

ELK39 Universal Electronic Controllers

The ELK39 universal electronic controllers offer 4 digit auto-tuning PID control with a wide range of temperature or analogue process inputs, displaying the setpoint and process variable with a dual red and green LED display. Versions are available with NTC, PTC, PT100 and J, K and S type thermocouple inputs for temperature control, and DC Voltage or mA inputs for process control.

The controllers feature a simple user interface, have up to 4 programmable setpoints and are housed in a compact panel mounting enclosure. The ELK39 electronic controllers are powered from 12Vac/dc, 24Vac/dc or 100 to 240Vac and are available with 1 or 2 relay or SSR drive outputs. A single display version (ELK38) which just displays the setpoint is also available.

Models Available

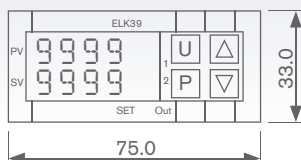
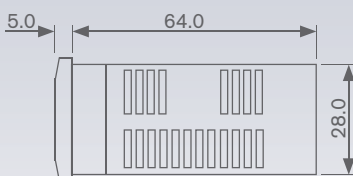
ELK39 Universal electronic PID controller

Product Features

- Temperature input or process input
- Dual 4 digit red & green LED display
- Dual display of set point & process value
- NTC, PTC, thermocouple, PT100 inputs
- 0-50mV, 0-60mV, 0-1Vdc inputs
- 0/1-5Vdc, 0/2-10Vdc, 0/4-20mA inputs
- Up to 4 programmable set points
- 1 or 2 relay or SSR output versions
- Auto-tuning PID or on/off control modes
- IP65 enclosure code

For digital temperature or process monitoring and control

Dimensions



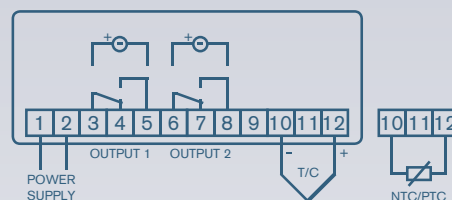
Panel cutout 71 mm x 29 mm (-0.0/+0.5)

Allow 12mm clearance around controller for panel clip

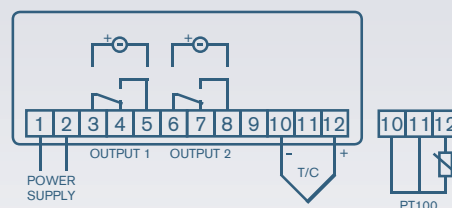
All dimensions in mm

Connections

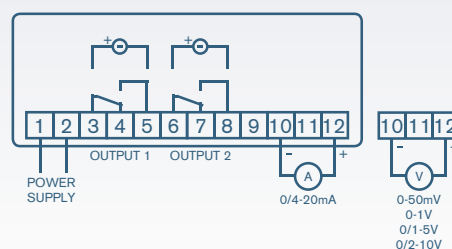
NTC, PTC & Thermocouple Input (E)



PT100 & Thermocouple Input (C)



DC Voltage or mA Input (V or I)



Ordering information

Model	Code	Description
	ELK39	Electronic Temperature & Process Controller with Dual Display of Setpoint & Process Variable

Auxiliary Power	Code	Description
	12	12Vac/dc
	24	24Vac/dc
	240	100 to 240Vac

Input	Code	Description
	E	NTC -50 to 110°C PTC -55 to 150°C J Type Thermocouple 0 to 1000°C K Type Thermocouple 0 to 1370°C S Type Thermocouple 0 to 1760°C mV -1999 to 9999 units
	C	J Type Thermocouple 0 to 1000°C K Type Thermocouple 0 to 1370°C S Type Thermocouple 0 to 1760°C PT100 -199 to 850°C mV -1999 to 9999 units
	V	DC Voltage 0/1-5V, 0/2-10V
	I	DC Current 0/4-20mA

Outputs	Code	Description
	R	1 Relay
	R-2R	2 Relays
	S	1 SSR
	S-2S	2 SSR

Example	ELK39-240-C-S
---------	---------------

Options**Temperature Probes**

A range of NTC, PTC, PT100 and thermocouple temperature probes are available to suit the ELK39 controllers.

Specification**Accuracy:**

- $\pm 0.5\%$ of scale range

Power Supply Voltage:

- 12Vac/dc ($\pm 10\%$)
- 24Vac/dc ($\pm 10\%$)
- 100 to 240Vac ($\pm 10\%$)

Frequency:

- 50/60Hz

Burden:

- $< 4\text{VA}$

Inputs:

- NTC / PTC / PT100
- J, K, S type thermocouples
- 0-50mV, 0-60mV, 0-1Vdc
- 0/1-5Vdc, 0/2-10Vdc, 0/4-20mA

Relay Output:

- 1 or 2 pole changeover relay contacts
- 8A at 250Vac (resistive)

SSR Output:

- 1 or 2 SSR drives
- Maximum output 8V/8mA

Operating Temperature & Humidity:

- 0°C to 50°C
- $< 90\%$ rH (non-condensing)

Enclosure Code:

- Case IP65

Weight:

- 200g

Markings:

- CE marked (meets EN61010-1 low voltage and EN50081-1/50082-1 EMC directives)

Specification subject to change without notice.

Tempatron: Eltime House, Hall Road, Maldon, Essex, CM9 4NF UK.

TEMPATRON

Tempatron Industrial Controls is a division of Eltime Ltd.

© Eltime Ltd. Tempatron ELK39 Controllers 04/2011