

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 valueper 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

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6700+[™]

Affordable, Well-Featured, Easy to Use and Adaptable

1/16 DIN Limit Controller

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

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: 100-240V, 50/60Hz, Optional 20-48VAC 50/60Hz or 22-65VDC

Power Consumption: 5W / 7.5 VA Maximum

DISPLAY:

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

INPUTS

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 milliamps: 0-20mA or 4-20mA DC millivolts: 0-50mV, 10-50mV

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 max; 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

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/C CJC better than 1 degree C)

Input sample rate: 4 per second, 14 bit

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

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

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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West Brand 6700+ Data Sheet (7/05)

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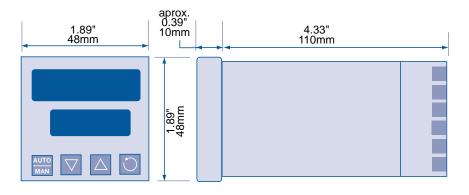
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MODELS

Code 1: Model #	Code 2: Input Type	Code 3: Output 1	Code 4: Output 2	Code 5: Output 3	Code 6: Options	Code 7: Power Supply	Code 8: Display Color	Code 9: Option Slot B
P6701Z		1						0 0
I/16 DIN Limit Controller includes: jumperless input configuration, auto-detection hardware and improved PC configuration software	1 3-Wire RTD or DC mV 2 Thermocouple 3 DC mA 4 DC Voltage	1 Limit relay output (fixed)	O Not fitted Relay Output Description Linear 0-10V DC Output Linear 0-20mA DC Output Linear 0-5V DC Output Linear 2-10V DC Output Linear 4-20mA DC Output T Linear 4-20mA DC Output T Linear 4-20mA DC Output T Linear 4-20mA DC Output Triac Output	 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 	Not fitted RS-485 Serial Communication Digital Input	0 100-240 AC 2 24-48 AC or DC	Red upper and Lower Green upper and lower Red upper, Green lower Green upper, Red lower	00 Not fitted

DIMENSIONS - 1/16 DIN



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