

Coil registers		Register parameters			Description	Values
Dec	Hex	Type	Access	Format		
<b>Coil registers</b>						
1	0x0001	Coil	RW	Bool	<b>Air conditioner status</b>	0 – Disabled 1 – Enabled
4	0x0004	Coil	RW	Bool	<b>Quiet mode</b>	0 – Disabled 1 – Enabled
6	0x0006	Coil	RW	Bool	<b>Eco mode</b>	0 – Disabled 1 – Enabled
7	0x0007	Coil	RW	Bool	<b>Turbo mode</b>	0 – Disabled 1 – Enabled
8	0x0008	Coil	RW	Bool	<b>Sleep mode</b>	0 – Disabled 1 – Enabled
9	0x0009	Coil	RW	Bool	<b>Ionization function</b>	0 – Disabled 1 – Enabled
10	0x000A	Coil	RW	Bool	<b>Self-cleaning function</b>	0 – Disabled 1 – Enabled
20	0x0014	Coil	R	Bool	<b>Air conditioner connected</b>	0 - No 1 – Yes
100	0x0064	Coil	RW	Bool	<b>Use external temperature sensor</b>	0 - No 1 – Yes
<b>Holding registers</b>						
1	0x0001	Holding	RW	UInt16	<b>Operating mode</b>	1 – Heating 2 – Cooling 3 – Automatic 4 – Dehumidification 5 – Ventilation

2	0x0002	Holding	RW	UInt16	<p align="center"><b>Status and mode</b></p> <p>This register helps integrate with systems where switching off is controlled by the same register as the mode.</p>	<p>0 – Off  1 – Heating  2 – Cooling  3 – Automatic  4 – Dehumidification  5 – Ventilation</p>
3	0x0003	Holding	RW	SInt16	<p align="center"><b>Indoor air temperature, °C</b></p> <p>By default, this register stores the air temperature measured by the air conditioner's built-in sensor. When a temperature value from an external sensor is written to this register, the value will be returned with the correction shown in register 20.</p>	<p align="center">-10000...10000</p> <p>To obtain the temperature, multiply the value by 0.01.  For example, 2560 means 25.6 °C.</p>
4	0x0004	Holding	R	SInt16	<p align="center"><b>Outdoor air temperature, °C</b></p>	<p align="center">-10000...10000</p> <p>To obtain the temperature, multiply the value by 0.01.  For example, 2560 means 25.6 °C.</p>
5	0x0005	Holding	RW	SInt16	<p align="center"><b>Target temperature, °C</b></p> <p>The temperature is set with an accuracy of 1°C</p>	<p align="center">0...3100</p> <p>To obtain the temperature, multiply the value by 0.01.  For example, 2500 means 25.0 °C.</p>
6	0x0006	Holding	R	UInt16	<p align="center"><b>Thermostat status</b></p>	<p>0 – Idle  1 – Heating  2 – Cooling</p>
7	0x0007	Holding	RW	UInt16	<p align="center"><b>Fan speed</b></p>	<p>0 – Auto  1 – First speed  2 – Second speed  3 – Third speed  4 – Fourth speed  5 – Fifth speed</p>

8	0x0008	Holding	RW	Uint16	<p><b>Extended fan speed</b></p> <p>This register helps integrate with systems where only one register can be used to control the fan speed. Enabling Quiet and Turbo modes does not change the fan speed state (shown on the air conditioner display and in Holding Register No. 7).</p>	<ul style="list-style-type: none"> <li>0 – Auto</li> <li>1 – Quiet mode</li> <li>2 – First speed</li> <li>3 – Second speed</li> <li>4 – Third speed</li> <li>5 – Fourth speed</li> <li>6 – Fifth speed</li> <li>7 – Turbo mode</li> </ul>
9	0x0009	Holding	RW	Uint16	<p><b>Horizontal louvers</b></p> <p>The first position is the lowest. The fifth position is the highest.</p>	<ul style="list-style-type: none"> <li>0 - Stopped</li> <li>1 - Swing</li> <li>2 - Low position</li> <li>3 - Middle low position</li> <li>4 - Middle position</li> <li>5 - Middle high position</li> <li>6 - High position</li> </ul>
10	0x000A	Holding	RW	Uint16	<p><b>Vertical louvers</b></p> <p>The first position is the leftmost. The fifth position is the rightmost.</p>	<ul style="list-style-type: none"> <li>0 - Stopped</li> <li>1 - Swing</li> <li>2 - Left position</li> <li>3 - Middle left position</li> <li>4 - Middle position</li> <li>5 - Middle right position</li> <li>6 - Right position</li> </ul>
11	0x000B	Holding	RW	Uint16	<p><b>Airflow direction</b></p> <p>This register helps integrate with systems where only one register can be used to control the air direction.</p>	<ul style="list-style-type: none"> <li>0 – Stopped</li> <li>1 – Horizontal and vertical swing</li> <li>2 – Horizontal louver swing</li> <li>3 – Vertical louver swing</li> </ul>

