West 6700+, 8700+ & 4700+ Limit control

- High or Low Trip Points
- 5 Amp Latching Limit Relay
- Remote Reset Option
- Exceed & Relay Indicators
- Jumperless Configuration
- Auto Detected Hardware
- Modbus & ASCII Comms
- Two Annunciators or Alarms
- Available in 1/16, 1/8 & 1/4 DIN Formats

The West range of 6700+, 8700+ and 4700+ have a programmable safety cut out with optional outputs for annunciators and alarms. A latched relay cuts power to your process if safe values are exceeded. These units must be reset before the process can continue. They have the improved Plus Series hardware and user interface for optimal ease of use.

### Specification

#### Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output Configuration</td>
<td>Up to 3 possible, for latching trip relays, alarm/annunciator relays, 24VDC transmitter power supply or retransmit of process value or limit trip setpoint</td>
</tr>
<tr>
<td>Alarm 1 &amp; 2 Types</td>
<td>Process high, process low, Limit SP deviation, band, logical OR alarms or trip annunciator. Alarms have fully adjustable hysteresis.</td>
</tr>
<tr>
<td>Output Reset Action</td>
<td>Limit output can be reset only when exceed condition is absent. Local or remote reset options.</td>
</tr>
<tr>
<td>Annunciator Reset Action</td>
<td>Annunciator output can be reset at any time. Local or remote reset options.</td>
</tr>
<tr>
<td>Human Interface</td>
<td>4 button operation, dual 4 digit 10mm &amp; 8mm (6700+ &amp; 8700+), 13mm &amp; 10mm (4700+) high LED displays, optional choice of colours (Red/Red, Red/Green, Green/Red or Green/Green), plus 4 LED indicators</td>
</tr>
<tr>
<td>PC Configuration</td>
<td>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</td>
</tr>
</tbody>
</table>

#### Input

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thermocouple</td>
<td>J, K, C, R, S, T, B, L, N &amp; PtRh20%vsPtRh40%</td>
</tr>
<tr>
<td>RTD</td>
<td>3 Wire PT100, 500Ω per lead maximum (balanced)</td>
</tr>
<tr>
<td>DC Linear</td>
<td>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</td>
</tr>
<tr>
<td>Impedance</td>
<td>&gt;10MΩ for Thermocouple and mV ranges, 47KΩ for V ranges and 5Ω for mA ranges</td>
</tr>
<tr>
<td>Accuracy</td>
<td>±0.1% of input range ±1 LSD (T/C CJC better than 1°C)</td>
</tr>
<tr>
<td>Sampling</td>
<td>4 per second, 14 bit resolution approximately</td>
</tr>
<tr>
<td>Sensor Break Detection</td>
<td>&lt;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</td>
</tr>
</tbody>
</table>

#### Output & Options

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limit Trip Relay Outputs</td>
<td>Latching SPDT, contacts 5Amp resistive at 240V AC, &gt;100,000 operations</td>
</tr>
<tr>
<td>Alarm Relay Outputs</td>
<td>Non-latching SPDT, contacts 2Amp resistive at 240V AC, &gt;500,000 operations</td>
</tr>
<tr>
<td>SSR Driver Alarm Outputs</td>
<td>Drive capability &gt;10V DC in 500Ω minimum</td>
</tr>
<tr>
<td>Triac Alarm Outputs</td>
<td>0.01 to 1Amp AC, 20 to 280Vrms, 47 to 63Hz</td>
</tr>
<tr>
<td>DC Linear Rettransmit Outputs</td>
<td>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)</td>
</tr>
<tr>
<td>Transmitter Power Supply</td>
<td>Output 24VDC (nominal) into 910Ω minimum to power external devices</td>
</tr>
<tr>
<td>Communications</td>
<td>2 Wire RS485, 1200 to 19200 Baud, Modbus and ASCII protocol (selectable)</td>
</tr>
<tr>
<td>Digital Input</td>
<td>Volt free or TTL input. -0.6 to 0.8V or contact closure resets latched relays and annunciators</td>
</tr>
</tbody>
</table>
Operating & Environment

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), NEMA4X

Standards
FM, CE, UL & ULC recognised

Dimensions

6700+

8700+

4700+
### Wiring Connections

#### 6700+

**Field Reconfiguration**

**Input**
- Jumper-free configuration for any type (no extra parts required)
- Option Slot 1
  - Latching Limit Relay: Fixed
  - Option Slot 2: Part Number
    - Relay Output: PO2-C10
    - Linear mA/V DC Output: PO2-C21
    - SSR Driver Output: PO2-C50
    - Triac Output: PO2-C80
  - Option Slot 3: Part Number
    - Relay Output: PO2-C10
    - Linear mA/V DC Output: PO2-C21
    - SSR Driver Output: PO2-C50
    - 24VDC Transmitter PSU: PO2-W08
  - Option Slot A: Part Number
    - Digital Input: PA1-W03
    - RS485 Comms: PA1-W06

#### 8700+ & 4700+

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## Ordering Code

<table>
<thead>
<tr>
<th>Model</th>
<th>Code</th>
<th>Display Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/16 DIN Limit</td>
<td>6701</td>
<td>0: Red Upper &amp; Lower</td>
</tr>
<tr>
<td>1/8 DIN Limit</td>
<td>8701</td>
<td>1: Green Upper &amp; Lower</td>
</tr>
<tr>
<td>1/4 DIN Limit</td>
<td>4701</td>
<td>2: Red Upper, Green Lower</td>
</tr>
</tbody>
</table>

### Input Type

- **Universal Input** (TC, RTD, mA, V) 2

### Option Slot 1

- **Latching Limit Relay (fixed)** 1

### Option Slot 2

- **Not fitted** 0
- **Relay** 1
- **DC Driver for SSR** 2
- **Linear DC (mA, V)** 7
- **Triac** 8

### Power Supply

- **100-240V AC** 0
- **24-48V AC or DC** 2

### Option Slot A

- **RS485 Communications** 1
- **Digital Input** 3
- **Not fitted** 0

### Option Slot 3

- **DC Driver for SSR** 1
- **Transmitter Power Supply** 2
- **Linear DC (mA, V)** 7

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