

SERIAL COMMUNICATION EP3

Communication Protocol: DNP3

Baud rate: 1,200 to 57,600 (automatic baud rate)

Data Bits: 8 Stop

Bits: 1 Parity:

None

MODBUS Address	Reading Range	Bitrate	State	Point Description/Name	Writing/Reading	Scale
1	0 – 2000	-	-	Sensor Alarm Temperature 1;	E/L	1:10
2	0 – 2000	-	-	Sensor Alarm Temperature 2;	E/L	1:10
3	0 – 2000	-	-	Sensor Alarm Temperature 3;	E/L	1:10
9	0 – 100	-	-	Alarm hysteresis value.	E/L	1:10
10	0 – 2000	-	-	Sensor Shutdown Temperature 1;	E/L	1:10
11	0 – 2000	-	-	Sensor Shutdown Temperature 2;	E/L	1:10
12	0 – 2000	-	-	Sensor Shutdown Temperature 3;	E/L	1:10
18	0 – 20	-	-	Delay time for shutdown in minutes.	E/L	1:1
28	-	-		Logger – Commands:	-	
		0	1	Resetting of maximum temperatures;	L/E	-
		1	1	CPU reset;	L/E	-
29	0 – 2000	-	-	Temperature measured by sensor 1;	L	1:10
30	0 – 2000	-	-	Temperature measured by sensor 2;	L	1:10
31	0-2000	-	-	Temperature measured by sensor 3;	L	1:10
37	0-2000	-	-	Maximum temperature reached by sensor 1;	L	1:10
38	0-2000	-	-	Maximum temperature reached by sensor 2;	L	1:10
39	0-2000	-	-	Maximum temperature reached by sensor 3;	L	1:10

CONTINUATION OF THE EP3 SERIES COMMUNICATION TABLE

Address MODBUS	Range of Reading	Bit Table of Contents	State	Description Point Name	Writing Reading	Scale
42	-	-		Recorder – Sensor Status:	-	
		0	0	Sensor 1 disabled;	L/E	-
			1	Sensor 1 enabled;	L/E	-
		1	0	Sensor 2 disabled;	L/E	-
			1	Sensor 2 enabled;	L/E	-
		2	0	Sensor 3 disabled;	L/E	-
			1	Sensor 3 enabled;	L/E	-
43	-	-		Logs: Alarm Return Logic:	-	
		0	0	Normal relay logic 1 (alarm);	L	-
			1	Reverse Relay 1 Logic (Alarm);	L	-
		1	0	Relay logic 2 normal (off);	L	-
			1	Logical Reverse Relay 2 (off);	L	-
		2	0	Normal relay logic 3 (fault);	L	-
			1	Reverse relay logic 3 (fault);	L	-
45	-	-		Logs – Alarm Situations:	-	
		0	1	High temperature alarm on sensor 1;	L	-
		1	1	High temperature alarm on sensor 2;	L	-
		2	1	High temperature alarm on sensor 3;	L	-
		8	1	The time for shutdown time has been enabled;	L	-

46	-	-		Registered – Status of closures:		-
		0	1	High Temperature Shutdown Count Sensor 1	L	-
		1	1	High Temperature Shutdown Count Sensor 2	L	-
		2	1	High Temperature Shutdown Count Sensor 3	L	-
47	-	-		Recorded – Shutdown Status:		-
		0	1	High Temperature Shutdown Sensor 1	L	-
		1	1	High Temperature Shutdown Sensor 2	L	-
		2	1	High Temperature Shutdown Sensor 3	L	-
		8	1	High-temperature shutdown was activated;	L	-
48	-	-		Logs – Refrigerator Status:	L	-
		0	1	Sensor 1 powered refrigerator;	L	-
		1	1	Sensor Powered Refrigerator 2;	L	-
		2	1	Sensor 3 Powered Cooler;	L	-
	-					
		8	1	Chiller Driven	L	-
49	-	-		Recorder – Fault Status:	L	-
		0	1	Sensor Reading Error 1;	L	-
		1	1	Sensor 2 Reading Failure;	L	-

		2	1	Sensor Reading Failure 3;	L	-
		8	1	Sensor failure activated;	L	-
50	1-254	-	-	Serial Network Address	L	-
54	0 - 2	-		Recorder – Analog output type;	L	-
		-	0	Analog output from 0 to 10mA;	L	-
			1	Analog output from 0 to 20mA;	L	-
			2	4 to 20 mA analog output	L	-
55	0 - 5	-		Recorder - Analog Output Duplication Sensor:	L/E	-
		-	0	Analog output disabled;	L/E	-
			1	Fixed analog output on sensor 1;	L/E	-
			2	Fixed analog output on sensor 2;	L/E	-
			3	Fixed analog output on sensor 3;	L/E	-
			5	Fixed analog output at the highest temperature;	L/E	-
56	0 – 2	-		Recorder - Screen Presentation Mode:	L/E	-
		-	0	Fixed display at the highest temperature;	L/E	-
		-	1	Set the display to SCAN mode;	L/E	-
		-	2	Set the display to Manual mode;	L/E	-
60	1-31	-	-	Calibration Day;	L	-
61	1-12	-	-	Month of calibration;	L	-
62	2017-2099	-	-	Year of calibration;	L	-
63	0-65535	-	-	Equipment Serial Number – LSB;	L	-