

3216L

MODEL



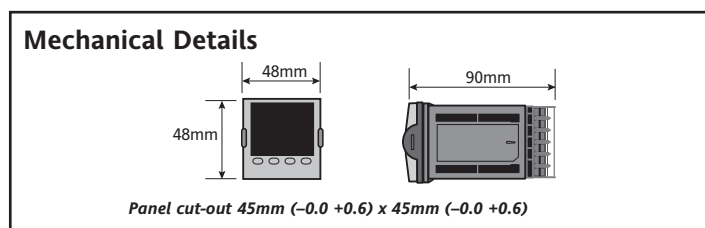
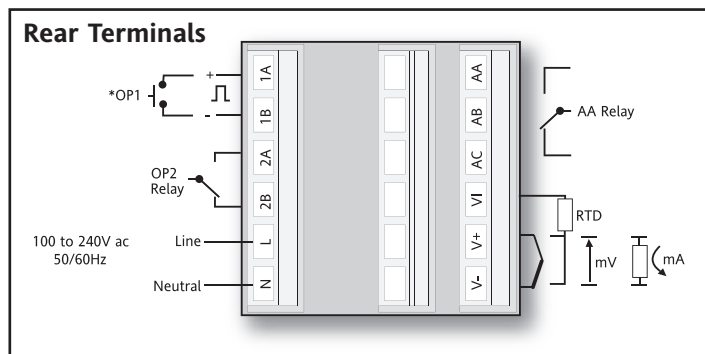
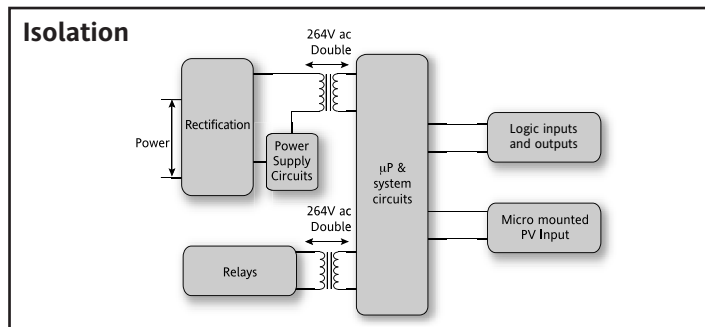
Temperature/Process Controller

Specification Sheet

- Entry level Eurotherm controller
- IP65 sealing and washdown membrane front
- Plastic extrusion
- Packaging machines
- Food and Beverage applications
- Overtemperature protection
- Process alarms

The entry level 3216L controller offers precision control of temperature and other process variables in an affordable format.

The emphasis is on simplicity and ease of use. A simple 'Quick Start' code is used to configure all the functions essential for controlling your process. This includes input sensor type, measurement range, control options and alarms, making 'Out of the Box' operation truly achievable. PID with autotune is available as standard with control outputs allowing relay and logic SSR drive in heat only or heat/cool configurations. Up to two latching alarm trip relays are available.



SPECIFICATION

General

Environmental performance

Temperature limits	Operation: 0 to 55°C Storage: -10 to 70°C
Humidity limits	Operation: 5 to 90% RH non condensing Storage: 5 to 90% RH non condensing
Panel sealing:	IP65, Nema 4X
Shock:	BS EN61010
Vibration:	2g peak, 10 to 150Hz
Altitude:	<2000 metres
Atmospheres:	Not suitable for use in explosive or corrosive atmosphere

Electromagnetic compatibility (EMC)

Emissions and immunity: BS EN61326

Electrical safety

(BS EN61010): Installation cat. II; Pollution degree 2

INSTALLATION CATEGORY II

The rated impulse voltage for equipment on nominal 230V mains is 2500V.

POLLUTION DEGREE 2

Normally, only non-conductive pollution occurs. Occasionally, however, a temporary conductivity caused by condensation shall be expected

Physical

Panel mounting:	1/16 DIN
Weight:	250g
Panel cut-out dimensions:	45W x 45Hmm
Panel depth:	90mm

Operator interface

Type:	LCD TN with backlight
Main PV display:	4 digits, green
Lower display:	5 character starburst, green
Status beacons:	Units, outputs, alarms, active setpoint

Power requirements

100 to 240V ac, -15%, +10%,
48 to 62 Hz, max 6W

Approvals

CE, cUL listed (file E57766), Gost
Suitable for use in Nadcap and
AMS2750D applications under Systems
Accuracy Test calibration conditions

Process variable input

Calibration accuracy:	<±0.25% of reading ±1LSD*
Sample rate:	4Hz (250ms)
Isolation:	264V ac double insulation from the PSU
Resolution (µV):	<0.5µV with 1.6sec filter
Resolution (effective bits):	>17 bits
Linearisation accuracy:	< 0.1% of reading
Drift with temperature:	<50ppm (typical) <100ppm (worst case)
Common mode rejection:	48-62Hz, >-120db
Series mode rejection:	48-62Hz, >-93dB
Input impedance:	100M
Cold junction compensation:	>30:1 rejection of ambient change
External cold junction:	Reference of 0°C
Cold junction accuracy:	<±1°C at 25°C ambient
Linear(process) input range:	-10 to 80mV, 0 to 10V with 100kΩ/806Ω external divider module
Thermocouple types:	K, J, N, R, S, B, L, T
Resistance thermometer types:	3-wire Pt100 DIN 43760

Bulb current:	0.2mA
Lead compensation:	No error for 22 ohms in all leads
Input filter:	1.6s

* Calibration accuracy quoted over full ambient operating range and for all input linearisation types

AA relay

Type:	Form C (changeover)
Rating:	Min 100mA@12V dc, max 2A@264V ac resistive
Functions:	Alarm

Logic I/O module

Output Rating:	ON 12Vdc@<44mA, OFF <300mV@100µA
Isolation:	None from PV or system. 264Vac double insulated from PSU
Functions:	Control outputs, events

Digital input

Contact closure:	Open >500Ω, closed <150Ω
Isolation:	None from PV or system 264V ac double insulated from PSU
Functions:	Includes alarm acknowledge, SP2 select, manual

Relay output channels

Type:	Form A (normally open)
Rating:	Min 100mA@12V dc, max 2A@264V ac resistive
Functions:	Control outputs, alarms

Software features

Control	
Number of loops:	1
Loop update	250ms
Control types:	PID
Cooling types:	Linear, fan, oil, water
Modes:	Auto, manual, standby
Overshoot inhibition:	High, low

Alarms

Number:	2
Type:	Absolute high & low, deviation high, low or band
Latching:	Manual latching
Output assignment:	Relay

ORDER CODE



Basic Product

3216L Box of 60 48 x 48mm units

2 Specials and Accessories

XXXXX Specials/Accessories

1 Product Language

ENG English

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