

# Temperature Controllers

Digital PID  
Temperature Controller

ESM-3720



- ▶ Remote access, data collecting and controlling with Modbus RTU
- ▶ Installing parameters using Prokey
- ▶ PID or ON/OFF selectable temperature control

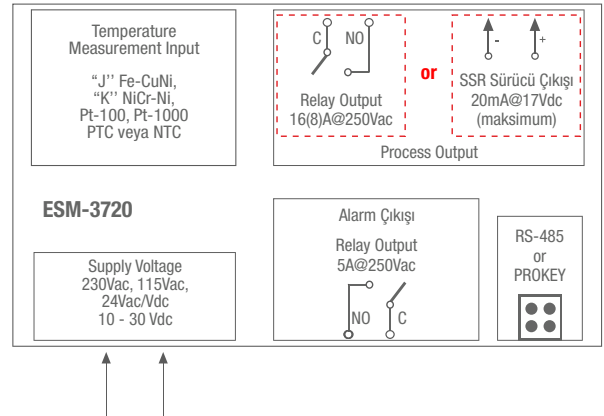
- ▶ Password protection for programming section
- ▶ Having CE mark according to European Norms
- ▶ Adjustable internal buzzer according to sensor defect status

## Specifications

- 4 Digits Display
- NTC Input or PTC Input or
- J type thermocouple Input or Ktype thermocouple Input or
- 2-Wire PT-100 Input or 2-Wire PT-1000 Input (Must be determined in order.)
- Adjustable temperature offset
- Selection of operation with hysteresis
- Adjustable temperature offset
- Set value low limit and set value high limit boundaries
- Operation selection of compressor operates continuously, stops or operates periodically in case of sensor defect
- Compressor protection delays

## Technical Specification

- Accuracy:** ±1% of scale
- Cold Junction Compensation:** Automatically ± 0.1°C/1°C
- Sensor Break Protection:** Upscale
- Sampling Cycle:** 3 samples per second



ESM-3720

A . BC . 0 . E / 01 . 00 / . 1 . V . 0 . 0

ESM-3720 (76x34,5x71mm)

- A** Supply Voltage
  - 2 24Vac/dc (±%15) 50/60 Hz
  - 3 24Vac (±%15) 50/60 Hz
  - 4 115Vac (±%15) 50/60 Hz
  - 5 230Vac (±%15) 50/60 Hz
  - 8 10-30Vdc
- BC** Input
  - 05 J, Fe CuNi IEC584.1(ITS90)
  - 10 K, NiCr Ni IEC584.1(ITS90)
  - 11 Pt 100, (-50...400°C)
  - 09 Pt 100, (-19.9...99.9°C)
  - 12 PTC (-50...130°C)
  - 14 Pt 1000, (-50...400°C)
  - 13 Pt 1000, (-19.9...99.9°C)
  - 18 NTC (-50...100°C)

- V**
  - 1 PTC-M6L40.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)
  - 3 NTC-M5L20.K1.5 (NTC Probe, thermoplastic moulded with 1.5 m cable for cooling application)
  - 4 NTC-M6L50.K1.5 (Metal protective tubular, 1.5 m wired NTC probe)
- FG** Alarm Output
  - 01 5A@250 Vac, 1 NO
- E** Process Output
  - 1 Relay Output: (16(8)A @ 250Vac)
  - 2 SSR Driver output (Maximum 20mA @ 17Vdc)