

DIN RAIL MOUNT TEMPERATURE CONTROLLER

Model : ESM-1510

FEATURES

- 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
- Adjustable temperature offset value
- ON / OFF Temperature control
- Selectable Heating or Cooling function
- Relay or SSR Driver output



SPECIFICATIONS

INPUT

PTC : PTC 1000 (1000Ω@25°C)

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

Thermo-resistance (RTD) : 2-wire PT 100, PT 1000 (IEC 751) (ITS90)

Measurement Range : As per Table - 1

Accuracy : ± 1% of scale

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

Sensor Break Protection : Upscale

Sampling Cycle : 3 Samples per second

Control Output :

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

SSR Driver output (Maximum 20mA@12V=)

DISPLAY

Process Display : 9mm Red 3 digits LED display

LED Indicators : SV (Green), OUT (Red), P(Red)

Power Supply

Supply Voltage : 230V ~ (±15%) 50/60 Hz - 1.5VA (Standard)

24V ~ (±15%) 50/60 Hz - 1.5VA (to be ordered Separately)

Operating Temperature : 0.....50°C

Humidity : 0-90%RH (non condensing)

Protection Class : IP 20

Weight : 150 gr.

Dimensions : H : 86mm×W : 35mm×D : 59mm

Mounting : DIN RAIL Mounting Type

Table - 1

Ordering Information

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

A	Supply Voltage
3	24V ~ (± 15%) 50/60 Hz
	230V ~ (± 15%) 50/60 Hz

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, IEC571(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 must be given with the device. For this reason, PTC sensor type (V) must be declared in ordering information.

E	Output-1 (For ESM 1510)
1	Relay Output (Resistive load 5A@250V ~, 1NO + 1NC)
2	SSR Driver Output (Max. 20mA@ 12V=)

Custom Oriented Controllers for Industrial Applications

Supply Voltage :

230V ~ ($\pm 15\%$) 50/60 Hz - 1.5VA

115V ~ ($\pm 15\%$) 50/60 Hz - 1.5VA

24V ~ ($\pm 15\%$) 50/60 Hz - 1.5VA

12V $\overline{\sim}$ ($\pm 15\%$) 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 :

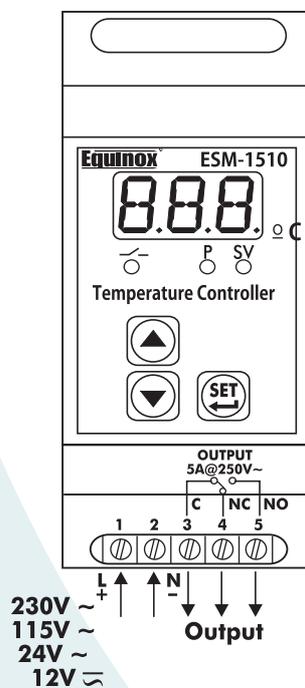
H : 86mm \times W : 35mm \times D : 59mm

Mounting :

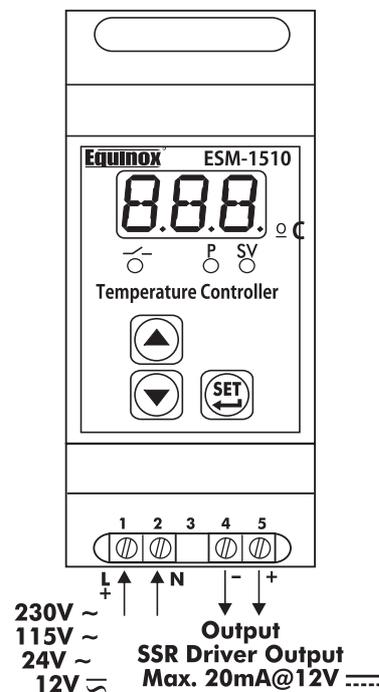
DIN RAIL Mounting Type

Electrical Wiring

(230V~, 115V~, 24V~, 12V $\overline{\sim}$) Supply Voltage and with Relay Output



(230V~, 115V~, 24V~, 12V $\overline{\sim}$) Supply Voltage and with SSR Driver Output



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