

CAL 8000

The CAL 8000 sets new standards for analogue temperature control. Accurate control combined with simple installation and ease of use enables major benefits to be achieved when compared to simple thermostats or more sophisticated controllers. Manufactured in modern production facilities to satisfy the most stringent quality standards, every unit is tested under extreme operating conditions prior to leaving the factory.



Features

- 5A Output relay or SSR drive replaceable module
- 2nd Setpoint option for alarm or cooling
- 5 step process error display
- Hi-definition scale with ranges to suit applications from (-)100 to 1600° C or F
- Scale lock behind hinged front cover
- Time proportioning or On-Off control

The CAL 8000

1/16th DIN

Analogue

Temperature

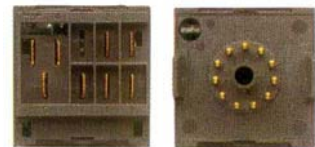
Controller

Practical design



Hinged fascia gives access to scale lock

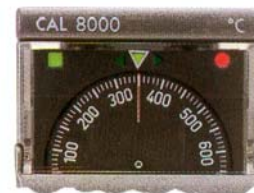
Choice of connection methods



8300 Panel mount with push-on connectors

8200 Plug in or panel mount

Clear indication of control/stability



3 LEDs indicate deviation from setpoint

Technical Specifications CAL 8000

ELECTRICAL		CODING	
Supply Voltage	Dual 115V/230V ±15% 50-60Hz	Series 8000	8
Consumption	3VA		-----
OUTPUTS		Type of unit	
Main output: SP1		11 pin base, panel mount or plug in	2
Relay – standard	5A/250Vac resistive SPDT/Form C	Faston connections panel mount only	3
SSR drive (SSd) – optional	5V 25mA non-isolated		
Second output: SP2		with Sp2 as	
Relay – standard	3A/250Vac resistive SPDT/Form C	Low limit (energised below SP2)	4
SSR drive (SSd) – optional	5V 25mA non-isolated	Out of limits (energised within SP2 band)	5
		High limit (energised above SP2)	6
		11 pin base as per 6200	7
ACCURACY			-----
Setting accuracy	±2% of full scale	Output	
.Reference conditions	22°C ±2°C 115V/230V ±5% after 30 mins settling time.	5A Relay	1
		SSR drive (SSD)	2
CONTROL MODES		SP1 5A SPDT Relay + SP2 3A SPDT Relay	5
SP1		SP1 5A SPDT Relay + SP2 SSd	6
Proportional band/gain	3% of full scale (fixed)	SP1 SSd + SP2 3A SPDT Relay	7
Proportional cycle time	25 seconds	SP1 5A SSd + SP2 3A SSd	8
On/Off hysteresis	2% of full scale		-----
SP2		Supply Voltage	
On/Off Hysteresis	2% of full scale	115Vac	1
		230Vac	2
INPUTS			-----
Thermocouple		Sensor Input	
types:	J,K,R,S (specify when ordering)		J
Standards:	IPTS/68/ DIN43710		K
Resistance thermometers:			R
RTD/PT100:	2-wire		S
Standards:	DIN43760 100 Ohms 0°C		T
	138 Ohms 100°C Pt		P

Sensor break protection	Automatic protection upscale (output off)	Temperature Range	
Common mode rejection	Negligible effect up to 264V rms 50/60Hz	-100/+200	A
Series mode rejection	Negligible effect up to full scale mV 50/60Hz	0/100	B
		0/200	D
		0/300	E
		0/400	G
		0/500	H
		0/800	L
		0/1000	M
		0/1200	N
		0/1600	V
GENERAL			
Ambient temperature	0-50°C (32-130°F)		
Weight	250g (90z)		
Mouldings	Flame retardant polycarbonate		



CAL Controls

CAL Controls Ltd
 Bury Mead Road, Hitchin, Herts, SG5 1RT, UK
 Tel +44 (0) 1462 436161
 Fax +44 (0) 1462 451801
 e-mail sales@cal-control.co.uk
 www.cal-controls.com

CAL Controls Inc
 1117 S. Milwaukee Av, Libertyville, IL60048, USA
 Tel (847) 680-7080
 Fax (847) 816-6852
 e-mail sales@cal-control.com
 www.cal-controls.com