for Inverter Compressor
	Y52C2	Bit 7 - Relay for Compressor2
	Y52C3	Bit 10 - Relay for Compressor3
	Y52C4	Bit 11 - Relay for Compressor4
	Y52C5	Bit 12 - Relay for Compressor5
	Y52C6	Bit 13 - Relay for Compressor6
+29	Comp2RunTm	Comp2 Run Time [Hr]
+31	H2	Total Frequency [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+36	A2	Compressor2 Current [A]
+37	Comp3RunTm	Comp3 Run Time [Hr]
+38	Comp4RunTm	Comp4 Run Time [Hr]
+39	Comp5RunTm	Comp5 Run Time [Hr]
+40	Comp6RunTm	Comp6 Run Time [Hr]
+41	A3	Compressor3 Current [A]
+42	A4	Compressor4 Current [A]
+43	A5	Compressor5 Current [A]
+44	A6	Compressor6 Current [A]
+45	Te2	Evaporating Temp2 [°C]
+46	Te3	Evaporating Temp3 [°C]
+47	Td3	Compressor 3 Top Temperature [°C]
+48	Td4	Compressor 4 Top Temperature [°C]
+49	Td5	Compressor 5 Top Temperature [°C]
+50	Td6	Compressor 6 Top Temperature [°C]
+51	cc	Run Compressor Quantity
+52	oE2	Expansion Valve 2 Opening [%]
+53	oE3	Expansion Valve 3 Opening [%]

- **Type Code = 1**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	Run	Bit 0 - Run/Stop

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Base Address	Input Registers	
	Short Name	Description
	ForDfrst	Bit 1 - For Defrost
	EmergRun	Bit 2 - Emergency Run
+3		**Bitfields:**
	RunSt	Bit 0 - Run State
	CycSt	Bit 4 - Cycle State
	ProtLvl	Bit 8 - Protection Level
	ProtCd	Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	Inverter run state
+6	FANCD1	FANCD1
+7	FAN1St	FAN1 run state
+8	Comp1RunTm	Comp1 Run Time [Hr]
+9	Comp1MntTm	Comp1 Run Time Since Maintenance [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	EVB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+17	TdSH	Discharge Gas Superheat [°C]
+18	Tsc	Sub-cooler bypass outlet temp [°C]
+19	Te1	Heat Exchanger Liquid Temperature 1 [°C]
+20	Tchg	Plate-type Heat Exchanger Liquid Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+25	Info1	Control Information 1
+26	Info2	Control Information 2
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	YFAN3	Bit 8 - Relay for FAN 3
	YFAN4	Bit 9 - Relay for FAN 4
	YCH	Bit 10 - Relay for Crank Case Heater 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
+28		**Bitfields:**
	Y20B	Bit 0 - Relay for Liquid Bypass
	Y20C	Bit 1 - Solenoid valve C/Relay for Gas-Liquid Bypass
	Y20F1	Bit 2 - Solenoid valve F1/Relay for Oil Back 1
	Y20G	Bit 4 - Solenoid valve G/Relay for Refrigerant Recovery
	YCHG	Bit 5 - Automatic charge solenoid valve CHG

- **Type Code = 5**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	ForDfrst	Bit 1 - For Defrost
	EmergRun	Bit 2 - Emergency Run
	TstRun	Bit 3 - Test Run
	HEXSt	Bit 12 - HEXSt
+3		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	RunSt CycSt ProtLvl ProtCd	Bit 0 - Run State Bit 4 - Cycle State Bit 8 - Protection Level Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	Inverter run state
+6	FANCD1	FANCD1
+7	FAN1St	FAN1 run state
+8	Comp1RunTm	Comp1 Run Time [Hr]
+9	Comp1MntTm	Comp1 Run Time Since Maintenance [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	EVB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+17	TdSH	Discharge Gas Superheat [°C]
+19	Te1	Heat Exchanger Liquid Temperature 1 [°C]
+20	Tchg	Plate-type Heat Exchanger Liquid Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+25	Info1	Control Information 1
+26	Info2	Control Information 2
+27	 C11 C13 C14 C15 C16 C17 CH1 Y211 Y212 Y20A1	**Bitfields:** Bit 0 - Compression Ratio Reduction Prevention Restricted Control Bit 1 - High PR. Increase Prevention Restricted Control Bit 2 - Inverter Module Temp Increase Prevention Restricted Control Bit 3 - Td Increase Prevention Restricted Control Bit 4 - TdSH Reduction Prevention Restricted Control Bit 5 - Overcurrent Prevention Restricted Control Bit 10 - Relay for Crank Case Heater 1 Bit 12 - Relay for 4Way-Valve 1 Bit 13 - Relay for 4Way-Valve 2 Bit 14 - Relay for Gass Bypass 1
+28	 Y20B Y20C Y20F1 20CHG Y52C1 X1 X2	**Bitfields:** Bit 0 - Relay for Liquid Bypass Bit 1 - Solenoid valve C/Relay for Gas-Liquid Bypass Bit 2 - Solenoid valve F1/Relay for Oil Back 1 Bit 5 - 20CHG Bit 6 - Relay for Inverter Compressor Bit 8 - Relay for Inverter Cooling Fan Bit 9 - Relay for Water Pump
+34	TBg	Relay Status [°C]
+35	Tg1	Heat Exchanger 1 Gas Side Temp. [°C]

- **Type Code = 8**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+1	ROMno	Outdoor Control PCB ROM number
+2	 ForDfrst EmergRun TstRun	**Bitfields:** Bit 1 - For Defrost Bit 2 - Emergency Run Bit 3 - Test Run
+3	 RunSt CycSt	**Bitfields:** Bit 0 - Run State Bit 4 - Cycle State

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Base Address	Input Registers	
	Short Name	Description
	ProtLvl ProtCd	Bit 8 - Protection Level Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	INVSt
+6	FANCD1	FANCD1
+7	FAN1St	FAN1St
+8	Comp1RunTm	Comp1 Run Time [Hr]
+9	Comp1MntTm	Comp1 Run Time Since Maintenance [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	EVB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+17	TdSH	Discharge Gas Superheat [°C]
+18	Tsc	Sub-cooler bypass outlet temp [°C]
+19	Te1	Heat Exchanger Liquid Temperature 1 [°C]
+20	Tchg	Plate-type Heat Exchanger Liquid Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+25	Info1	Control Information 1
+26	Info2	Control Information 2
+27	 C11 C13 C14 C15 C16 C17 YFAN3 YFAN4 YCH Y211 Y212 Y20A1 Y20A2	**Bitfields:** Bit 0 - Compression Ratio Reduction Prevention Restricted Control Bit 1 - High PR. Increase Prevention Restricted Control Bit 2 - Inverter Module Temp Increase Prevention Restricted Control Bit 3 - Td Increase Prevention Restricted Control Bit 4 - TdSH Reduction Prevention Restricted Control Bit 5 - Overcurrent Prevention Restricted Control Bit 8 - Relay for FAN 3 Bit 9 - Relay for FAN 4 Bit 10 - Relay for Crank Case Heater 1 Bit 12 - Relay for 4Way-Valve 1 Bit 13 - Relay for 4Way-Valve 2 Bit 14 - Relay for Gass Bypass 1 Bit 15 - Relay for Gass Bypass 2
+28	 Y20B Y20C Y20F1 Y20G YCHG Y52C1 Y52C2 Y52C3 Y52C4 Y52C5	**Bitfields:** Bit 0 - Relay for Liquid Bypass Bit 1 - Solenoid valve C/Relay for Gas-Liquid Bypass Bit 2 - Solenoid valve F1/Relay for Oil Back 1 Bit 4 - Solenoid valve G/Relay for Refrigerant Recovery Bit 5 - Automatic charge solenoid valve CHG Bit 6 - Relay for Inverter Compressor Bit 7 - Relay for Compressor2 Bit 10 - Relay for Compressor3 Bit 11 - Relay for Compressor4 Bit 12 - Relay for Compressor5
+29	Comp2RunTm	Comp2 Run Time [Hr]
+30	Comp2MntTm	Comp2 Run Time Since Maintenance [Hr]
+31	H2	Total Frequency [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+36	A2	Compressor2 Current [A]
+37	Comp3RunTm	Comp3 Run Time [Hr]
+38	Comp4RunTm	Comp4 Run Time [Hr]
+39	Comp5RunTm	Comp5 Run Time [Hr]
+41	A3	Compressor3 Current [A]

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Base Address	Input Registers	
	Short Name	Description
+42	A4	Compressor4 Current [A]
+43	A5	Compressor5 Current [A]
+45	Te2	Te2
+46	Te3	Te3
+47	Td3	Compressor 3 Top Temperature [°C]
+48	Td4	Compressor 4 Top Temperature [°C]
+49	Td5	Compressor 5 Top Temperature [°C]
+52	oE2	Expansion Valve 2 Opening [%]
+53	oE3	Expansion Valve 3 Opening [%]
+62		**Bitfields:**
	Y20A3	Bit 0 - Y20A3
	Y20A4	Bit 1 - Y20A4
	Y20A5	Bit 2 - Y20A5

- **Type Code = 2**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	ForDfrst	Bit 1 - For Defrost
	EmergRun	Bit 2 - Emergency Run
	TstRun	Bit 3 - Test Run
	HEXSt	Bit 12 - Heat Exchange State
+3		**Bitfields:**
	RunSt	Bit 0 - Run State
	CycSt	Bit 4 - Cycle State
	ProtLvl	Bit 8 - Protection Level
	ProtCd	Bit 12 - Protection Code
+4	INVCD	Inverter Stop Reason Code
+5	INVSt	Inverter run state
+6	FANCD1	FANCD1
+7	FAN1St	FAN1 run state
+8	Comp1RunTm	Comp1 Run Time [Hr]
+9	Comp1MntTm	Comp1 Run Time Since Maintenance [Hr]
+10	H1	Inverter Comp Frequency [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	EVB	Bypass Exp.V Opening [%]
+14	Pd	Discharge (high) Pressure x 0.1 [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+19	Te1	Heat Exchanger Liquid Temperature 1 [°C]
+20	Tchg	Plate-type Heat Exchanger Liquid Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin	Inv Fin Temperature [°C]
+23	A12	Inv Comp1 2nd Current x2 [A]
+24	A1	Inverter Compressor Current [A]
+25	Info1	Control Information 1
+26	Info2	Control Information 2
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	CH1	Bit 10 - Relay for Crank Case Heater 1
	CH2	Bit 11 - Relay for Crank Case Heater 2

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Base Address	Input Registers	
	Short Name	Description
	Y211	Bit 12 - Relay for 4Way-Valve 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
	Y20A2	Bit 15 - Relay for Gass Bypass 2
+28		**Bitfields:**
	Y20B	Bit 0 - Relay for Liquid Bypass
	Y20C	Bit 1 - Solenoid valve C/Relay for Gas-Liquid Bypass
	Y20F1	Bit 2 - Solenoid valve F1/Relay for Oil Back 1
	Y20F2	Bit 3 - Relay for Oil Back 2
	YCHG	Bit 5 - Automatic charge solenoid valve CHG
	Y52C1	Bit 6 - Relay for Inverter Compressor
	Y52C2	Bit 7 - Relay for Compressor2
	X1	Bit 8 - Relay for Inverter Cooling Fan
	X2	Bit 9 - Relay for Water Pump
+29	Comp2RunTm	Comp2 Run Time [Hr]
+30	Comp2MntTm	Comp2 Run Time Since Maintenance [Hr]
+31	H2	Total Frequency [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+34	TBg	Relay Status [°C]
+35	Tg1	Heat Exchanger 1 Gas Side Temp. [°C]
+36	A2	Compressor2 Current [A]

- **Type Code = 4**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	ForDfrst	Bit 1 - For Defrost
	EmergRun	Bit 2 - Emergency Run
	TstRun	Bit 3 - Test Run
	HEXSt	Bit 12 - Heat Exchange State
+3		**Bitfields:**
	RunSt	Bit 0 - Run State
	CycSt	Bit 4 - Cycle State
	ProtLvl	Bit 8 - Protection Level
	ProtCd	Bit 12 - Protection Code
+4	INV1Cd	Inverter 1 Stop Reason Code
+5	INV1St	Inverter 1 run state
+6	FAN1Cd	FANCON 1 Stop Reason Code
+7	FAN1St	FANCON 1 Run State
+8	Comp1RunTm	Comp1 Run Time [Hr]
+9	Comp1MntTm	Comp1 Run Time Since Maintenance [Hr]
+10	H1	Inverter 1 Comp Frequency x 0.1 [Hz]
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	EVB	Bypass Exp.V Opening [%]
+14	Pd	High Pressure [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+18	Tsc	Subcooler Temp [°C]
+19	Te1	Heat Exchanger Liquid Temperature 1 [°C]
+20	Tchg	Plate-type Heat Exchanger Liquid Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin1	Inverter 1 Fin Temperature [°C]
+23	INV1A2	Inverter Comp 1 2nd Current x 0.1 [A]
+24	INV1A1	Inverter Compressor 1 Primary Current x 0.1 [A]
+25	Info1	Control Information 1 x 0.1 [Hz]

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Base Address	Input Registers	
	Short Name	Description
+26	Info2	Control Information 2 [°C]
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	CH1	Bit 10 - Relay for Crank Case Heater 1
	CH2	Bit 11 - Relay for Crank Case Heater 2
	Y211	Bit 12 - Relay for 4Way-Valve 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
+28		**Bitfields:**
	Y20B	Bit 0 - Relay for Liquid Bypass
	Y20C	Bit 1 - Solenoid valve C/Relay for Gas-Liquid Bypass
	Y20F	Bit 2 - Relay for Oil Back
	YCHG	Bit 5 - Automatic charge solenoid valve CHG
	RY1	Bit 6 - Relay for Inverter Compressor
	RY2	Bit 7 - Relay for Compressor 2
	20X1	Bit 8 - Relay for X1
	20X2	Bit 9 - Relay for X2
+29	Comp2RunTm	Comp2 Run Time [Hr]
+30	Comp2MntTm	Comp2 Run Time Since Maintenance [Hr]
+31	H2	Inverter 2 Comp Frequency x 0.1 [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+35	Tg1	Heat Exchanger 1 Gas Side Temp. [°C]
+36	INV2A1	Inverter Compressor 2 Primary Current x 0.1 [A]
+45	Te2	Heat Exchanger Liquid Temperature 2 [°C]
+52	oE2	Expansion Valve 2 Opening [%]
+54	Tfin2	Inverter 2 Fin Temperature [°C]
+55	Tg2	Heat Exchanger 2 Gas Side Temp. [°C]
+56	Ts	Suction Gas Temp [°C]
+57	INV2A2	Inverter Comp 2 2nd Current x 0.1 [A]
+58	EVD1	Exp.V 1 Opening for Outdoor Hot Gas Defrost [%]
+59	EVD2	Exp.V 2 Opening for Outdoor Hot Gas Defrost [%]

- **Type Code = 7**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+1	ROMno	Outdoor Control PCB ROM number
+2		**Bitfields:**
	ForDfrst	Bit 1 - For Defrost
	EmergRun	Bit 2 - Emergency Run
	TstRun	Bit 3 - Test Run
	HEXSt	Bit 12 - Heat Exchange State
+3		**Bitfields:**
	RunSt	Bit 0 - Run State
	CycSt	Bit 4 - Cycle State
	ProtLvl	Bit 8 - Protection Level
	ProtCd	Bit 12 - Protection Code
+4	INV1Cd	Inverter 1 Stop Reason Code
+5	INV1St	Inverter 1 run state
+6	FAN1Cd	FANCON 1 Stop Reason Code
+7	FAN1St	FANCON 1 Run State
+8	Comp1RunTm	Comp1 Run Time [Hr]
+9	Comp1MntTm	Comp1 Run Time Since Maintenance [Hr]
+10	H1	Inverter 1 Comp Frequency x 0.1 [Hz]

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Base Address	Input Registers	
	Short Name	Description
+11	Fo	Air Flow Fan Tap
+12	oE1	Expansion Valve 1 Opening [%]
+13	EVB	Bypass Exp.V Opening [%]
+14	Pd	High Pressure [MPa]
+15	Ps	Suction (low) Pressure [MPa]
+16	Td1	Inverter Compressor 1 Top Temperature [°C]
+18	Tsc	Subcooler Temp [°C]
+19	Te1	Heat Exchanger Liquid Temperature 1 [°C]
+20	Tchg	Plate-type Heat Exchanger Liquid Temp1 [°C]
+21	Ta	Outdoor Temperature [°C]
+22	Tfin1	Inverter 1 Fin Temperature [°C]
+23	INV1A2	Inverter Comp 1 2nd Current x 0.1 [A]
+24	INV1A1	Inverter Compressor 1 Primary Current x 0.1 [A]
+25	Info1	Control Information 1 x 0.1 [Hz]
+26	Info2	Control Information 2 [°C]
+27		**Bitfields:**
	C11	Bit 0 - Compression Ratio Reduction Prevention Restricted Control
	C13	Bit 1 - High PR. Increase Prevention Restricted Control
	C14	Bit 2 - Inverter Module Temp Increase Prevention Restricted Control
	C15	Bit 3 - Td Increase Prevention Restricted Control
	C16	Bit 4 - TdSH Reduction Prevention Restricted Control
	C17	Bit 5 - Overcurrent Prevention Restricted Control
	CH1	Bit 10 - Relay for Crank Case Heater 1
	CH2	Bit 11 - Relay for Crank Case Heater 2
	Y211	Bit 12 - Relay for 4Way-Valve 1
	Y212	Bit 13 - Relay for 4Way-Valve 2
	Y20A1	Bit 14 - Relay for Gass Bypass 1
+28		**Bitfields:**
	Y20B	Bit 0 - Y20B
	Y20C	Bit 1 - Y20C
	Y20F1	Bit 2 - Y20F1
	Y20F2	Bit 3 - Y20F2
	YCHG	Bit 5 - Automatic charge solenoid valve CHG
	RY1	Bit 6 - Relay for Inverter Compressor
	RY2	Bit 7 - Relay for Compressor 2
	20X1	Bit 8 - Relay for X1
	20X2	Bit 9 - Relay for X2
+29	Comp2RunTm	Comp2 Run Time [Hr]
+30	Comp2MntTm	Comp2 Run Time Since Maintenance [Hr]
+31	H2	Inverter 2 Comp Frequency x 0.1 [Hz]
+32	Td2	Compressor 2 Top Temperature [°C]
+33	Td	Operating Comp. Top Temperature [°C]
+35	Tg1	Heat Exchanger 1 Gas Side Temp. [°C]
+36	INV2A1	Inverter Compressor 2 Primary Current x 0.1 [A]
+45	Te2	Heat Exchanger Liquid Temperature 2 [°C]
+52	oE2	Expansion Valve 2 Opening [%]
+54	Tfin2	Inverter 2 Fin Temperature [°C]
+57	INV2A2	Inverter Comp 2 2nd Current x 0.1 [A]
+58	EVD1	Exp.V 1 Opening for Outdoor Hot Gas Defrost [%]
+59	EVD2	Exp.V 2 Opening for Outdoor Hot Gas Defrost [%]
+60	Tpf	Tpf
+61	Tpb	Tpb

4.1.5.3 Hitachi PRO Enumerated Parameters

- **Run State (RunSt)**

Value	Description
0	SW Off

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Value	Description
1	Th. Off
2	Pump Down
3	SW On
4	StartCmp
5	Start After def
6	StartRun1
7	StartRun2
8	Normal
9	Oil Return
10	Def1Stnby
11	Def2Stnby
12	P Diff Cntrl
13	Defrost

- **Cycle State (CycSt)**

Value	Description
0	Stop
1	Heat
2	Cool
3	C&H
4	Def
5	Def
6	Def
7	Def

- **Protection Level (ProtLvl)**

Value	Description
0	--
1	Enf. Decre.
2	Ban Incre.
3	Ban Decre.
4	Enf. Incre.

