The **+ series**
Limit Controllers...

The 6700+, 4700+ and 8700+ from West are a new range of limit controllers designed to provide a programmable safety cut out and optional alarm for use in a wide variety of applications.

The + Series limit controllers provide a latched relay output which is activated when process parameters either exceed or fall below the desired value, providing a fail safe cut-off which has to then be reset before the process can continue.

LED indication shows when limits have been exceeded and when the relay is latched out.

With a full range of universal sensor input options and versatile configuration, the + Series range will provide a valuable safety control element in most systems.
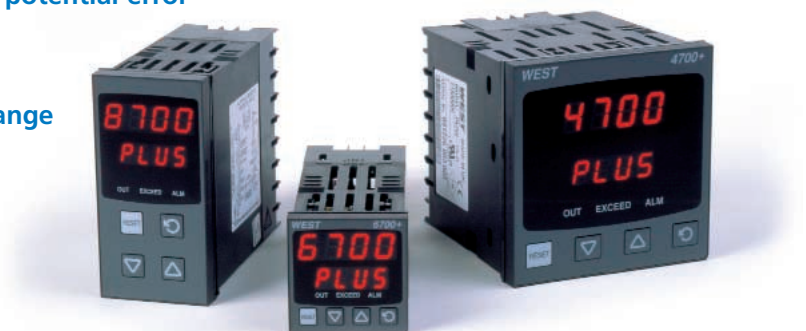
Our new + Series range of limit controllers use the proven reliability of existing models PLUS great new features that make them more versatile and even easier to set up and use.

Sharing the same distinctive styling as the + Series temperature controllers, the limit controllers maintain the 'family' approach to the West range and have the performance to match.
Just take a look at these features:

- **Improved, easy to use HMI – making set-up process quick and easy**
- **Configuration via PC / Customisable operator menu**
- **Auto-hardware detect/set-up – to reduce set-up times**
- **NEW MODBUS communications across the range (as well as West ASCII)**
- **Jumperless configuration – one less area for potential error**
- **FM approval**
- **Universal input**
- **Stock levels are reduced by having one '+' range**

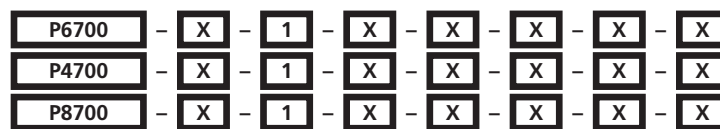For the full specifications and order codes,
see overleaf.

...so **adaptable**, you won't need **anything else**

WEST
Temperature Control Solutions

Technical Data

Features	
Output Configuration	Up to 3 possible, for latching trip relays, alarm/annunciator relays, 24VDC transmitter power supply or retransmit of process value or limit trip setpoint
Alarm 1 & 2 Types	Process high, process low, Limit SP deviation, band, logical OR alarms or trip annunciator. Alarms have fully adjustable hysteresis.
Output Reset Action	Limit output can be reset only when exceed condition is absent. Local or remote reset options.
Annunciator Reset Action	Annunciator output can be reset at any time. Local or remote reset options.
Human Interface	4 button operation, dual 4 digit LED displays, optional choice of colours (Red/Red, Red/Green, Green/Red or Green/Green), plus 4 LED indicators
PC Configuration	Off-line configuration from PC serial port to dedicated config socket (comms option not required). Configuration Software for Windows 98 or higher. West Part Number: PS1-CON

Input	
Thermocouple	J, K, C, R, S, T, B, L, N & PtRh20%vsPtRh40%.
RTD	3 Wire PT100, 50Ω per lead maximum (balanced)
DC Linear	0 to 20mA, 4 to 20mA, 0 to 50mV, 10 to 50mV, 0 to 5V, 1 to 5V, 0 to 10V, 2 to 10V. Scaleable -1999 to 9999, with adjustable decimal point
Impedance	>10MΩ for Thermocouple and mV ranges, 47KΩ for V ranges and 5Ω for mA ranges
Accuracy	±0.1% of input range ±1 LSD (T/C CJC better than 1°C)
Sampling	4 per second, 14 bit resolution approximately
Sensor Break Detection	<2 secs (except zero based DC ranges), Limit trip and annunciators activate. High alarms activate for Temperature and mV ranges, low alarms activate for, mA or V ranges

Outputs & Options	
Limit Trip Relay Outputs	Latching SPDT, contacts 5Amp resistive at 240V AC, >100,000 operations
Alarm Relay Outputs	Non-latching SPDT, contacts 2Amp resistive at 240V AC, >500,000 operations
SSR Driver Alarm Outputs	Drive capability >10V DC in 500Ω minimum
Triac Alarm Outputs	0.01 to 1 Amp AC, 20 to 280Vrms, 47 to 63Hz
DC Linear Retransmit Outputs	0 to 20mA, 4 to 20mA into 500Ω max, 0 to 10V, 2 to 10V, 0 to 5V into 500Ω min. Accuracy ±0.25% at 250Ω (degrades linearly to 0.5% for increasing burden to specified limits)
Transmitter Power Supply	Output 24VDC (nominal) into 910Ω minimum to power external devices
Communications	2 Wire RS485, 1200 to 19200 Baud, Modbus and ASCII protocol (selectable)
Digital Input	Volt free or TTL input. -0.6 to 0.8V or contact closure resets latched relays and annunciators

Operating & Environmental	
Temperature & RH	0 to 55°C (-20 to 80°C storage), 20% to 95% RH non-condensing
Power Supply	100 to 240V ±10% at 50/60Hz 7.5VA, (optional 20 to 48V AC 7.5VA/22 to 65V DC 5 watts)
Front Panel Protection	IEC IP66 (Behind panel protection is IP20)
Standards	FM, CE, UL & ULC recognised

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

Order Code

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P6700 – X – 1 – X – X – X – X – X
P4700 – X – 1 – X – X – X – X – X
P8700 – X – 1 – X – X – X – X – X
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Input Type	
3 Wire RTD or DC mV	1
Thermocouple	2
DC mA	3
DC Voltage	4

Option Slot 1	
Latching Limit Relay (fixed)	1

Option Slot 2	
Not fitted	0
Relay	1
DC Driver for SSR	2
DC 0-10V	3
DC 0-20mA	4
DC 0-5V	5
DC 2-10V	6
DC 4-20mA	7
Triac	8

Display Colour	
0	Red Upper & Lower
1	Green Upper & Lower
2	Red Upper, Green Lower
3	Green Upper, Red Lower

Power Supply	
0	100-240V AC
2	24-48V AC or DC

Option Slot A	
0	Not fitted
1	RS485 Communications
3	Digital Input

Option Slot 3	
0	Not fitted
1	Relay
2	DC Driver for SSR
3	DC 0-10V
4	DC 0-20mA
5	DC 0-5V
6	DC 2-10V
7	DC 4-20mA
8	Transmitter Power Supply

Available From: