**NEW**

6700+
Limit Control

**1/16 DIN Limit Controller**

**DESCRIPTION**

The West 6700+ is part of a range of new generation '+ Series limit devices that share the same distinctive styling as the '+ Series temperature controllers.

The expanded '+ Series limit controller platform includes 1/4, 1/8 and 1/16 DIN models that incorporate numerous product specification, communication, display interface and software improvements that surpass competitive limit device offerings in ease of use, delivery and value-per-dollar characteristic of the growing '+ Series product family.

By adding more versatile features and user-friendly functionality like digital inputs, an easy-to-use HMI, jumperless and auto-hardware configuration, 24VDC transmitter power supply and MODBUS communication across the range - the new generation West + Series limit controllers transform the complicated into the simple while saving you time (as much as 50% on product set-up), reducing inventory stock and virtually eliminating the likelihood of operator errors.

The + Series limit controllers are affordable, well-featured, easy to use and adaptable with performance features that work for you to make limit control simple.

**APPLICATIONS:**

Fail-safe protection device to prevent damage to equipment or products. It will shut down a process when a preset temperature is reached and cannot be reset by the operator until the process has returned to a safe condition.

**INDUSTRIES**

- Industrial and lab ovens/furnaces
- Plastics and thermal forming
- Packaging applications
- And any other where protection against out-of-range temperature condition is a critical requirement

**FEATURES/BENEFITS**

- **NEW** Improved easy-to-use HMI
- **NEW** Jumperless input configuration
- **NEW** Auto-hardware recognition
- **NEW** Improved Windows PC configuration software
- Process alarms
- Optional digital input and remote reset
- Optional 10V SSR driver output
- Faster communication speeds in selectable MODBUS or ASCII format
- FM Approved
- Backward compatible panel cutout, housing and terminal wiring capability

ISE, Inc. - 10100 Royalton Rd. - Cleveland, OH 44133 - Tel: (440) 237-3200 - Fax: (440) 237-1744
http://iseinc.com
SPECIFICATIONS*

**STANDARD FEATURES**
- 4 per second input sample rate
- Universal input
- **NEW** Improved HMI, 4 button operation, dual 4-digit LED display
- **NEW** Plug-in output modules – install just the function needed
- **NEW** Jumperless input configuration
- **NEW** Auto-detection of installed output modules
- **NEW** Improved PC configuration software
- Process alarms
- **Construction/Enclosure:** Rugged ABS Plastic housing

**COMMUNICATIONS INTERFACE**
- User-selectable: 2-wire, RS-485 serial communications option with choice of Modbus RTU or ASCII protocol; 1200 to 19200 baud
- **PC Configuration:** Offline configuration from serial port to dedicated configuration socket (comms option not required)

**RATINGS/AGENCY APPROVALS**
- **Conformance:** FM, CE, UR, cUR UL File # 67237
- **Safety:** EN61010
- **EMC:** EN61326

**PROTECTION**
- IEC IP66 (NEMA 4X) front panel
- IEC IP20 (behind the panel protection)

**PHYSICAL DIMENSIONS**
- **Panel Cutout:** 1.77" x 1.77" (45mm x 45mm)
- **Height:** 1.89" (48mm)
- **Width:** 1.89" (48mm)
- **Depth:** 4.33" (110mm)
- **Weight:** 0.46 lbs (0.21 kg)
- **Mounting:** Plug in panel with fixing strap

**OUTPUTS**
- Output 1 (limit relay) fixed; outputs 2 and 3 (alarm relay) are user-selectable and customized based on desired application; choose from the following output types
  - Max # of Outputs: 3 for alarm, 24 VDC transmitter power supply or retransmit of process value/limit trip setpoint
  - Limit Relay: SPDT; 240VAC 5A resistive; Lifetime >100,000 operations at rated voltage/current
  - Alarm Relay: Optional SPDT; 240VAC 2A resistive, Lifetime >500,000 operations at rated voltage/current
  - **SSR Drive:** Optional drive capability: >10 VDC nominal into 500 ohm minimum
  - **DC Linear:** Optional 0-20mA, 4-20mA into 500 ohm min; 0-10V, 1-5V, 2-10V, 0-5V into 500 ohm min; Outputs have 2% over/under drive applied; Accuracy +0.25% (mA into 250 ohm load, V into 2k ohm load); degrading linearity to +0.5% for increasing burden to specified limits
  - **Triac:** Optional 0.01 to 1A AC, 20 to 280Vrms, 47-63 Hz (Limit 2)
  - **Transmitter Power Supply:** Optional 24 VDC (Limit 1)

