

2132 2116

MODELS

Ideal for:

- Ovens
- Chillers
- Sterilisers
- Trace heating
- Heat sealing

Features:

- Universal input
- Self tuning
- In-built timer
- Setpoint rate limit
- Tactile buttons
- Wide-range 85-264V ac, or 20-29Vac/dc supply
- Plug-in from front
- IP65 and NEMA 4X panel sealing
- Three year warranty

...with improved timer



Model 2132
1/32 DIN (48 x 24mm)



Model 2116
1/16 DIN (48 x 48mm)

PID Temperature Controllers

Available in compact 1/32 and 1/16 DIN panel sizes, the 2132 and 2116 temperature controllers are designed for accurate, trouble free control of ovens, chillers, sterilisers and other simple heating and cooling processes. Two outputs are configurable for heating, cooling and alarms.

Eurotherm's advanced control techniques give stable "straight-line" temperature control. Self tuning is included to optimise the control performance without the need for specialist knowledge or training. Heater failure can be detected when the controller is used with a Eurotherm TE10S Solid State Relay (requires PDSIO mode 1).

Three internal alarm setpoints are provided, configurable as latching or non-latching. Alarms can be "blocked" on start-up to prevent unnecessary operator alerts.

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

Improved timer

An improved timer can apply heating (and cooling) for a pre-set period, or delay heating to come on after a set time. The latter is useful for over-night batch processing.

