

DIN Rail Panel Montage Type Temperature Controller

ESM-1510



- Heating / Cooling Applications
- Economical
- Easy to Use
- DIN RAIL Mounting
- 3 Digits display
- PTC input or
J Type Thermocouple Input or
K Type Thermocouple Input or
2-wire Pt-100 or Pt-1000 Input
- ON / OFF Temperature Control
- Selectable Heating or Cooling Function
- Adjustable Temperature Offset Value
- Set Value Low Limit and Set Value High Limit Boundaries
- Relay or SSR Driver Output
- Operation Selection of compressor operates continuously,
stops or operates periodically in case of probe defect
- Compressor Protection Delay

SPECIFICATIONS

INPUT

PTC: PTC1000 (1000Ω@25°C)

Thermocouple (TC): J, K (IEC 584.1) (ITS90)

Thermoresistance (RTD): 2-wire Pt-100, Pt-1000 (IEC 751)(ITS90)

Measurement Range: It is in ordering information

Accuracy: ± 1% of scale

Cold Junction Compensation: Automatically ± 0.1°C/1°C

Sensor Break Protection: Upscale

Sampling Cycle: 3 samples per second

CONTROL

Control Form: ON/OFF

ON/OFF hysteresis: It can be configured by the user

OUTPUTS

Control Output:

Relay (5A@250V~at resistive load) or

SSR Driver Output (Max.20mA@12V=)

Supply Voltage:

230V~(±15%) 50/60 Hz - 1.5VA

115V~(±15%) 50/60 Hz - 1.5VA

24V~(±15%) 50/60 Hz - 1.5VA

12V~(±15%) 50/60 Hz - 1.5VA

(Supply voltage must be determined in order)

ENVIRONMENTAL RATINGS and PHYSICAL SPECIFICATIONS

Operating Temperature: 0...50°C

Humidity: 0-90%RH (none condensing)

Protection Class: IP20

Dimensions:

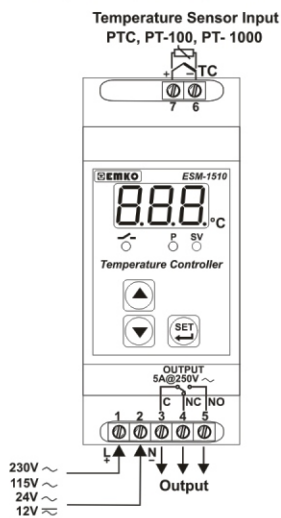
H: 86mm / W: 35mm / D: 59 mm

Mounting:

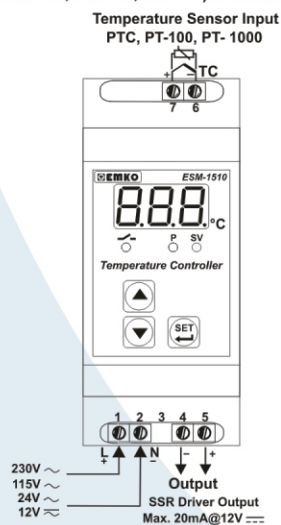
DIN RAIL Mounting Type

Electrical Wiring

(230V ~, 115V ~, 24V ~, 12V ~) with Relay Output



(230V ~, 115V ~, 24V ~, 12V ~) with SSR driver Output



Ordering Information

ESM-1510	A	BC	D	E	/	FG	HI	/	U	V	W	Z
			0		/	00	00	/	1		0	0

A	Supply Voltage
3	24V ~ (± %15) 50/60Hz
4	115V ~ (± %15) 50/60Hz
5	230V ~ (± %15) 50/60Hz
6	12V ~ (± %15) 50/60Hz

BC	Input Type	Scale(°C)	
05	J, Fe CuNi IEC584.1(ITS90)	0°C	800°C
10	K, NiCr Ni IEC584.1(ITS90)	0°C	999°C
11	PT 100, IEC751(ITS90)	-50°C	400°C
09	PT 100, IEC751(ITS90)	-19.9°C	99.9°C
12	PTC (Note-1)	-50°C	150°C
15	PTC (Note-1)	-19.9°C	99.9°C
14	PT 1000, IEC751(ITS90)	-50°C	400°C
13	PT 1000, IEC751(ITS90)	-19.9°C	99.9°C

Note-1 : If input type is selected PTC (BC = 12 or BC = 15), PTC Temperature sensor is given with the device. For this reason, PTC sensor type (V) must be declared in ordering information.

E	Output-1
1	Relay Output (5A@250V ~ at resistive load, 1 NO + 1NC)
2	SSR Driver Output (Maximum 20mA@ 12V ~)

V	Temperature Sensor which is given with ESM 1510
0	None
1	PTC-M6L50.K1.5 (PTC Air probe with 1.5 m silicon cable)
2	PTCS-M6L30.K1.5.1/8" (PTC Liquid probe with 1.5 m silicon cable)
9	Customer