

# 2108i

MODEL



## Ideal for

- temperature indication
- 4-20mA process inputs
- over-temperature protection
- process value trip unit

## Specifications

### Dimensions:

96W x 48H x 103D mm  
panel cut-out 92 x 45mm

### Display:

Red or green 4 digit 15.9mm  
LED

### Supply voltage:

85-264Vac

### Operating ambient:

0-55°C, 5-95%RH non-  
condensing

### Inputs:

Nine standard  
thermocouple types.  
Pt100. Linear mV/mA

### Sample rate:

5Hz

### Relay output ratings:

2A, 264Vac resistive

### Panel sealing:

IP65, plug-in from front panel

## 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

**Universal input** - covers a wide range of temperature and process inputs

**Three alarm setpoints** - separate warning and shut-down limits

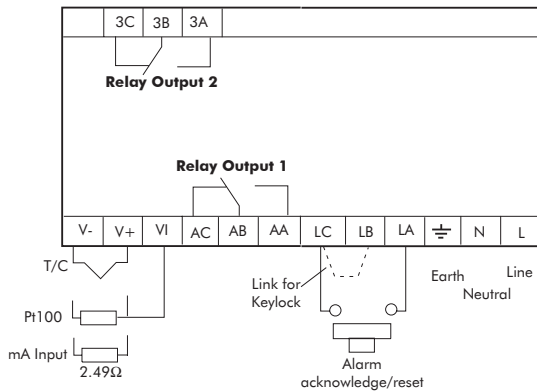
**Two alarm relay outputs** - for operator alert and plant protection

**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

## Rear terminal connections



## Ordering codes

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 2	Sensor Input	Setpoint Min	Setpoint Max	Units	Input Adaptor																																																																																		
<b>AL</b> Alarm unit  <b>Display Colour</b> GN Green display RD Red display  <b>Supply Voltage</b> VH 85-264Vac  <b>Relay Output 1</b> RF Unconfigured <b>Non-latched alarm</b> FH High alarm 1 FL Low alarm 1 RA Rate of change alarm 1 <b>Latched alarm</b> 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 <b>Non-latched alarm</b> FH High alarm 2 FL Low alarm 2 RA Rate of change alarm 2 <b>Latched alarm</b> HA High alarm 2 LA Low alarm 2 RT Rate of change alarm 2 NW New alarm status  <b>Manual</b> XXX No manual ENG English FRA French GER German NED Dutch SPA Spanish SWE Swedish ITA Italian	<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 Platinel 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)	<table border="1"> <thead> <tr> <th>Min</th> <th>°C</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>-210</td><td></td><td>1200</td></tr> <tr><td>-200</td><td></td><td>1372</td></tr> <tr><td>-200</td><td></td><td>400</td></tr> <tr><td>-200</td><td></td><td>900</td></tr> <tr><td>-200</td><td></td><td>1300</td></tr> <tr><td>-50</td><td></td><td>1768</td></tr> <tr><td>-50</td><td></td><td>1768</td></tr> <tr><td>0</td><td></td><td>1820</td></tr> <tr><td>0</td><td></td><td>1369</td></tr> <tr><td>-200</td><td></td><td>850</td></tr> <tr><th>Min</th><th>°C</th><th>Max</th></tr> <tr><td>0</td><td></td><td>2319</td></tr> <tr><td>0</td><td></td><td>2399</td></tr> <tr><td>-250</td><td></td><td>1000</td></tr> <tr><td>0</td><td></td><td>1399</td></tr> <tr><td>0</td><td></td><td>1870</td></tr> <tr><td>0</td><td></td><td>2000</td></tr> <tr><td>0</td><td></td><td>2010</td></tr> <tr><td>10</td><td></td><td>2300</td></tr> <tr><td>0</td><td></td><td>2000</td></tr> <tr><td>200</td><td></td><td>1800</td></tr> <tr><td>-45</td><td></td><td>650</td></tr> <tr><th>Min</th><th>°C</th><th>Max</th></tr> <tr><td>-1999</td><td></td><td>9999</td></tr> <tr><td>-1999</td><td></td><td>9999</td></tr> <tr><td>-1999</td><td></td><td>9999</td></tr> <tr><td>-1999</td><td></td><td>9999</td></tr> </tbody> </table>	Min	°C	Max	-210		1200	-200		1372	-200		400	-200		900	-200		1300	-50		1768	-50		1768	0		1820	0		1369	-200		850	Min	°C	Max	0		2319	0		2399	-250		1000	0		1399	0		1870	0		2000	0		2010	10		2300	0		2000	200		1800	-45		650	Min	°C	Max	-1999		9999	-1999		9999	-1999		9999	-1999		9999	C Celsius F Fahrenheit K Kelvin X Linear input  <b>Input Adaptor</b> XX Not fitted V1 0-10Vdc A1 0-20mA current sense resistor (2.49Ω/0.1%)
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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.

### Example ordering code

2108i - AL - GN - VH - FH - FL - ENG - K - 0 - 1000 - C - XX

2108i, Indicator, green display, relay 1 high alarm, relay 2 low alarm, English manual, Type K thermocouple, 0 to 1000°C, no options

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