15	0x000F	Holding	RW	UInt16	<b>Operating mode (for Loxone)</b>	<p>1 – Automatic  2 – Heating  3 – Cooling  4 – Dehumidification  5 – Ventilation</p>
20	0x0014	Holding	RW	SLint16	<b>Temperature correction</b>	<p>-32768...32768</p> <p>To obtain the temperature, multiply the value by 0.01.  For example, 100 means 1.00 °C.</p>
23	0x0017	Holding	R	SLint16	<b>Indoor heat exchanger temperature, °C</b>	<p>-32768...32768</p> <p>To obtain the temperature, multiply the value by 0.01.  For example, 100 means 1.00 °C.</p>
<b>Holding registers (service)</b>						
110	0x006E	Holding	RW	SLint16	<b>Modbus speed</b>	<p>To get the actual speed, multiply the register value by 100. To write the desired value, divide it by 100.</p> <p><b>96 - 9600</b>  192 - 19200  384 - 38400  576 - 57600  1152 - 115200</p>

111	0x006F	Holding	RW	UInt16	<b>RS-485 port parity setting</b>	0 — no parity bit (none), 1 — odd, 2 — even
112	0x0070	Holding	RW	UInt16	<b>RS-485 port stop bits</b>	1, 2
128	0x0080	Holding	RW	UInt16	<b>Modbus device address</b>	1...247
200 - 219	0x00C8 - 0x00DB	Holding	R	String	<b>Hardware version of the device</b>	GR-3-MB-B
250 - 265	0x00FA- 0x0109	Holding	R	String	<b>Device software version</b>	0.4.8 - current version

270 - 271	0x010E - 0x010F	Holding	R	UInt32	<b>Device serial number</b>	
400 - 420	0x0190 - 0x01A4	Holding	R	String	<b>Air conditioner communication protocol version</b>	2.0.3 — current version
<b>Input registers</b>						
0	0x0000	Inputs	RW	SInt16	<b>Number of errors</b>	0..24
<b>Discrete registers</b>						

0	0x01	Discrete	R	Bool	<b>Errors present</b>	0 – no errors 1 – error
1	0x02	Discrete	R	Bool	<b>Error 1 - Refrigerant recovery mode</b>	0 – no errors 1 – error
2	0x03	Discrete	R	Bool	<b>Error 2 - Remote controller temperature sensor error</b>	0 – no errors 1 – error
3	0x04	Discrete	R	Bool	<b>Error 3 - Remote controller EEPROM error</b>	0 – no errors 1 – error
4	0x05	Discrete	R	Bool	<b>Error 4 - Emergency stop</b>	0 – no errors 1 – error

5	0x06	Discrete	R	Bool	<b>Error 5 - Evaporator temperature sensor error</b>	0 – no errors 1 – error
6	0x07	Discrete	R	Bool	<b>Error 6 - Ambient temperature sensor error</b>	0 – no errors 1 – error
7	0x08	Discrete	R	Bool	<b>Error 7 - Humidity sensor error</b>	0 – no errors 1 – error
8	0x09	Discrete	R	Bool	<b>Error 8 - Condensate overflow protection</b>	0 – no errors 1 – error
9	0x0A	Discrete	R	Bool	<b>Error 9 - IDU memory chip error</b>	0 – no errors 1 – error

