

SERIAL COMMUNICATION REGISTERS

The protocol used for communication is a subset of MODICON MODBUS 1 (MB1), only functions 03 and 06 are supported. Data are exchanged in ASCII mode with the following serial communication parameters:

Baudrate: 9600

Data bit: 7

Stop bit: 1

Parity: even

AC1-5 (ID code = 25 @ 199): parameters settings		
Reg.	Address	Description
0	000	T1 – Air probe

Reg.	Address	Byte Map			
1	100	Status flag			
		0: ALR	1: nc	2: nc	3: nc
		4: nc	5: nc	6: nc	7: nc
2	101	Alarm flag			
		0: Probe failure T1	1: High Temperature	2: Low temperature	3: nc
		4: nc	5: nc	6: nc	7: nc
3	102	Output flag			
		0: OUT1	1: OUT2	2: nc	3: nc
		4: nc	5: nc	6: nc	7: nc

Reg.	Address	Mnem.	Description	Range	Unit/Value
4	200	SCL	Reading scale	0, 1, 2	1°C, 2°C, °F
5	201	SPL	Minimum temperature set point	-199...SPH	°C or °F
6	202	SPH	Maximum temperature set point	SPL...999	°C or °F
7	203	1SP	Effective temp. set point channel 1	SPL...SPH	°C or °F
8	204	1HY	Change-over hysteresis channel 1	0...199	°C or °F
9	205	1T0	Minimum time in OFF channel 1	0...30	min
10	206	1T1	Minimum time in ON channel 1	0...30	min
12	207	1PB	Proportional band channel 1	0...199	°C or °F
13	208	1IT	Integral action time channel 1	0...999	sec
14	209	1DT	Derivative action time channel 1	0...999	sec
15	210	1AR	Reset of integral action referred to Pb1	0...100	%
16	211	1CT	Cycle time channel 1	1...255	sec
17	212	OAU	Control mode for channel2	25,26,27,28	NON, THR, AL0, AL1
18	213	2SP	Effective temp. set point channel 1	SPL...SPH	°C or °F
19	214	2DF	Differential setpoint referred to 1SP	-19.9...19.9	°C or °F
20	215	2HY	Change-over hysteresis channel 2	0...199	°C or °F
21	216	2T0	Minimum time in OFF channel 2	0...30	min
22	217	2T1	Minimum time in ON channel 2	0...30	min
23	218	ATM	Alarm threshold management	22,23,24	NON,ABS,REL
24	219	ALA	Low temperature alarm (ABS)	-50...AHA	°C or °F
25	220	AHA	High temperature alarm (ABS)	ALA...120	°C or °F
26	221	ALR	Low temperature alarm differential	-12.0...0.0	°C or °F
27	222	AHR	High temperature alarm differential	0.0...12.0	°C or °F
28	223	ATD	Temperature alarm delay	0...120	min
29	224	INP	Probe type selection	3...10	T1, T2, PT100, ST1, SN4, 0mA, 4mA, 0-1V
30	225	RLO	Probe Low reference	-199...RHI	°C or °F
31	226	RHI	Probe High reference	RLO...999	°C or °F
32	227	OS1	Probe 1 offset	-120...120	°C or °F
33	228	TLD	Logging temp. delay	1...30	min
34	229	SIM	Display slowdown	0...100	
35	230	ADR	Unit address	1...255	

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36	231	Configuration "Cfg_1"			
		0: 1CM (HY/PID)	1: 1CH (heat/cool)	2: 2CH (heat/cool set2)	3: 2SM (ABS/REL set2)
		4: 1PF Out state PF	5: 2PF Out state PF	6:	7: SB button enable
37	239	Configuration "Cfg_2"			
		0: Lock Keyboard	1:	2:	3:
		4:	5:	6:	7:
1	236	THI	Max. stored temp.	...	°C or °F
2	237	TLO	Min. stored temp.	...	°C or °F
3	238	MDL	Device Model	0,1,2,3,4	A,I,J,P,T