

# Process Controllers

Dual SET  
PID Process Control

ESM-3723



- ▶ Temperature Sensor Input (NTC, PTC, PT-100 and ProNem Mini PMI-P)
- ▶ Auto-Tune PID

- ▶ Humidity Sensor Input (0/2..10V, 0/4..20mA or ProHumidity Mini PMI-D)
- ▶ 4 Digits Temperature and 4 Digit Humidity Display

## Specifications

Heating Control Output, Heating Alarm Output  
 Humidity Control Output, Humidity Alarm Output  
 PID or ON/OFF selectable temperature control  
 Set Value Boundaries  
 Alarm parameters and alarm status can be adjusted according to the audible alert (internal buzzer functions for alarm conditions)  
 Password protection for programming section

## Technical Specification

### ESM-3723 Measurement range

0°C...100°C (PTC, NTC, Pt-100),  
 -50°C...400°C (PT100),  
 -20°C...80°C(ProNem Mini PMI-P)

**Accuracy:** Scale ±%1, **Sensor Break Protection:** Upscale

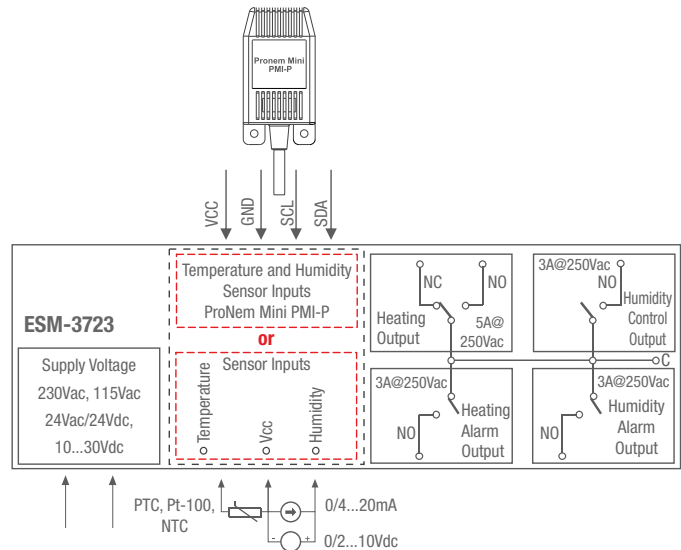
**Sampling Cycle:** 3 samples per second **Control Form:** ON/OFF, PID

### ProNem Mini Measurement range

Measurement range (RH): 0...100 %RH  
 Measurement range (T): -20°C...+80°C

**Accuracy (RH):** +/-2 %RH (Typ)@23°C

**Accuracy (T):** +/-0,3°C (Typ)@23°C



ESM-3723 . A . B . C . 0 . E / 01 . 01 / 1 . V . 0 . 0

ESM-3723  
(76x34,5x71 mm)

- A** Supply Voltage
  - 2 24Vac/dc 50/60 Hz (-%15; +%10)
  - 3 24Vac 50/60 Hz (-%15; +%10)
  - 4 115Vac 50/60 Hz (-%15; +%10)
  - 5 230Vac 50/60 Hz (-%15; +%10)
  - 8 10..30Vdc 1.5W
- B** Temperature Sensor Input
  - 1 PT 100, IEC751(ITS90)
  - 2 PTC
  - 3 NTC
  - 4 0/2..10Vdc Voltage Input
  - 5 0/4..20mA Current Input
  - 6 ProNem Mini PMI-P
- E** Process Output
  - 1 Heating Control: Relay (5A @ 250Vac)
  - 2 SSR Driver output (Maximum 30mA @ 15Vdc)

- C** Humidity Sensor Input
  - 4 0/2..10Vdc Voltage Input
  - 5 0/4..20mA Current Input
  - 6 ProNem Mini PMI-P

- 1 PTC-M6L40.K1.5 (PTC Air Probe 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 1.5m cable for cooling application)
- 4 NTC-M6L50.K1.5 (Metal protective tubular, 1.5 m wired NTC probe)
- 6 ProNem Mini PMI-P (2.5m cable for Temperature and Humidity application)
- U** Humidity Alarm Output Relay (3A@250Vac)
- HI** Heating Alarm Output Relay (3A@250Vac)
- FG** Humidity Output (3A@250Vac)