- **Inverter run state (INVSt)**

Value	Description
0	Usual
4	IPM Error, Over Current
9	Moment Over Current
10	Usually accelerating
13	High Fin Temperature
14	Usually slowing down
17	Electron Thermal Activation
18	Usually steading
21	Insufficient Voltage
22	After the over-load during the acceleration
25	Excessive Voltage
26	After the over-load during the slowdown
29	Transmitting Abnormal
30	After the over-load during the steady
33	Current Sensor Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
38	Lost of Voltage
45	Micro-Computer Reset
49	Ground Short Detection
53	Lost of phase Abnormality
61	Stop of INV

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- **FAN1 run state (FAN1St)**

Value	Description
0	Usual
4	Driver IC Error, Over Current
9	Moment Over Current
10	Usually accelerating
13	High Fin Temperature
14	Usually slowing down
17	Electron Thermal Activation
18	Usually steading
21	Insufficient Voltage
25	Excessive Voltage
26	Slowdown by Overcurrent
29	Transmitting Abnormal
37	Instantaneous Picking
45	Micro-Computer Reset
49	Start Error
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area
65	FAN-Control Retry
69	Control Abnormality

- **Heat Exchange State (HEXSt)**

Value	Description
1	Heat Main(Lo)
2	Cool Main(Lo)
8	Cool Main(Hi)
10	Heat Main(Hi)

- **Run State (RunSt)**

Value	Description
0	SW Off
1	Th. Off
2	SW On
3	SrartCmp
4	StartRun
5	Normal
6	Defrost1
7	Defrost2

- **Cycle Condition (Cyc)**

Value	Description
1	Cool
2	Stop
3	Stop
4	Heat
5	Heat
6	Heat
7	Heat

- **Fan Con State (FANSt)**

Value	Description
0	Usual
4	Driver IC Error, Over Current
9	Moment Over Current
10	Usually accelerating
13	High Fin Temperature

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Value	Description
14	Usually slowing down
17	Electron Thermal Activation
18	Usually steading
21	Insufficient Voltage
25	Excessive Voltage
26	Slowdown by Overcurrent
29	Transmitting Abnormal
37	Instantaneous Picking
45	Micro-Computer Reset
49	Start Error
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area

- **Heat Exchange State (HEXSt)**

Value	Description
1	Heat Main(Lo)
2	Cool Main(Lo)
4	Heat Main(Hi)
8	Cool Main(Hi)

- **Inverter 1 run state (INV1St)**

Value	Description
0	Usual Stop
1	Constant Speed
4	IPM Error, Over Current
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
33	Current Sensor Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
42	Forced deceleration at voltage phase limiter activation
45	Micro-Computer Reset
49	Ground Short Detection
53	Lost of phase Abnormality
61	Stop of INV
65	Stop of INV
69	Com. Abnormal
73	Pro. Activation
77	Pro. Abnormal
81	63H Early Return
85	Step-out Detection
89	PCB Setting Abnormality

- **Inverter 2 run state (INV2St)**

Value	Description
0	Usual Stop
1	Constant Speed
4	IPM Error, Over Current

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Value	Description
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
33	Current Sensor Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
42	Forced deceleration at voltage phase limiter activation
45	Micro-Computer Reset
49	Ground Short Detection
53	Lost of phase Abnormality
61	Stop of INV
65	Stop of INV
69	Com. Abnormal
73	Pro. Activation
77	Pro. Abnormal
81	63H Early Return
85	Step-out Detection
89	PCB Setting Abnormality

- **FANCON 1 Run State (FAN1St)**

Value	Description
0	Usual
1	Constant Speed
4	Driver IC Error, Over Current
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
45	Micro-Computer Reset
46	Rise prohibit 1
49	Start Error
50	Driving reverse rotation
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area
65	FAN-Control Retry
69	Control Abnormality
85	Step-out Detection

- **FANCON 2 Run State (FAN2St)**

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Value	Description
0	Usual
1	Constant Speed
4	Driver IC Error, Over Current
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
45	Micro-Computer Reset
46	Rise prohibit 1
49	Start Error
50	Driving reverse rotation
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area
65	FAN-Control Retry
69	Control Abnormality
85	Step-out Detection

- **HEXSt (HEXSt)**

Value	Description
1	Heat Main(Lo)
2	Cool Main(Lo)
4	Heat Main(Hi)
8	Cool Main(Hi)

- **INVSt (INVSt)**

Value	Description
0	Usual Stop
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Inverter Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Inverter Overcurrent)
17	Usually steading
20	Inverter Voltage Decrease
21	After the over-load during the acceleration
24	Inverter Voltage Increase
25	After the over-load during the slowdown
28	Abnormal Inverter Transmission
29	After the over-load during the steady
32	Abnormal Current Sensor
33	Unbalance of Voltage
36	Instantaneous Power Failure Detection
37	Lost of Voltage
44	Micro-Computer Reset
48	Ground Fault Detection
52	Open-Phase Detection
60	Stop of Inverter

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Value	Description
64	Inverter Malfunction
68	Abnormal Control
72	Forced Stoppage by High Pressure Detection
76	Abnormality of Picking up Circuit for Protection
80	63H Early Return
84	Abnormal Compressor Motor (Step-Out)
88	Abnormal Combination of PCB
100	Abnormal Inctruction Frequency

- **FAN1St (FAN1St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FAN2St (FAN2St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control

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Value	Description
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FAN3St (FAN3St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FAN4St (FAN4St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FANSt (FANSt)**

Value	Description
0	Usual

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Value	Description
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving

- **Run State (RunSt)**

Value	Description
0	SW Off
1	Th. Off
2	Pump Down
3	SW On
4	StartCmp
5	Start After def
6	StartRun1
7	StartRun2
8	Normal
9	Oil Return
10	Def1Stnby
11	Def2Stnby
12	P Diff Cntrl
13	Defrost

- **Cycle State (CycSt)**

Value	Description
0	Stop
1	Heat
2	Cool
3	C&H
4	Def
5	Def
6	Def
7	Def

- **Protection Level (ProtLvl)**

Value	Description
0	--
1	Enf. Decre.
2	Ban Incre.
3	Ban Decre.
4	Enf. Incre.

- **Inverter run state (INVSt)**

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Value	Description
0	Usual
4	IPM Error, Over Current
9	Moment Over Current
10	Usually accelerating
13	High Fin Temperature
14	Usually slowing down
17	Electron Thermal Activation
18	Usually steading
21	Insufficient Voltage
22	After the over-load during the acceleration
25	Excessive Voltage
26	After the over-load during the slowdown
29	Transmitting Abnormal
30	After the over-load during the steady
33	Current Sensor Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
38	Lost of Voltage
45	Micro-Computer Reset
49	Ground Short Detection
53	Lost of phase Abnormality
61	Stop of INV

- **FAN1 run state (FAN1St)**

Value	Description
0	Usual
4	Driver IC Error, Over Current
9	Moment Over Current
10	Usually accelerating
13	High Fin Temperature
14	Usually slowing down
17	Electron Thermal Activation
18	Usually steading
21	Insufficient Voltage
25	Excessive Voltage
26	Slowdown by Overcurrent
29	Transmitting Abnormal
37	Instantaneous Picking
45	Micro-Computer Reset
49	Start Error
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area
65	FAN-Control Retry
69	Control Abnormality

- **Heat Exchange State (HEXSt)**

Value	Description
1	Heat Main(Lo)
2	Cool Main(Lo)
8	Cool Main(Hi)
10	Heat Main(Hi)

- **Run State (RunSt)**

Value	Description
0	SW Off
1	Th. Off
2	SW On

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Value	Description
3	SrartCmp
4	StartRun
5	Normal
6	Defrost1
7	Defrost2

- **Cycle Condition (Cyc)**

Value	Description
1	Cool
2	Stop
3	Stop
4	Heat
5	Heat
6	Heat
7	Heat

- **Fan Con State (FANSt)**

Value	Description
0	Usual
4	Driver IC Error, Over Current
9	Moment Over Current
10	Usually accelerating
13	High Fin Temperature
14	Usually slowing down
17	Electron Thermal Activation
18	Usually steading
21	Insufficient Voltage
25	Excessive Voltage
26	Slowdown by Overcurrent
29	Transmitting Abnormal
37	Instantaneous Picking
45	Micro-Computer Reset
49	Start Error
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area

- **Heat Exchange State (HEXSt)**

Value	Description
1	Heat Main(Lo)
2	Cool Main(Lo)
4	Heat Main(Hi)
8	Cool Main(Hi)

- **Inverter 1 run state (INV1St)**

Value	Description
0	Usual Stop
1	Constant Speed
4	IPM Error, Over Current
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage

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Value	Description
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
33	Current Sensor Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
42	Forced deceleration at voltage phase limiter activation
45	Micro-Computer Reset
49	Ground Short Detection
53	Lost of phase Abnormality
61	Stop of INV
65	Stop of INV
69	Com. Abnormal
73	Pro. Activation
77	Pro. Abnormal
81	63H Early Return
85	Step-out Detection
89	PCB Setting Abnormality

- **Inverter 2 run state (INV2St)**

Value	Description
0	Usual Stop
1	Constant Speed
4	IPM Error, Over Current
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
33	Current Sensor Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
42	Forced deceleration at voltage phase limiter activation
45	Micro-Computer Reset
49	Ground Short Detection
53	Lost of phase Abnormality
61	Stop of INV
65	Stop of INV
69	Com. Abnormal
73	Pro. Activation
77	Pro. Abnormal
81	63H Early Return
85	Step-out Detection
89	PCB Setting Abnormality

- **FANCON 1 Run State (FAN1St)**

Value	Description
0	Usual
1	Constant Speed
4	Driver IC Error, Over Current
6	Usually accelerating
9	Moment Over Current

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Value	Description
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
45	Micro-Computer Reset
46	Rise prohibit 1
49	Start Error
50	Driving reverse rotation
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area
65	FAN-Control Retry
69	Control Abnormality
85	Step-out Detection

- **FANCON 2 Run State (FAN2St)**

Value	Description
0	Usual
1	Constant Speed
4	Driver IC Error, Over Current
6	Usually accelerating
9	Moment Over Current
10	Usually slowing down
13	High Fin Temperature
14	After the over-load during the acceleration
17	Electron Thermal Activation
18	After the over-load during the slowdown
21	Insufficient Voltage
22	After the over-load during the constant speed
25	Excessive Voltage
29	Transmitting Abnormal
34	Unbalance of Voltage
37	Instantaneous Picking
45	Micro-Computer Reset
46	Rise prohibit 1
49	Start Error
50	Driving reverse rotation
53	Abnormal Speed
57	Abnormal Position Sensing
61	Drive Prohibition Area
65	FAN-Control Retry
69	Control Abnormality
85	Step-out Detection

- **HEXSt (HEXSt)**

Value	Description
1	Heat Main(Lo)
2	Cool Main(Lo)
4	Heat Main(Hi)
8	Cool Main(Hi)

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- **INVSt (INVSt)**

Value	Description
0	Usual Stop
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Inverter Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Inverter Overcurrent)
17	Usually steading
20	Inverter Voltage Decrease
21	After the over-load during the acceleration
24	Inverter Voltage Increase
25	After the over-load during the slowdown
28	Abnormal Inverter Transmission
29	After the over-load during the steady
32	Abnormal Current Sensor
33	Unbalance of Voltage
36	Instantaneous Power Failure Detection
37	Lost of Voltage
44	Micro-Computer Reset
48	Ground Fault Detection
52	Open-Phase Detection
60	Stop of Inverter
64	Inverter Malfunction
68	Abnormal Control
72	Forced Stoppage by High Pressure Detection
76	Abnormality of Picking up Circuit for Protection
80	63H Early Return
84	Abnormal Compressor Motor (Step-Out)
88	Abnormal Combination of PCB
100	Abnormal Inctruction Frequency

- **FAN1St (FAN1St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

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- **FAN2St (FAN2St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FAN3St (FAN3St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FAN4St (FAN4St)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase

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Value	Description
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving
64	Fan Controller Malfunction
68	Abnormal Control
84	Abnormal Fan Motor (Step-Out)
100	Abnormal Inctruction Frequency

- **FANSt (FANSt)**

Value	Description
0	Usual
4	Driver IC Error Signal Detection
8	Instantaneous Overcurrent
9	Usually accelerating
12	Fan Controller Fin Temperature Increase
13	Usually slowing down
16	Electronic Thermal Protection(Overcurrent)
17	Usually steading
20	Fan Controller Voltage Decrease
24	Fan Controller Voltage Increase
25	Slowdown by Overcurrent
28	Abnormal Fan Controller Transmission
32	Abnormal Current Sensor
36	Instantaneous Power Failure
44	Micro-Computer Reset
48	Ground Fault Detection
52	Abnormal Power Source Phase
56	Abnormality of Detection for Fan Motor Position
60	Reverse Driving

4.1.6 LG

4.1.6.1 LG PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+1	EEV	Electronic Expansion Valve [pls]
+2	PipeIn	Pipe In x 0.1 [°C]
+3	PipeOut	Pipe Out x 0.1 [°C]

4.1.6.2 LG PRO Outdoor Units

- **SUPER3 Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 9

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Base Address	Input Registers	
	Short Name	Description
+1	Mode	Operation Mode
+2	Err	Error Code
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+15	InvTrcFrq	Inverter current frequency [Hz]
+19	Fan1Trc	Fan1 current frequency [Hz]
+20	Fan2Trc	Fan2 current frequency [Hz]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	Comp1DisT	Constant compressor1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+56	 4way CComp HotGas	**Bitfields:** Bit 1 - 4 WAY valve Bit 13 - Constant compressor Bit 14 - Hot gas
+61	MICOM	MICOM version

- **SUPER3 Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 10
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+15	InvTrcFrq	Inverter current frequency [Hz]
+19	Fan1Trc	Fan1 current frequency [Hz]
+20	Fan2Trc	Fan2 current frequency [Hz]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	Comp1DisT	Constant compressor1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+56		**Bitfields:**
	4way	Bit 1 - 4 WAY valve
	CComp	Bit 13 - Constant compressor
	HotGas	Bit 14 - Hot gas
+61	MICOM	MICOM version

- **SUPER4 Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	Mode	Operation Mode
+2	Err	Error Code
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+16	Inv2TrgFrq	Inverter 2 target frequency [Hz]
+17	Inv2TrcFrq	Inverter 2 current frequency [Hz]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+25	ViEEV1	Vapor injection EEV1 [pls]
+26	ViEEV2	Vapor injection EEV2 [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+32	Inv2DisT	Inverter 2 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+40	Inv2InCT	Inverter 2 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+42	Inv2InVT	Inverter 2 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+46	Inv2PhsCT	Inverter 2 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+51	Inv2DcLnk	Inverter 2 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+53	Inv2IpmT	Inverter 2 IPM temperature [°C]
+56		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	4way	Bit 1 - 4 WAY valve
	RcvIn	Bit 5 - Normal close valve
	RcvOut	Bit 6 - Normal open valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	Inv2HtVlv	Bit 9 - Inverter2 heater
	OilLvl1	Bit 10 - Oil level 1
	OilLvl2	Bit 11 - Oil level 2
	CompOper	Bit 13 - Compressor operation
+57		**Bitfields:**
	Inv1Bkp	Bit 9 - Inverter1 backup
	Inv2Bkp	Bit 10 - Inverter2 backup
+61	MICOM	MICOM version
+63		**Bitfields:**
	CompQty	Bit 0 - Compressor quantity
	Inv1Cap	Bit 2 - Inverter 1 capacity [HP]
	Inv2Cap	Bit 6 - Inverter 2 capacity [HP]

- **SUPER4 Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 6
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+16	Inv2TrgFrq	Inverter 2 target frequency [Hz]
+17	Inv2TrcFrq	Inverter 2 current frequency [Hz]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+25	ViEEV1	Vapor injection EEV1 [pls]
+26	ViEEV2	Vapor injection EEV2 [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+32	Inv2DisT	Inverter 2 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+40	Inv2InCT	Inverter 2 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+42	Inv2InVT	Inverter 2 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+46	Inv2PhsCT	Inverter 2 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+51	Inv2DcLnk	Inverter 2 DC LINK voltage [V]

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Base Address	Input Registers	
	Short Name	Description
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+53	Inv2IpmT	Inverter 2 IPM temperature [°C]
+56		**Bitfields:**
	4way	Bit 1 - 4 WAY valve
	RcvIn	Bit 5 - Normal close valve
	RcvOut	Bit 6 - Normal open valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	Inv2HtVlv	Bit 9 - Inverter2 heater
	OilLvl1	Bit 10 - Oil level 1
	OilLvl2	Bit 11 - Oil level 2
	CompOper	Bit 13 - Compressor operation
+57		**Bitfields:**
	Inv1Bkp	Bit 9 - Inverter1 backup
	Inv2Bkp	Bit 10 - Inverter2 backup
+61	MICOM	MICOM version
+63		**Bitfields:**
	CompQty	Bit 0 - Compressor quantity
	Inv1Cap	Bit 2 - Inverter 1 capacity [HP]
	Inv2Cap	Bit 6 - Inverter 2 capacity [HP]

- **WATER4 Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+1	Mode	Operation Mode
+2	Err	Error Code
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+56		**Bitfields:**
	4way	Bit 1 - 4 WAY valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	OilLvl1	Bit 10 - Oil level 1
	CompOper	Bit 13 - Compressor operation
	HotGas	Bit 14 - Hot gas
+57		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	Inv1Bkp DDC	Bit 9 - Inverter1 backup Bit 11 - DDC
+61	MICOM	MICOM version
+63	CompQty	Compressor quantity

- **WATER4 Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+56	 4way Inv1HtVlv OilLvl1 CompOper HotGas	**Bitfields:** Bit 1 - 4 WAY valve Bit 8 - Inverter1 heater Bit 10 - Oil level 1 Bit 13 - Compressor operation Bit 14 - Hot gas
+57	 Inv1Bkp DDC	**Bitfields:** Bit 9 - Inverter1 backup Bit 11 - DDC
+61	MICOM	MICOM version
+63	CompQty	Compressor quantity

- **MULTIV_S Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3
+1	Mode	Operation Mode
+2	Err	Error Code
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+19	Fan1Trc	FAN1 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+56	Inv1HtVlv CompOper	**Bitfields:** Bit 8 - Inverter1 heater Bit 13 - Compressor operation
+61	MICOM	MICOM version
+63	CompQty	Compressor quantity

- **MULTIV_S Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+19	Fan1Trc	FAN1 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+56	Inv1HtVlv CompOper	**Bitfields:** Bit 8 - Inverter1 heater Bit 13 - Compressor operation

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Base Address	Input Registers	
	Short Name	Description
+61	MICOM	MICOM version
+63	CompQty	Compressor quantity

- **SUPER5 Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+1	Mode	Operation Mode
+2	Err	Error Code
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+16	Inv2TrgFrq	Inverter 2 target frequency [Hz]
+17	Inv2TrcFrq	Inverter 2 current frequency [Hz]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+25	ViEEV1	Vapor injection EEV1 [pls]
+26	ViEEV2	Vapor injection EEV2 [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+32	Inv2DisT	Inverter 2 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+40	Inv2InCT	Inverter 2 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+42	Inv2InVT	Inverter 2 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+46	Inv2PhsCT	Inverter 2 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+51	Inv2DcLnk	Inverter 2 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+53	Inv2IpmT	Inverter 2 IPM temperature [°C]
+56		**Bitfields:**
	4way	Bit 1 - 4 WAY valve
	RcvIn	Bit 5 - Normal close valve
	RcvOut	Bit 6 - Normal open valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	Inv2HtVlv	Bit 9 - Inverter2 heater
	OilLvl1	Bit 10 - Oil level 1
	OilLvl2	Bit 11 - Oil level 2

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Base Address	Input Registers	
	Short Name	Description
	CompOper	Bit 13 - Compressor operation
+57		**Bitfields:**
	Inv1Bkp	Bit 9 - Inverter1 backup
	Inv2Bkp	Bit 10 - Inverter2 backup
+61	MICOM	MICOM version
+63		**Bitfields:**
	CompQty	Bit 0 - Compressor quantity
	Inv1Cap	Bit 2 - Inverter 1 capacity [HP]
	Inv2Cap	Bit 6 - Inverter 2 capacity [HP]

- **SUPER5 Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+16	Inv2TrgFrq	Inverter 2 target frequency [Hz]
+17	Inv2TrcFrq	Inverter 2 current frequency [Hz]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+25	ViEEV1	Vapor injection EEV1 [pls]
+26	ViEEV2	Vapor injection EEV2 [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+32	Inv2DisT	Inverter 2 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+40	Inv2InCT	Inverter 2 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+42	Inv2InVT	Inverter 2 input voltage [V]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+46	Inv2PhsCT	Inverter 2 phase current x 0.1 [A]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+51	Inv2DcLnk	Inverter 2 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+53	Inv2IpmT	Inverter 2 IPM temperature [°C]
+56		**Bitfields:**
	4way	Bit 1 - 4 WAY valve
	RcvIn	Bit 5 - Normal close valve
	RcvOut	Bit 6 - Normal open valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	Inv2HtVlv	Bit 9 - Inverter2 heater

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Base Address	Input Registers	
	Short Name	Description
	OilLvl1	Bit 10 - Oil level 1
	OilLvl2	Bit 11 - Oil level 2
	CompOper	Bit 13 - Compressor operation
+57		**Bitfields:**
	Inv1Bkp	Bit 9 - Inverter1 backup
	Inv2Bkp	Bit 10 - Inverter2 backup
+61	MICOM	MICOM version
+63		**Bitfields:**
	CompQty	Bit 0 - Compressor quantity
	Inv1Cap	Bit 2 - Inverter 1 capacity [HP]
	Inv2Cap	Bit 6 - Inverter 2 capacity [HP]

4.1.6.3 LG PRO Enumerated Parameters

- **Operation Mode (Mode)**

Value	Description
0	OFF
1	COOL
2	HEAT
3	OFF

- **Inverter 1 capacity [HP] (Inv1Cap)**

Value	Description
0	0
1	4.4
2	4.8
3	6.8
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0

- **Inverter 2 capacity [HP] (Inv2Cap)**

Value	Description
0	0
1	4.4
2	4.8
3	6.8
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0

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Value	Description
14	0
15	0

4.1.7 LGMV

4.1.7.1 LGMV PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+0	Capa	Capacity [kBtu/h]
+1	EEV	Electronic Expansion Valve [pls]
+2	PipeIn	Pipe In x 0.1 [°C]
+3	PipeOut	Pipe Out x 0.1 [°C]
+4	SC/SH	Super Cool/Super Heat

4.1.7.2 LGMV PRO Outdoor Units

- **MultiV IV Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+1	Mode	Operation Mode
+2	Err	Error Code
+3	AvgT	Average indoor temperature x 0.1 [°C]
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+16	Inv2TrgFrq	Inverter 2 target frequency [Hz]
+17	Inv2TrcFrq	Inverter 2 current frequency [Hz]
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+25	ViEEV1	Vapor injection EEV1 [pls]
+26	ViEEV2	Vapor injection EEV2 [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+32	Inv2DisT	Inverter 2 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+40	Inv2InCT	Inverter 2 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+42	Inv2InVT	Inverter 2 input voltage [V]
+43	Inv1PwrFrq	Inverter 1 power frequency [Hz]
+44	Inv2PwrFrq	Inverter 2 power frequency [Hz]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+46	Inv2PhsCT	Inverter 2 phase current x 0.1 [A]
+47	Fan1PhsCT	Fan1 phase current x 0.1 [A]
+48	Fan2PhsCT	Fan2 phase current x 0.1 [A]
+49	FanDcLnk	Fan DC LINK voltage [V]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+51	Inv2DcLnk	Inverter 2 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+53	Inv2IpmT	Inverter 2 IPM temperature [°C]
+54	FanHtSnkT	Outdoor fan heat sink temperature x 0.1 [°C]
+55	DrifSnow	Drifted snow
+56		**Bitfields:**
	Accum	Bit 0 - Oil return valve
	4way	Bit 1 - 4 WAY valve
	HexVlv	Bit 2 - Heat exchanger valve
	HexUpVlv	Bit 3 - Heat exchanger top valve
	HexDnVlv	Bit 4 - Heat exchanger bottom valve
	RcvIn	Bit 5 - Normal close valve
	RcvOut	Bit 6 - Normal open valve
	SuctVlv	Bit 7 - Suction valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	Inv2HtVlv	Bit 9 - Inverter2 heater
	OilLvl1	Bit 10 - Oil level 1
	OilLvl2	Bit 11 - Oil level 2

