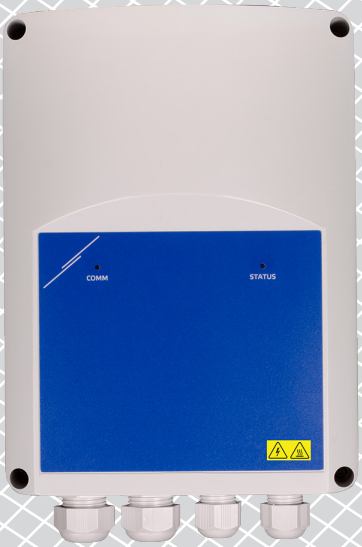
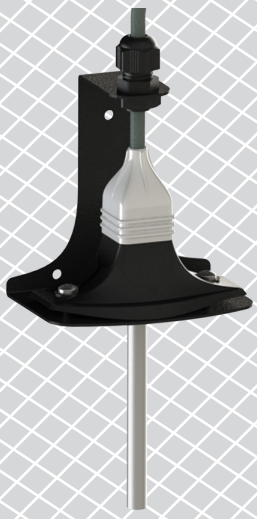
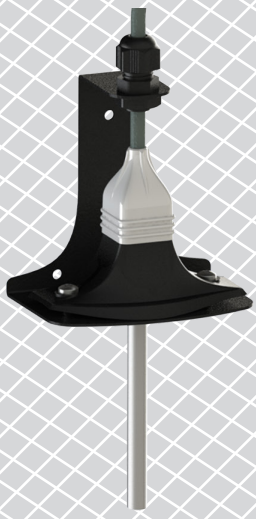
Destratification | AC fans

Modbus register map







MODBUS REGISTER MAP

INPUT REGISTERS

		Data type	Description	Raw data range	Values
1	Analogue input 1 value	unsigned integer	Measured input value 1	0—1.000	600 = 60,0 % 1.000 = 100,0
2			Reserved, returns 0		
3	Output 1 value	unsigned integer	Actual voltage level in % Us over output 1	0—1.000	800 = 80% Us
4	Current output 1	unsigned integer	Current measured through output 1	0—1.000	0 = 0 A 10 = 0,1 A 100 = 1,0 A 1.000 = 10,0 A
5	Output 1 operation status	unsigned integer	Operation status output 1	0 – 1	0 = Stop 1 = Run
6-7			Reserved, returns 0		
8	Temperature delta	unsigned integer	Measured difference between temperature sensor T1 and temperature sensor T2	0 – 300	99 = 9,9 °C
9-12			Reserved, returns 0		
13	Output 2 value	unsigned integer	Actual voltage level in % Us over output 2	0—1.000	800 = 80% Us
14	Current output 2	unsigned integer	Current measured through output 2	0—1.000	0 = 0 A 10 = 0,1 A 100 = 1,0 A 1.000 = 10,0 A
15	Output 2 operation status	unsigned integer	Operation status output 2	0—1	0 = Stop 1 = Run
16-28			Reserved, returns 0		
29	Circuit temperature protection	unsigned integer	Temperature protection when too high temperature measurement on the electronics board	0—1	0 = OK 1 = High temperature
30	Device status	unsigned integer	Device status	0 – 65535	Bit 10: Overcurrent status (0 = OK, 1 = Fault) Bit 3: Sensor 2 (outside) Temperature sensor status (0 = OK, 1 = Fault) Bit 2: Sensor 1 (outside) Temperature sensor status (0 = OK, 1 = Fault) Bit 1: Sensor 2 (outside) communication status (0 = OK, 1 = Lost) Bit 0: Sensor 1 (outside) communication status (0 = OK, 1 = Lost)

HOLDING REGISTERS

		Data type	Description	Raw data range	Values	Factory default values
1	Device slave address	unsigned integer	Modbus device address	1		1
2	Modbus baud rate	unsigned integer	Modbus communication baud rate	0—6	0 = 4.800 1 = 9.600 2 = 19.200 3 = 38.400 4 = 57.600 5 = 115.200 6 = 230.400	2
3	Modbus parity check	unsigned integer	Parity check mode	0—2	0 = 8N1 1 = 8E1 2 = 8O1	1
4	Device type	unsigned integer	Device type. Read only	2.403	TCMF8-302DM = 2111 TCMF8-302WF = 2112 TCMF8-302EW = 2113 TCMF8-602DM = 2114 TCMF8-602WF = 2115 TCMF8-602EW = 2116	
5	HW version	unsigned integer	Hardware version. Read only	XXXX	0x0100 = HW version 1.0	
6	FW version	unsigned integer	Firmware version. Read only	XXXX	0x0101 = FW version 1.01	
7			Reserved, returns 0			
8	Modbus Time Out	unsigned integer	Time Out Of Modbus, after which the output is set to minimum output	0—60	0 = Time Out OFF 1 = 1 min 60 = 60 minutes	0
9	Modbus network bus termination (NBT)	unsigned integer	Set device as end device on the line or not by connecting NBT	0—1	0 = disconnected 1 = connected	0
10	Modbus registers reset	unsigned integer	Resets Modbus Holding registers to default values. When finished this register is automatically reset to 0	0—1	0 = Idle 1 = Reset Modbus Registers	0
11-17			Reserved, returns 0			
18	Minimum voltage output 1	unsigned integer	Minimum output voltage output 1	200 - 400	300 = 30 % 400 = 40 %	300
19	Maximum voltage output 1	unsigned integer	Maximum output voltage output 1	600 – 1.000	600 = 60 % 1.000 = 100 %	1.000

HOLDING REGISTERS

		Data type	Description	Raw data range	Values	Factory default values
20	Overwrite output	unsigned integer	Value overwrite for output 1	0 – 1.000	0 = OFF 400 = 40 % 1.000 = 100 %	0
21-22			Reserved, returns 0			
23	Temperature delta offlevel (dToff)	unsigned integer	Temperature difference between sensor 1 (T1) minus sensor 2 (T2) to have output switched off.	5 – 15	10 = 1,0 °C	10
24	Minimum temperature delta (dTmin)	unsigned integer	Minimum temperature difference between sensor 1 (T1) minus sensor 2 (T2) to have minimum output level.	20 – 40	20 = 2,0 °C	20
25	Maximum temperature delta (dTmax)	unsigned integer	Maximum temperature difference between sensor 1 (T1) minus sensor 2 (T2) to have maximum output level.	50 – 150	50 = 5,0 °C 150 = 15,0 °C	50
26	Output overwrite enable	unsigned integer	Enable manual overwrite	0 – 1	0 = Automatic 1 = Overwrite	0
27	Hysteresis	unsigned integer	Select hysteresis for temperature delta offevel	0 – dToff	10 = 1,0 °C	2
28-51			Reserved, returns 0			
52	LED’s brightness control	unsigned integer	The intensity of the LED 2	0 - 10	0 = Off 1 = 10% 2 = 20% 3 = 30% 4 = 40% 5 = 50% 6 = 60% 7 = 70% 8 = 80% 9 = 90% 10 = 100%	5
53-60			Reserved, returns 0			

The free Sentera configuration and monitoring software 3SModbus can be downloaded via: https://www.sentera.eu/en/3SMCenter