**OUTPUT FUNCTIONS**
- **Process Alarm:** (reverse or direct)
- **Modes (Alarm 1 and 2):** High/Low, Band, Deviation, logical OR/AND
- **Retransmit:** Process value or limit setpoint

**ELECTRICAL PERFORMANCE**
- **Accuracy:** ± 0.1% of input range ± 1 LSD (T/CCJC better than 1 degree C)
- **Input sample rate:** 4 per second, 14 bit resolution
- **Impedance:** >10M ohm for the thermocouple and mV ranges, 47k ohm for V ranges and 5 ohm for mA ranges
- **Sensor Break Detection:** <2 seconds (except zero based DC ranges), limit output opens, low alarms activate for RTD, mA or V ranges
- **Power Consumption:** 5W / 7.5 VA Maximum
- **Supply Voltage:** 100-240V, 50/60Hz, Optional 20-48VAC 50/60Hz or 22-65VDC
- **Type:** Red or Green, 7 segment LED, 4 digit upper and lower displays
- **Height:** 10mm (0.39") upper display, 8mm (0.31") lower display
- **Annunciators:** 5 LED indicators for output and status

**DISPLAY**
- **T/C's:** J, T, K, L, N, B, R, S, C; Pt Rh20% vs. Pt 40% Rh
- **RTD:** 3-wire, PT100
- **DC Linear:** (Scalable –1999 to +9999)
- **Volts:** 0-5V, 1-5V, 0-10V, 2-10V
- **DC Milliamperes:** 0-20mA or 4-20mA
- **DC Millivolts:** 0-50mV, 10-50mV

**ENVIRONMENTAL CHARACTERISTICS**
- **Operating Temp:** 32° to 131°F (0° to 55°C)
- **Storage Temp:** -4° to 176°F (-20° to 80°C)
- **Humidity:** 20% to 95% non-condensing RH

**ELECTRICAL**
- **Supply Voltage:** Optional 24 VDC

**OPTIONS/ACCESSORIES**
- **Digital Input 1 (Optional):** remote reset
- **NEW** Faster RS-485 serial communication speeds and user-selectable (Modbus or ASCII) option
- **NEW** 24VDC transmitter power supply option
- **Choice of Led colors:** red/red, red/green, green/red, green/green
- **10VDC SSR Drive output

**WARRANTY**
- 3 Years

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## MODELS

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<tbody>
<tr>
<td>Model #</td>
<td>Input Type</td>
<td>Output 1</td>
<td>Output 2</td>
<td>Output 3</td>
<td>Options</td>
<td>Power Supply</td>
<td>Display Color</td>
<td>Option Slot B</td>
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<tr>
<td>P6701Z</td>
<td>1/16 DIN Limit Controller</td>
<td>1 3-Wire RTD or DCmV 2 Thermocouple 3 DCmA 4 DC Voltage</td>
<td>1 Limit relay output (fixed)</td>
<td>0 Not fitted 1 Relay Output 2 DC Drive SSR Output 3 Linear 0-10V DC Output 4 Linear 0-20mA DC Output 5 Linear 0-5V DC Output 6 Linear 2-10V DC Output 7 Linear 4-20mA DC Output 8 Triac Output</td>
<td>0 Not fitted 1 Relay Output 2 DC Drive SSR Output 3 Linear 0-10V DC Output 4 Linear 0-20mA DC Output 5 Linear 0-5V DC Output 6 Linear 2-10V DC Output 7 Linear 4-20mA DC Output 8 Transmitter Power Supply</td>
<td>0 Not fitted 1 RS-485 Serial Communication 2 Digital Input</td>
<td>0 100-240 AC 2 24-48 AC or DC</td>
<td>0 Red upper and lower 1 Green upper and lower 2 Red upper, Green lower 3 Green upper, Red lower</td>
<td>00 Not fitted</td>
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### DIMENSIONS - 1/16 DIN

- 1.89" (48mm)
- 1.89" (48mm)
- 4.33" (110mm)
- approx. 0.39" (10mm)

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