- **MultiV IV Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	Inv1TrgFrq	Inverter 1 target frequency [Hz]
+15	Inv1TrcFrq	Inverter 1 current frequency [Hz]
+16	Inv2TrgFrq	Inverter 2 target frequency [Hz]
+17	Inv2TrcFrq	Inverter 2 current frequency [Hz]
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+25	ViEEV1	Vapor injection EEV1 [pls]
+26	ViEEV2	Vapor injection EEV2 [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	Inv1DisT	Inverter 1 discharge temperature x 0.1 [°C]
+32	Inv2DisT	Inverter 2 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	Inv1InCT	Inverter 1 input current x 0.1 [A]
+40	Inv2InCT	Inverter 2 input current x 0.1 [A]
+41	Inv1InVT	Inverter 1 input voltage [V]
+42	Inv2InVT	Inverter 2 input voltage [V]
+43	Inv1PwrFrq	Inverter 1 power frequency [Hz]
+44	Inv2PwrFrq	Inverter 2 power frequency [Hz]
+45	Inv1PhsCT	Inverter 1 phase current x 0.1 [A]
+46	Inv2PhsCT	Inverter 2 phase current x 0.1 [A]
+47	Fan1PhsCT	Fan1 phase current x 0.1 [A]
+48	Fan2PhsCT	Fan2 phase current x 0.1 [A]
+49	FanDcLnk	Fan DC LINK voltage [V]
+50	Inv1DcLnk	Inverter 1 DC LINK voltage [V]
+51	Inv2DcLnk	Inverter 2 DC LINK voltage [V]
+52	Inv1IpmT	Inverter 1 IPM temperature [°C]
+53	Inv2IpmT	Inverter 2 IPM temperature [°C]
+54	FanHtSnkT	Outdoor fan heat sink temperature x 0.1 [°C]
+55	DrifSnow	Drifted snow
+56		**Bitfields:**
	Accum	Bit 0 - Oil return valve
	4way	Bit 1 - 4 WAY valve
	HexVlv	Bit 2 - Heat exchanger valve
	HexUpVlv	Bit 3 - Heat exchanger top valve
	HexDnVlv	Bit 4 - Heat exchanger bottom valve
	RcvIn	Bit 5 - Normal close valve
	RcvOut	Bit 6 - Normal open valve
	SuctVlv	Bit 7 - Suction valve
	Inv1HtVlv	Bit 8 - Inverter1 heater
	Inv2HtVlv	Bit 9 - Inverter2 heater
	OilLvl1	Bit 10 - Oil level 1
	OilLvl2	Bit 11 - Oil level 2

- **MultiV Plus II Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3
+1	Mode	Operation Mode
+2	Err	Error Code
+3	AvgT	Average indoor temperature x 0.1 [°C]
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]
+18	Fan1Trg	Fan1 target frequency [Hz]
+19	Fan1Trc	Fan1 current frequency [Hz]

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Base Address	Input Registers	
	Short Name	Description
+20	Fan2Trc	Fan2 current frequency [Hz]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	CompDisT	Constant compressor discharge temperature x 0.1 [°C]
+34	HexTF	Heat exchanger pipe temperature (front) x 0.1 [°C]
+35	HexTB	Heat exchanger pipe temperature (back/rear) x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvCT	Inverter current value x 0.1 [A]
+40	CompCT	Compressor current value [A]
+41	InvV	Inverter voltage [V]
+42	CompV	Compressor voltage [V]
+43	PwrFrq	Power frequency [Hz]
+45	InvI	Inverter current x 0.1 [A]
+47	Fan1I	Fan1 current x 0.1 [A]
+48	Fan2I	Fan2 current x 0.1 [A]
+49	DcLnk	DC Link voltage [V]
+56	 4way PCBFan CComp HotGas	**Bitfields:** Bit 1 - 4 WAY valve Bit 12 - PCB fan Bit 13 - Constant compressor Bit 14 - Hot gas
+57	 LiqIjtInv LiqIjtStd	**Bitfields:** Bit 0 - Liquid injection valve (inverter) Bit 1 - Liquid injection valve (standard)
+58	Fan1V	Fan1 voltage [V]
+59	Fan2V	Fan2 voltage [V]
+60	CompHtSnkT	Compressor heat sink temperature [°C]
+61	PCBVer	PCB version
+62	EEPVer	EEP version

- **MultiV Plus II Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]
+18	Fan1Trg	Fan1 target frequency [Hz]
+19	Fan1Trc	Fan1 current frequency [Hz]
+20	Fan2Trc	Fan2 current frequency [Hz]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	CompDisT	Constant compressor discharge temperature x 0.1 [°C]
+34	HexTF	Heat exchanger pipe temperature (front) x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+35	HexTB	Heat exchanger pipe temperature (back/rear) x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvCT	Inverter current value x 0.1 [A]
+40	CompCT	Compressor current value [A]
+41	InvV	Inverter voltage [V]
+42	CompV	Compressor voltage [V]
+43	PwrFrq	Power frequency [Hz]
+45	InvI	Inverter current x 0.1 [A]
+47	Fan1I	Fan1 current x 0.1 [A]
+48	Fan2I	Fan2 current x 0.1 [A]
+49	DcLnk	DC Link voltage [V]
+56	 4way PCBFan CComp HotGas	**Bitfields:** Bit 1 - 4 WAY valve Bit 12 - PCB fan Bit 13 - Constant compressor Bit 14 - Hot gas
+57	 LiqIjtInv LiqIjtStd	**Bitfields:** Bit 0 - Liquid injection valve (inverter) Bit 1 - Liquid injection valve (standard)
+58	Fan1V	Fan1 voltage [V]
+59	Fan2V	Fan2 voltage [V]
+60	CompHtSnkT	Compressor heat sink temperature [°C]
+61	PCBVer	PCB version
+62	EEPVer	EEP version

- **MultiV III Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+1	Mode	Operation Mode
+2	Err	Error Code
+3	AvgT	Average indoor temperature x 0.1 [°C]
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+32	Comp1DisT	Constant compressor1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvCT	Inverter current value x 0.1 [A]
+40	Comp1CT	Compressor1 current value [A]
+41	InvV	Inverter voltage [V]
+43	InvPwrFrq	Inverter power frequency [Hz]
+45	InvPhsCT	Inverter phase current x 0.1 [A]
+47	Fan1PhsCT	Fan1 phase current x 0.1 [A]
+48	Fan2PhsCT	Fan2 phase current x 0.1 [A]
+50	InvDcLnk	Inverter DC LINK voltage [V]
+52	InvIpmT	Inverter IPM temperature x 0.1 [°C]
+54	FanHtSnkT	Outdoor fan heat sink temperature x 0.1 [°C]
+56	 Accum 4way HexUpVlv HexDnVlv InvHtVlv Comp1 HotGas Comp2	**Bitfields:** Bit 0 - Oil return valve Bit 1 - 4 WAY valve Bit 3 - Heat exchanger top valve Bit 4 - Heat exchanger bottom valve Bit 8 - Inverter heater valve Bit 13 - Compressor1 Bit 14 - Hot gas Bit 15 - Compressor2
+57	 Comp1HtVlv Comp2HtVlv InvIjt Comp1Ijt Comp2Ijt ScIjt	**Bitfields:** Bit 2 - Compressor1 heater valve Bit 3 - Compressor2 heater valve Bit 4 - Inverter injection valve Bit 6 - Compressor1 injection valve Bit 7 - Compressor2 injection valve Bit 8 - SC injection valve
+58	Fan1V	Fan1 voltage [V]
+59	Fan2V	Fan2 voltage [V]
+62	EEPVer	EEP version

- **MultiV III Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 6
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	Comp1DisT	Constant compressor1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvCT	Inverter current value x 0.1 [A]
+40	Comp1CT	Compressor1 current value [A]
+41	InvV	Inverter voltage [V]
+43	InvPwrFrq	Inverter power frequency [Hz]
+45	InvPhsCT	Inverter phase current x 0.1 [A]
+47	Fan1PhsCT	Fan1 phase current x 0.1 [A]
+48	Fan2PhsCT	Fan2 phase current x 0.1 [A]
+50	InvDcLnk	Inverter DC LINK voltage [V]
+52	InvIpmT	Inverter IPM temperature x 0.1 [°C]
+54	FanHtSnkT	Outdoor fan heat sink temperature x 0.1 [°C]
+56		**Bitfields:**
	Accum	Bit 0 - Oil return valve
	4way	Bit 1 - 4 WAY valve
	HexUpVlv	Bit 3 - Heat exchanger top valve
	HexDnVlv	Bit 4 - Heat exchanger bottom valve
	InvHtVlv	Bit 8 - Inverter heater valve
	Comp1	Bit 13 - Compressor1
	HotGas	Bit 14 - Hot gas
	Comp2	Bit 15 - Compressor2
+57		**Bitfields:**
	Comp1HtVlv	Bit 2 - Compressor1 heater valve
	Comp2HtVlv	Bit 3 - Compressor2 heater valve
	InvIjt	Bit 4 - Inverter injection valve
	Comp1Ijt	Bit 6 - Compressor1 injection valve
	Comp2Ijt	Bit 7 - Compressor2 injection valve
	ScIjt	Bit 8 - SC injection valve
+58	Fan1V	Fan1 voltage [V]
+59	Fan2V	Fan2 voltage [V]
+62	EEPVer	EEP version

- **MultiV III HR Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+1	Mode	Operation Mode
+2	Err	Error Code
+3	AvgT	Average indoor temperature x 0.1 [°C]
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]

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Base Address	Input Registers	
	Short Name	Description
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	Comp1DisT	Constant compressor1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvCT	Inverter current value x 0.1 [A]
+40	Comp1CT	Compressor1 current value [A]
+41	InvV	Inverter voltage [V]
+43	InvPwrFrq	Inverter power frequency [Hz]
+45	InvPhsCT	Inverter phase current x 0.1 [A]
+47	Fan1PhsCT	Fan1 phase current x 0.1 [A]
+48	Fan2PhsCT	Fan2 phase current x 0.1 [A]
+50	InvDcLnk	Inverter DC LINK voltage [V]
+52	InvIpmT	Inverter IPM temperature x 0.1 [°C]
+54	FanHtSnkT	Outdoor fan heat sink temperature x 0.1 [°C]
+56		**Bitfields:**
	Accum	Bit 0 - Oil return valve
	4wayUp	Bit 1 - 4 WAY up valve
	HexUpVlv	Bit 3 - Heat exchanger top valve
	HexDnVlv	Bit 4 - Heat exchanger bottom valve
	InvHtVlv	Bit 8 - Inverter heater valve
	Comp1	Bit 13 - Compressor1
	HotGas	Bit 14 - Hot gas
	Comp2	Bit 15 - Compressor2
+57		**Bitfields:**
	Comp1HtVlv	Bit 2 - Compressor1 heater valve
	Comp2HtVlv	Bit 3 - Compressor2 heater valve
	InvIjt	Bit 4 - Inverter injection valve
	Comp1Ijt	Bit 6 - Compressor1 injection valve
	Comp2Ijt	Bit 7 - Compressor2 injection valve
	ScIjt	Bit 8 - SC injection valve
	4wayDn	Bit 12 - 4 WAY down valve
+58	Fan1V	Fan1 voltage [V]
+59	Fan2V	Fan2 voltage [V]
+62	EEPVer	EEP version

- **MultiV III HR Slave**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+5	HiPrsTrc	Current high pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+22	SubEEV	Sub EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+24	EqEEV	Oil supply EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	BubT	Condenser temperature x 0.1 [°C]
+30	DewT	Evaporator temperature x 0.1 [°C]
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+32	Comp1DisT	Constant compressor1 discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+34	UpHexT	Top/Upper heat exchanger pipe temperature x 0.1 [°C]
+35	LoHexT	Bottom/Down/Lower heat exchanger pipe temperature x 0.1 [°C]
+36	ScInT	Subcooling inlet temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvCT	Inverter current value x 0.1 [A]
+40	Comp1CT	Compressor1 current value [A]
+41	InvV	Inverter voltage [V]
+43	InvPwrFrq	Inverter power frequency [Hz]
+45	InvPhsCT	Inverter phase current x 0.1 [A]
+47	Fan1PhsCT	Fan1 phase current x 0.1 [A]
+48	Fan2PhsCT	Fan2 phase current x 0.1 [A]
+50	InvDcLnk	Inverter DC LINK voltage [V]
+52	InvIpmT	Inverter IPM temperature x 0.1 [°C]
+54	FanHtSnkT	Outdoor fan heat sink temperature x 0.1 [°C]
+56		**Bitfields:**
	Accum	Bit 0 - Oil return valve
	4wayUp	Bit 1 - 4 WAY up valve
	HexUpVlv	Bit 3 - Heat exchanger top valve
	HexDnVlv	Bit 4 - Heat exchanger bottom valve
	InvHtVlv	Bit 8 - Inverter heater valve
	Comp1	Bit 13 - Compressor1
	HotGas	Bit 14 - Hot gas
	Comp2	Bit 15 - Compressor2
+57		**Bitfields:**
	Comp1HtVlv	Bit 2 - Compressor1 heater valve
	Comp2HtVlv	Bit 3 - Compressor2 heater valve
	InvIjt	Bit 4 - Inverter injection valve
	Comp1Ijt	Bit 6 - Compressor1 injection valve
	Comp2Ijt	Bit 7 - Compressor2 injection valve
	ScIjt	Bit 8 - SC injection valve
	4wayDn	Bit 12 - 4 WAY down valve
+58	Fan1V	Fan1 voltage [V]
+59	Fan2V	Fan2 voltage [V]
+62	EEPVer	EEP version

- **HRU Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 9
+1		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	P1Md P2Md P3Md P4Md NumIDU SetP	Bit 0 - Pipe 1 mode Bit 2 - Pipe 2 mode Bit 4 - Pipe 3 mode Bit 6 - Pipe 4 mode Bit 8 - Number of IDU Bit 13 - Set pipe
+2	EEV	EEV [pls]
+3	LiqT	Liquid temperature x 0.1 [°C]
+4	InT	Pipe inlet temperature x 0.1 [°C]
+5	OutT	Pipe outlet temperature x 0.1 [°C]

- **MultiV S Mini Master**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 10
+1	Mode	Operation Mode
+2	Err	Error Code
+3	AvgT	Average indoor temperature x 0.1 [°C]
+4	HiPrsTrg	Target high pressure [KPa]
+5	HiPrsTrc	Current high pressure [KPa]
+6	LoPrsTrg	Target low pressure [KPa]
+7	LoPrsTrc	Current low pressure [KPa]
+8	ComprRatio	Compression ratio x 0.1
+9	SHTrg	Target degree of super heat x 0.1 [°C]
+10	SHTrc	Current degree of super heat x 0.1 [°C]
+11	SCTrc	Current degree of subcooling x 0.1 [°C]
+12	SCSHTrg	Target degree of subcooling and super heat x 0.1 [°C]
+13	SCSCTrc	Current degree of subcooling and super heat x 0.1 [°C]
+14	InvTrgFrq	Inverter target frequency [Hz]
+15	InvTrcFrq	Inverter current frequency [Hz]
+18	Fan1Trg	FAN1 target RPM [rpm]
+19	Fan1Trc	FAN1 current RPM [rpm]
+20	Fan2Trc	FAN2 current RPM [rpm]
+21	MainEEV	Main EEV [pls]
+23	ScEEV	Subcooling EEV [pls]
+27	AirT	Outdoor air temperature x 0.1 [°C]
+28	SuctT	Compressor suction temperature x 0.1 [°C]
+29	CondT	CondT
+30	EvapT	EvapT
+31	InvDisT	Inverter discharge temperature x 0.1 [°C]
+33	HexT	Heat exchanger pipe temperature x 0.1 [°C]
+37	ScOutT	Subcooling outlet temperature x 0.1 [°C]
+38	LiqT	Liquid pipe temperature x 0.1 [°C]
+39	InvInCT	InvInCT
+43	InvPwrFrq	Inverter power frequency [Hz]
+45	InvPhsCT	Inverter phase current x 0.1 [A]
+50	InvDcLnk	Inverter DC LINK voltage [V]
+56	 4way InvHtVlv CoolFan HotGas	**Bitfields:** Bit 1 - 4 WAY valve Bit 8 - Inverter heater valve Bit 12 - CoolFan Bit 14 - Hot gas
+57	 InvOvld HtSnkLim	**Bitfields:** Bit 13 - InvOvld Bit 14 - HtSnkLim
+60	CompHtSnkT	CompHtSnkT
+61	MainVer	MainVer
+62	EEPVer	EEP version

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4.1.7.3 LGMV PRO Enumerated Parameters

- **Pipe 1 mode (P1Md)**

Value	Description
0	OFF
1	COOL
2	HEAT
3	WIND

- **Pipe 2 mode (P2Md)**

Value	Description
0	OFF
1	COOL
2	HEAT
3	WIND

- **Pipe 3 mode (P3Md)**

Value	Description
0	OFF
1	COOL
2	HEAT
3	WIND

- **Pipe 4 mode (P4Md)**

Value	Description
0	OFF
1	COOL
2	HEAT
3	WIND

4.1.8 ME

4.1.8.1 ME PRO Indoor Units

- **LOSSNEY**

Base Address	Input Registers	
	Short Name	Description
+1	Type Code = **0x8011**	Type Code
+2	TH1	Room Thermistor
+3	TH2	Liquid Pipe Thermistor
+4	SA	Supply Air
+5		
+6	EA	Exhaust Air

- **F/P**

Base Address	Input Registers	
	Short Name	Description
+1	Type Code = **0x80FF**	Type Code
+2	TH1	Room Thermistor
+3	TH2	Liquid Pipe Thermistor
+4	TH3	Gas Pipe Thermistor
+5		
+6	SH	Super Heat
+6	SC	Super Cool
+7	Li	LEV opening pulse

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- **PUHZ**

Base Address	Input Registers	
	Short Name	Description
+1	Type Code = 0x800C	Type Code
+2	TH1	Room Thermistor
+3	TH2	Liquid Pipe Thermistor
+4	TH3	Gas Pipe Thermistor
+5	TH4	Thermistor 4
+6	TH5	Thermistor 5
+7	TH6	Thermistor 6
+8	TH7	Thermistor 7
+9	TH8	Thermistor 8
+10	FAN	Fan capacity
+11	HZ	Frequency
+12	SC	Super Cool
+13	LevA	LEV pulse of indoor unit
+14	LevB	LEV pulse of indoor unit

4.1.8.2 ME PRO Outdoor Units

- **PUMY-P100-140Y/VHM/36-48NHMU**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 1
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+20	Vdc	COMP bus voltage x 0.1 [V]
+21	Ii	Input Current x 0.1 [A]
+22	Ic	Compressor Current x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+28	Pdm	Target high pressure x 0.1
+29	ETm	Target Evaporation Temperature x 0.1 [°C]
+32	SC	Sub Cool
+33	SCm	Target Sub Cool
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+39	LEV3	LEV3 Pulse [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	52C	Bit 1 - 52C
	21S4	Bit 2 - 21S4
	SV1a	Bit 3 - SV1(A)/SV1a
	SV1b	Bit 4 - SV1(B)/SV1b
	SV1c	Bit 5 - SV1(C)/SV1c

- **PUMY-P*V/Y/NH/KM(BR4/UR4/SR1/C-C/-A)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 7
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+20	Vdc	COMP bus voltage x 0.1 [V]
+21	Ii	Input Current x 0.1 [A]
+22	Ic	Compressor Current x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+28	Pdm	Target high pressure x 0.1
+29	ETm	Target Evaporation Temperature x 0.1 [°C]
+32	SC	Sub Cool
+33	SCm	Target Sub Cool
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+39	LEV3	LEV3 Pulse [pls]
+40	LEV4	Linear expansion valve [pls]

- **MXZ series**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 104
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+20	Vdc	VDC x 0.1 [V]
+21	Ii	I(input) x 0.1 [A]
+22	Ic	I(comp) x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+28	Pdm	Pdm x 0.1 [kg/cm2]
+29	ETm	ETm x 0.1 [°C]
+32	SC	SC x 0.1 [°C]
+33	SCm	SCm x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+39	LEV3	LEV3 Pulse [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd 52C 21S4 SV1	**Bitfields:** Bit 0 - Demand Bit 1 - 52C Bit 2 - 21S4 Bit 3 - SV1
+42	 SV2	**Bitfields:** Bit 9 - SV2
+57	OpeM	OPERATION MODE
+58	State	State
+61	 SV3	**Bitfields:** Bit 7 - SV3

- **PUMY**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 81 Type Code = 113
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+20	Vdc	VDC x 0.1 [V]
+21	Ii	I(input) x 0.1 [A]
+22	Ic	I(comp) x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+28	Pdm	Pdm x 0.1 [kg/cm2]
+29	ETm	ETm x 0.1 [°C]
+32	SC	SC x 0.1 [°C]
+33	SCm	SCm x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+39	LEV3	LEV3 Pulse [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd 52C 21S4 SV1	**Bitfields:** Bit 0 - Demand Bit 1 - 52C Bit 2 - 21S4 Bit 3 - SV1
+42	 SV2	**Bitfields:** Bit 9 - SV2
+57	OpeM	OPERATION MODE
+58	State	State
+61	 SV3	**Bitfields:** Bit 7 - SV3

- **PURY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 34
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd	**Bitfields:** Bit 0 - Demand

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Base Address	Input Registers	
	Short Name	Description
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
	SV5c	Bit 15 - SV5c
+42		**Bitfields:**
	52F	Bit 0 - 52F
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4c	Bit 4 - SV4c
	SV4d	Bit 5 - SV4d
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PURY-P [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 102
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	ALh	Bit 7 - ALh
	SV2	Bit 9 - SV2
+43		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	RefChrgAdj	Bit 8 - Ref Charge Adj
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-P [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 56
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	ALh	Bit 7 - ALh
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	RefChrgAdj	Bit 8 - Ref Charge Adj
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON

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Base Address	Input Registers	
	Short Name	Description
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-P [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 57
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 ALh SV2	**Bitfields:** Bit 7 - ALh Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]

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Base Address	Input Registers	
	Short Name	Description
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-EP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 97
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 ALh SV2	**Bitfields:** Bit 7 - ALh Bit 9 - SV2
+43	 IH FAN-Fr RefChrgAdj WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 8 - Ref Charge Adj Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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Base Address	Input Registers	
	Short Name	Description
+60	LEV2d	LEV2d

- **PURY-EP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 61
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 ALh SV2	**Bitfields:** Bit 7 - ALh Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr RefChrgAdj WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 8 - Ref Charge Adj Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

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- **PURY-EP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 48
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b 21S4c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 12 - 21S4c
+42	 CH21 ALh SV2	**Bitfields:** Bit 6 - CH21 Bit 7 - ALh Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr RefChrgAdj WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 8 - Ref Charge Adj Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d
+62	LEV2c	LEV2c [pls]

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- **PURY-EP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 62
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 ALh SV2	**Bitfields:** Bit 7 - ALh Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-EP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 95
+3	TH3	Thermistor 3 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 CH21 ALh SV2 SV10	**Bitfields:** Bit 6 - CH21 Bit 7 - ALh Bit 9 - SV2 Bit 11 - SV10
+43	 IH FAN-Fr FAN2-Fr RefChrgAdj WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 8 - Ref Charge Adj Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+48	TH18	Thermistor 18 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d
+61	 SV3	**Bitfields:** Bit 7 - SV3

- **PURY-EP [capacity] (T/Y)NU-A**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 96
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 CH21 ALh SV2 SV10	**Bitfields:** Bit 6 - CH21 Bit 7 - ALh Bit 9 - SV2 Bit 11 - SV10
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+48	TH18	Thermistor 18 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d
+61	 SV3	**Bitfields:** Bit 7 - SV3

- **PURY-P [capacity], PUHY-P [capacity]**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 9 Type Code = 10
+1	TH1	Thermistor 1 x 0.1 [°C]
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+10	TH10	Thermistor 10 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]

- **PURY-EP [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 70
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-EP [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 99
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply

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Base Address	Input Registers	
	Short Name	Description
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-EP [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 101
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV2	**Bitfields:** Bit 9 - SV2
+43	 IH FAN-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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Base Address	Input Registers	
	Short Name	Description
+60	LEV2d	LEV2d

- **PURY-EP [capacity] YNW-A/A1(-**), PURY-P [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 100 Type Code = 108
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	OjC	Total capacity Cool
+31	OjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV2	**Bitfields:** Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-P [capacity] YNW-A**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 49
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 CH21 ALh SV2	**Bitfields:** Bit 6 - CH21 Bit 7 - ALh Bit 9 - SV2
+43	 IH H-Def1 H-Def2 FAN-Fr	**Bitfields:** Bit 0 - IH Bit 1 - H-Def1 Bit 2 - H-Def2 Bit 3 - Fan1 run status
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d
+61	 CH22	**Bitfields:** Bit 1 - CH22

- **PURY-P [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 80
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV2	**Bitfields:** Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 20
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+10	TH10	Thermistor 10 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat

- **PURY-P [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 109
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b 21S4c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 12 - 21S4c
+42	 SV2	**Bitfields:** Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]

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Base Address	Input Registers	
	Short Name	Description
+55	LEV2b	LEV2b [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+62	LEV2c	LEV2c [pls]

- **PURY-P [capacity] YNW-A/A1(-**)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 110
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b 21S4c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 12 - 21S4c
+42	 SV2	**Bitfields:** Bit 9 - SV2
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d
+62	LEV2c	LEV2c [pls]

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- **PURY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 39
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 14 - SV5b
+42	 SV9 SV4a SV4b SV4d CH21 ALh	**Bitfields:** Bit 1 - SV9 Bit 2 - SV4a Bit 3 - SV4b Bit 5 - SV4d Bit 6 - CH21 Bit 7 - ALh
+43	IH	IH
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]

- **PURY-(E)P [capacity], PURY-(W) [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 13 Type Code = 22
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]

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Base Address	Input Registers	
	Short Name	Description
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat

- **PURY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 112
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 14 - SV5b
+42	 SV9 SV4a SV4b SV4d	**Bitfields:** Bit 1 - SV9 Bit 2 - SV4a Bit 3 - SV4b Bit 5 - SV4d
+43	 IH FAN-Fr AF WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 7 - Active Filter Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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Base Address	Input Registers	
	Short Name	Description
+59	LEV5a	LEV5a [pls]

- **PURY-(E)P [capacity], PURY-(E) [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 14 Type Code = 23
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	OjC	Total capacity Cool
+31	OjH	Total capacity Heat

- **PURY-P [capacity] ZKMU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 91
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	OjC	Total capacity Cool
+31	OjH	Total capacity Heat
+41	 Dmnd 52C SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 1 - 52C Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+42		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4c	Bit 4 - SV4c
	SV4d	Bit 5 - SV4d
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]

- **PURY-HP [capacity] TKMU/YKMU**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 103
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	SV5b	Bit 14 - SV5b

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Base Address	Input Registers	
	Short Name	Description
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
	SV10	Bit 11 - SV10
	SV11	Bit 14 - SV11
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	AF	Bit 7 - Active Filter
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]

- **PURY-M [capacity] YNW-A/A1**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 44
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status

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Base Address	Input Registers	
	Short Name	Description
	WM Rep 72C CompOn M-NetSup	Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 8
+1	TH1	Thermistor 1 x 0.1 [°C]
+2	TH2	Thermistor 2 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat

- **PURY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 3
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]

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- **PURY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 2
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]

- **PURY-P [capacity] TLMU/YLMU**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 64
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 14 - SV5b
+42	 SV9 SV4a SV4b	**Bitfields:** Bit 1 - SV9 Bit 2 - SV4a Bit 3 - SV4b

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Base Address	Input Registers	
	Short Name	Description
	SV4d	Bit 5 - SV4d
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61		**Bitfields:**
	SV7	Bit 5 - SV7

- **PURY-P [capacity] (T/Y)LMU**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 24
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4c	Bit 4 - SV4c
	SV4d	Bit 5 - SV4d

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Base Address	Input Registers	
	Short Name	Description
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61		**Bitfields:**
	SV7	Bit 5 - SV7

- **PURY-P [capacity] TLMU/YLMU**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 65
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh

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Base Address	Input Registers	
	Short Name	Description
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61		**Bitfields:**
	SV7	Bit 5 - SV7

- **PURY-P [capacity] TLMU/YLMU**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 118
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4c	Bit 4 - SV4c
	SV4d	Bit 5 - SV4d
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh
+43		**Bitfields:**
	IH	Bit 0 - IH

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Base Address	Input Registers	
	Short Name	Description
	FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61	 SV7	**Bitfields:** Bit 5 - SV7

- **PURY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 82
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a SV5b SV5c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 14 - SV5b Bit 15 - SV5c
+42	 SV9 SV4a SV4b SV4d SV2	**Bitfields:** Bit 1 - SV9 Bit 2 - SV4a Bit 3 - SV4b Bit 5 - SV4d Bit 9 - SV2

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Base Address	Input Registers	
	Short Name	Description
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PURY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 41
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	SV5b	Bit 14 - SV5b
	SV5c	Bit 15 - SV5c
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
	CH21	Bit 6 - CH21
	ALh	Bit 7 - ALh
	SV2	Bit 9 - SV2
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PURY-(E) [capacity]**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 42
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a SV5b SV5c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 14 - SV5b Bit 15 - SV5c
+42	 SV9 SV4a SV4b SV4d CH21 ALh SV2	**Bitfields:** Bit 1 - SV9 Bit 2 - SV4a Bit 3 - SV4b Bit 5 - SV4d Bit 6 - CH21 Bit 7 - ALh Bit 9 - SV2
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+46	TH16	Thermistor 16 x 0.1 [°C]
+47	TH17	TH17
+48	TH18	Thermistor 18 x 0.1 [°C]
+57	OpeM	Operation Mode

- **PURY-HP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 88
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]

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Base Address	Input Registers	
	Short Name	Description
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	ALh	Bit 7 - ALh
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	RefChrgAdj	Bit 8 - Ref Charge Adj
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-HP [capacity] (T/Y)NU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 89
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat

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Base Address	Input Registers	
	Short Name	Description
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	ALh	Bit 7 - ALh
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+60	LEV2d	LEV2d

- **PURY-EP [capacity] YLM-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 120
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool

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Base Address	Input Registers	
	Short Name	Description
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
	SV10	Bit 11 - SV10
	SV11	Bit 14 - SV11
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61		**Bitfields:**
	SV7	Bit 5 - SV7

- **PURY-EP [capacity] YLM-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 122
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a

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Base Address	Input Registers	
	Short Name	Description
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4c	Bit 4 - SV4c
	SV4d	Bit 5 - SV4d
	SV10	Bit 11 - SV10
	SV11	Bit 14 - SV11
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61		**Bitfields:**
	SV7	Bit 5 - SV7

- **PURY-EP [capacity] YLM-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 121
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow

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Base Address	Input Registers	
	Short Name	Description
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
	SV10	Bit 11 - SV10
	SV11	Bit 14 - SV11
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]
+61		**Bitfields:**
	SV7	Bit 5 - SV7

- **PURY-P [capacity] YLM-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 12
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat

- **PURY-P [capacity] YLM-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 119
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+42	 SV9 SV4a SV4b SV4c SV4d SV10 SV11	**Bitfields:** Bit 1 - SV9 Bit 2 - SV4a Bit 3 - SV4b Bit 4 - SV4c Bit 5 - SV4d Bit 11 - SV10 Bit 14 - SV11
+43	 IH FAN-Fr FAN2-Fr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+59	LEV5a	LEV5a [pls]

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 32
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b 21S4c SV5b SV5c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 12 - 21S4c Bit 14 - SV5b Bit 15 - SV5c
+42	 52F SV9	**Bitfields:** Bit 0 - 52F Bit 1 - SV9
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 33
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat

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Base Address	Input Registers	
	Short Name	Description
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	21S4c	Bit 12 - 21S4c
	SV5b	Bit 14 - SV5b
	SV5c	Bit 15 - SV5c
+42		**Bitfields:**
	52F	Bit 0 - 52F
	SV9	Bit 1 - SV9
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-HP [capacity] TJMU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 47
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow

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Base Address	Input Registers	
	Short Name	Description
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV6	Bit 15 - SV6
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PUHY-HP [capacity] TJMU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 52
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b

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Base Address	Input Registers	
	Short Name	Description
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV6	Bit 15 - SV6
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PUHY-EP [capacity] YLM-A, PUHY-P [capacity] YKB**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 19 Type Code = 28 Type Code = 31
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]

- **PUHY-EP [capacity] YLM-A, PUHY-P [capacity] YKB**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 29 Type Code = 30
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 37
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b

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Base Address	Input Registers	
	Short Name	Description
	21S4c SV5b	Bit 12 - 21S4c Bit 14 - SV5b
+42	 SV9 SV2	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2
+43	IH	IH
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 38
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV9 SV2	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2
+43	IH	IH
+44	Fos	Temporary frequency [Hz]
+51	FAN(rpm)	FAN(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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- **PUHY-P [capacity] DM-G/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 76
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+43	 AF WM Rep 72C CompOn M-NetSup CH11	**Bitfields:** Bit 7 - Active Filter Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity] DM-G/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 77
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+42	52F	52F
+43	 AF WM Rep 72C CompOn M-NetSup CH11	**Bitfields:** Bit 7 - Active Filter Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity] SDM-G/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 75
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]

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Base Address	Input Registers	
	Short Name	Description
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+43		**Bitfields:**
	AF	Bit 7 - Active Filter
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity] SDM-G/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 78
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+42	52F	52F
+43		**Bitfields:**

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Base Address	Input Registers	
	Short Name	Description
	AF WM Rep 72C CompOn M-NetSup CH11	Bit 7 - Active Filter Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity] SDM*/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 74
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+42	52F	52F
+43	 AF WM Rep 72C CompOn M-NetSup CH11	**Bitfields:** Bit 7 - Active Filter Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+57	OpeM	Operation Mode

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Base Address	Input Registers	
	Short Name	Description
+58	CtrlM	Control Mode

- **PUHY-P [capacity] YKB**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 83
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV10	Bit 11 - SV10
	SV11	Bit 14 - SV11
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	AF	Bit 7 - Active Filter
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+51	FAN(rpm)	FAN(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+57	OpeM	Operation Mode

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Base Address	Input Registers	
	Short Name	Description
+58	CtrlM	Control Mode

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 92
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+42	 SV9 SV2	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2
+43	 FAN-Fr AF Pwr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 3 - Fan1 run status Bit 7 - Active Filter Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity]**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 84
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	21S4c	Bit 12 - 21S4c
	SV5b	Bit 14 - SV5b
	SV5c	Bit 15 - SV5c
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	AF	Bit 7 - Active Filter
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 93

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Base Address	Input Registers	
	Short Name	Description
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
+43		**Bitfields:**
	FAN-Fr	Bit 3 - Fan1 run status
	AF	Bit 7 - Active Filter
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-EP [capacity] YNW-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 35
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV9 SV2a SV10 SV14 SV15	**Bitfields:** Bit 1 - SV9 Bit 10 - SV2a Bit 11 - SV10 Bit 12 - SV14 Bit 13 - SV15
+43	 IH H-Def1 H-Def2	**Bitfields:** Bit 0 - IH Bit 1 - H-Def1 Bit 2 - H-Def2
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-EP [capacity] YNW-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 36
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV9 SV2a SV10 SV14 SV15	**Bitfields:** Bit 1 - SV9 Bit 10 - SV2a Bit 11 - SV10 Bit 12 - SV14 Bit 13 - SV15
+43	 IH H-Def1 H-Def2	**Bitfields:** Bit 0 - IH Bit 1 - H-Def1 Bit 2 - H-Def2
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity] YNW-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 25 Type Code = 26
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]

- **PUHY-M [capacity] YNW-A1**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 51
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b

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Base Address	Input Registers	
	Short Name	Description
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV10	Bit 11 - SV10
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	AF	Bit 7 - Active Filter
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-P [capacity] YNW-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 27
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+9	TH9	Thermistor 9 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]

- **PUHY-P [capacity] YNW-A/A1(-**)**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 106
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV10	Bit 11 - SV10
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	AF	Bit 7 - Active Filter
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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- **PUHY-P [capacity] TGMU-A**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 117
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+12	TH12	Thermistor 12 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS1	THHS1 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+39	LEV3	**Bitfields:** Bit 7 - LEV3 Pulse [pls]
+41	Dmnd SV1 Dmnd2 Snow Ngt 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1 Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+42	52F	52F
+43	Pwr Rep	**Bitfields:** Bit 9 - Power source frequency Bit 11 - Repeater output
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+63	THHS5	THHS5 x 0.1 [°C]

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 60
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS1	THHS1 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1	Bit 3 - SV1
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	21S4a	Bit 10 - 21S4a
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+63	THHS5	THHS5 x 0.1 [°C]

- **PUHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 59
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+11	TH11	Thermistor 11 x 0.1 [°C]
+13	63HS	High pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS1	THHS1 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1	Bit 3 - SV1
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
	SV5b	Bit 14 - SV5b
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+63	THHS5	THHS5 x 0.1 [°C]

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- **PUHY-P [capacity] (T/Y)NU-A.TH**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 43
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV9 SV2 SV10	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2 Bit 11 - SV10
+43	 IH H-Def1 H-Def2 FAN-Fr FAN2-Fr AF RefChrgAdj Pwr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 1 - H-Def1 Bit 2 - H-Def2 Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 7 - Active Filter Bit 8 - Ref Charge Adj Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]

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Base Address	Input Registers	
	Short Name	Description
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 5
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]

- **PUHY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 17
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]

- **PUHY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 6
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]

- **PUHY-HP [capacity] (T/Y)NU-A.TH**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 85
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]

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Base Address	Input Registers	
	Short Name	Description
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV10	Bit 11 - SV10
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	AF	Bit 7 - Active Filter
	RefChrgAdj	Bit 8 - Ref Charge Adj
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-(E)P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 18
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Thermistor 6 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]

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Base Address	Input Registers	
	Short Name	Description
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]

- **PUHY-HP [capacity] THMU/YHMC**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 53
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a
+42	 SV9 SV2 SV6	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2 Bit 15 - SV6
+43	 Pwr WM Rep 72C CompOn M-NetSup CH11	**Bitfields:** Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+57	OpeM	Operation Mode

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Base Address	Input Registers	
	Short Name	Description
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PUHY-HP [capacity] THMU/YHMC**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 114
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+14	63HS2	63HS2 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a
+42	 SV9 SV2 SV6	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2 Bit 15 - SV6
+43	 Pwr WM Rep 72C CompOn M-NetSup CH11	**Bitfields:** Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PUHY-EP [capacity] (T/Y)NU-A.TH**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 66
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV10	Bit 11 - SV10
	SV14	Bit 12 - SV14
	SV15	Bit 13 - SV15
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	AF	Bit 7 - Active Filter
	RefChrgAdj	Bit 8 - Ref Charge Adj
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode

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Base Address	Input Registers	
	Short Name	Description
+58	CtrlM	Control Mode

- **PUHY-EP [capacity] (T/Y)NU-A.TH**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 54
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV2	Bit 9 - SV2
	SV10	Bit 11 - SV10
	SV14	Bit 12 - SV14
	SV15	Bit 13 - SV15
+43		**Bitfields:**
	IH	Bit 0 - IH
	H-Def1	Bit 1 - H-Def1
	H-Def2	Bit 2 - H-Def2
	FAN-Fr	Bit 3 - Fan1 run status
	FAN2-Fr	Bit 5 - Fan2 run status
	AF	Bit 7 - Active Filter
	RefChrgAdj	Bit 8 - Ref Charge Adj
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUHY-EP [capacity] (T/Y)NU-A.TH**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 67
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b 21S4c	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 12 - 21S4c
+42	 SV9 SV2 SV10 SV11	**Bitfields:** Bit 1 - SV9 Bit 9 - SV2 Bit 11 - SV10 Bit 14 - SV11
+43	 IH H-Def1 H-Def2 FAN-Fr	**Bitfields:** Bit 0 - IH Bit 1 - H-Def1 Bit 2 - H-Def2 Bit 3 - Fan1 run status

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Base Address	Input Registers	
	Short Name	Description
	FAN2-Fr AF RefChrgAdj Pwr WM Rep 72C CompOn M-NetSup	Bit 5 - Fan2 run status Bit 7 - Active Filter Bit 8 - Ref Charge Adj Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+62	LEV2c	LEV2c [pls]

- **PUHY-EP [capacity] (T/Y)NU-A.TH**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 68
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+40	LEV4	Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b
+42	 SV9	**Bitfields:** Bit 1 - SV9

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Base Address	Input Registers	
	Short Name	Description
	SV2 SV10 SV14 SV15	Bit 9 - SV2 Bit 11 - SV10 Bit 12 - SV14 Bit 13 - SV15
+43	 IH H-Def1 H-Def2 FAN-Fr FAN2-Fr AF Pwr WM Rep 72C CompOn M-NetSup	**Bitfields:** Bit 0 - IH Bit 1 - H-Def1 Bit 2 - H-Def2 Bit 3 - Fan1 run status Bit 5 - Fan2 run status Bit 7 - Active Filter Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+45	TH15	Thermistor 15 x 0.1 [°C]
+49	THHS(FAN1)	THHS(FAN1) x 0.1 [°C]
+50	THHS(FAN2)	THHS(FAN2) x 0.1 [°C]
+51	FAN(rpm)	FAN(rpm) [rpm]
+52	FAN2	FAN2
+53	FAN2(rpm)	FAN2(rpm) [rpm]
+54	LEV2a	LEV2a [pls]
+55	LEV2b	LEV2b [pls]
+56	LEV9	LEV9 [pls]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PUCY-P [capacity] YKA/YKD**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 46
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41	 Dmnd SV1a	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a

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Base Address	Input Registers	
	Short Name	Description
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
+43		**Bitfields:**
	IH	Bit 0 - IH
	FAN-Fr	Bit 3 - Fan1 run status
	AF	Bit 7 - Active Filter
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+51	FAN(rpm)	FAN(rpm) [rpm]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

- **PQRY-P [capacity] (T/Y)LMU-A(A1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 55
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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Base Address	Input Registers	
	Short Name	Description
+61		**Bitfields:**
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PQRY-P [capacity] (T/Y)LMU-A(A1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 79
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off
	SV7c	Bit 6 - SV7c

- **PQRY-P [capacity] YLM-A(A1/A2)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 86
+4	TH4	Thermistor 4 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PQRY-P [capacity] YLM-A(A1/A2)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 87
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+30	QjC	Total capacity Cool

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Base Address	Input Registers	
	Short Name	Description
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PQRY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 63
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b

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Base Address	Input Registers	
	Short Name	Description
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	INV-FAN1	Bit 0 - INV-FAN1
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PQHY-P [capacity] (T/Y)LMU-A(A1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 105
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON

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Base Address	Input Registers	
	Short Name	Description
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	INV-FAN1	Bit 0 - INV-FAN1
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PQHY-P [capacity] (T/Y)LMU-A(A1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 115
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode

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Base Address	Input Registers	
	Short Name	Description
+61		**Bitfields:**
	INV-FAN1	Bit 0 - INV-FAN1
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off
	SV7c	Bit 6 - SV7c

- **PQHY-P [capacity] (T/Y)LMU-A(A1)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 116
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	Bus voltage [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
	21S4b	Bit 11 - 21S4b
+42		**Bitfields:**
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	IH	Bit 0 - IH
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	INV-FAN1	Bit 0 - INV-FAN1
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b

