

# DIGITAL TEMPERATURE & PROCESS CONTROLLERS

## ELK39 TEMPERATURE & PROCESS CONTROLLER



The ELK39 is an autotuning PID controller that can accept inputs from a wide range of sensors - NTC and PTC thermistors, J, K or S type thermocouples, PT100 RTD's as well as analogue voltage or current inputs. It has a dual red/green display that shows the set point and the process reading.

Versions are available with 1 or 2 relay or SSR outputs and can be powered from 12Vac/dc, 24Vac/dc or 100-230Vac.

- Autotuning PID or on/off control modes
- Up to 4 programmable set points
- Input options : NTC or PTC thermistor, thermocouple, PT100, current or voltage
- 1 and 2 Relay or SSR drive output option
- Dual red/green 4 digit LED display - set point and process value
- IP65 water and dust protection

### SPECIFICATION

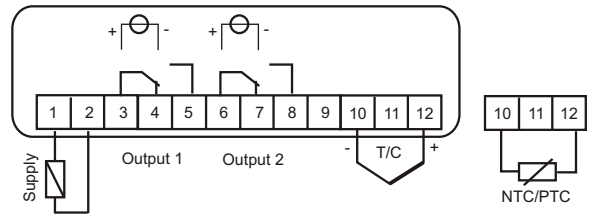
Supply options: 12Vac/dc, 24Vac/dc or 100-240Vac  
 Supply drain: 4VA max.  
 Input options: NTC, PTC, PT100, J, K, S T/C, 0/4-20mA, 0/1-5V, 0/2-10V  
 Scale range:  
 NTC : -50 to 110°C  
 PTC : -55 to 150°C  
 PT100 : -199 to 850°C  
 J T/c : 0 to 1000°C  
 K T/c : 0 to 1370°C  
 S T/c : 0 to 1760°C  
 mA/V : -1999 to 9999 units  
 Accuracy: +/- 0.5% of scale range  
 Output types: 1 or 2 Relay or SSR - see connection diagrams  
 Output ratings:  
 Relay: 8A @ 250Vac (10 A inrush)  
 SSR: 8V/8mA  
 Protection: IP65  
 Approval: Conform to CE emc EN50081-1 & EN50082-1 and low voltage EN61010-1 directives.  
 Ambient range: 0 to 50°C @ 90% rH (non-condensing)  
 Weight: IR32A: 180 gms

### Part Numbering Options : ELK39 - A - B - C

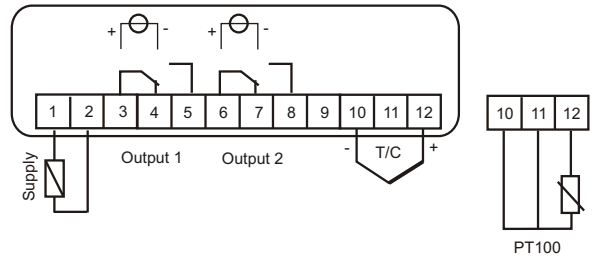
Option	Description	Options	Part Number
A	Power supply	12Vac/dc	12
		24Vac/dc	24
		100 - 240Vac	240
B	Input sensor	TC, NTC, PTC, mV	E
		TC, Pt100, mV	C
		0/1 - 5V, 0/2 - 10V	V
		0/4 - 20mA	I
C	Outputs	1 Relay	R
		2 Relay	2R
		1 SSR	S
		2 SSR	2S

### CONNECTION DIAGRAMS

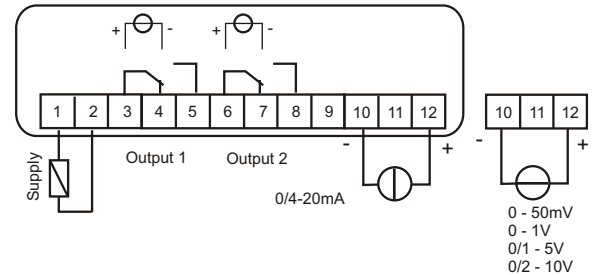
NTC - PTC - Thermocouple input versions (E)



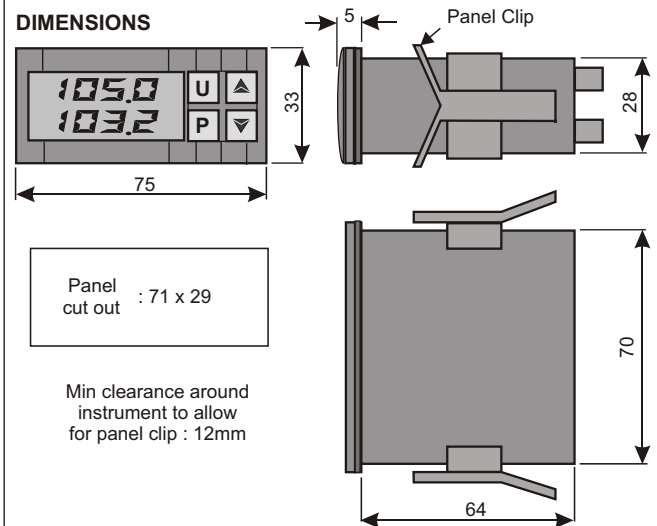
Thermocouple - PT100 input versions (C)



Current - Voltage input versions (V/I)



### DIMENSIONS



### STANDARD ITEMS

Output	Supply	Input Type	Part Number
1 Relay	12Vac/dc	NTC, PTC, TC, mV	ELK39-12-E-R
	100-240Vac	NTC, PTC, TC, mV	ELK39-240-E-R
2 Relays	12Vac/dc	NTC, PTC, TC, mV	ELK39-12-E-2R
	100-240Vac	NTC, PTC, TC, mV	ELK39-240-E-2R
	12Vac/dc	PT100, TC, mV	ELK39-12-C-2R
	100-240Vac	PT100, TC, mV	ELK39-240-C-2R
	12Vac/dc	Voltage	ELK39-12-V-2R
2 SSR	100-240Vac	Current	ELK39-240-I-2R
	12Vac/dc	NTC, PTC, TC, mV	ELK39-12-E-2S
	100-240Vac	NTC, PTC, TC, mV	ELK39-240-E-2S
	12Vac/dc	PT100, TC, mV	ELK39-12-C-2S
	100-240Vac	PT100, TC, mV	ELK39-240-C-2S
	12Vac/dc	Voltage	ELK39-12-V-2S
	100-240Vac	Current	ELK39-240-I-2S

For other versions please contact our sales office