Covers a wide range of temperature and process inputs

Easy commissioning

Sets heating/cooling times

Provides ramp-dwell heat treatment profile

Friendly to use

Can be installed world-wide

Rapid replacement - reducing downtime

Can be used in wet and dusty atmospheres

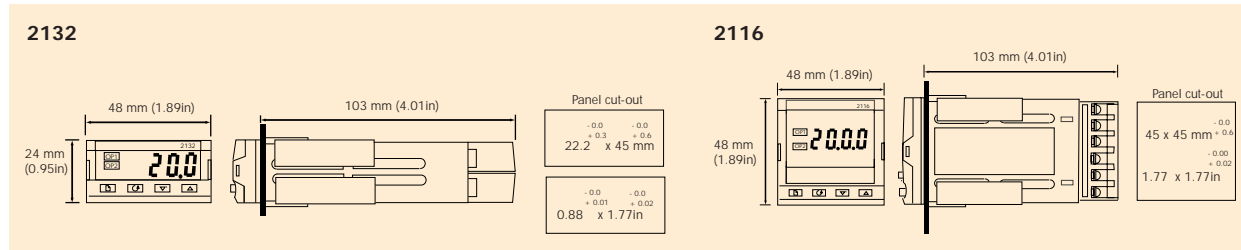
Low ownership cost



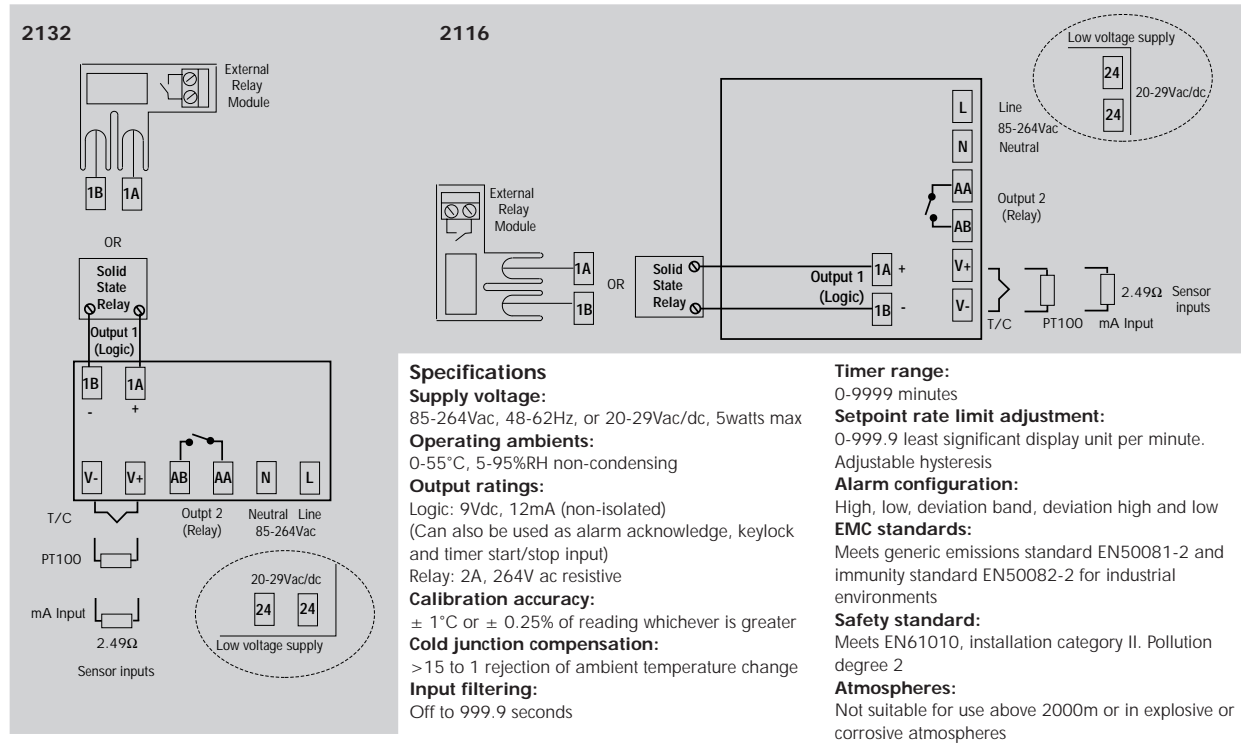
EUROTHERM
CONTROLS

PID
Temperature
Controllers

Dimensions



Electrical connections



Specifications

Supply voltage: 85-264Vac, 48-62Hz, or 20-29Vac/dc, 5watts max

Operating ambients: 0-55°C, 5-95%RH non-condensing

Output ratings: Logic: 9Vdc, 12mA (non-isolated)
(Can also be used as alarm acknowledge, keylock and timer start/stop input)
Relay: 2A, 264V ac resistive

Calibration accuracy: ± 1°C or ± 0.25% of reading whichever is greater

Cold junction compensation: >15 to 1 rejection of ambient temperature change

Input filtering: Off to 999.9 seconds

Timer range:

0-9999 minutes

Setpoint rate limit adjustment: 0-999.9 least significant display unit per minute. Adjustable hysteresis

Alarm configuration: High, low, deviation band, deviation high and low

EMC standards: Meets generic emissions standard EN50081-2 and immunity standard EN50082-2 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	Supply Voltage	Manual	Output 1 (Logic)	Output 2 (Relay)	Sensor Input	Setpoint Min.	Setpoint Max.	Units	Ext. Relay Module	Input Adaptor
2132 48 x 24mm unit	XX No function	VH 85-264Vac	XXX No manual	XX No function	XX No function	Thermocouples	note 2	note 2			
2116 48 x 48mm unit	LH Heating	VL 20-29V dc or ac	ENG English	RH Heating	RH Heating	J Type J					
	LC Cooling		FRA French	RC Cooling	RC Cooling	K Type K					
	M1 PDS heater break detect (note 1)		GER German	FH High alarm 2	FH High alarm 2	L Type L					
	FH High alarm 1		NED Dutch	FL Low alarm 2	FL Low alarm 2	N Type N					
	FL Low alarm 1		SPA Spanish	AL High alarm 2 & low alarm 3	AL High alarm 2 & low alarm 3	R Type R					
	DB Dev. band alarm 1		SWE Swedish	DB Dev. band alarm 2	DB Dev. band alarm 2	S Type S					
	DL Dev. low alarm 1		ITA Italian	DL Dev. low alarm 2	DL Dev. low alarm 2	B Type B					
	DH Dev. high alarm 1			DH Dev. high alarm 2	DH Dev. high alarm 2	P Platinell II					
	NW New alarm			NW New alarm	NW New alarm	Z Pt100					
	Logic input					Resistance thermometer					
	AC Alarm ack/reset					C Type C - W5%Re/W26%Re (default custom sensor)					
	KL Keylock					D Type D - W3%Re/W25%Re					
	TM Timer Off/On					E Thermocouple					
						1 Ni/Ni18%/Mo					
						2 Pt20%Rh/Pt40%Rh					
						3 W/W26%Re (Englehard)					
						4 W/W26%Re (Hoskins)					
						5 W5%Re/W26%Re (Englehard)					
						6 W5%Re/W26%Re (Bucose)					
						7 Pt10%Rh/Pt40%Rh					
						8 Exegen K80 I.R. pyrometer					
						Process inputs (linear)					
						M -9.99 to +80mV					
						Y 0 to 20mA (note 3)					
						A 4 to 20mA (note 3)					
						V 0 to 10Vdc (input adaptor required)					

EUROTHERM CONTROLS LIMITED

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

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