10	0x0B	Discrete	R	Bool	<b>Error 10 - Indoor unit jumper error</b>	0 – no errors 1 – error
11	0x0C	Discrete	R	Bool	<b>Error 11 - IDU fan motor error</b>	0 – no errors 1 – error
12	0x0D	Discrete	R	Bool	<b>Error 12 - Filter cleaning required</b>	0 – no errors 1 – error
13	0x0E	Discrete	R	Bool	<b>Error 13 - Indoor unit communication error with the remote controller</b>	0 – no errors 1 – error
14	0x0F	Discrete	R	Bool	<b>Error 14 - Indoor unit communication error with the remote controller</b>	0 – no errors 1 – error

15	0x10	Discrete	R	Bool	<b>Error 15 - Communication error between IDU and ODU</b>	0 – no errors 1 – error
16	0x11	Discrete	R	Bool	<b>Error 16 - Indoor unit error</b>	0 – no errors 1 – error
17	0x12	Discrete	R	Bool	<b>Error 17 - Compressor discharge temperature protection</b>	0 – no errors 1 – error
18	0x13	Discrete	R	Bool	<b>Error 18 - Refrigerant leak protection</b>	0 – no errors 1 – error
19	0x14	Discrete	R	Bool	<b>Error 19 - DC fan motor protection</b>	0 – no errors 1 – error

20	0x15	Discrete	R	Bool	<b>Error 20 - Four-way valve protection</b>	0 – no errors 1 – error
21	0x16	Discrete	R	Bool	<b>Error 21 - Overload protection</b>	0 – no errors 1 – error
22	0x17	Discrete	R	Bool	<b>Error 22 - Compressor overload protection</b>	0 – no errors 1 – error
23	0x18	Discrete	R	Bool	<b>Error 23 - Low pressure protection</b>	0 – no errors 1 – error
24	0x19	Discrete	R	Bool	<b>Error 24 - High pressure protection</b>	0 – no errors 1 – error

25	0x1A	Discrete	R	Bool	<b>Error 25 - Freeze protection</b>	0 – no errors 1 – error
26	0x1B	Discrete	R	Bool	<b>Error 26 - Outdoor air temperature sensor error</b>	0 – no errors 1 – error
27	0x1C	Discrete	R	Bool	<b>Error 27 - Discharge temperature sensor error</b>	0 – no errors 1 – error
28	0x1D	Discrete	R	Bool	<b>Error 28 - Condenser temperature sensor error</b>	0 – no errors 1 – error
29	0x1E	Discrete	R	Bool	<b>Error 29 - Jumper error</b>	0 – no errors 1 – error

30	0x1F	Discrete	R	Bool	<b>Error 30 - ODU memory chip error</b>	0 – no errors 1 – error
31	0x20	Discrete	R	Bool	<b>Error 31 - Outdoor unit failure</b>	0 – no errors 1 – error
32	0x21	Discrete	R	Bool	<b>Error 32 - ODU and IDU mismatch</b>	0 – no errors 1 – error
33	0x22	Discrete	R	Bool	<b>Error 33 - Communication error between ODU and motor</b>	0 – no errors 1 – error
34	0x23	Discrete	R	Bool	<b>Error 34 - Compressor phase sequence protection</b>	0 – no errors 1 – error

35	0x24	Discrete	R	Bool	<b>Error 35 - Low-voltage bus protection</b>	0 – no errors 1 – error
36	0x25	Discrete	R	Bool	<b>Error 36 - High-voltage bus protection</b>	0 – no errors 1 – error
37	0x26	Discrete	R	Bool	<b>Error 37 - AC protection</b>	0 – no errors 1 – error
38	0x27	Discrete	R	Bool	<b>Error 38 - IPM module protection</b>	0 – no errors 1 – error
39	0x28	Discrete	R	Bool	<b>Error 39 - PFC board protection</b>	0 – no errors 1 – error

40	0x29	Discrete	R	Bool	<b>Error 40 - Activation error</b>	0 – no errors 1 – error
41	0x2A	Discrete	R	Bool	<b>Error 41 - Phase loss protection</b>	0 – no errors 1 – error
42	0x2B	Discrete	R	Bool	<b>Error 42 - Motor restart protection</b>	0 – no errors 1 – error
43	0x2C	Discrete	R	Bool	<b>Error 43 - Overcurrent protection</b>	0 – no errors 1 – error
44	0x2D	Discrete	R	Bool	<b>Error 44 - Power protection</b>	0 – no errors 1 – error

