



Your Technology Partner

ESM-4420
ESM-7720
ESM-9920

Temperature Controllers

PID Temperature Controllers



- 4 digits process(PV) and 4 digits set value(SV) display
- Universal process input (TC, RTD)
- Configurable ON/OFF, P, PI, PD and PID control forms
- Adaptation of PID Coefficients to the system with Self-Tune operation (Step Response Tuning)
- Programmable Heating or Cooling Functions for Control Output
- Alarm Functions for Alarm Output
- Soft Start Output For Resistance Durability
- SET Value Limitation For System Protection
- Sensor Break Protection

Specifications

Input

Process Input: TC, RTD

Thermocouple (TC): J, K, R, S and T (IEC584.1)(ITS90)

Thermoresistance (RTD): PT-100 (IEC751)(ITS90)

Output

Process Output : Relay (5A@250Vac at resistive load) and SSR Driver Output (Maximum 12mA@ 5Vdc)

Alarm Output : Relay(5A@250Vac at resistive load)

Measurement Range

Accuracy: $\pm 0.25\%$ of scale for thermocouple and thermoresistance

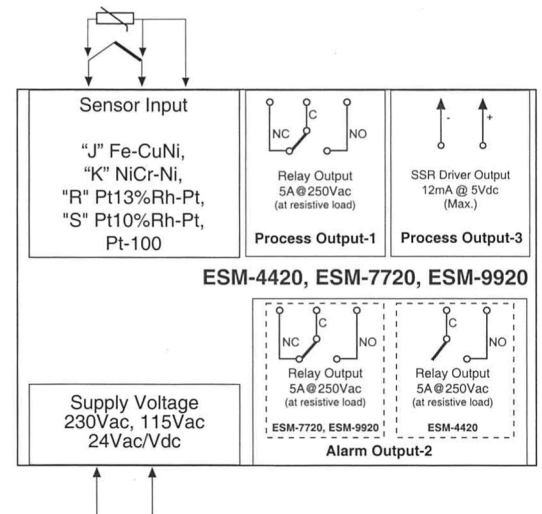
Cold Junction Compensation: Automatically $\pm 0.1^\circ\text{C}/1^\circ\text{C}$

Line Compensation: Maximum 10 Ohm

Sensor Break Protection: Upscale

Sampling Cycle: 3 samples per second

Input Filter: 1.0 second



Supply Voltage:

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

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

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

24Vac/dc (-15% ; $+10\%$) 50/60 Hz -1.5VA

Dimensions

ESM-4420, 48x48mm, Depth: 95mm

ESM-7720, 72x72mm, Depth: 95,5mm

ESM-9920, 96x96mm, Depth: 96mm