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Base Address	Input Registers	
	Short Name	Description
	UnOnOff	Bit 4 - Unit On/Off
	SV7c	Bit 6 - SV7c

- **PQHY-P [capacity]**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 107
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	INV-FAN1	Bit 0 - INV-FAN1
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PQHY-P [capacity]**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 90
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+8	TH8	Thermistor 8 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+42		**Bitfields:**
	SV9	Bit 1 - SV9
	SV4a	Bit 2 - SV4a
	SV4b	Bit 3 - SV4b
	SV4d	Bit 5 - SV4d
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61		**Bitfields:**
	INV-FAN1	Bit 0 - INV-FAN1
	SV7a	Bit 2 - SV7a
	SV7b	Bit 3 - SV7b
	UnOnOff	Bit 4 - Unit On/Off

- **PUHV-P [capacity] CM-E/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 69
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+41	 Dmnd SV1a Dmnd2 Snow Ngt Ngt2 21S4a 21S4b SV5b	**Bitfields:** Bit 0 - Demand Bit 3 - SV1(A)/SV1a Bit 6 - Demand2 Bit 7 - Snow Bit 8 - Night Bit 9 - Night2 Bit 10 - 21S4a Bit 11 - 21S4b Bit 14 - SV5b
+43	 Pwr WM Rep 72C CompOn M-NetSup CH11	**Bitfields:** Bit 9 - Power source frequency Bit 10 - WM Bit 11 - Repeater output Bit 12 - 72C Bit 13 - Comp ON Bit 14 - M-NET supply Bit 15 - CH11
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PUHV-P [capacity] SCM-E/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 72
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]

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Base Address	Input Registers	
	Short Name	Description
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+25	F(Hz)	All temporary frequencies [Hz]
+26	FAN	Fan output [Hz]
+27	Foc	Temporary frequency [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **PUHV-P [capacity] SCM-E/...**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 73
+2	TH2	Thermistor 2 x 0.1 [°C]
+3	TH3	Thermistor 3 x 0.1 [°C]
+4	TH4	Thermistor 4 x 0.1 [°C]
+5	TH5	Thermistor 5 x 0.1 [°C]
+6	TH6	Inlet pipe temperature of the heat exchanger x 0.1 [°C]
+7	TH7	Thermistor 7 x 0.1 [°C]
+13	63HS1	63HS1 Pressure sensor x 0.1 [kg/cm2]
+15	63LS	63LS Pressure sensor x 0.1 [kg/cm2]
+16	THHS	Thermistor 9 x 0.1 [°C]
+17	THBOX	Thermistor in box x 0.1 [°C]
+18	Tc	Condensing temperature x 0.1 [°C]
+19	Te	Evaporating temperature x 0.1 [°C]
+20	Vdc	COMP bus voltage x 0.1 [V]
+23	Iu	U-Phase current effective value x 0.1 [A]
+24	Iw	W-Phase current effective value x 0.1 [A]
+26	FAN	Fan output [Hz]
+30	QjC	Total capacity Cool
+31	QjH	Total capacity Heat
+34	SCo	Heat exchanger outlet subcooling x 0.1 [°C]
+35	SCc	Coil outlet subcooling x 0.1 [°C]
+36	SHb	Coil bypass outlet superheat x 0.1 [°C]
+37	LEV1	LEV1 Linear expansion valve [pls]
+38	LEV2	LEV2 Linear expansion valve [pls]

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Base Address	Input Registers	
	Short Name	Description
+41		**Bitfields:**
	Dmnd	Bit 0 - Demand
	SV1a	Bit 3 - SV1(A)/SV1a
	Dmnd2	Bit 6 - Demand2
	Snow	Bit 7 - Snow
	Ngt	Bit 8 - Night
	Ngt2	Bit 9 - Night2
	21S4a	Bit 10 - 21S4a
+43		**Bitfields:**
	Pwr	Bit 9 - Power source frequency
	WM	Bit 10 - WM
	Rep	Bit 11 - Repeater output
	72C	Bit 12 - 72C
	CompOn	Bit 13 - Comp ON
	M-NetSup	Bit 14 - M-NET supply
	CH11	Bit 15 - CH11
+44	Fos	Temporary frequency [Hz]
+57	OpeM	Operation Mode
+58	CtrlM	Control Mode
+61	INV-FAN1	INV-FAN1

- **CAHV-P [capacity] YA/YB-HPB**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 98
+12	TH12	TH12
+13	TH13	TH13

- **CMB-WP [capacity] V-GA1, CMB-WM [capacity] V-AA**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 45 Type Code = 94
+10	L1	BC L1 Liquid level control
+11	L2	BC L2 Liquid level control
+12	L3	BC L3 Liquid level control
+14	dPHM	BC dPHM x 0.1 [kg/cm2]
+15	SC1	BC SC1 x 0.1 [°C]
+18	SH2	BC SH2 x 0.1 [°C]
+23		**Bitfields:**
	PS	Bit 1 - Power failure detection
	Float	Bit 2 - Float SW
	FlCon	Bit 3 - Float SW
	Debris	Bit 4 - Debris removal operation
	AirVent	Bit 5 - Air vent operation
	SVM1	Bit 6 - Solenoid valve
	21S4Ma	Bit 7 - 21S4Ma
	21S4Mb	Bit 8 - 21S4Mb
+24	TH13	TH13 x 0.1
+25	TH14	TH13 x 0.1
+26	TH31a	TH31a x 0.1
+27	TH31b	TH31b x 0.1
+28	TH31c	TH31c x 0.1
+29	TH31d	TH31d x 0.1
+30	TH31e	TH31e x 0.1
+31	TH31f	TH31f x 0.1
+32	TH31g	TH31g x 0.1
+33	TH31h	TH31h x 0.1
+34	TH31i	TH31i x 0.1

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Base Address	Input Registers	
	Short Name	Description
+35	TH31j	TH31j x 0.1
+36	TH34	TH34 x 0.1
+37	TH35	TH35 x 0.1
+38	PS1	Detects the high pressure at the liquid side. x 0.1
+39	PS3	Detects the low pressure. x 0.1
+40	TH31k	TH31k x 0.1
+41	TH31l	TH31l x 0.1
+42	TH31m	TH31m x 0.1
+43	TH31n	TH31n x 0.1
+44	TH31o	TH31o x 0.1
+45	TH31p	TH31p x 0.1
+46	SH1	Superheat at bypass exit area. TH13-TH11 (only HB) x 0.1
+47	SC2	Subcool at liquid entrance area. PT1-TH12 (only HB) x 0.1
+48	PT1	Average of saturation gas temperature x 0.1
+49	PumpI1	number of rotations
+50	PumpI2	number of rotations
+51	PumpO1	variable for control
+52	PumpO2	variable for control
+53	HBSig	Outdoor unit operation control signal to OC
+54	OCSig	Indoor unit operation control signal from OC
+55	TH11	Liquid-side refrigerant temp. of Heating-main heat exchanger
+56	TH12	Liquid-side refrigerant temp. of Cooling-main heat exchanger
+57	TH15	Bypass inlet temperature
+58	TH16	Bypass outlet temperature
+59	TH32	Outlet water temp. of Heating-main heat exchanger
+60	TH33	Outlet water temp. of Cooling-main heat exchanger
+61	QjC	Total capacity Cool
+62	QjH	Total capacity Heat
+63	VB3a	3-way valve VB3a

- **BC**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 11
+1	T1	BC T1 x 0.1 [°C]
+2	T2	BC T2 x 0.1 [°C]
+3	T3	BC T3 x 0.1 [°C]
+4	T4	BC T4 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+7	P1	BC P1 High pressure x 0.1 [kg/cm2]
+8	P2	BC P2 High pressure x 0.1 [kg/cm2]
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+10	L1	BC L1 Liquid level control
+11	L2	BC L2 Liquid level control
+12	L3	BC L3 Liquid level control
+13	L4	BC L4 Liquid level control

- **BC(main)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 21
+1	T1	BC T1 x 0.1 [°C]
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+7	P1	BC P1 High pressure x 0.1 [kg/cm2]

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Base Address	Input Registers	
	Short Name	Description
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+10	L1	BC L1 Liquid level control
+12	L3	BC L3 Liquid level control

- **BC**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 40
+1	T1	BC T1 x 0.1 [°C]
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+7	P1	BC P1 High pressure x 0.1 [kg/cm2]
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+10	L1	BC L1 Liquid level control
+12	L3	BC L3 Liquid level control
+14	dPHM	BC dPHM x 0.1 [kg/cm2]
+15	SC1	BC SC1 x 0.1 [°C]
+17	SC6	BC SC6 x 0.1 [°C]
+18	SH2	BC SH2 x 0.1 [°C]
+20		**Bitfields:**
	1a	Bit 0 - 1a
	2a	Bit 1 - 2a
	3a	Bit 2 - 3a
	4a	Bit 3 - 4a
	5a	Bit 4 - 5a
	6a	Bit 5 - 6a
	7a	Bit 6 - 7a
	8a	Bit 7 - 8a
	9a	Bit 8 - 9a
	Aa	Bit 9 - Aa
	Ba	Bit 10 - Ba
	Ca	Bit 11 - Ca
	Da	Bit 12 - Da
	Ea	Bit 13 - Ea
	Fa	Bit 14 - Fa
	0a	Bit 15 - 0a
+21		**Bitfields:**
	1b	Bit 0 - 1b
	2b	Bit 1 - 2b
	3b	Bit 2 - 3b
	4b	Bit 3 - 4b
	5b	Bit 4 - 5b
	6b	Bit 5 - 6b
	7b	Bit 6 - 7b
	8b	Bit 7 - 8b
	9b	Bit 8 - 9b
	Ab	Bit 9 - Ab
	Bb	Bit 10 - Bb
	Cb	Bit 11 - Cb
	Db	Bit 12 - Db
	Eb	Bit 13 - Eb
	Fb	Bit 14 - Fb
	0b	Bit 15 - 0b
+22		**Bitfields:**
	1c	Bit 0 - 1c
	2c	Bit 1 - 2c
	3c	Bit 2 - 3c
	4c	Bit 3 - 4c
	5c	Bit 4 - 5c

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Base Address	Input Registers	
	Short Name	Description
	6c	Bit 5 - 6c
	7c	Bit 6 - 7c
	8c	Bit 7 - 8c
	9c	Bit 8 - 9c
	Ac	Bit 9 - Ac
	Bc	Bit 10 - Bc
	Cc	Bit 11 - Cc
	Dc	Bit 12 - Dc
	Ec	Bit 13 - Ec
	Fc	Bit 14 - Fc
	0c	Bit 15 - 0c
+23	SVM	SVM

- **BC(main)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 4 Type Code = 15
+1	T1	BC T1 x 0.1 [°C]
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+7	P1	BC P1 High pressure x 0.1 [kg/cm2]
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+10	L1	BC L1 Liquid level control
+11	L2	BC L2 Liquid level control
+12	L3	BC L3 Liquid level control

- **BC(sub)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 16 Type Code = 123
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+12	L3	BC L3 Liquid level control

- **BC(J)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 71
+1	T1	BC T1 x 0.1 [°C]
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+7	P1	BC P1 High pressure x 0.1 [kg/cm2]
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+10	L1	BC L1 Liquid level control
+12	L3	BC L3 Liquid level control
+14	dPHM	BC dPHM x 0.1 [kg/cm2]
+15	SC1	BC SC1 x 0.1 [°C]
+17	SC6	BC SC6 x 0.1 [°C]
+18	SH2	BC SH2 x 0.1 [°C]
+20		**Bitfields:**
	1a	Bit 0 - 1a
	2a	Bit 1 - 2a
	3a	Bit 2 - 3a
	4a	Bit 3 - 4a

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Base Address	Input Registers	
	Short Name	Description
	5a	Bit 4 - 5a
	6a	Bit 5 - 6a
	7a	Bit 6 - 7a
	8a	Bit 7 - 8a
	9a	Bit 8 - 9a
	Aa	Bit 9 - Aa
	Ba	Bit 10 - Ba
	Ca	Bit 11 - Ca
	Da	Bit 12 - Da
	Ea	Bit 13 - Ea
	Fa	Bit 14 - Fa
	0a	Bit 15 - 0a
+21		**Bitfields:**
	1b	Bit 0 - 1b
	2b	Bit 1 - 2b
	3b	Bit 2 - 3b
	4b	Bit 3 - 4b
	5b	Bit 4 - 5b
	6b	Bit 5 - 6b
	7b	Bit 6 - 7b
	8b	Bit 7 - 8b
	9b	Bit 8 - 9b
	Ab	Bit 9 - Ab
	Bb	Bit 10 - Bb
	Cb	Bit 11 - Cb
	Db	Bit 12 - Db
	Eb	Bit 13 - Eb
	Fb	Bit 14 - Fb
	0b	Bit 15 - 0b
+22		**Bitfields:**
	1c	Bit 0 - 1c
	2c	Bit 1 - 2c
	3c	Bit 2 - 3c
	4c	Bit 3 - 4c
	5c	Bit 4 - 5c
	6c	Bit 5 - 6c
	7c	Bit 6 - 7c
	8c	Bit 7 - 8c
	9c	Bit 8 - 9c
	Ac	Bit 9 - Ac
	Bc	Bit 10 - Bc
	Cc	Bit 11 - Cc
	Dc	Bit 12 - Dc
	Ec	Bit 13 - Ec
	Fc	Bit 14 - Fc
	0c	Bit 15 - 0c
+53	BCSig	BC controller operation control signal
+54	OCSig	Indoor unit operation control signal from OC

- **BC(JA), BC(KA)**

Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 50 Type Code = 111
+1	T1	BC T1 x 0.1 [°C]
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+7	P1	BC P1 High pressure x 0.1 [kg/cm2]
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+10	L1	BC L1 Liquid level control

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Base Address	Input Registers	
	Short Name	Description
+12	L3	BC L3 Liquid level control
+13	L4	BC L4 Liquid level control
+14	dPHM	BC dPHM x 0.1 [kg/cm2]
+15	SC1	BC SC1 x 0.1 [°C]
+17	SC6	BC SC6 x 0.1 [°C]
+18	SH2	BC SH2 x 0.1 [°C]
+20		**Bitfields:**
	1a	Bit 0 - 1a
	2a	Bit 1 - 2a
	3a	Bit 2 - 3a
	4a	Bit 3 - 4a
	5a	Bit 4 - 5a
	6a	Bit 5 - 6a
	7a	Bit 6 - 7a
	8a	Bit 7 - 8a
	9a	Bit 8 - 9a
	Aa	Bit 9 - Aa
	Ba	Bit 10 - Ba
	Ca	Bit 11 - Ca
	Da	Bit 12 - Da
	Ea	Bit 13 - Ea
	Fa	Bit 14 - Fa
	0a	Bit 15 - 0a
+21		**Bitfields:**
	1b	Bit 0 - 1b
	2b	Bit 1 - 2b
	3b	Bit 2 - 3b
	4b	Bit 3 - 4b
	5b	Bit 4 - 5b
	6b	Bit 5 - 6b
	7b	Bit 6 - 7b
	8b	Bit 7 - 8b
	9b	Bit 8 - 9b
	Ab	Bit 9 - Ab
	Bb	Bit 10 - Bb
	Cb	Bit 11 - Cb
	Db	Bit 12 - Db
	Eb	Bit 13 - Eb
	Fb	Bit 14 - Fb
	0b	Bit 15 - 0b
+22		**Bitfields:**
	1c	Bit 0 - 1c
	2c	Bit 1 - 2c
	3c	Bit 2 - 3c
	4c	Bit 3 - 4c
	5c	Bit 4 - 5c
	6c	Bit 5 - 6c
	7c	Bit 6 - 7c
	8c	Bit 7 - 8c
	9c	Bit 8 - 9c
	Ac	Bit 9 - Ac
	Bc	Bit 10 - Bc
	Cc	Bit 11 - Cc
	Dc	Bit 12 - Dc
	Ec	Bit 13 - Ec
	Fc	Bit 14 - Fc
	0c	Bit 15 - 0c
+53	BCSig	BC controller operation control signal
+54	OCSig	Indoor unit operation control signal from OC

- **BS(KB)**

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Base Address	Input Registers	
	Short Name	Description
+0	Type	Type Code = 58
+2	T2	BC T2 x 0.1 [°C]
+5	T5	BC T5 x 0.1 [°C]
+6	T6	BC T6 x 0.1 [°C]
+9	P3	BC P3 Intermediate pressure x 0.1 [kg/cm2]
+12	L3	BC L3 Liquid level control
+17	SC6	BC SC6 x 0.1 [°C]
+18	SH2	BC SH2 x 0.1 [°C]
+20		**Bitfields:**
	1a	Bit 0 - 1a
	2a	Bit 1 - 2a
	3a	Bit 2 - 3a
	4a	Bit 3 - 4a
	5a	Bit 4 - 5a
	6a	Bit 5 - 6a
	7a	Bit 6 - 7a
	8a	Bit 7 - 8a
+21		**Bitfields:**
	1b	Bit 0 - 1b
	2b	Bit 1 - 2b
	3b	Bit 2 - 3b
	4b	Bit 3 - 4b
	5b	Bit 4 - 5b
	6b	Bit 5 - 6b
	7b	Bit 6 - 7b
	8b	Bit 7 - 8b
+22		**Bitfields:**
	1c	Bit 0 - 1c
	2c	Bit 1 - 2c
	3c	Bit 2 - 3c
	4c	Bit 3 - 4c
	5c	Bit 4 - 5c
	6c	Bit 5 - 6c
	7c	Bit 6 - 7c
	8c	Bit 7 - 8c

4.1.9 Midea

4.1.9.1 Midea PRO Indoor Units

- **V5**

Base Address	Input Registers	
	Short Name	Description
+1	HP	Capacity x 0.1 [hp]
+2	T2B	T2B (Evaporator middle pipe temperature) x 0.1 [°C]
+3	T2A	T2A (Evaporator pipe temperature) x 0.1 [°C]
+4	T1	T1 (Ambient temperature) x 0.1 [°C]
+5	T3	T3 (Condenser pipe temperature) x 0.1 [°C]
+6	Cur	Compressor current [A]
+7	Hum	Humidity [%]
+8	Dmnd	Capacity demand
+9	Freq	Compressor frequency [Hz]
+10	EEV1	EEV1
+11	EEV2	EEV2

- **V6**

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Base Address	Input Registers	
	Short Name	Description
+1	HP	Capacity x 0.1 [hp]
+1	HP	Capacity x 0.1 [hp]
+2	T2B	T2B x 0.1 [°C]
+2	T2B	T2B (Evaporator middle pipe temperature) x 0.1 [°C]
+3	T2	T2 x 0.1 [°C]
+3	T2A	T2A (Evaporator pipe temperature) x 0.1 [°C]
+4	T1	T1 (Ambient temperature) x 0.1 [°C]
+4	T1	T1 (Ambient temperature) x 0.1 [°C]
+5	EXV	EXV (Electronic expansion valve)
+5	T3	T3 (Condenser pipe temperature) x 0.1 [°C]
+6	Cur	Compressor current [A]
+7	Hum	Humidity [%]
+8	Dmnd	Capacity demand
+9	Freq	Compressor frequency [Hz]
+10	EEV1	EEV1
+11	EEV2	EEV2

4.1.9.2 Midea PRO Outdoor Units

- **V6 Master**

Base Address	Input Registers	
	Short Name	Description
+1		**Bitfields:**
	Md	Bit 0 - Mode
	PreHt	Bit 4 - Preheat
	OiRet	Bit 5 - Oil Return
	Dfrst	Bit 6 - Defrosting
	MdOpPri	Bit 7 - Mode operation priority
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	SV4	Bit 5 - SV4
	SV5	Bit 6 - SV5
	SV6	Bit 7 - SV6
	SV7	Bit 8 - SV7
	SV8A	Bit 9 - SV8A
	ST1	Bit 12 - ST1
+4	T2BAvg	T2B Average x 0.1 [°C]
+5	SysDmnd	System Demand
+11	HP	HP [hp]
+12	Fan1	Fan1
+14	HiPrs	H pressure x 0.1
+15	T6A	T6A x 0.1 [°C]
+16	T6B	T6B x 0.1 [°C]
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+18	T3	T3 (condenser temperature) x 0.1 [°C]
+19	Tf1	Tf1
+21	INV1	INV1 (compressor 1 frequency) [rps]
+23	CUR1	CUR1 (current 1) [A]
+25	T7C1	T7C1 (discharge 1) [°C]
+26	T7C2	T7C2 (discharge 2) [°C]
+27	EXVA	EXVA (electronic expansion valve A)
+29	EXVC	EXVB (electronic expansion valve C)
+30	Err	Error Code
+31	Dmnd	Demand
+32	SprHt	Superheat

- **V6 Slave**

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Base Address	Input Registers	
	Short Name	Description
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	SV4	Bit 5 - SV4
	SV5	Bit 6 - SV5
	SV6	Bit 7 - SV6
	SV7	Bit 8 - SV7
	SV8A	Bit 9 - SV8A
	ST1	Bit 12 - ST1
+11	HP	HP [hp]
+12	Fan1	Fan1
+14	HiPrs	H pressure x 0.1
+15	T6A	T6A x 0.1 [°C]
+16	T6B	T6B x 0.1 [°C]
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+18	T3	T3 (condenser temperature) x 0.1 [°C]
+19	Tf1	Tf1
+21	INV1	INV1 (compressor 1 frequency) [rps]
+23	CUR1	CUR1 (current 1) [A]
+25	T7C1	T7C1 (discharge 1) [°C]
+26	T7C2	T7C2 (discharge 2) [°C]
+27	EXVA	EXVA (electronic expansion valve A)
+29	EXVC	EXVB (electronic expansion valve C)
+30	Err	Error Code
+31	Dmnd	Demand
+32	SprHt	Superheat

