

## At a Glance

### Applications



Pipelines



Valves, pumps

- › Industrial plants and facilities
- › Industrial process technology
- › Mechanical, electrical and plumbing (MEP)

### Advantages

- › Intelligent, proportional adaptation to ambient temperatures
- › Efficiency and energy saving (up to 75%)

### Design

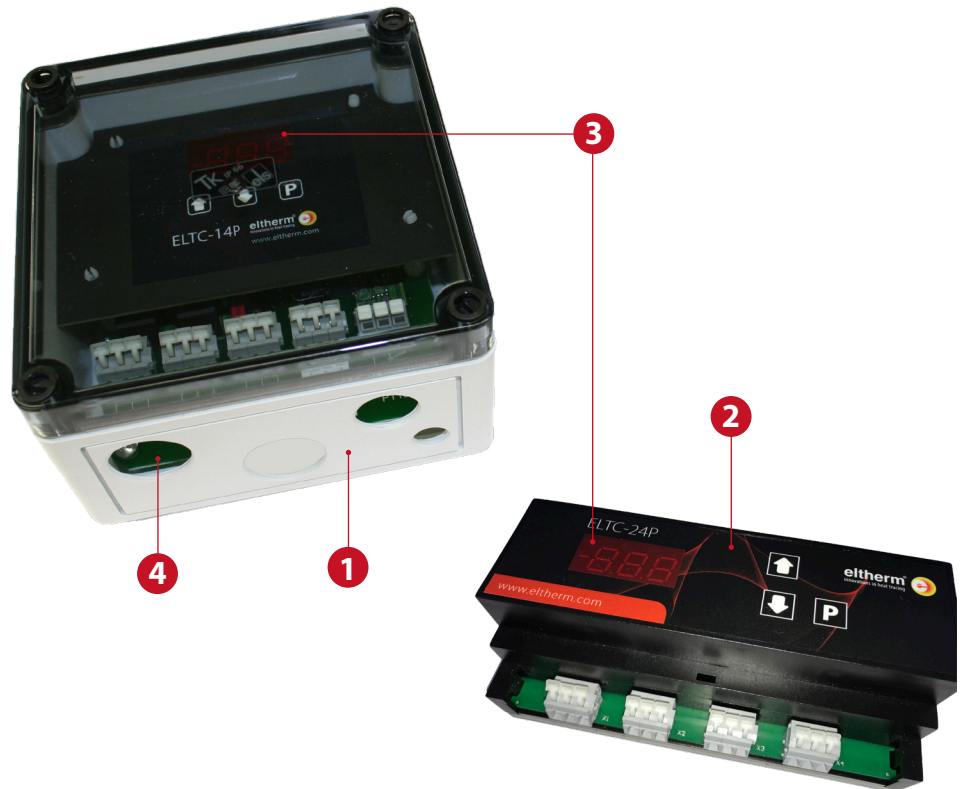
- › LED display operable up to -25 °C
- › Programmable up to -70 °C
- › 20A resistive load with hybrid relay
- › Suitable for Pt100 with 2 or 3 wires
- › Settings for freeze prevention
- › Operating voltage: 90-260 VAC / 50/60 Hz

### Approvals



# ELTC-14P and 24P

## Proportional Electronic Temperature Controller

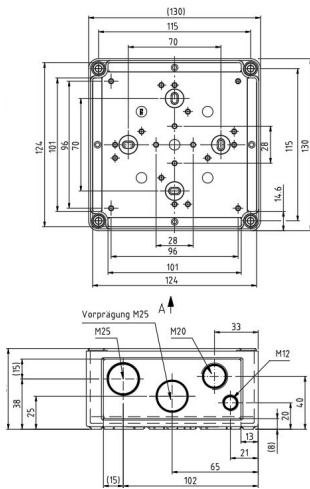


<b>1 ELTC-14P</b>	Temperature Controller with proportional adaptation to ambient temperatures, in housing for wall mounting
<b>2 ELTC-24P</b>	Temperature Controller with proportional adaptation to ambient temperatures for rail mounting
<b>3 LED display</b>	displays temperature settings and functions
<b>4 Knockouts for cable glands</b>	for M12x1,5, 20x1,5 and 25x1,5 cable glands

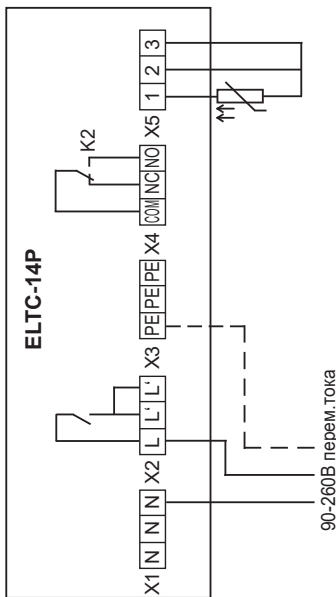
### Intelligent adaptation to ambient temperature for energy savings

The ELTC-14P/-24P is eltherm's „intelligent“ electronic temperature controller range which proportionally adapts to the ambient temperature and reacts proportionally to it, rather than just switching on/off: The higher the ambient temperature, the less energy is supplied to the heating circuit. This achieves energy savings of up to 75%, especially in large, complex plants and with varying degrees of winter cold. It also enhances greater temperature stability in the pipes. The ambient temperature is measured by a Pt100 sensor, processed by the microcontroller and shown in the digital display. Appropriate output relays are switched automatically. The duty cycle depends on actual ambient temperatures and temperature to maintain (set point).

## Technical Information



Dimensions for ELTC-14P



Wiring diagram ELTC-14P

<b>Housing ELTC-14P</b>	Water resistant plastic with see-through lid
<b>IP rating</b>	IP 65 (ELTC-14P) IP 20 (ELTC-24P)
<b>Operating voltage</b>	90-260 VAC 50/60 Hz
<b>Power consumption</b>	max 4 mA, < 5 W
<b>Switching capacity relay 1</b>	20 A with hybrid relay
<b>Switching capacity relay 2</b>	8 A, changeover contact (alarm)
<b>Operating temperature</b>	-25 to +55 °C (ELTC-14P) / -25 to +55 °C (ELTC-24P)
<b>Storage temperature</b>	-30 to +60 °C
<b>Display range</b>	-50 to +99 °C (ELTC-14P) / -60 to +99 °C (ELTC-24P)
<b>Adjustable range</b>	-70 to +99 °C, optional configuration
<b>Sensor connection</b>	Pt100 2-wire, 3-wire, optional configuration
<b>Display</b>	LED, red
<b>Dimensions</b>	130x133x175 mm (ELTC-14P) / 153x93x59 mm (ELTC-24P)
<b>Installation</b>	ELTC-14P: wall mounted ELTC-24P: rail mounted

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## Checklist

### A Temperature Controllers

ELTC-14P	IP 65, stand-alone unit in housing for wall mounting	0620010
ELTC-24P	IP 20, controller for rail mounting in control panel	0620011

### B Temperature Sensors

	ELTF-PT.1, 2 wire, measuring sleeve 5x50 mm, PVC cable, Tmax 80 °C	0650001
	ELTF-PT.3, 2 wire, measuring sleeve 5x50 mm, FP cable, Tmax 250 °C	0650003
Pt100	ELTF-PT.31, 3 wire, measuring sleeve 5x50 mm, FP cable, Tmax 250 °C	0650002
	ELTF-PT.33, 2 wire, measuring sleeve 6x6x46 mm, FP cable, Tmax 250 °C	0650000
	ELTF-PT.61, 2 wire, measuring sleeve 3x200 mm, FP cable, Tmax 500 °C	0650040