



## CONFIGURABLE & VERSATILE TEMPERATURE CONTROLLERS

- ⊕ PROCESS CONTROLLERS & DIGITAL THERMOSTATS
- ⊕ PROGRAMMABLE FEATURES & PID CONTROL
- ⊕ MULTIPLE INPUT AND OUTPUT OPTIONS
- ⊕ AVAILABLE WITH INTERNATIONAL CERTIFICATION



**WEST**  
Control Solutions

**Pixsys**  
ELECTRONICS

**lae**  
ELECTRONIC

**CAREL**

**eliwell**  
by Schneider Electric

QUALITY DIGITAL CONTROLLERS USED IN A DIVERSE RANGE OF INDUSTRIAL AND COMMERCIAL APPLICATIONS

**hawco**

For many commercial applications, it is **sufficient to maintain a single set point** within a fairly broad deviation using a manually programmed on-off digital controller.

However, some industrial or commercial processes require **a more rigorous approach**, with multiple programming features used for more sophisticated temperature management.

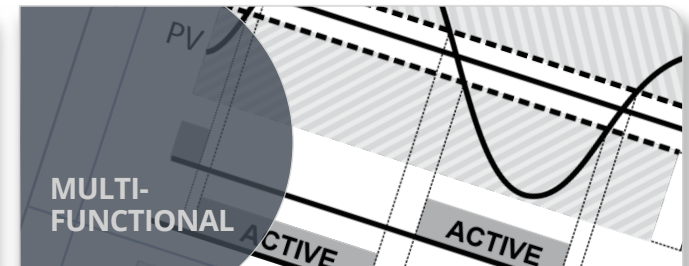
We supply temperature controllers suitable for the effective control of temperatures **from -100°C right up to 1600°C** - embracing heating and cooling applications as diverse as foodservice equipment, commercial refrigeration, laboratory equipment and test chambers, plastics, packaging and ovens and furnaces.



### ADAPTABLE ALTERNATIVES

From multi-programmable process controllers to simple 2- and 3-stage thermostats

- Choice of control actions to meet requirements of each industrial or commercial application
- Multiple options for the number and type of inputs, relays and SSd outputs
- Covers available for water ingress protection



### MULTI-FUNCTIONAL

Versatile features to achieve an optimal temperature profile over a given time period

- From on-off hysteresis to PID control as well as combined heating and cooling operations
- Compatibility with NTC & PTC probes, RTDs and all thermocouple types



### EFFICIENT SETUP

Easy-to-program software tools which can include integrated autotuning

- User-friendly interfaces and innovative configuration tools to simplify start-up
- Some models available with memory USB, card or key
- Optional RS232 or RS485 Modbus comms



### PRODUCTION SUPPORT

Stock items delivered next-day - with all other controllers available within 2 to 3 weeks

- Most controllers with CE, UL & VDE approvals for easier international product certification
- Simplify production with a single programmable model for multiple markets
- Technical advice on installation & commissioning

## Temperature Controllers

On/Off | Autotuning | PID Heating/Cooling

**WEST**  
Control Solutions

- High limit controllers with two outputs & 5 alarm modes
- 9 thermocouple input types or PT100 RTD (2 wire)
- Single ramp soak (dwell programme)
- PID control & dAC function to minimise overshoot problems (CAL9300/9400)



## Temperature Controllers

On/Off | Autotuning | PID Heating/Cooling

**PIXSYS**  
ELECTRONICS

- 1 programmable analogue or digital input
- Two setpoints (control & alarm)
- J, K, R or S thermocouple, PT100/PT1000 RTD or PTC/NTC input



## 2- & 3-Stage Thermostats

On/Off | PID Heating/Cooling (Depending on Model)

**lae**  
ELECTRONIC



**IDPLUS**  
Series

**eliwell**  
by Schneider Electric



**CAREL**

## Also Available



Refrigeration Controllers,  
Single-Stage Controllers,  
Thermometers, Timers & Counters



Probes, Thermocouples & Transmitters



Plastic Moulding



Industrial Process Control



Laboratory Equipment



Food Production



Catering Equipment & Foodservice



Commercial Refrigeration



Ovens and Furnaces



## Selected Items Summary (further controllers available on request)

### On/Off or PID Temperature Controller

Typically available within 5-10 working days



MODEL	Power Supply	PROBE TYPE	OUTPUTS/RELAYS	DIMENSIONS (W x H x D) mm
CAL3300	100-240V AC	Thermocouple / PT100	2A SSD/Relay	48 x 24 x 107
CAL9300	100-240V AC	Thermocouple / PT100	2A Relay / 1A Relay	48 x 48 x 107
CAL9400	100-240V AC	Thermocouple / PT100	SSd / SSd	48 x 48 x 107