- **CR-HP Master**

Base Address	Input Registers	
	Short Name	Description
+1		**Bitfields:**
	Md	Bit 0 - Mode
	PreHt	Bit 4 - Preheat
	OiRet	Bit 5 - Oil Return
	Dfrst	Bit 6 - Defrosting
	MdOpPri	Bit 7 - Mode operation priority
	ShtRefSig	Bit 11 - ShtRefSig
	OvrCon	Bit 12 - OvrCon
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	CRANK2	Bit 1 - CRANK2
	SV4	Bit 5 - SV4
	SV7	Bit 8 - SV7
	ST1	Bit 12 - ST1
	OnOff	Bit 13 - OnOff
	NqtSlnt	Bit 14 - NqtSlnt
+3		**Bitfields:**
	FanStc	Bit 0 - FanStc
	SlntSt	Bit 2 - SlntSt
+6	SysT4	SysT4
+7	SysHP	SysHP
+8	SysLP	SysLP
+9	MinDSH	MinDSH
+10	PrtChk	PrtChk
+11	Ton	Ton
+12	Fan1	Fan1
+13	Fan2	Fan2
+14	HiPrs	H pressure x 0.1
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+18	T3	T3 (condenser temperature) x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+19	Tf	Tf
+21	INV1	INV1 (compressor 1 frequency) [rps]
+22	INV2	INV2
+23	CUR1	CUR1 (current 1) [A]
+24	CUR2	CUR2
+27	EXVA/B	EXVA/B
+29	EXVC	EXVB (electronic expansion valve C)
+30	Err	Error Code
+31	Dmnd	Demand
+33	LoPrs	LoPrs
+34	Tc	Tc
+35	Te	Te
+36	T71	T71
+37	T5	T5
+39	T7	T7
+40	InvQty	InvQty
+46	T72	T72

- **CR-HP Slave**

Base Address	Input Registers	
	Short Name	Description
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	CRANK2	Bit 1 - CRANK2
	SV4	Bit 5 - SV4
	SV7	Bit 8 - SV7
	ST1	Bit 12 - ST1
	OnOff	Bit 13 - OnOff
	NqtSlnt	Bit 14 - NqtSlnt
+11	Ton	Ton
+12	Fan1	Fan1
+13	Fan2	Fan2
+14	HiPrs	H pressure x 0.1
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+18	T3	T3 (condenser temperature) x 0.1 [°C]
+19	Tf	Tf
+21	INV1	INV1 (compressor 1 frequency) [rps]
+22	INV2	INV2
+23	CUR1	CUR1 (current 1) [A]
+24	CUR2	CUR2
+27	EXVA/B	EXVA/B
+29	EXVC	EXVB (electronic expansion valve C)
+30	Err	Error Code
+31	Dmnd	Demand
+33	LoPrs	LoPrs
+34	Tc	Tc
+35	Te	Te
+36	T71	T71
+37	T5	T5
+39	T7	T7
+40	InvQty	InvQty
+46	T72	T72

- **CR-HR Master**

Base Address	Input Registers	
	Short Name	Description
+1		**Bitfields:**
	Md	Bit 0 - Mode

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Base Address	Input Registers	
	Short Name	**Description**
	PreHt	Bit 4 - Preheat
	OiRet	Bit 5 - Oil Return
	Dfrst	Bit 6 - Defrosting
	ShtRefSig	Bit 11 - ShtRefSig
	OvrCon	Bit 12 - OvrCon
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	CRANK2	Bit 1 - CRANK2
	SV4	Bit 5 - SV4
	SV5	Bit 6 - SV5
	SV6	Bit 7 - SV6
	SV7	Bit 8 - SV7
	ST1	Bit 12 - ST1
	OnOff	Bit 13 - OnOff
	NgtSlnt	Bit 14 - NgtSlnt
+3		**Bitfields:**
	FanStc	Bit 0 - FanStc
	SlntSt	Bit 2 - SlntSt
	MdChngSig	Bit 4 - MdChngSig
	PI	Bit 5 - PI
	FF	Bit 6 - FF
+6	SysT4	SysT4
+9	MinDSH	MinDSH
+10	PrtChk	PrtChk
+11	Ton	Ton
+12	Fan1	Fan1
+13	Fan2	Fan2
+14	HiPrs	H pressure x 0.1
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+19	Tf	Tf
+21	INV1	INV1 (compressor 1 frequency) [rps]
+22	INV2	INV2
+23	CUR1	CUR1 (current 1) [A]
+24	CUR2	CUR2
+30	Err	Error Code
+31	Dmnd	Demand
+33	LoPrs	LoPrs
+34	Tc	Tc
+35	Te	Te
+36	T71	T71
+37	T5	T5
+38	T6	T6
+39	T7	T7
+40	InvQty	InvQty
+41	Tcs	Tcs
+42	Tes	Tes
+43	T3A	T3A
+44	T3C	T3C
+45	HexStp	HexStp
+46	T72	T72

- **CR-HR Slave**

Base Address	Input Registers	
	Short Name	**Description**
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	CRANK2	Bit 1 - CRANK2
	SV4	Bit 5 - SV4
	SV5	Bit 6 - SV5
	SV6	Bit 7 - SV6

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Base Address	Input Registers	
	Short Name	**Description**
	SV7	Bit 8 - SV7
	ST1	Bit 12 - ST1
	OnOff	Bit 13 - OnOff
	NqtSlnt	Bit 14 - NqtSlnt
+11	Ton	Ton
+12	Fan1	Fan1
+13	Fan2	Fan2
+14	HiPrs	H pressure x 0.1
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+19	Tf	Tf
+21	INV1	INV1 (compressor 1 frequency) [rps]
+22	INV2	INV2
+23	CUR1	CUR1 (current 1) [A]
+24	CUR2	CUR2
+30	Err	Error Code
+31	Dmnd	Demand
+33	LoPrs	LoPrs
+34	Tc	Tc
+35	Te	Te
+36	T71	T71
+37	T5	T5
+38	T6	T6
+39	T7	T7
+40	InvQty	InvQty
+43	T3A	T3A
+44	T3C	T3C
+45	HexStp	HexStp
+46	T72	T72

- **CR-Mini Master**

Base Address	Input Registers	
	Short Name	**Description**
+1		**Bitfields:**
	Md	Bit 0 - Mode
	OiRet	Bit 5 - Oil Return
	Dfrst	Bit 6 - Defrosting
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	SV4	Bit 5 - SV4
	SV5	Bit 6 - SV5
	SV6	Bit 7 - SV6
	ST1	Bit 12 - ST1
	OnOff	Bit 13 - OnOff
+6	SysT4	SysT4
+7	SysHP	SysHP
+9	MinDSH	MinDSH
+10	PrtChk	PrtChk
+11	Ton	Ton
+12	Fan1	Fan1
+13	Fan2	Fan2
+14	HiPrs	H pressure x 0.1
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+18	T3	T3 (condenser temperature) x 0.1 [°C]
+19	Tf	Tf
+21	INV1	INV1 (compressor 1 frequency) [rps]
+23	CUR1	CUR1 (current 1) [A]
+27	EXVA	EXVA (electronic expansion valve A)
+30	Err	Error Code
+31	Dmnd	Demand

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Base Address	Input Registers	
	Short Name	Description
+34	Tc	Tc
+37	T5	T5
+40	InvQty	InvQty

- **CR-Mini Slave**

Base Address	Input Registers	
	Short Name	Description
+2		**Bitfields:**
	CRANK1	Bit 0 - CRANK1
	SV4	Bit 5 - SV4
	SV5	Bit 6 - SV5
	SV6	Bit 7 - SV6
	ST1	Bit 12 - ST1
	OnOff	Bit 13 - OnOff
+11	Ton	Ton
+12	Fan1	Fan1
+13	Fan2	Fan2
+14	HiPrs	H pressure x 0.1
+17	T4	T4 (outdoor ambient temperature) x 0.1 [°C]
+18	T3	T3 (condenser temperature) x 0.1 [°C]
+19	Tf	Tf
+21	INV1	INV1 (compressor 1 frequency) [rps]
+23	CUR1	CUR1 (current 1) [A]
+27	EXVA	EXVA (electronic expansion valve A)
+30	Err	Error Code
+31	Dmnd	Demand
+34	Tc	Tc
+37	T5	T5
+40	InvQty	InvQty

4.1.9.3 Midea PRO Enumerated Parameters

- **Mode (Md)**

Value	Description
0	OFF
1	FAN
2	COOL
3	HEAT
4	F_COOL
5	M_COOL
6	M_HEAT
7	F_HEAT

- **Mode operation priority (MdOpPri)**

Value	Description
0	AUTO
1	COOL
2	VIP
3	HEAT ONLY
4	COOL ONLY
5	COOL ONLY
6	COOL ONLY
7	COOL ONLY
8	COOL ONLY
9	COOL ONLY
10	COOL ONLY

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Value	Description
11	COOL ONLY
12	COOL ONLY
13	COOL ONLY
14	COOL ONLY
15	COOL ONLY

- **Model (Mdl)**

Value	Description
1	Wall-mounted
2	Floor-standing
3	Cassette
4	Duct
5	Ceiling & Floor
9	Auxiliary Unit
10	Intelligent Multi System

- **Model (Mdl)**

Value	Description
0	1st Gen.IDU
1	4-WAY
2	WALL
3	M-DUCT
4	L-DUCT
5	AHU
6	H-DUCT
7	COMPACT
8	C&F
9	FS
10	FS
11	FAPU
12	1st Gen.IDU
13	HRV
14	1-WAY
15	2-WAY
16	CONSOLE
17	WATER
18	FAPU
19	FAPU
20	FAPU
21	1st Gen.IDU
22	1st Gen.IDU
23	1st Gen.IDU
24	1st Gen.IDU
25	1st Gen.IDU
26	1st Gen.IDU
27	1st Gen.IDU
28	1st Gen.IDU
29	1st Gen.IDU
30	1st Gen.IDU
31	1st Gen.IDU

4.1.10 Samsung

4.1.10.1 Samsung PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+0	Capa	Capacity

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Base Address	Input Registers	
	Short Name	Description
+1	EvaIn	Eva IN1
+2	EvaOut	Eva OUT1
+3	EEV	EEV
+4	**Bitfields:** Bit 0 - MTFC Bit 1 - DisCtrl Bit 2 - WindFr	 MTFC Status Discharge control Wind Free
+5	ESP	Auto ESP
+6	DisT	Discharge(Duct)
+7	DisCool	Disc. Set temp.(Cool)
+8	DisHeat	Disc. Set temp.(Heat)
+9	BstrF1	Booster Fan1
+10	BstrF2	Booster Fan2
+11	BstrF3	Booster Fan3
+12	Hum	Humidity

4.1.10.2 Samsung PRO Outdoor Units

- **DVM-S, DVM-S HR, DVM-S C/O**

Base Address	Input Registers	
	Short Name	Description
+1	OpMode	Operation Mode
+2	OpStat	Operation Status
+3	ErrCode	Error Code
+4	Cap	Capacity [hp]
+5	CurPow	Control Watt-meter x 0.001 [kW]
+6	TrgFreq1	Target Frequency1 [Hz]
+7	OrdFreq1	Order Frequency1 [Hz]
+8	CurFreq1	Current Frequency1 [Hz]
+9	TrgFreq2	Target Frequency2 [Hz]
+10	OrdFreq2	Order Frequency2 [Hz]
+11	CurFreq2	Current Frequency2 [Hz]
+12	HiPrs	High Pressure x 0.1 [kg/cm2]
+13	SatTPd	Saturated T Pd [°C]
+14	LoPrs	Low Pressure x 0.1 [kg/cm2]
+15	SatTPs	Saturated T Ps [°C]
+16	MidPrs	Mid Pressure x 0.1 [kg/cm2]
+17	DisT1	Discharge1 x 0.1 [°C]
+18	DisT2	Discharge2 x 0.1 [°C]
+19	TstOp	Test Operation(UP)
+20	CompTop1	Comp Top1 x 0.1 [°C]
+21	CompTop2	Comp Top2 x 0.1 [°C]
+22	OutT	Outdoor temperature x 0.1 [°C]
+23	CompCur1	Compressor current1 x 0.1 [A]
+24	CompCur2	Compressor current2 x 0.1 [A]
+25	IPM1T	IPM1 temperature x 0.1 [°C]
+26	IPM2T	IPM2 temperature x 0.1 [°C]
+27	CondOutT	CondOut temperature x 0.1 [°C]
+28	LiqTubT	Liquid tube temperature x 0.1 [°C]
+29	Suct1T	Suction1 temperature x 0.1 [°C]
+30	Suct2T	Suction2 temperature x 0.1 [°C]
+31	MainEEV	Main EEV
+32	EviEEV	EVI EEV
+33	EviIn	EVI IN x 0.1 [°C]
+34	EviOut	EVI OUT x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+35	OutFnSt	Outdoor Fan Step
+36	PFCM	PFCM Temperature x 0.1 [°C]
+37		**Bitfields:**
	Comp1	Bit 0 - Comp1
	Comp2	Bit 1 - Comp2
	4Way	Bit 2 - 4Way valve
	HotGas1	Bit 3 - Hot Gas Bypass1
	HotGas2	Bit 4 - Hot Gas Bypass2
	MainCool	Bit 5 - Main Cooling
	EEVMv	Bit 6 - EEV Valve
	EviSol1	Bit 7 - EVI Solenoid Valve1
	EviSol2	Bit 8 - EVI Solenoid Valve2
	EviBps	Bit 9 - EVI Bypass
	CCH1	Bit 10 - Comp Coil Heater1
	CCH2	Bit 11 - Comp Coil Heater2
	BsHt	Bit 12 - Base Heater

- **DVM-S Eco 4/5/6HP**

Base Address	Input Registers	
	Short Name	Description
+1	OpMode	Operation Mode
+2	OpStat	Operation Status
+3	ErrCode	Error Code
+4	Cap	Capacity [hp]
+6	TrgFreq1	Target Frequency1 [Hz]
+7	OrdFreq1	Order Frequency1 [Hz]
+8	CurFreq1	Current Frequency1 [Hz]
+12	HiPrs	High Pressure x 0.1 [kg/cm2]
+13	SatTPd	Saturated T Pd [°C]
+14	LoPrs	Low Pressure x 0.1 [kg/cm2]
+15	SatTPs	Saturated T Ps [°C]
+16	MidPrs	Mid Pressure x 0.1 [kg/cm2]
+17	DisT1	Discharge1 x 0.1 [°C]
+19	TstOp	Test Operation(UP)
+20	CompTop1	Comp Top1 x 0.1 [°C]
+22	OutT	Outdoor temperature x 0.1 [°C]
+23	CompCur1	Compressor current1 x 0.1 [A]
+25	IPM1T	IPM1 temperature x 0.1 [°C]
+27	CondOutT	CondOut temperature x 0.1 [°C]
+28	LiqTubT	Liquid tube temperature x 0.1 [°C]
+29	Suct1T	Suction1 temperature x 0.1 [°C]
+31	MainEEV	Main EEV
+32	EviEEV	EVI EEV
+37		**Bitfields:**
	Comp1	Bit 0 - Comp1
	4Way	Bit 2 - 4Way valve
	HotGas1	Bit 3 - Hot Gas Bypass1
+41	FanRPM	Fan RPM [rpm]

- **DVM-S Water HR**

Base Address	Input Registers	
	Short Name	Description
+1	OpMode	Operation Mode
+2	OpStat	Operation Status
+3	ErrCode	Error Code
+4	Cap	Capacity [hp]
+6	TrgFreq1	Target Frequency1 [Hz]
+7	OrdFreq1	Order Frequency1 [Hz]

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Base Address	Input Registers	
	Short Name	Description
+8	CurFreq1	Current Frequency1 [Hz]
+9	TrgFreq2	Target Frequency2 [Hz]
+10	OrdFreq2	Order Frequency2 [Hz]
+11	CurFreq2	Current Frequency2 [Hz]
+12	HiPrs	High Pressure x 0.1 [kg/cm2]
+13	SatTPd	Saturated T Pd [°C]
+14	LoPrs	Low Pressure x 0.1 [kg/cm2]
+15	SatTPs	Saturated T Ps [°C]
+17	DisT1	Discharge1 x 0.1 [°C]
+18	DisT2	Discharge2 x 0.1 [°C]
+19	TstOp	Test Operation(UP)
+20	CompTop1	Comp Top1 x 0.1 [°C]
+21	CompTop2	Comp Top2 x 0.1 [°C]
+22	WtrT	Water temperature x 0.1 [°C]
+23	CompCur1	Compressor current1 x 0.1 [A]
+24	CompCur2	Compressor current2 x 0.1 [A]
+25	IPM1T	IPM1 temperature x 0.1 [°C]
+26	IPM2T	IPM2 temperature x 0.1 [°C]
+27	CondOutT	CondOut temperature x 0.1 [°C]
+28	LiqTubT	Liquid tube temperature x 0.1 [°C]
+29	Suct1T	Suction1 temperature x 0.1 [°C]
+30	Suct2T	Suction2 temperature x 0.1 [°C]
+31	MainEEV	Main EEV
+32	EviEEV	EVI EEV
+33	EviIn	EVI IN x 0.1 [°C]
+34	EviOut	EVI OUT x 0.1 [°C]
+37		**Bitfields:**
	Comp1	Bit 0 - Comp1
	Comp2	Bit 1 - Comp2
	4Way	Bit 2 - 4Way valve
	HotGas1	Bit 3 - Hot Gas Bypass1
	HotGas2	Bit 4 - Hot Gas Bypass2
	MainCool	Bit 5 - Main Cooling
	EEVMv	Bit 6 - EEV Valve
	EviSol1	Bit 7 - EVI Solenoid Valve1
	EviSol2	Bit 8 - EVI Solenoid Valve2
	EviBps	Bit 9 - EVI Bypass
	CCH1	Bit 10 - Comp Coil Heater1
	CCH2	Bit 11 - Comp Coil Heater2
	LiqTub	Bit 13 - Liquid tube
	HotGasChrg	Bit 14 - Hot Gas Charging
	FlwSw	Bit 15 - Flow Switch
+38		**Bitfields:**
	2Way	Bit 0 - 2Way
	PumpOut	Bit 1 - Pump Out
	DcFan	Bit 2 - DC Fan
+43	CtrlBxT	Control Box Temperature x 0.1 [°C]
+44	FlwCtrl	Flow Control x 0.1

- **DVM-S Eco 7/8/9HP**

Base Address	Input Registers	
	Short Name	Description
+1	OpMode	Operation Mode
+2	OpStat	Operation Status
+3	ErrCode	Error Code
+4	Cap	Capacity [hp]
+6	TrgFreq1	Target Frequency1 [Hz]
+7	OrdFreq1	Order Frequency1 [Hz]
+8	CurFreq1	Current Frequency1 [Hz]

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Base Address	Input Registers	
	Short Name	Description
+12	HiPrs	High Pressure x 0.1 [kg/cm2]
+13	SatTPd	Saturated T Pd [°C]
+14	LoPrs	Low Pressure x 0.1 [kg/cm2]
+15	SatTPs	Saturated T Ps [°C]
+17	DisT1	Discharge1 x 0.1 [°C]
+19	TstOp	Test Operation(UP)
+20	CompTop1	Comp Top1 x 0.1 [°C]
+22	OutT	Outdoor temperature x 0.1 [°C]
+23	CompCur1	Compressor current1 x 0.1 [A]
+25	IPM1T	IPM1 temperature x 0.1 [°C]
+27	CondOutT	CondOut temperature x 0.1 [°C]
+28	LiqTubT	Liquid tube temperature x 0.1 [°C]
+29	Suct1T	Suction1 temperature x 0.1 [°C]
+31	MainEEV	Main EEV
+32	EviEEV	EVI EEV
+33	EviIn	EVI IN x 0.1 [°C]
+34	EviOut	EVI OUT x 0.1 [°C]
+35	OutFnSt	Outdoor Fan Step
+37		**Bitfields:**
	Comp1	Bit 0 - Comp1
	4Way	Bit 2 - 4Way valve
	HotGas1	Bit 3 - Hot Gas Bypass1
	EviSol1	Bit 7 - EVI Solenoid Valve1
	EviBps	Bit 9 - EVI Bypass
	CCH1	Bit 10 - Comp Coil Heater1

- **FJM**

Base Address	Input Registers	
	Short Name	Description
+1	OpMode	Operation Mode
+2	OpStat	Operation Status
+3	ErrCode	Error Code
+4	Cap	Capacity [hp]
+6	TrgFreq1	Target Frequency1 [Hz]
+7	OrdFreq1	Order Frequency1 [Hz]
+8	CurFreq1	Current Frequency1 [Hz]
+17	DisT1	Discharge1 x 0.1 [°C]
+19	TstOp	Test Operation(UP)
+20	CompTop1	Comp Top1 x 0.1 [°C]
+22	OutT	Outdoor temperature x 0.1 [°C]
+23	CompCur1	Compressor current1 x 0.1 [A]
+25	IPM1T	IPM1 temperature x 0.1 [°C]
+27	CondOutT	CondOut temperature x 0.1 [°C]
+31	EEV1	Main EEV 1
+37		**Bitfields:**
	Comp1	Bit 0 - Comp1
	4Way	Bit 2 - 4Way valve
	HotGas1	Bit 3 - Hot Gas Bypass1
+41	FanRPM	Fan RPM [rpm]
+45	PipIn1	Pipe In 1 temp x 0.1 [°C]
+46	PipIn2	Pipe In 2 temp x 0.1 [°C]
+47	PipIn3	Pipe In 3 temp x 0.1 [°C]
+48	PipIn4	Pipe In 4 temp x 0.1 [°C]
+49	PipIn5	Pipe In 5 temp x 0.1 [°C]
+50	PipOut1	Pipe Out 1 temp x 0.1 [°C]
+51	PipOut2	Pipe Out 2 temp x 0.1 [°C]
+52	PipOut3	Pipe Out 3 temp x 0.1 [°C]
+53	PipOut4	Pipe Out 4 temp x 0.1 [°C]
+54	PipOut5	Pipe Out 5 temp x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+55	EEV2	Main EEV 2
+56	EEV3	Main EEV 3
+57	EEV4	Main EEV 4
+58	EEV5	Main EEV 5

