

West 8600 1/8 DIN Plastics Controller



The West 8600 temperature controller can measure and display the heater current. Special heater break alarms give early warning of element failure, to protect equipment and product. A soft-start feature is available for process warm up.

- Heat/Cool operation
- Process & Heater alarms
- Soft Start
- Ramping setpoint
- Current “Quick Transfer”
- Current Display
- RS485 Comms
- PC configuration



Technical Data

Features

Control Types	Full PID with Pre-tune, Self-tune, Manual Tuning, or On-Off control. Heat only or heat & cool
Soft Start	Allows lower SP value and cycle time during the process start-up phase
Auto/Manual	Selectable from front panel, with bumpless transfer. Instant power-off feature also available as standard
Output Configuration	Up to 4 total. Max 2 for control (Heat & Cool), max 3 for Alarms, max 1 for retransmit Process value or Setpoint
Process Alarm Types	Process high, process low, SP deviation, band, logical OR
Heater Break Alarm Types	Current low or high, (in absolute amps or % of nominal current) plus contactor/thyristor short circuit
Human Interface	4 button operation, dual 4 digit 10mm & 8mm high LED displays, plus 3 LED indicators
PC Configuration	Off-line configuration from serial port to dedicated config socket (comms option not required)

Input

Thermocouple	J, K, R, S, T, B, L, & N.
RTD	3 Wire PT100, 50Ω per lead maximum (balanced)
Impedance	>100MΩ
Accuracy	+/- 0.25% of input span +/- 1 LSD (T/C CJC better than 0.7°C)
Sampling	4 per second, 14 bit resolution approximately
Sensor Break Detection	<2 secs, control O/P's turn off, high alarms activate for thermocouple ranges, low alarms activate for RTD
Heater Current	0-50mA secondary from external current transformer. Display is scaleable up to 100 amps

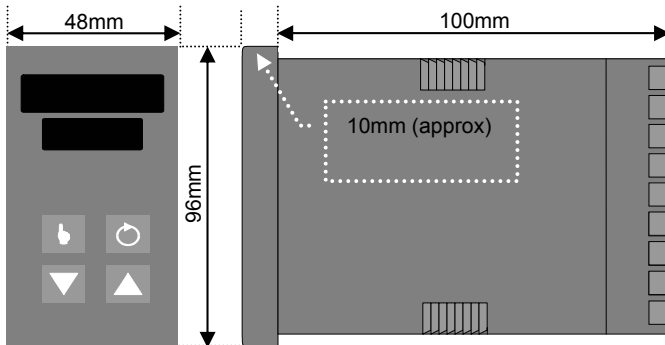
Outputs & Options

Ctrl & Alarm Relays	Contacts *SPDT 2Amp resistive at 240V AC, >500,000 operations.*Dual relay=SPST for O/P's 2 & 4
Control SSR Outputs	Drive capability, output 1= >10V DC into 500Ω min, output 2= >4.3V DC into 250Ω min
Solid State (Triac) Outputs	0.01 to 1 Amp AC 20 to 280V, 47 to 63Hz
Retransmit Outputs	0-20/4-20mA into 500Ω max, 0-10/0-5V into 500Ω min. Accuracy typically +/- 0.25%
Communications	2 Wire RS485, 1200 to 9600 Baud, Modbus or West ASCII (Selectable)
Dual SP/Current Transfer	Volt free or TTL input. Selects between 2 setpoints or quick transfer of heater current as nominal value

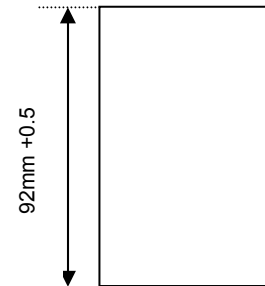
Operating & Environmental

Temperature & RH	0 to 55°C (-20 to 80°C storage), 20% to 95%RH non-condensing
Power Supply	100 to 240V 50/60Hz 7.5VA (optional 20 to 50V AC 7.5VA/22 to 65V DC 4W)
Front Panel Protection	IEC IP66 (Behind panel protection is IP20)
Approvals and Certification	CE, UL & ULc

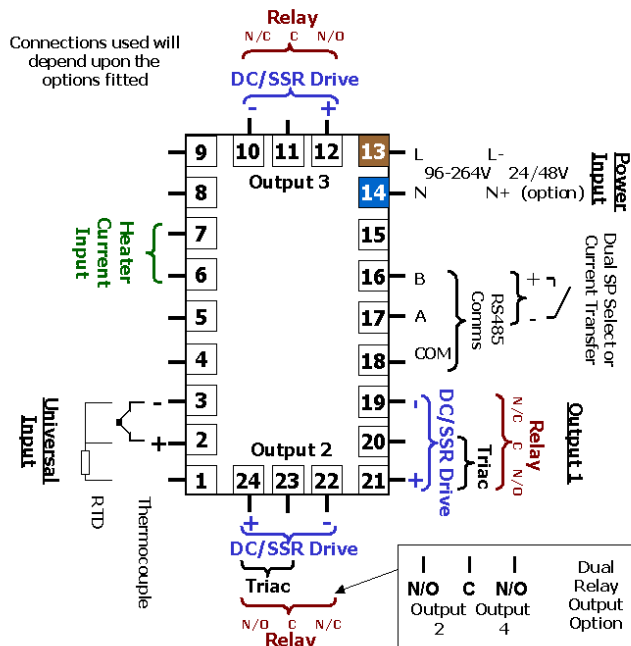
Dimensions



Cut out 45mm +0.5



Connection Details



Field Reconfiguration

Input

Configurable Thermocouple or RTD, no extra parts required

Output 1

Type is fixed as Relay/SSR (selectable)

Output 2 (and 4)

Configurable as Cool O/P or Alarm via plug-in Relay, SSR, Triac or DC Linear modules. A Dual Relay card is available which allows Cool O/P or Alarm on output 2 plus Heater Break Alarm on output 4

Output 3

Configurable as Alarm via plug-in Relay module, or retransmit using DC Linear module

Option Slot

Configurable as RS485 comms or dual setpoint selection/current transfer, via plug-in modules

Order Code



Input Type

3 Wire RTD	1
Thermocouple	2

Output 1

Relay Control	1
DC for SSR Control	2
Triac Control Output	8

Output 2 and 4

Not fitted	0
Relay Control or Alarm 2	1
DC for SSR Control or Alarm 2	2
Triac Control	8
Dual Relay Control or Alarm, & Heater Break	9

Options & Power Supply

00	No Options/100-240V AC supply
02	No Options/24-48V AC or DC supply
10	RS485 Comms/100-240V AC supply
12	RS485 Comms/24-48V AC or DC supply
30	Dual SP or Current Transfer/100-240V AC supply
32	Dual SP or Current Transfer/24-48V AC or DC line

Output 3

0	Not fitted
1	Relay Alarm 1 output
3	DC 0-10V Re-Transmit PV or SP
4	DC 0-20mA Re-Transmit PV or SP
5	DC 0-5V Re-Transmit PV or SP
7	DC 4-20mA Re-Transmit PV or SP

Current Transformers:

25 Amp	Part No: 85258
50 Amp	Part No: 85259
100 Amp	Part No: 85260

In accordance with our policy of continuous improvement, we reserve the right to change specifications from those shown in this document.