

Product Information

Temperature Controller TTM-00xW Series



Characteristics

- 2-, 3-point- or continuous controller
- Measuring input for Pt100, thermocouple or voltage / current
- Measuring range programmable
- Control performance PID with auto-tuning
- Process output relay, electronic output 0/12 V or continuous 4..20 mA
- Alarm output relay, alarm function configurable

Technical data

Power supply

Supply voltage : 100..240 V AC, -15%, +10% or 24 V AC/DC, +,-10; 50/60 Hz

Power consumption : < 10 VA at 240 V AC

CE-conformity : EN 61326-1:2013; EN 61010-1:2010

Certification : UL3121-1 (UL/CUL)

Measuring input

Pt100 : Pt100/JPt100 range -199(.9)..500(.0) °C
 2- or 3-wire connection

Thermocouple

- Type J : Fe-CuNi -200..+850/-199.9..+850.0 °C
- Type K : NiCr-Ni -200..+1372/-199.9..+990.0 °C
- Type N : NiCrSi-NiSi -200..+1300/-199.9..+990.0 °C
- Type R : PtRh-Pt87/13 0..1700°C
- Type S : PtRh-Pt90/10 0..1700°C
- Type T : Cu-CuNi -200..+400/-199.9..+400.0 °C
- Type B : Pt30Rh/Pt6Rh 0..1800 °C

break of sensor, built-in cold junction

Voltage : 0/1..5 V DC -1999..+9999 Digit

Current : 4..20 mA -1999..+9999 Digit

Sensor correction : programmable

Accuracy : ± 0.3 % +1 digit of the measuring range

Sampling rate : 0.25 s

Output

Electronic : 0/12 V DC bistable, max. 20 mA, > 600 Ω

Relay : process output <250 V AC <250 VA <3 A
 alarm output <250 V AC <250 VA <2.4 A

Continuous : 4..20 mA, burden max. 600 Ω

Interface

Physically : RS485

Protocol : Toho / MODBUS (RTU, ASCII)

Baud rates : 1200, 2400, 4800, 9600, 19200 bps

Display

Process value : LED 4-digit white 10 or 14 mm

Set value : LED 4-digit green 8 mm

Decimal point : programmable

Status indicator : LED red or green

Case

Dimensions : HxWxD

TTM-004W : 48x48x77 mm DIN48x48

TTM-005W : 48x96x76.5 mm DIN48x96

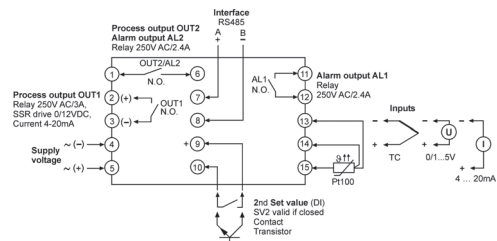
TTM-009W : 96x96x77 mm DIN96x96

Protection class : front IP65

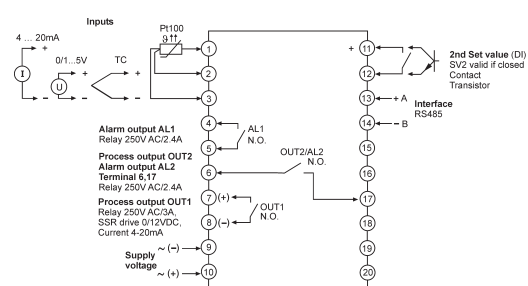
Terminals : screw terminals max 2.5 mm²

Connection diagram

TTM-004W



TTM-005 / 009W



Ordering code

1. 2. 3. 4. 5. 6.
 TTM - - - - - -

1. Model	
004W	DIN 48x48
005W	DIN 48x96
009W	DIN 96x96
2. Input	
0	thermocouple; Pt100, JPt100
2	current, voltage
3. Process output OUT1	
R	relay SPST
P	electronic bistable 0/12 V DC for SSR relay
I	continuous, current 4..20 mA
4. Options	
AB	AL1 relay SPST (standard) OUT2 / AL2 relay SPST (3-point-controller)
5. Interface	
0	without interface
ME	serial interface RS485, 2. set value SV2
6. Supply voltage	
0	100..240 V AC
5	24 V AC/DC