- **CAC Inverter**

Base Address	Input Registers	
	Short Name	Description
+1	OpMode	Operation Mode
+3	ErrCode	Error Code
+6	TrgFreq1	Target Frequency1 [Hz]
+7	OrdFreq1	Order Frequency1 [Hz]
+8	CurFreq1	Current Frequency1 [Hz]
+17	DisT1	Discharge1 x 0.1 [°C]
+20	CompTop1	Comp Top1 x 0.1 [°C]
+22	OutT	Outdoor temperature x 0.1 [°C]
+23	CompCur1	Compressor current1 x 0.1 [A]
+25	IPM1T	IPM1 temperature x 0.1 [°C]
+27	CondOutT	CondOut temperature x 0.1 [°C]
+31	MainEEV	Main EEV
+37	4Way	**Bitfields:** Bit 2 - 4Way valve
+39	DCLnk1	DC Link1 [V]
+40	TrgDis	Target Discharge x 0.1 [°C]
+41	FanRPM	Fan RPM [rpm]
+42	PhsCur	Phase Current [A]

- **MCU**

Base Address	Input Registers	
	Short Name	Description
+1	BpsEEV	Bypass EEV
+2	SubCoolEEV	SubCool EEV
+3	SubCoolInT	SubCooler In temp x 0.1 [°C]
+4	SubCoolOutT	SubCooler Out temp x 0.1 [°C]
+5	LBV A-Cool A-Heat B-Cool B-Heat C-Cool C-Heat D-Cool D-Heat E-Cool E-Heat F-Cool F-Heat	**Bitfields:** Bit 0 - LBV Bit 1 - A-Cool Bit 2 - A-Heat Bit 3 - B-Cool Bit 4 - B-Heat Bit 5 - C-Cool Bit 6 - C-Heat Bit 7 - D-Cool Bit 8 - D-Heat Bit 9 - E-Cool Bit 10 - E-Heat Bit 11 - F-Cool Bit 12 - F-Heat
+6	A-EEV	A-EEV
+7	A-Addr	A-Address
+8	B-EEV	B-EEV
+9	B-Addr	B-Address
+10	C-EEV	C-EEV
+11	C-Addr	C-Address
+12	D-EEV	D-EEV
+13	D-Addr	D-Address
+14	E-EEV	E-EEV
+15	E-Addr	E-Address

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Base Address	Input Registers	
	Short Name	Description
+16	F-EEV	F-EEV
+17	F-Addr	F-Address

4.1.10.3 Samsung PRO Enumerated Parameters

- **Operation Mode (OpMode)**

Value	Description
0	Stop
1	Safety Start
2	Normal
3	Balance
4	Recovery
5	Defrost
6	CompDown
7	Prohibit
8	Line Jig
9	FT Jig
10	Test
11	Charge
12	Pump Down
13	Pump Out
14	Vaccum
15	Calory Jig
16	PumpDownStop
17	Sub Stop
18	Check Pipe
19	Check Ref
20	FPT Jig
21	Nonstop Heat Cool
22	Auto Inspect
23	Electric Discharge
24	Split Deice
25	InverterCheck
26	Nonstop Deice
27	Remocon Test
28	Rating
29	PC TEST
30	Pumpdown thermo off
31	3PHASE Test
32	Smart Install
33	Deice Performance
34	Inverter FAN Check
35	Auto Pipe Pairing
36	Auto Charge

- **Operation Status (OpStat)**

Value	Description
0	Undefined
1	Cool
2	Heat
3	CoolMain
4	HeatMain

- **Test Operation(UP) (TstOp)**

Value	Description
0	Not Completed

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Value	Description
1	Completed

4.1.11 Toshiba

Enter topic text here.

4.1.11.1 Toshiba PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+1		**Bitfields:**
	Kind	Bit 0 - Kind
	Mode	Bit 2 - Operation Mode
	Fan	Bit 5 - Fan Mode
	W_Pump	Bit 9 - W_Pump
	Heater	Bit 10 - Heater
	Valve	Bit 11 - Valve
+2	Type	Type
+3	HP	HP x 0.1 [hp]
+4	Capacity	Requirement Capacity [%]
+5	PMV	PMV
+6	TC1	TC1 x 0.1 [°C]
+7	TC2	TC2 x 0.1 [°C]
+8	TJ	TJ x 0.1 [°C]
+9	TA	RoomTemp(TA) x 0.1 [°C]
+10	TF	Discharge Air Temperature sensor for VN Units x 0.1 [°C]
+11	Error	Error Code
+12	TSA	Supply Air Temperature Sensor for A2A Heat Exchanger Unit x 0.1 [°C]
+13	TOA	Outdoor Air Temperature Sensor for A2A Heat Exchanger Unit x 0.1 [°C]

4.1.11.2 Toshiba SMM PRO Indoor Units

Base Address	Input Registers	
	Short Name	Description
+1	Kind	Kind
+2	Type	Type
+3	HP	HP [hp]
+4	ReqCap	Requirement Capacity [%]
+5	PMV	PMV
+6	TC1	TC1 x 0.1 [°C]
+7	TC2	TC2 x 0.1 [°C]
+8	TCj	TCj x 0.1 [°C]
+9	TA	RoomTemp(TA) x 0.1 [°C]
+10	TF	Discharge Air Temperature sensor for VN Units x 0.1 [°C]
+11	NtcCd	Notice Code
+12	TSA	Supply Air Temperature Sensor for A2A Heat Exchanger Unit x 0.1 [°C]
+13	TOA	Outdoor Air Temperature Sensor for A2A Heat Exchanger Unit x 0.1 [°C]
+14		**Bitfields:**
	Mode	Bit 0 - Operation Mode
	Fan	Bit 3 - Fan Mode
	FrzPrCtrl	Bit 12 - Freeze prevention Control
+15	CtrlT	Room Temp Control x 0.1 [°C]

4.1.11.3 Toshiba PRO Outdoor Systems

- **SMMS**

Base Address	Input Registers	
	Short Name	Description
+1	LineAddr	Line Address

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Base Address	Input Registers	
	Short Name	Description
+2	CapCtrl	Capacity Control [%]
+3	Demand	Demand [%]
+4		**Bitfields:**
	OilRecC	Bit 0 - Oil Recovery(Cool)
	OilRecH	Bit 1 - Oil Recovery(Heat)
	CStart	Bit 2 - Cooling Start
	HStart	Bit 3 - Heating Start
	Defrost	Bit 4 - Defrost
	OilEqCt	Bit 5 - Oil Equalizing Control
	SndRedCt	Bit 6 - Sound Reduction Control
	SnowFnCt	Bit 7 - Snowfall Fan Control
	DownCtrl	Bit 8 - Capacity Down Control
	UpCtrl	Bit 9 - Capacity Up Control *
	StartCtr	Bit 10 - Start Control
	HiPrsRel	Bit 11 - High Pressure Release
	LoPrsRel	Bit 12 - Low Pressure Release
	OilProt	Bit 13 - Oil Dilution Protect
+7	StopKeep	Stop Keep Timer
+8	OnStrtHH	On Time From Start [hh] [hr]
+9	OnStrtMM	On Time From Start [mm] [min]
+11	TotalCon	Indoor Total Connect
+12	InvCurRl	INV Current Release * [A]

- **SMMSe, SHRMe**

Base Address	Input Registers	
	Short Name	Description
+1	LineAddr	Line Address
+2	CapCtrl	Capacity Control [%]
+3	Demand	Demand [%]
+4		**Bitfields:**
	OilRecC	Bit 0 - Oil Recovery(Cool)
	OilRecH	Bit 1 - Oil Recovery(Heat)
	CStart	Bit 2 - Cooling Start
	HStart	Bit 3 - Heating Start
	Defrost	Bit 4 - Defrost
	OilEqCt	Bit 5 - Oil Equalizing Control
	SndRedCt	Bit 6 - Sound Reduction Control
	SnowFnCt	Bit 7 - Snowfall Fan Control
	DownCtrl	Bit 8 - Capacity Down Control
	UpCtrl	Bit 9 - Capacity Up Control *
	HiPrsRel	Bit 11 - High Pressure Release
	OCapCtrl	Bit 14 - Odu Capacity Ctrl
	DschTRel	Bit 15 - Discharge Temp Release
+5		**Bitfields:**
	CoolStop	Bit 0 - Cool Stop(amb temp low)
	HeatStop	Bit 1 - Heat Stop(amb temp hi)
	SV2Start	Bit 2 - SV2 Start Control
	SV2HPRel	Bit 3 - SV2 High Pressure Release
	SV2LPRel	Bit 4 - SV2 Low Pressure Release
	SV2OilPr	Bit 5 - SV2 Oil Dilution Protect
+7	StopKeep	Stop Keep Timer
+8	OnStrtHH	On Time From Start [hh] [hr]
+9	OnStrtMM	On Time From Start [mm] [min]
+10	OnStrtSS	On Time From Start [ss]
+11	TotalCon	Indoor Total Connect
+12	InvCurRl	INV Current Release * [A]
+13	TotCtStp	Odu Capacity Tot.Ctrl(step)

- **SMMS-Mini**

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Base Address	Input Registers	
	Short Name	Description
+1	LineAddr	Line Address
+2	CapCtrl	Capacity Control [%]
+3	Demand	Demand [%]
+4		**Bitfields:**
	OilRecC	Bit 0 - Oil Recovery(Cool)
	OilRecH	Bit 1 - Oil Recovery(Heat)
	CStart	Bit 2 - Cooling Start
	HStart	Bit 3 - Heating Start
	Defrost	Bit 4 - Defrost
	OilEqCt	Bit 5 - Oil Equalizing Control
	SnowFnCt	Bit 7 - Snowfall Fan Control
	DownCtrl	Bit 8 - Capacity Down Control
	UpCtrl	Bit 9 - Capacity Up Control *
	HiPrsRel	Bit 11 - High Pressure Release
	OCapCtrl	Bit 14 - Odu Capacity Ctrl
	DschTRel	Bit 15 - Discharge Temp Release
+5		**Bitfields:**
	CoolStop	Bit 0 - Cool Stop(amb temp low)
	HeatStop	Bit 1 - Heat Stop(amb temp hi)
	SV2Start	Bit 2 - SV2 Start Control
	SV2HPRel	Bit 3 - SV2 High Pressure Release
	SV2LPRel	Bit 4 - SV2 Low Pressure Release
	SV2OilPr	Bit 5 - SV2 Oil Dilution Protect
	LoFanOp	Bit 6 - Low Fan Operation
	HtSinkRl	Bit 7 - Heat sink overheat release
+7	StopKeep	Stop Keep Timer
+8	OnStrtHH	On Time From Start [hh] [hr]
+9	OnStrtMM	On Time From Start [mm] [min]
+11	TotalCon	Indoor Total Connect
+12	InvCurRl	INV Current Release * [A]
+13	TotCtStp	Odu Capacity Tot.Ctrl(step)

4.1.11.4 Toshiba PRO Outdoor Units

- **SMMS Header**

Base Address	Input Registers	
	Short Name	Description
+1	StPri	Starting Priority
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+4	Comp(2)	Comp(2) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	CompBUp1	Bit 1 - Comp BackUp1
	CompBUp2	Bit 2 - Comp BackUp2
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV5	Bit 4 - SV5 ON/OFF
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
	SV3B	Bit 6 - SV3B:Oil Return ON/OFF
	SV3C	Bit 7 - SV3C:Gas Pressure ON/OFF
	SV3D	Bit 8 - SV3D:Separator Open
	SV3E	Bit 9 - SV3E:Oil Balance ON/OFF
	SV41	Bit 10 - SV41:Comp Start Assist
	SV42	Bit 11 - SV42:Comp Start Assist
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+12	TD2	TD2 Discharge Temp x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+13	TE	TE:Heat Exchanger Temp x 0.1 [°C]
+14	TL	TL:Liquid Pipe Temp x 0.1 [°C]
+15	TG	TG:High Pressure Temp x 0.1 [°C]
+16	TS	TS Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+18	TO	TO Outdoor Air Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+21	TK3	TK3:Oil Temp3 x 0.1 [°C]
+22	TK4	TK4:Oil Temp4 x 0.1 [°C]
+23	CheckCd1	Check Code1
+24	CheckCd2	Check Code2
+25	OilLvCk1	Oil Level Check1
+26	OilLvCk2	Oil Level Check2
+27	I1	I1 [A]
+28	I2	I2 [A]
+29	PMV1+2	PMV1+2

- **SMMS Follower**

Base Address	Input Registers	
	Short Name	Description
+1	StPri	Starting Priority
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+4	Comp(2)	Comp(2) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV5	Bit 4 - SV5 ON/OFF
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
	SV3B	Bit 6 - SV3B:Oil Return ON/OFF
	SV3C	Bit 7 - SV3C:Gas Pressure ON/OFF
	SV3D	Bit 8 - SV3D:Separator Open
	SV3E	Bit 9 - SV3E:Oil Balance ON/OFF
	SV41	Bit 10 - SV41:Comp Start Assist
	SV42	Bit 11 - SV42:Comp Start Assist
	OilLvCk1	Bit 12 - Oil Level Check1
	OilLvCk2	Bit 13 - Oil Level Check2
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+12	TD2	TD2 Discharge Temp x 0.1 [°C]
+13	TE	TE:Heat Exchanger Temp x 0.1 [°C]
+14	TL	TL:Liquid Pipe Temp x 0.1 [°C]
+16	TS	TS Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+21	TK3	TK3:Oil Temp3 x 0.1 [°C]
+22	TK4	TK4:Oil Temp4 x 0.1 [°C]
+27	I1	Follower I1 [A]
+28	I2	Follower I2 [A]
+29	PMV1+2	PMV1+2

- **SMMSe Header**

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Base Address	Input Registers	
	Short Name	Description
+1	StPri	Starting Priority
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+4	Comp(2)	Comp(2) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	CompBUp1	Bit 1 - Comp BackUp1
	CompBUp2	Bit 2 - Comp BackUp2
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
	SV3B	Bit 6 - SV3B:Oil Return ON/OFF
	SV3C	Bit 7 - SV3C:Gas Pressure ON/OFF
	SV3D	Bit 8 - SV3D:Separator Open
	SV3E	Bit 9 - SV3E:Oil Balance ON/OFF
	SV41	Bit 10 - SV41:Comp Start Assist
	SV42	Bit 11 - SV42:Comp Start Assist
	SV51	Bit 14 - SV51
	SV52	Bit 15 - SV52
+7		**Bitfields:**
	AccHeat	Bit 0 - Accumulator Heater
	Co1Heat	Bit 1 - Comp1 Heater
	Co2Heat	Bit 2 - Comp2 Heater
	CFoStop1	Bit 3 - Comp Forced Stop1
	CFoStop2	Bit 4 - Comp Forced Stop2
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+12	TD2	TD2 Discharge Temp x 0.1 [°C]
+13	TE1	TE1:Heat Exchanger Temp x 0.1 [°C]
+14	TL1	TL1:Liquid Pipe Temp x 0.1 [°C]
+15	TG	TG:High Pressure Temp x 0.1 [°C]
+16	TS1	TS1:Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+18	TO	TO Outdoor Air Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+22	TK4	TK4:Oil Temp4 x 0.1 [°C]
+23	CheckCd1	Check Code1
+24	CheckCd2	Check Code2
+25	OilLvCk1	Oil Level Check1
+26	OilLvCk2	Oil Level Check2
+27	I1	I1 [A]
+28	I2	I2 [A]
+29	PMV1	PMV1 [pls]
+31	PMV3	PMV3 [pls]
+32	PMV4	PMV4 [pls]
+33	TE2	TE2:Heat Exchanger Temp x 0.1 [°C]
+34	TL2	TL2:Liquid Pipe Temp x 0.1 [°C]
+35	TL3	TL3:Liquid Pipe Temp x 0.1 [°C]
+36	TS3	TS3:Suction Temp x 0.1 [°C]
+37	TG1	TG1:Gas.Temp x 0.1 [°C]
+38	TG2	TG2:Gas.Temp x 0.1 [°C]
+39	TK5	TK5:Oil Temp5 x 0.1 [°C]
+40	TH1	TH1:Comp1 IGBT Temp x 0.1 [°C]
+41	TH2	TH2:Comp2 IGBT Temp x 0.1 [°C]
+42	THF1	THF1:Fan Motor1 IGBT Temp x 0.1 [°C]
+43	THF2	THF2:Fan Motor1 IGBT Temp x 0.1 [°C]

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- **SMMSe Follower**

Base Address	Input Registers	
	Short Name	Description
+1	StPri	Starting Priority
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+4	Comp(2)	Comp(2) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	CompBUp1	Bit 1 - Comp BackUp1
	CompBUp2	Bit 2 - Comp BackUp2
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
	SV3B	Bit 6 - SV3B:Oil Return ON/OFF
	SV3C	Bit 7 - SV3C:Gas Pressure ON/OFF
	SV3D	Bit 8 - SV3D:Separator Open
	SV3E	Bit 9 - SV3E:Oil Balance ON/OFF
	SV41	Bit 10 - SV41:Comp Start Assist
	SV42	Bit 11 - SV42:Comp Start Assist
	OilLvCk1	Bit 12 - Oil Level Check1
	OilLvCk2	Bit 13 - Oil Level Check2
	SV51	Bit 14 - SV51
	SV52	Bit 15 - SV52
+7		**Bitfields:**
	AccHeat	Bit 0 - Accumulator Heater
	Co1Heat	Bit 1 - Comp1 Heater
	Co2Heat	Bit 2 - Comp2 Heater
	CFoStop1	Bit 3 - Comp Forced Stop1
	CFoStop2	Bit 4 - Comp Forced Stop2
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+12	TD2	TD2 Discharge Temp x 0.1 [°C]
+13	TE1	TE1:Heat Exchanger Temp x 0.1 [°C]
+14	TL1	TL1:Liquid Pipe Temp x 0.1 [°C]
+16	TS1	TS1:Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+18	TO	TO Outdoor Air Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+22	TK4	TK4:Oil Temp4 x 0.1 [°C]
+27	I1	I1 [A]
+28	I2	I2 [A]
+29	PMV1	PMV1 [pls]
+31	PMV3	PMV3 [pls]
+32	PMV4	PMV4 [pls]
+33	TE2	TE2:Heat Exchanger Temp x 0.1 [°C]
+34	TL2	TL2:Liquid Pipe Temp x 0.1 [°C]
+35	TL3	TL3:Liquid Pipe Temp x 0.1 [°C]
+36	TS3	TS3:Suction Temp x 0.1 [°C]
+37	TG1	TG1:Gas.Temp x 0.1 [°C]
+38	TG2	TG2:Gas.Temp x 0.1 [°C]
+39	TK5	TK5:Oil Temp5 x 0.1 [°C]

- **SMMS-Mini**

Base Address	Input Registers	
	Short Name	Description
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode

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Base Address	Input Registers	
	Short Name	Description
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV5	Bit 4 - SV5 ON/OFF
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
+7		**Bitfields:**
	SV4	Bit 5 - SV4 Comp Start Assist
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+13	TE	TE:Heat Exchanger Temp x 0.1 [°C]
+14	TL	TL:Liquid Pipe Temp x 0.1 [°C]
+15	TG	TG:High Pressure Temp x 0.1 [°C]
+16	TS	TS Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+18	TO	TO Outdoor Air Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+23	CheckCd1	Check Code1
+24	CheckCd2	Check Code2
+27	I1	I1 [A]
+29	PMV1	PMV1 [pls]
+32	PMV4	PMV4 [pls]
+35	TL3	TL3:Liquid Pipe Temp x 0.1 [°C]
+36	TS3	TS3:Suction Temp x 0.1 [°C]
+44	TH	TH Heat Sink Temperature x 0.1 [°C]
+45	MCUver	MCU Version

- **SHRMe**

Base Address	Input Registers	
	Short Name	Description
+1	StPri	Starting Priority
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+4	Comp(2)	Comp(2) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	CompBUp1	Bit 1 - Comp BackUp1
	CompBUp2	Bit 2 - Comp BackUp2
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
	SV3B	Bit 6 - SV3B:Oil Return ON/OFF
	SV3C	Bit 7 - SV3C:Gas Pressure ON/OFF
	SV3D	Bit 8 - SV3D:Separator Open
	SV3E	Bit 9 - SV3E:Oil Balance ON/OFF
	SV41	Bit 10 - SV41:Comp Start Assist
	SV42	Bit 11 - SV42:Comp Start Assist
	SV51	Bit 14 - SV51
	SV52	Bit 15 - SV52
+7		**Bitfields:**
	CFoStop1	Bit 3 - Comp Forced Stop1
	CFoStop2	Bit 4 - Comp Forced Stop2
	SV61	Bit 6 - SV61
	SV11	Bit 7 - SV11
	SV12	Bit 8 - SV12
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+12	TD2	TD2 Discharge Temp x 0.1 [°C]

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Base Address	Input Registers	
	Short Name	Description
+13	TE1	TE1:Heat Exchanger Temp x 0.1 [°C]
+14	TL1	TL1:Liquid Pipe Temp x 0.1 [°C]
+15	TG	TG:High Pressure Temp x 0.1 [°C]
+16	TS1	TS1:Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+18	TO	TO Outdoor Air Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+22	TK4	TK4:Oil Temp4 x 0.1 [°C]
+23	CheckCd1	Check Code1
+24	CheckCd2	Check Code2
+25	OilLvCk1	Oil Level Check1
+26	OilLvCk2	Oil Level Check2
+27	I1	I1 [A]
+28	I2	I2 [A]
+29	PMV1	PMV1 [pls]
+31	PMV3	PMV3 [pls]
+32	PMV4	PMV4 [pls]
+33	TE2	TE2:Heat Exchanger Temp x 0.1 [°C]
+39	TK5	TK5:Oil Temp5 x 0.1 [°C]
+40	TH1	TH1:Comp1 IGBT Temp x 0.1 [°C]
+41	TH2	TH2:Comp2 IGBT Temp x 0.1 [°C]
+46	TH3	TH3 x 0.1 [°C]
+47	I3	I3 [A]
+48	TS2	TS2:Suction Temp x 0.1 [°C]

