



At a glance

Applications



Frost protection



Temperature maintenance



Silos, containers, tanks



Pipelines, valves, pumps

- › Power plants
- › Chemical industry
- › Pharmaceutical industry
- › Tank containers
- › Building technology

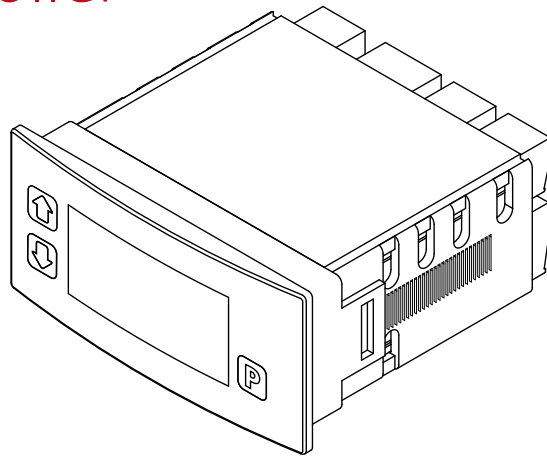
Advantages

- › Front installation
- › LED display up to -25 °C
- › Programmable -50 to +400 °C
- › Switches 16 A resistive load
- › Alarm contact
- › Pt100 in 2- & 3-wire circuit
- › Thermocouples type K

Approvals

ELTC-41 & ELTC-42

Electronic temperature controller



The ELTC-41 / ELTC-42 is an electronic temperature controller with digital display for front mounting in a switch cabinet. The temperature controller supports the connection of two temperature tracers Pt100 or two thermocouples type K with two independently programmable relays. A current and voltage input are also available as well as an RS485 interface with Modbus.

Checklist

Temperature sensors

ELTF-PT.1	Pt100 2-wire, AL PVC, length = 5 m	0650001
ELTF-PT.15	Pt100 3-wire, AL fluoropolymer, length = 3 m	0650070
ELTF-PT.33	Pt100 2-wire, AL fluoropolymer, length = 5 m	0650000
ELTF-Te4.1	Thermocouple type K, AL silicone, length = 5 m	0670019

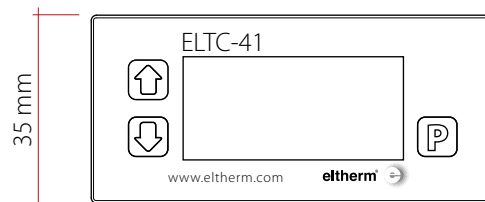
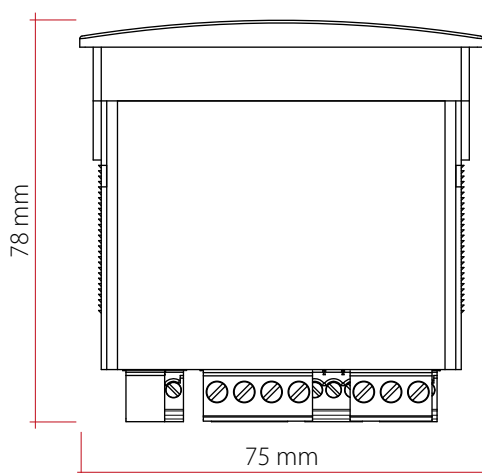
Technical Specifications

Operating voltage	100..240 V AC (ELTC-41), 24 V DC; 22-28 V AC (ELTC-42)
Power consumption	Max. 4 mA < 5 VA
Switching capacity Relay 1	16 A N/O contact (heating)
Switching capacity Relay 2	8 A changeover contact (alarm)
Ambient temperature	-25°C up to +55°C
Storage temperature	-25°C up to +60°C
Setpoint temperature range	Pt100 -50 °C to 390 °C, thermocouple -50 °C to 950 °C
Switching hysteresis	Pt100: +/- 0.5 K, +/- 0.5 %, type K :+/- 2 K, +/- 0.5%
Setpoint temperature range	0°C up to 400°C
Tracer connection	Pt100 2-wire & Pt100 3-wire, thermocouple type K*
Interface	1 x RS 485 (Modbus protocol)
Display	LED red, 3 places
Housing material	Polycarbonate, black
Housing dimensions	75 x 35 x 78 mm (WxHxD)
Protection	IP 54 from the front, IP 30
Mounting	Front installation for cutouts 70 x 30 cm
Weight	approx. 0.3 kg

* **Sensor and display:** 2 different sensor types can be used, Pt100/2-wire or Pt100/3-wire, and values can be displayed either as °C or °F. When using a Pt100/2-wire, the actual temperature value can be corrected. Range +/- 10K or +/- 18F. When using the Pt100/3-wire, the temperature is corrected automatically. Also suitable for use with ELTF-PTEX 1 and 2 sensors.

Temperature alarm: If the measured actual value deviates from the pre-set limit value, an alarm is triggered and passed on using the K2 relay as an alarm relay.

Dimensions



Ordering Information

Type	Operating voltage	Item no.
ELTC 41	230 VAC	0620041
ELTC 42	24 VDC	0620042