

# IR32 General Purpose On/Off/PI LED Temperature/Process Controllers



The IR32 series of general purpose Controllers, with their Analogue, Thermocouple and RTD input and Relay or SSR drive output options, combine simple control and programmability with flexibility of use for a wide range of applications. They are available with 1, 2 or 4 outputs/Set-points, can be configured for 9 different control modes for On/Off, P or PI action and used to control Temperature, Humidity, Air-pressure or other media with suitable transducers.

- 9 programmable control modes
- Temperature, Humidity or Air-pressure input sensor options
- 1, 2 or 4 output/Set-point options
- Relay or SSR drive output options

- Infra-red, hand-held remote control programming option
- RS232/485 programming and data analysis via serial link
- IP65 water and dust protection
- CE approval for emc and low voltage directives

## **Specification**

Inputs: Sensor: 1 or 2 NTC, PT100, J, K T/c, 4-20mA, -0.5 to 1V

Digital Input: Programmable function to switch between Set-points or to act as an Alarm condition.

Scale Range:  $NTC = -40 \text{ to } 90^{\circ}\text{C}$ 

PTC = -99 to 600°C J T/c= -99 to 800°C K T/c= -99 to 999°C mA/V = -99 to 999 units

Accuracy: +/- 0.5% of scale range

Output Types: See Connection Diagrams on page 10

Output Ratings: Relay: 8A @ 250Vac (10 A inrush)

SSR: 10V/25mA

Supply: 12-24Vac/dc +/- 10%

Supply Drain: 3VA max.

Probe Supply: 10Vdc @ 30mA internal

Protection: IP65

Approval: Conform to CE emc EN50081-1 & EN58002-1 and low voltage EN61010-1

directives.

Ambient range: 0 to 50°C @ 90% rH (non-condensing)

Weight: IR32A: 240 gms

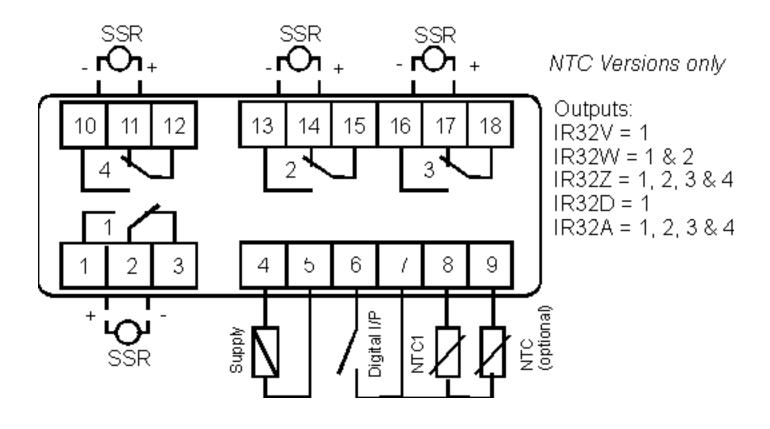
IR32D: 200 gms IR32V: 200 gms IR32W: 220 gms IR32Z: 240 gms

