

# 2132 2116

## MODELS

### Ideal for

- small ovens
- chillers
- sterilisers
- trace heating
- heat sealing

### Specifications

#### Dimensions:

Model 2132:  
48W x 24H x 103D mm  
Model 2116:  
48W x 48H x 103D mm

#### Control modes:

PID or On/Off

#### Supply voltages:

85-264Vac, 5.0watts max.  
20-29Vac or dc, 5.0watts  
maximum

#### Operating ambient:

0-55°C, 0-90%RH non-  
condensing

#### Inputs:

Nine standard  
thermocouple types.  
Pt100. 4-20mA linear.  
Custom input available

#### Output ratings:

Relay: 2A, 264Vac resistive  
Logic: 9Vdc, 18mA

#### Panel sealing:

IP65, plug-in from front  
panel



## PID Temperature Controllers

Available in compact 1/32 and 1/16 DIN panel sizes, the 2100 series uses advanced PID algorithms to give stable 'straight line' temperature control.

Self tuning is included to optimise the control performance without the need for specialist knowledge or training.

A **universal input** allows selection of nine internally stored thermocouple types and the Pt100 resistance thermometer. Other input linearisations may be factory downloaded. Linear inputs can be scaled to the desired display range.

Two **outputs** are configurable for heating, cooling or alarms.

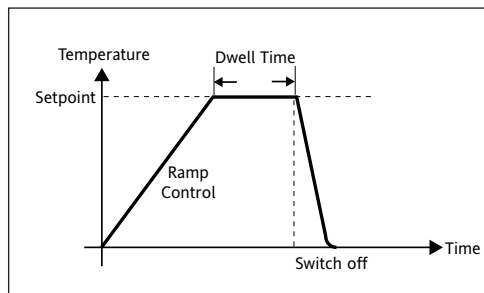
**Three internal alarm setpoints** are provided, configurable as high, low or deviation alarms. Alarms can be 'blocked' on start-up to prevent unnecessary operator alerts.

**Heater failure** can be detected when the controller is used with a TE10S Solid State Relay.

**Tactile buttons** ensure positive operation.

**The operator interface** can be customised to present only those parameters that an operator needs to see and adjust, while all other parameters are locked away under password protection.

### Timer functionality



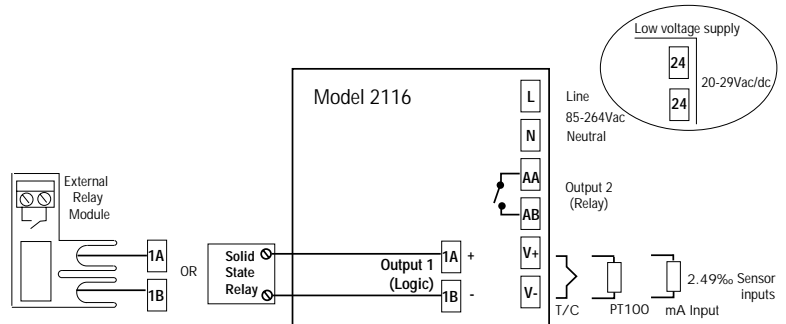
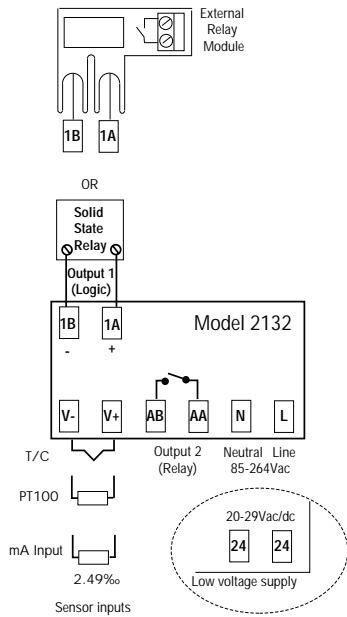
**EUROTHERM**

CONTROLS  
PROCESS AUTOMATION  
RECORDERS

# Rear terminal connections

## Model 2132

## Model 2116



## Ordering codes

Model Number	Function	Supply Voltage	Manual	Output 1 (Logic)	Output 2 (Relay)	Sensor Input	Setpoint Min	Setpoint Max	Units	Ext. Relay Module	Input Adaptor
							note 2	note 2			