45	0x2E	Discrete	R	Bool	<b>Error 45 - Motor current protection</b>	0 – no errors 1 – error
46	0x2F	Discrete	R	Bool	<b>Error 46 - Desynchronization protection</b>	0 – no errors 1 – error
47	0x30	Discrete	R	Bool	<b>Error 47 - Compressor lock protection</b>	0 – no errors 1 – error
48	0x31	Discrete	R	Bool	<b>Error 48 - Motor overheat protection</b>	0 – no errors 1 – error
49	0x32	Discrete	R	Bool	<b>Error 49 - Motor module sensor protection</b>	0 – no errors 1 – error

50	0x33	Discrete	R	Bool	<b>Error 50 - Motor memory chip protection</b>	0 – no errors 1 – error
51	0x34	Discrete	R	Bool	<b>Error 51 - Load circuit error</b>	0 – no errors 1 – error
52	0x35	Discrete	R	Bool	<b>Error 52 - Motor input voltage error</b>	0 – no errors 1 – error
53	0x36	Discrete	R	Bool	<b>Error 53 - Sensor error</b>	0 – no errors 1 – error
54	0x37	Discrete	R	Bool	<b>Error 54 - Overvoltage protection</b>	0 – no errors 1 – error

55	0x38	Discrete	R	Bool	<b>Error 55 - Temperature change protection</b>	0 – no errors 1 – error
56	0x39	Discrete	R	Bool	<b>Error 56 - Sensor connection protection</b>	0 – no errors 1 – error
57	0x3A	Discrete	R	Bool	<b>Error 57 - IDU gas valve temperature sensor error</b>	0 – no errors 1 – error
58	0x3B	Discrete	R	Bool	<b>Error 58 - IDU liquid valve temperature sensor error</b>	0 – no errors 1 – error
59	0x3C	Discrete	R	Bool	<b>Error 59 - Motor board temperature sensor error</b>	0 – no errors 1 – error

60	0x3D	Discrete	R	Bool	<b>Error 60 - Condenser inlet temperature sensor error</b>	0 – no errors 1 – error
61	0x3E	Discrete	R	Bool	<b>Error 61 - Condenser outlet temperature sensor error</b>	0 – no errors 1 – error
62	0x3F	Discrete	R	Bool	<b>Error 62 - Communication line disconnected or EEV error</b>	0 – no errors 1 – error
63	0x40	Discrete	R	Bool	<b>Error 63 - Operating mode conflict</b>	0 – no errors 1 – error
64	0x41	Discrete	R	Bool	<b>Error 64 - Compressor demagnetization protection</b>	0 – no errors 1 – error

65	0x42	Discrete	R	Bool	<b>Error 65 - Entire unit current sensor error</b>	0 – no errors 1 – error
66	0x43	Discrete	R	Bool	<b>Error 66 - AC contactor protection</b>	0 – no errors 1 – error
67	0x44	Discrete	R	Bool	<b>Error 67 – Overspeed</b>	0 – no errors 1 – error
68	0x45	Discrete	R	Bool	<b>Error 68 - Outdoor unit fan 2 protection</b>	0 – no errors 1 – error
69	0x46	Discrete	R	Bool	<b>Error 69 - Motor zero-crossing protection</b>	0 – no errors 1 – error

70	0x47	Discrete	R	Bool	<b>Error 70 - Compressor suction temperature sensor error</b>	0 – no errors 1 – error
71	0x48	Discrete	R	Bool	<b>Error 71 - Fan closing error</b>	0 – no errors 1 – error
72	0x49	Discrete	R	Bool	<b>Error 72 - Communication error between IDU and power system</b>	0 – no errors 1 – error
73	0x4A	Discrete	R	Bool	<b>Error 73 - Communication error between ODU and grid</b>	0 – no errors 1 – error
74	0x4B	Discrete	R	Bool	<b>Error 74 - Main side network error (Master)</b>	0 – no errors 1 – error

75	0x4C	Discrete	R	Bool	<b>Error 75 - IDU network address error</b>	0 – no errors 1 – error
76	0x4D	Discrete	R	Bool	<b>Error 76 - IP address overflow error</b>	0 – no errors 1 – error
77	0x4E	Discrete	R	Bool	<b>Error 77 - Other errors</b>	0 – no errors 1 – error