

# 2108i

MODEL



**Model 2108i**  
1/8 DIN (96 x 48mm)

## Ideal for:

- **Temperature indication**
- **Process indication**
- **Over-temperature protection**
- **Process value trip unit**

## Features:

- **Universal input** Covers a wide range of temperature and process inputs
- **Two alarm relay outputs** For operator alert and plant protection
- **Wide-range 85-264V ac, supply** Can be installed world-wide
- **Plug-in from front** Rapid replacement - reducing downtime
- **Front panel configuration** Easy, on-site set-up
- **Tactile buttons** Friendly operation
- **Three year warranty** Low ownership cost

## Indicator and Alarm Unit

The 2108i provides accurate measurement and display of temperature and other process variables in a standard 1/8 DIN panel format. Two alarm relay outputs are provided for operator alert and process protection.

A universal input allows selection of nine internally stored thermocouple types. Other input linearisations may be factory downloaded. Linear, process inputs are scaleable to the desired display range. Keylock and passwords prevent unauthorised access to configuration and alarm settings.

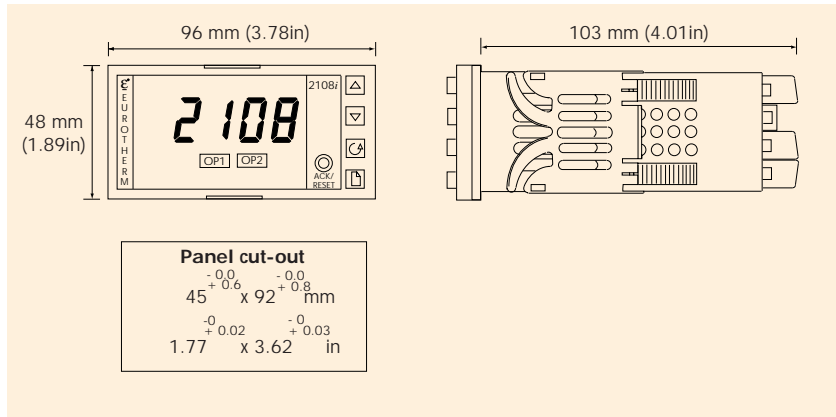
A large, red or green LED display gives good visibility in low and high ambient lighting.

New alarms can be acknowledged and old alarms reset by a front panel button or an external contact closure input.

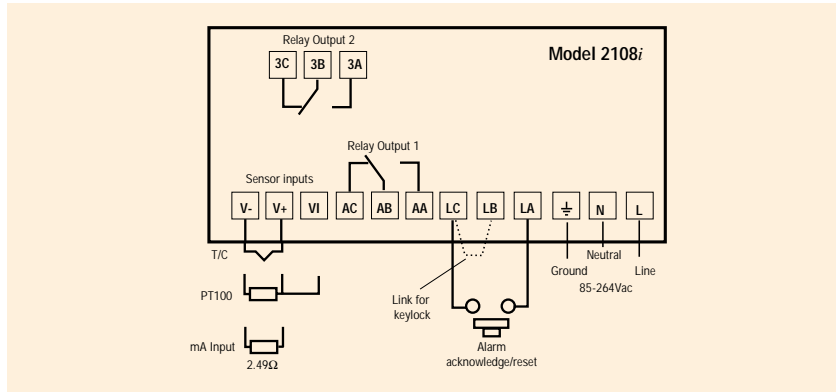
Three internal alarm setpoints are provided. They are configurable as high, or low, or rate of change alarms. Any combination of the three internal alarms can activate the two relay outputs. Latching or non-latching operation can be selected and alarm delays can be applied. A special mode known as 'alarm blocking' is available. In this mode, after power on, the process value must first enter a good state before the alarm becomes active. This is particularly useful for low alarms which can be 'blocked' while the process is warming-up.

Calibration accuracy is preserved with a self-correcting input circuit, while a User Calibration facility allows offsets to be applied to compensate for sensor and other system errors.