Model Number	Output 1 (Logic)	Output 2 (Relay)	Sensor Input	Setpoint Min	Setpoint Max
2132 48x24mm unit 2116 48x48mm unit	<b>XX</b> No function <b>Logic output</b> <b>LH</b> Heating <b>LC</b> Cooling <b>M1</b> PDS heater break detect (note 1) <b>FH</b> High alarm 1 <b>FL</b> Low alarm 1 <b>DB</b> Dev. band alarm 1 <b>DL</b> Dev. low alarm 1 <b>DH</b> Dev. high alarm 1 <b>NW</b> New alarm <b>Logic input</b> <b>AC</b> Alarm ack/reset <b>KL</b> Keylock <b>TM</b> Timer Off/On	<b>XX</b> No function <b>RH</b> Heating <b>RC</b> Cooling <b>FH</b> High alarm 2 <b>FL</b> Low alarm 2 <b>AL</b> High alarm 2 & low alarm 3 <b>DB</b> Dev. band alarm 2 <b>DL</b> Dev. low alarm 2 <b>DH</b> Dev. high alarm 2 <b>NW</b> New alarm	<b>Standard Sensor Inputs</b> <b>J</b> J Thermocouple <b>K</b> K Thermocouple <b>T</b> T Thermocouple <b>L</b> L Thermocouple <b>N</b> N Thermocouple-Nicrosil/Nisil <b>R</b> R Thermocouple-Pt/Pt13%Rh <b>S</b> S Thermocouple-Pt /Pt10%Rh <b>B</b> B Thermocouple-Pt/Pt30%Rh -6%Rh <b>P</b> Platinel II Thermocouple <b>Z</b> RTD/PT100 DIN 43760 <b>Factory Downloaded Input</b> <b>C</b> C Thermocouple - W5%Re/W26%Re (Hoskins) <b>D</b> D Thermocouple - W3%Re/W25%Re <b>E</b> E Thermocouple <b>1</b> Ni/Ni18%Mo Thermocouple <b>2</b> Pt20%Rh/Pt40%Rh Thermocouple <b>3</b> W/W26%Re (Engelhard) Thermocouple <b>4</b> W/W26%Re (Hoskins) Thermocouple <b>5</b> W5%Re/W26%Re (Engelhard) Thermocouple <b>6</b> W5%Re/W26%Re (Bucose) Thermocouple <b>7</b> Pt10%Rh/Pt40%Rh Thermocouple <b>8</b> Exergen K80 I.R. pyrometer <b>Process Inputs (Scaled to setpoint min and max)</b> <b>M</b> -9.99 to +80mV linear <b>Y</b> 0 to 20mA linear (note 3) <b>A</b> 4 to 20mA linear (note 3) <b>V</b> 0 to 10Vdc linear (Input adaptor required)	<b>Min °C Max</b> -210 1200 -200 1372 -200 400 -200 900 -200 1300 -50 1768 -50 1768 0 1820 0 1369 -200 850 <b>Min °C Max</b> 0 2319 0 2399 -200 1000 0 1399 0 1870 0 2000 0 2010 10 2300 0 2000 200 1800 -45 650 -1999 9999 -1999 9999 -1999 9999	

*Note 1. PDS heater break detect will transmit the power demand to a TE10S Solid State Relay and read back a heater break alarm.*

*Note 2. Setpoint min and max : Include the decimal position required in the displayed value. Up to one for temperature inputs, up to two for process inputs.*

*Note 3. An external 1% current sense resistor is supplied as standard. If greater accuracy is required specify 'A1' in the Input Adaptor field.*

### Example ordering code

2132-CC-VH-ENG-LH-RC-K-0-1000-C-XX-XX

2132, Controller, 85 to 264Vac, English manual, Logic heating, Relay cooling, Type K thermocouple, 0 to 1000°C, no options

Units	Ext. Relay Module	Input Adaptor
<b>C</b> Celsius <b>F</b> Fahrenheit <b>K</b> Kelvin <b>X</b> Linear input	<b>XX</b> Not fitted <b>R7</b> Fitted (Operated by the logic output)	<b>XX</b> Not fitted <b>V1</b> 0-10Vdc <b>A1</b> 0-20mA or 4-20mA 0.1% current sense resistor (2.49Ω)