Some models also available for 12-24V AC/DC

### On/Off or PID Temperature Controller

Typically available within 10 working days



MODEL	Power Supply	PROBE TYPE	OUTPUTS/RELAYS	DIMENSIONS (W x H x D) mm	
ATR121-B	230V AC	PTC, NTC (10K) PT100, PT1000, Thermocouple (K, S, R, J)	No Digital Input	Out 1: 8A ; Out 2: 8A; Out 3: SSR	74 x 32 x 53
ATR121-AD	12..24V AC/DC		No Digital Input	Out 1: 8A ; Out 2: 8A; Out 3: SSR	74 x 32 x 53
ATR144-ABC	24..230V AC/DC		1 x Digital Input	Out 1: 5A; Out 2: 5A; Out 3: D.I/O	74 x 32 x 53
ATR144-ABC-T	24..230V AC/DC		1/2 x Digital Input	Out 1: 5A; Out 2: SSR	74 x 32 x 53
ATR227	24..230V AC/DC		1 x Digital Input	Out 1: 2A; Out 2: 2A	48 x 48 x 90

### Two-Stage Universal Controller (On/Off or PID)

Typically available within 2 working days



SERIES	Power Supply (V)	PROBE TYPES	OUTPUTS/RELAYS	DIMENSIONS (W x H x D) mm
AC1-5 Panel Mount	115-230V	NTC (10K) / PTC, 0-1V PT100, Thermocouple (J or K)	Out 1: SSR Driver; Out 2: 7(2)A Out 1: 12(4)A; Out 2: 7(2)A	77 x 35 x 77
AC1-5 DIN Rail Mount	230V	NTC (10K) / PTC	Out 1: 16(4)A; Out 2: 7(2)A	71 x 97 x 61
AC1-5 Wall Mount	230V	NTC (10K) / PTC	Out 1: 8(3)A; Out 2: 8(3)A	110 x 53 x 75

### PID Temperature Controller

Typically available within 2 working days



SERIES	Power Supply (V)	PROBE TYPES/INPUTS	RELAYS/OUTPUTS	DIMENSIONS (W x H x D) mm	
IR33 Panel Mount	230V	2 x NTC (10K) / PTC	1 x Digital Input	Out 1: 8(4)A; Out 2: 8(4)A; Out 3: 5(1)A	76 x 34 x 65
	12-24V	2 x NTC (10K)	2 x Digital Inputs	Out 1: 12(2)A; Out 2: 8(4)A; Out 3: 8(4)A; Out 4: 8(4)A	

### Multi-Function Electronic or Defrost Controllers

Typically available within 2 working days



SERIES	Power Supply (V)	PROBE TYPES/INPUTS	RELAYS/OUTPUTS	DIMENSIONS (W x H x D) mm	
ICPLUS915	12V	1 x NTC (10K) / PTC	1 x Digital Input	Out 1: 8(4)A; Out 2: 8(4)A	76 x 34 x 59
IDPLUS961	12V or 230V	2 x NTC (10K) / PTC	1 x Digital Input	1 x 2HP	76 x 34 x 59
IDPLUS971	12V or 230V	2 x NTC (10K)	1 x Digital Input	Out 1: 12(2)A; Out 2: 8(4)A	76 x 34 x 59
IDPLUS974	12V or 230V	2 x NTC (10K) / PTC, PT1000	1 x Digital Input	Out 1: 12(12)A; Out 2: 8(4)A; Out 3: 5(2)A	76 x 34 x 59

## GOT A PROJECT IN MIND? WE CAN HELP

Every day, our in-house design team advise OEM customers on the components they need.

We can source a suitable part from an existing design specification or set of technical drawings. Or we can investigate a number of different solutions based on original requirements.

If you want advice on how to improve your product or reduce its cost, discuss your project with us.



**REQUEST A TEST SAMPLE FOR YOUR PRODUCT DESIGN**



**ARRANGE A MEETING WITH A TECHNICAL EXPERT**



**SEND US YOUR PROJECT SCOPE**



TO TALK TO OUR EXPERT TEAM,  
CALL +44 (0)1483 869 070 OR  
EMAIL [SALES@HAWCO.CO.UK](mailto:SALES@HAWCO.CO.UK)

**hawco**