

2108i

MODEL



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

Ideal for:

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

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.

Features:

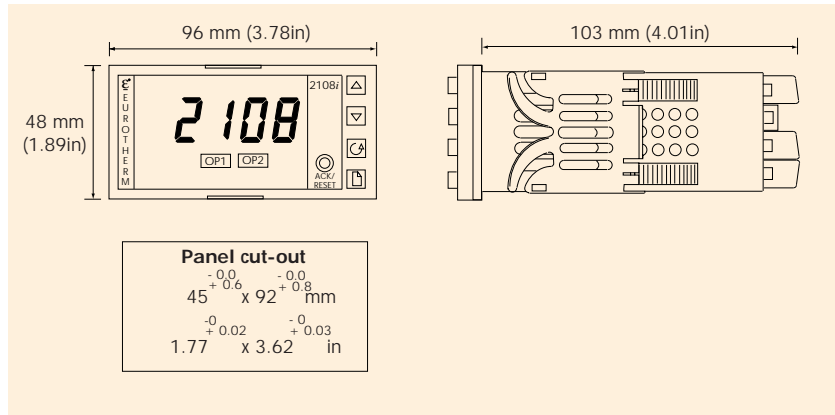
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|--|---|
| • Universal input | Covers a wide range of temperature and process inputs |
| • Two alarm relay outputs | For operator alert and plant protection |
| • Wide-range 85-264V ac, supply | Can be installed world-wide |
| • Plug-in from front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



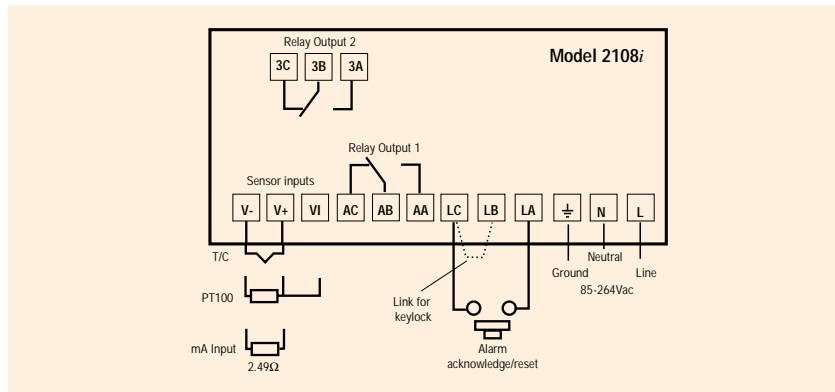
**EUROTHERM
CONTROLS**

**Indicator
and Alarm
Unit**

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
2108/	AL		VH					note 1	note 1		

Function	Relay Output 1	Relay Output 2	Sensor Input	Setpoint Min/Max	Units
AL Alarm unit	RF Unconfigured Non-latched alarm	RF Unconfigured Non-latched alarm	Standard Sensor Inputs	Min °C Max	C °C F °F K Kelvin X Linear input
Display Colour	FH High alarm 1 FL Low alarm 1 AL High alarm 1 & low alarm 3	FH High alarm 1 FL Low alarm 1 RA Rate of change alarm 2	J J Thermocouple	-210 to 1200	
GN Green RD Red	RA Rate of change alarm 1	HA High alarm 2 LA Low alarm 2 RT Rate of change alarm 2	K K Thermocouple	-200 to 1372	
Supply Voltage	Latched alarm	Latched alarm	T T Thermocouple	-200 to 400	
VH 85-264Vac	HA High alarm 1 LA Low alarm 1 AA High alarm 1 & low alarm 3	HA High alarm 2 LA Low alarm 2 RT Rate of change alarm 2	L L Thermocouple	-200 to 900	
	RT Rate of change alarm 1	NW New alarm status	N N Thermocouple-Nicrosil/Nisil	-200 to 1300	
	NW New alarm status		R R Thermocouple-Pt/Pt13%Rh	-50 to 1768	
			S S Thermocouple-Pt/Pt10%Rh	-50 to 1768	
			B B Thermocouple-Pt/Pt130%Rh-6%Rh	0 to 1820	
			P Platinell II Thermocouple	0 to 1369	
			Z RTD/PT100 DIN 43760	-200 to 850	
			Factory Downloaded Input	Min °C Max	
			C C Thermocouple - W5%Re/W26%Re(Hoskins)	0 to 2319	
			D D Thermocouple - W3%Re/W25%Re	0 to 2399	
			E E Thermocouple	-200 to 1000	
			1 Ni/Ni18%Mo Thermocouple	0 to 1399	
			2 Pt20%Rh/Pt40%Rh Thermocouple	0 to 1870	
			3 W/W26%Re (Engelhard) Thermocouple	0 to 2000	
			4 W/W26%Re (Hoskins) Thermocouple	0 to 2010	
			5 W5%Re/W26%Re (Engelhard) Thermocouple	10 to 2300	
			6 W5%Re/W26%Re (Bucose) Thermocouple	0 to 2000	
			7 Pt10%Rh/Pt40%Rh Thermocouple	200 to 1800	
			8 Exergen K80 I.R. pyrometer	-45 to 650	
			Process Inputs (Scaled to setpoint min and max)	Min Max	
			M -9.99 to +80mV linear	-1999 to 9999	
			Y 0 to 20mA linear (note 2)	-1999 to 9999	
			A 4 to 20mA linear (note 2)	-1999 to 9999	
			V 0 to 10Vdc linear (Input Adaptor required)	-1999 to 9999	

Input Adaptor
XX Not fitted
V1 0-10Vdc
A1 0-20mA current sense resistor (2.49kΩ 0.1%)

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

EUROTHERM CONTROLS LIMITED

<http://www.eurotherm.co.uk>

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