- **SHRMe**

Base Address	Input Registers	
	Short Name	Description
+1	StPri	Starting Priority
+2	HP	Outdoor Unit HP
+3	Comp(1)	Comp(1) Hz x 0.1 [Hz]
+4	Comp(2)	Comp(2) Hz x 0.1 [Hz]
+5	FanMode	Outdoor Unit FanMode
+6		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	CompBUp1	Bit 1 - Comp BackUp1
	CompBUp2	Bit 2 - Comp BackUp2
	SV2	Bit 3 - SV2:Hot Gas Bypass
	SV3A	Bit 5 - SV3A:Oil Supply ON/OFF
	SV3B	Bit 6 - SV3B:Oil Return ON/OFF
	SV3C	Bit 7 - SV3C:Gas Pressure ON/OFF
	SV3D	Bit 8 - SV3D:Separator Open
	SV3E	Bit 9 - SV3E:Oil Balance ON/OFF
	SV41	Bit 10 - SV41:Comp Start Assist
	SV42	Bit 11 - SV42:Comp Start Assist
	OilLvCk1	Bit 12 - Oil Level Check1
	OilLvCk2	Bit 13 - Oil Level Check2
	SV51	Bit 14 - SV51
	SV52	Bit 15 - SV52
+7		**Bitfields:**
	CFoStop1	Bit 3 - Comp Forced Stop1
	CFoStop2	Bit 4 - Comp Forced Stop2
	SV61	Bit 6 - SV61
	SV11	Bit 7 - SV11
	SV12	Bit 8 - SV12
	SV14	Bit 9 - SV14
	SV15	Bit 10 - SV15
+9	Pd[psi]	Pd:High Pressure x 0.1 [PSI]

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Base Address	Input Registers	
	Short Name	Description
+10	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+11	TD1	TD1 Discharge Temp x 0.1 [°C]
+12	TD2	TD2 Discharge Temp x 0.1 [°C]
+13	TE1	TE1:Heat Exchanger Temp x 0.1 [°C]
+14	TL1	TL1:Liquid Pipe Temp x 0.1 [°C]
+16	TS1	TS1:Suction Temp x 0.1 [°C]
+17	TU	TU Low Pressure Temp x 0.1 [°C]
+18	TO	TO Outdoor Air Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+22	TK4	TK4:Oil Temp4 x 0.1 [°C]
+27	I1	I1 [A]
+28	I2	I2 [A]
+29	PMV1	PMV1 [pls]
+31	PMV3	PMV3 [pls]
+33	TE2	TE2:Heat Exchanger Temp x 0.1 [°C]
+39	TK5	TK5:Oil Temp5 x 0.1 [°C]
+48	TS2	TS2:Suction Temp x 0.1 [°C]

4.1.11.5 Toshiba SMMSu PRO Outdoor Systems

- **SMMSu**

Base Address	Input Registers	
	Short Name	Description
+1	TotHP	Total HP [hp]
+2		**Bitfields:**
	HiPrsRel	Bit 0 - High Pressure Release
	DschTRel	Bit 1 - Discharge Temp Release
	DfrstPrepHt	Bit 2 - Defrost preparation (Heating)
	DfrstCtrlCl	Bit 3 - During Defrost control (Cooling)
	DfrstFinCl	Bit 4 - Defrost finish action (Cooling)
	CStart	Bit 5 - Cooling Start
	HStart	Bit 6 - Heating Start
	OilRecC	Bit 7 - Oil Recovery(Cool)
	OilRecH	Bit 8 - Oil Recovery(Heat)
	OilEqCt	Bit 9 - Oil Equalizing Control
	StatOv	Bit 10 - Status Over (outdoor capacity correction)
	StatSh	Bit 11 - Status Short (outdoor capacity correction)
	DmndRel	Bit 12 - Demand release
	SndRedCt	Bit 13 - Sound Reduction Control
	SnowFnCt	Bit 14 - Snowfall Fan Control
+3	Inv1CurCtrl	Control current INV1 [A]
+4	IndCapCorrFc	Indoor Unit capacity correction factor [%]
+5	DmndRelRto	Demand release ratio [%]
+6	TotalCon	Indoor Total Connect
+7	TotReqCap	Total required capacity x 0.1 [%]
+8	OnStrtHH	On Time From Start [hh] [hr]
+9	OnStrtMM	On Time From Start [mm] [min]
+10	StopKeep	Unit Stop keep timer
+11	SysStopKeep	System Stop keep timer
+12	IndAddrWTer	Indoor address with terminator
+13		**Bitfields:**
	CommProt	Bit 0 - Communication protocol
	CommSpeed	Bit 1 - Communication speed at Uv line
+14		**Bitfields:**
	RSW1	Bit 0 - RSW1
	RSW2	Bit 5 - RSW2
	RSW3	Bit 10 - RSW3

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Base Address	Input Registers	
	Short Name	Description
+15		**Bitfields:**
	SW101	Bit 0 - SW101
	SW102	Bit 4 - SW102
	SW103	Bit 8 - SW103
	SW104	Bit 12 - SW104
+16	SW105	SW105

4.1.11.6 Toshiba SMMSu PRO Outdoor Units

- **SMMSu**

Base Address	Input Registers	
	Short Name	Description
+1	HP	Outdoor Unit HP
+2		**Bitfields:**
	StPri	Bit 0 - Starting Priority
	DfrstGr	Bit 4 - Defrost Gr
	OilLvCk1	Bit 6 - Oil Level Check1
	OilLvCk2	Bit 7 - Oil Level Check2
	CFoStop1	Bit 8 - Comp Forced Stop1
	CFoStop2	Bit 9 - Comp Forced Stop2
	CompBUp1	Bit 10 - Comp BackUp1
	CompBUp2	Bit 11 - Comp BackUp2
+3	ChkCd	ChkCd
+4	PreChkCd	PreChkCd
+5	NtcCd1	Notice Code1
+6	NtcCd2	Notice Code2
+7	NtcCd3	Notice Code3
+8	NtcCd4	Notice Code4
+9	NtcCd5	Notice Code5
+10	Comp1	Comp(1) Hz x 0.1 [Hz]
+11	Comp2	Comp(2) Hz x 0.1 [Hz]
+12	FanMode	Outdoor Unit FanMode
+13	Pd[psi]	Pd:High Pressure x 0.1 [PSI]
+14	Ps[psi]	Ps:Low Pressure x 0.1 [PSI]
+15	TG	TG:High Pressure Temp x 0.1 [°C]
+16	TU	TU Low Pressure Temp x 0.1 [°C]
+17	TD1	TD1 Discharge Temp x 0.1 [°C]
+18	TD2	TD2 Discharge Temp x 0.1 [°C]
+19	TK1	TK1:Oil Temp1 x 0.1 [°C]
+20	TK2	TK2:Oil Temp2 x 0.1 [°C]
+21	TS1	TS1:Suction Temp x 0.1 [°C]
+22	TS3	TS3:Suction Temp x 0.1 [°C]
+23	TE1	TE1:Heat Exchanger Temp x 0.1 [°C]
+24	TE2	TE2:Heat Exchanger Temp x 0.1 [°C]
+25	TE3	TE3 x 0.1 [°C]
+26	TG1	TG1:Gas.Temp x 0.1 [°C]
+27	TG2	TG2:Gas.Temp x 0.1 [°C]
+28	TG3	TG3 x 0.1 [°C]
+29	TL1	TL1:Liquid Pipe Temp x 0.1 [°C]
+30	TL2	TL2:Liquid Pipe Temp x 0.1 [°C]
+31	TL3	TL3:Liquid Pipe Temp x 0.1 [°C]
+32	TO	TO Outdoor Air Temp x 0.1 [°C]
+33	TH1	TH1:Comp1 IGBT Temp x 0.1 [°C]
+34	TH2	TH2:Comp2 IGBT Temp x 0.1 [°C]
+35	THF1	THF1:Fan Motor1 IGBT Temp x 0.1 [°C]
+36	THF2	THF2:Fan Motor1 IGBT Temp x 0.1 [°C]
+37	I1	I1 [A]
+38	I2	I2 [A]

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Base Address	Input Registers	
	Short Name	Description
+39	PwrOnTm	Power ON Time [hr]
+40	PMV1	PMV1 [pls]
+41	PMV2	PMV2 [pls]
+42	PMV3	PMV3 [pls]
+43	PMV4	PMV4 [pls]
+44		**Bitfields:**
	4wayVlv	Bit 0 - 4way Valve
	SV41	Bit 1 - SV41:Comp Start Assist
	SV42	Bit 2 - SV42:Comp Start Assist
	SV3D	Bit 3 - SV3D:Separator Open
	SV3F	Bit 4 - SV3F
	SV5B	Bit 5 - SV5B
	Co1Heat	Bit 6 - Comp1 Heater
	Co2Heat	Bit 7 - Comp2 Heater
	AccHeat	Bit 8 - Accumulator Heater

4.1.11.7 Toshiba PRO Enumerated Parameters

- **Kind (Kind)**

Value	Description
0	Normal
1	Fresh
2	Fresh
3	Fresh

- **Type (Type)**

Value	Description
0	1-way
1	4-way
2	2-way
3	1-way
4	C-Duct
5	S-Duct
6	H-Duct
7	U-Ceiling
8	High wall
9	Kitchen
10	F-Cabinet
11	F-Concealed
12	F-8/10
13	F-Standing
14	Compact
15	SSD
16	Fresh-D
17	Fresh-F
18	Console
19	Ice
26	H-Duct
27	PAC-F
28	PAC-D
29	V-AHU
30	V-AHU
31	RoofTop
32	RoofTop
50	A2A
51	A2A
52	A2A

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Value	Description
53	A2A
55	RA
56	RA
60	M-HWM
61	M-HWM
62	H-HWM
63	M-HWM
65	Large-PAC
66	Large-PAC
67	Large-PAC

- **Operation Mode (Mode)**

Value	Description
1	Heat
2	Cool
3	Fan
4	Dry
5	Auto (heat)
6	Auto (cool)

- **Fan Mode (Fan)**

Value	Description
2	Stop
3	Stop
4	Auto
5	Auto
6	High
7	High
8	Med
9	Med
10	Low
11	Low
12	Ultra Low
13	Ultra Low

4.1.11.8 Toshiba SMM PRO Enumerated Parameters

- **Kind (Kind)**

Value	Description
0	Normal
1	Normal
2	Normal
3	Normal
4	Normal
5	Normal
6	Normal
7	Normal
8	Normal
9	Normal
10	Normal
11	Normal
12	Normal
13	Normal
14	Normal
15	Normal
16	Fresh
17	Fresh

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Value	Description
18	Normal
19	Normal
21	Normal
26	Normal
27	Normal
28	Normal
29	Normal
30	Normal
31	Normal
32	Normal
50	DX-Coil Unit
51	DX-Coil Unit
52	DX-Coil Unit
53	DX-Coil Unit
55	Dx-I/F
56	Dx-I/F
60	Hot Water
61	Hot Water
62	Hot Water
63	Hot Water
65	Normal
66	Fresh
67	Fresh
68	Normal
69	Fresh

- **Type (Type)**

Value	Description
0	1-way
1	4-way
2	2-way
3	1-way
4	C-Duct
5	S-Duct
6	H-Duct
7	U-Ceiling
8	High wall
9	Kitchen
10	F-Cabinet
11	F-Concealed
12	F-8/10
13	F-Standing
14	Compact
15	SSD
16	Fresh-D
17	Fresh-F
18	Console
19	Ice
21	SSD
26	H-Duct
27	PAC-F
28	PAC-D
29	V-AHU
30	V-AHU
31	Rooftop
32	Rooftop
50	A2A
51	A2A
52	A2A

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Value	Description
53	A2A
55	0-10V/RA
56	0-10V/RA
60	M-HWM
61	M-HWM
62	H-HWM
63	H-HWM
65	L-Duct
66	L-Direct
67	L-Fresh
68	FLEXAIR
69	FLEXAIR-F

- **Fan Mode (Fan)**

Value	Description
1	Off
2	Auto
3	HH
4	HH
5	L
6	LL
9	Off
10	Auto
11	HH
12	H+
13	L+
14	LL

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5 Commands Reference

5.1 line

SYNOPSIS

```
line
line type <Ln> <TYPE>
line myid <Ln> <SA>
line baud <Ln> <FRAME>
```

DESCRIPTION

<Ln> parameter denotes communication line number like for example: **L3** or **L4**.

- Without parameters **line** command prints status of all communication lines available in specific device.
- **line type** command is used to activate Modbus RTU module on line **<Ln>. <TYPE>** parameter can be **CG5** or **CG4** (see Legacy CoolGate Mode) for CoolMasterNet device and **CLMB** for CooLinkNet device.
- **line myid** command will change Modbus Slave Address of the Modbus RTU module running on line **<Ln>.** Parameter **<SA>** is a new Modbus Slave Address in hexadecimal format. Accepted range of addresses is 01..F7 . New address will be in use after power reset.
- **line baud** command is used to change Modbus RTU frame format for line **<Ln>**. **<FRAME>** parameter format is **<BAUD>_<8|9><N|E|O><1|2>**. Supported baud rates for **<BAUD>** parameter are: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200. Frame format change is effective only after power reset.

EXAMPLE

See examples in Modbus RTU Configuration chapter.

5.2 modbus

SYNOPSIS

```
modbus
modbus IP <enable|disable>
modbus server port <PORT>
modbus ignore r
modbus server idle <timeout_s>
modbus cg4
```

DESCRIPTION

This command is available only in CoolMasterNet device.

- Without parameters **modbus** command prints status of the Modbus IP Server.
- **modbus IP** command is used to enable or disable Modbus IP activation.
- **modbus server port** command will change Modbus IP Server TCPI/IP port number. New port number will be effective only after power reset.
- **modbus ignore r** command will toggle ignore flag used by Modbus RTU module in attempt to access non implemented holding or input register. If ignore flag is set, attempt to access non existing register(s) will not cause the "Illegal Data Address" Modbus exception. This feature enables accessing of the multiple registers block with gap(s).

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- **modbus server idle** will set the idle socket timeout to <timeout_s> seconds. It means that if during timeout time there will be no Modbus transactions over socket, the socket will be implicitly closed by CoolAutomation Modbus IP server. Timeout can be disable by setting it to zero. By default timeout is not activated (set to zero).
- **modbus cg4** command is used for legacy CoolGate Modbus RTU operation mode (see Legacy CoolGate Mode). It prints relation between detected UID's and CoolGate Modbus objects Base Addresses.

EXAMPLE

```
>modbus
ModBus IP     : enabled
server port   : 502
server idle TO: 0 sec
CG4/5 ignore  : none
OK
```

See more examples in Modbus IP Configuration chapter.

5.3 va

SYNOPSIS

```
va
va auto
va + <UID> <VA>
va delall
va - <UID>|<VA>
va ram <N>
```

DESCRIPTION

This command is available only in CoolMasterNet device.
<UID> parameter denotes Indoor Unit identifier/number like for example: **L1.100** or **L2.003**. **<VA>** parameter denotes VA number in decimal format.

- Without parameters **va** command prints status of all allocated VA's.
- **va auto** command is used to automatically distribute VA's for all detected UID's one to one. Previously allocated VA's will be deleted
- **va + <UID> <VA>** command will allocate VA for given UID. Number of VA's allocated for UID is not limited.
- **va delall** command will delete all allocated VA's.
- **va - <UID>** will delete all allocated VA's for given UID.
- **va - <VA>** will delete specific VA.
- **va ram <N>** resizes RAM memory used for VA's. Parameter **<N>** denotes a desired total number of VA's that can be allocated. By default N=170. VA's memory resize is effective only after power reset.

EXAMPLE

See examples in VA's Configuration chapter.

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6 Legacy CoolGate Mode

CoolMasterNet Modbus RTU module can be configured to work in legacy CoolGate mode. This is done for backward compatibility with CoolAutomation's CoolGate devices. This mode is not recommended for use in new projects. Activation of legacy CoolGate mode is made with below command:

```
>line type L3 CG4
OK, Boot Required!
```

In this case a number of critical limitations should be taken in account:

- HVAC communication lines are not distinguished. I.e. for example, UID's L1.101 and L2.101 are treated as a same indoor unit.
- UID's range is limited.
- Only Modbus RTU mode is supported. Modbus IP is not supported in CoolGate mode.
- Features available in CoolMasterNet that were not previously implemented in CoolGate devices are not accessible via Modbus RTU module in CoolGate mode.

Details of the CoolGate Modbus implementation can be found in CoolGate Programmer Reference Manual. Minor changes and improvements made in CoolMasterNet Modbus RTU module compared to CoolGate are depicted in following subchapters.

6.1 DK

6.1.1 DK PRO via Airnet address

In CoolMasterNet, access to DK PRO Outdoor System and Outdoor Unit parameters is primary made via Airnet address and not via internal address as it was in CoolGate. Airnet address has a precedence over internal address and access is made according to the below tables.

Outdoor System Airnet Address	Outdoor System CoolGate Base Address (Hex)	Outdoor System
1	0x0801	S0
2	0x0811	S1
3	0x0821	S2
4	0x0831	S3
5	0x0841	S4
6	0x0851	S5
7	0x0861	S6
8	0x0871	S7
9	0x0881	S8
10	0x0891	S9
11	0x08A1	S10
12	0x08B1	S11

Outdoor System Airnet Address	Outdoor Unit & CoolGate Base Address (Hex)		
	Master	Slave 1	Slave 2
1	S0U2 0x0921	S0U3 0x0941	S0U4 0x0961
2	S1U2 0x09A1	S1U3 0x09C1	S1U4 0x09E1
3	S2U2 0x0A21	S2U3 0x0A41	S2U4 0x0A61
4	S3U2 0x0AA1	S3U3 0x0AC1	S3U4 0x0AE1
5	S4U2 0x0B21	S4U3 0x0B41	S4U4 0x0B61
6	S5U2 0x0BA1	S5U3 0x0BC1	S5U4 0x0BE1
7	S6U2 0x0C21	S6U3 0x0C41	S6U4 0x0C61
8	S7U2 0x0CA1	S7U3 0x0CC1	S7U4 0x0CE1
9	S8U2 0x0D21	S8U3 0x0D41	S8U4 0x0D61
10	S9U2 0x0DA1	S9U3 0x0DC1	S9U4 0x0DE1
11	S10U2 0x0E21	S10U3 0x0E41	S10U4 0x0E61
12	S11U2 0x0EA1	S11U3 0x0EC1	S11U4 0x0EE1

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6.1.2 DK PRO Outdoor Systems

Base Address	Input Registers	
+0	System HP	
+1	System Current in 0.1A units	
+2	Evaporation Temperature x10 °C	
+3	Condensing Temperature x10 °C	
+4	System Failure	
+5	**Bitfields** LSB Bit 0 - Cooling Bit 1 - Heating Bit 2 - Ventilation Bit 3 - Thermostat_ON Bit 4 - Standby_ON Bit 5 - Defrost Bit 6 - Startup Control Bit 14 - VRV3 Bit 15 - VRV4	
	VRV3	**VRV4**
+6		Operation Control Mode
+7		I/U Thermostat ON Capacity x10
+8	System AirNet Address	

6.1.3 DK PRO Outdoor Units

Base Address	Input Registers	
	VRV3	**VRV4**
+0	Outdoor System Number	
+1	HP	
+2	Ambient Temperature °C	
+3	Suction Temperature °C	Inv1 Rotation Amnt
+4	Evaporation Temperature °C	
+5	Condensing Temperature °C	
+6	Inverter Revolution Speed	Inv2 Rotation Amnt
+7	EV Opening 1	
+8	EV Opening 2	
+9	CT1 (STD1)	Fan1 Rotation Amnt
+10 0x0A	CT1 (STD2)	Fan2 Rotation Amnt
+11 0x0B	Fan Step	
+12 0x0C	Coil Temperature °C	Comp1 Discharge Temp °C
+13 0x0D	Discharge Temperature (INV) °C	Comp2 Discharge Temp °C
+14 0x0E	Discharge Temperature (STD1) °C	Comp Surface Temp °C
+15 0x0F	Discharge Temperature (STD2) °C	Acc Inlet Temp °C
+16 0x10	Acc Entrance Temperature °C	R4T Exchange Temp °C / Heat Exchanger Temp °C
+17 0x11	Receiver Liquid Temperature °C	R7T Exchange Temp °C / Heat Exchanger Liquid Pipe Temp °C
+18 0x12	Inverter Temperature °C	SBC Exchange Liquid Temp °C
+19 0x13	Inverter Current	SBC Excahnge Gas Temp °C

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+20 0x14	Inverter FAN Current	Inv1 Fin Temp °C
+21 0x15	**Bitfields** LSB Bit 0 - Compressor1 (INV) Bit 1 - Compressor2 (STD1) Bit 2 - Compressor3 (STD2) Bit 3 - Oil_return Bit 4 - Hot_Gas Bit 5 - Crank Case Heater (CH1) Bit 6 - Crank Case Heater (CH2) Bit 7 - Crank Case Heater (CH3) Bit 8 - Soft Start Bit 9 - Restart Standby Bit 10 - Multi Oil Bit 11 - Error State	Inv2 Fin Temp °C
+22 0x16	EV Opening 3	
+23 0x17	SBC Coil Exit Temp °C	Comp1 Current
+24 0x18		Comp2 Current
+25 0x19		Inverter FAN Primary Current
+26 0x1A		**Bitfields** LSB Bit 0 - INV1 Bit 1 - INV2 Bit 2 - Crank Case Heater (CH1) Bit 3 - Crank Case Heater (CH2) Bit 4 - 4 Way Valve Bit 5 - Oil Return 1 Bit 6 - Acc Oil Return Bit 7 - Oil Return 2 Bit 8 - 4 Way Valve Heating Bit 9 - Own Unit Error
+27 0x1B	AirNet Address	

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