

ESM-4450

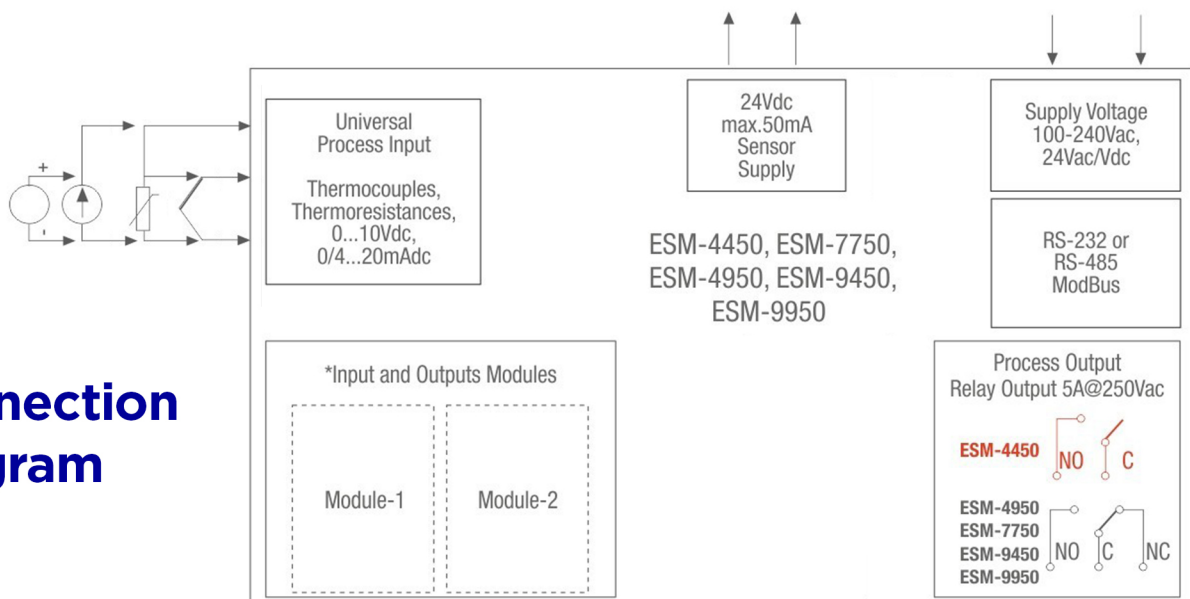
“Smart IO Module” Process Controller

ESM-4450

- 8 steps profile control (Ramp & Soak) function and start-hold-stop by using logic input module
- For process value and process control
- Retransmission feature
- Detection/heater failure by using 0...5Adc CT input module
- Universal process input (TC, RTD, mVdc, Vdc, mAdc)
- Bumpless transfer
- Motorized valve control function
- 4 Digits process (PV) and 4 Digits set (SV) display
- Programmable heating, cooling and alarm functions for control outputs
- Auto-tune and Self-tune PID
- Dual or multi point calibration for dc Voltage/Current input
- Configurable ON/OFF, P, PI, PD, & PID control forms



Connection Diagram



Features	Descriptions
Physical Features	
Dimensions	48 mm x 48 mm 116 mm
Protection Class	NEMA 4X (IP65 at front, IP20 at rear)
Installation	Fixed Installation
Storage / Operating Temperature	0...50°C
Storage / Operating Humidity	90 % max. (None condensing)
Electrical Features	
Supply Voltage and Power	100-240 Vac (-15%,+10%) 50/60 Hz. 6 VA 24 Vac (-15%,+10%) 50/60 Hz. 6 VA 24 Vdc (-15%,+10%) 6 W
Sensor Inputs	Universal Input TC, RTD, Voltage/Current (dc) Selectable by configuration parameters L (DIN43710), J, K, R, T, S, B, E, N (IEC584.1) (ITS90) PT100 (IEC751) (ITS90) Selectable by configuration parameters 0-50 mV, 0-5 V, 0-10 V Selectable by configuration parameters 0-20 mA, 4-20 mA
Optional Sensor Inputs	EMI-400 Dijital Input Module EMI-410 0/4-20mA Current Input Module EMI-420 CT 0-5A Input Module EMI-430 TC veya 0.-50mVdc Input Module EMI-440 PT-100 Input Module EMI-450 0-10Vdc Input Module
Scale	
Accuracy	± 0,25% of full scale for Thermocouple ,Thermoresistance, and Voltage
Output	
Relay Output	5A@250 Vac at resistive load
SSR Output	
Analogue Output	
Optional Outputs	EM0-400 Relay Output Module (3A@250V) EM0-410 SSR Output Module (20mA@18V) EM0-420 Dijital (Transistor) Output Module (40mA@18V) EM0-430 0/4-20mA Current Output Module
Control	
Control Form	On / Off, P, PI, PD, PID
Reading Frequency	3 readings per second
Communication Protocols	MODBUS-RTU
Approvals	UL Recognized Component (File No : E 254103), GOST-R, CE