## Dimensions



## Electrical connections



## Specifications

### Display:

4 digit, red or green. 15.9mm high characters

### Supply voltage:

100 to 240Vac -15%, +10%

### Operating ambients:

0-55°C, 5-95%RH non-condensing

### Panel sealing:

IP54, plug-in from front panel

### Relay ratings:

2A, 240Vac resistive

### Calibration accuracy:

±0.25% of reading, or ±1°C, or ±1LSD whichever is the greater

### Cold junction compensation:

> 15 to 1 rejection of ambient temperature change

### Input filtering:

Off-999.9 seconds

### EMC standards:

EN50081-2 and EN50082-2 generic standards for industrial environments

### Safety standard:

Meets EN61010, installation category II. Pollution degree 2

### Atmospheres:

Not suitable for use above 2000m or in explosive or corrosive atmospheres

## Ordering Code

Model Number	Function	Display Colour	Supply Voltage	Relay Output 1	Relay Output 2	Manual	Sensor Input	Setpoint Min.	Setpoint Max.	Units	Input Adaptor
2108i	AL		VH					note 1	note 1		

Function	Relay Output 1	Relay Output 2	Sensor Input	Setpoint Min/Max	Units
<b>Function</b>	<b>Relay Output 1</b>	<b>Relay Output 2</b>	<b>Sensor Input</b>	<b>Setpoint Min/Max</b>	<b>Units</b>
AL Alarm unit	RF Unconfigured Non-latched alarm FH High alarm 1 FL Low alarm 1 AL High alarm 1 & low alarm 3 RA Rate of change alarm 1 Latched alarm HA High alarm 1 LA Low alarm 1 AA High alarm 1 & low alarm 3 RT Rate of change alarm 1 NW New alarm status	RF Unconfigured Non-latched alarm FH High alarm 2 FL Low alarm 2 RA Rate of change alarm 2 Latched alarm HA High alarm 2 LA Low alarm 2 RT Rate of change alarm 2 NW New alarm status	<b>Standard Sensor Inputs</b> J J Thermocouple K K Thermocouple T T Thermocouple L L Thermocouple N N Thermocouple-Nicrosil/Nisil R R Thermocouple-Pt/Pt13%Rh S S Thermocouple-Pt/Pt10%Rh B B Thermocouple-Pt/Pt30%Rh-6%Rh P Platinell II Thermocouple Z RTD/PT100 DIN 43760 <b>Factory Downloaded Input</b> C C Thermocouple - W5%Re/W26%Re (Hoskins) D D Thermocouple - W3%Re/W25%Re E E Thermocouple 1 Ni/Ni18%Mo Thermocouple 2 Pt20%Rh/Pt40%Rh Thermocouple 3 W/W26%Re (Engelhard) Thermocouple 4 W/W26%Re (Hoskins) Thermocouple 5 W5%Re/W26%Re (Engelhard) Thermocouple 6 W5%Re/W26%Re (Bucose) Thermocouple 7 Pt10%Rh/Pt40%Rh Thermocouple 8 Exergen K80 I.R. pyrometer <b>Process Inputs (Scaled to setpoint min and max)</b> M -9.99 to +80mV linear Y 0 to 20mA linear (note 2) A 4 to 20mA linear (note 2) V 0 to 10Vdc linear (Input Adaptor required)	Min °C Max -210 to 1200 -200 to 1372 -200 to 400 -200 to 900 -200 to 1300 -50 to 1768 -50 to 1768 0 to 1820 0 to 1369 -200 to 850 Min °C Max 0 to 2319 0 to 2399 -200 to 1000 0 to 1399 0 to 1870 0 to 2000 0 to 2010 10 to 2300 0 to 2000 200 to 1800 -45 to 650 Min Max -1999 to 9999 -1999 to 9999 -1999 to 9999	C °C F °F K Kelvin X Linear input
<b>Display Colour</b>	GN Green RD Red				<b>Input Adaptor</b> XX Not fitted V1 0-10Vdc A1 0-20mA current sense resistor (2.49Ω 0.1%)
<b>Supply Voltage</b>	VH 85-264Vac				
		<b>Manual</b>			
		XX No manual ENG English FRA French GER German NED Dutch SPA Spanish SWE Swedish ITA Italian			

Note 1. Setpoint min and max: include the decimal points required in the display value; up to one for temperature inputs, up to two for process inputs.

Note 2. A 1% 2.49Ω current sense resistor is supplied as standard. If greater accuracy is required a 0.1% resistor can be specified in the input adaptor field.

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