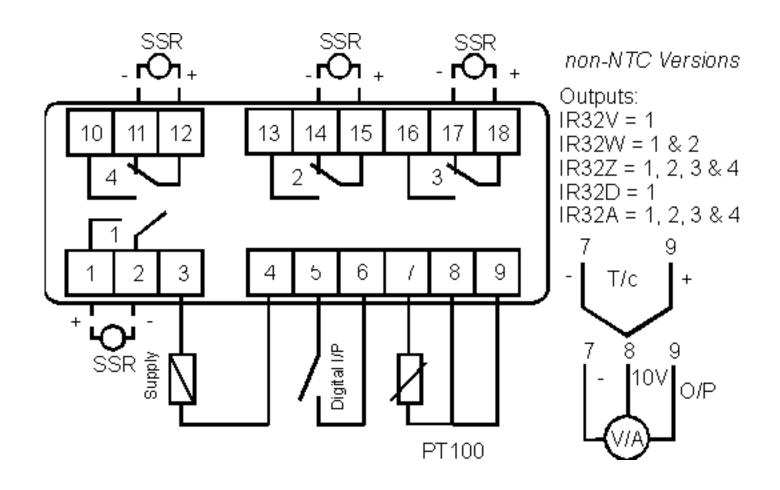
## **Model Descriptions**

Model No	Description
IR32V0E000	Single relay output with one Set-point and driven from a NTC sensor (probe), Suitable for temperature ranges from -50°C to 90°C. This is the most economic version and does not include an alarm buzzer or infra-red (IR) sensor for remote programming. Supply is 12-24 Vac/dc.
IR32V0L000	As for IR32V0E000 but with buzzer and IR sensor.
IR32V1L000	As for IR32V0L000 but driven from a PT100 sensor and suitable for temperatures of -99°C to 600°C.
IR32V2L000	As for IR32V0L000 but driven from a J or K T/couple. And suitable for temperatures of -99°C to 800°C.
IR32V3L000	As for IR32V0L000 but driven from a 4-20mA signal and, using the programmable scaling function, suitable for control of any medium using a signal transducer such as the Carel SPK10/25/30 pressure sensors for up to 7/25/30 bar.

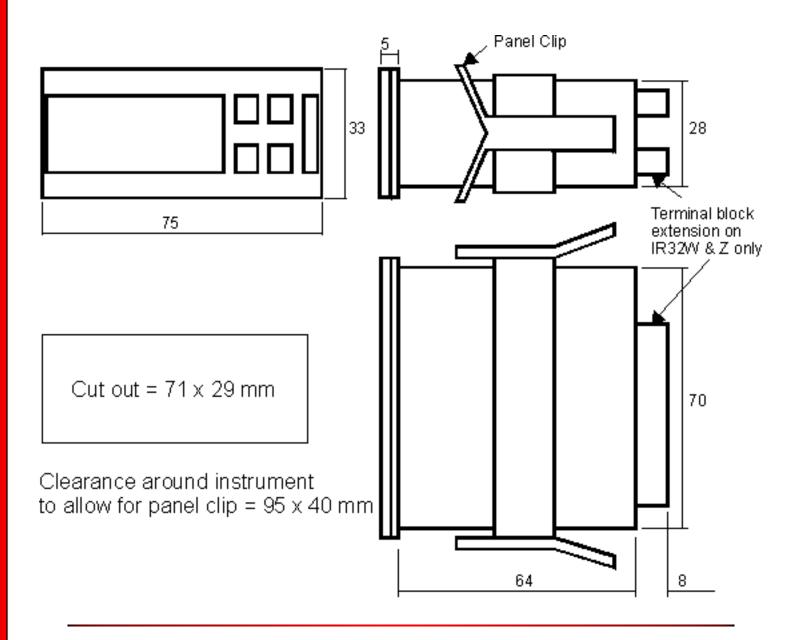
IR32V4L000	As for IR32V0L000 but driven from a -0.5 to 1V signal and, using the programmable scaling function, suitable for control of Humidity or other medium using a signal transducer such as the Carel SSD/SSW Humidity sensors for 20% to 100% rH.
IR32W00000 IR32W10000 IR32W20000 IR32W30000 IR32W40000	Equivalent to IR32V models but with dual relay outputs and two Set-points programmable for direct or reverse control action or as alarm outputs.
IR32Z00000 IR32Z10000 IR32Z20000 IR32Z30000 IR32Z40000	Equivalent to IR32V models but with four relay outputs and two Set-points programmable for direct or reverse control action plus two alarm outputs.
IR32D*L000	As for IR32V*L but with a single SSR drive output.
IR32A*0000	As for IR32Z*L but with a four SSR drive outputs.

## **Connection Diagrams**





#### **Dimensions**



## **Standard Items**

OutputType	Input Type	Part Number
1 Relay	NTC,	IR32V0E000
	economic	IR32V0L000
	NTC	IR32V1L000
	PT100	IR32V2L000
	J/K T/c	IR32V3L000
	4-20mA	IR32V4L000
	-0.5 to 1V	

2 Relays	NTC PT100 J/K T/c 4-20mA	IR32W00000 IR32W10000 IR32W20000 IR32W30000
4 Relays	PT100 J/K T/c	IR32Z10000 IR32Z20000
1 SSR	PT100 J/K T/c	IR32D1L000 IR32D2L000
4 SSRs	PT100 J/K T/c	IR32A10000 IR32A20000

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