

# Product Specification

# West 4700 1/4 DIN Limit Alarm Unit



The West 4700 is a safety cut-out, with optional annunciators and alarms. A latched relay cuts process power if safe values are exceeded. A reset is required before continuing.

- High or low trip
- 5 amp latched relay
- Remote reset option
- 2 Annunciators or alarms
- Exceed & relay indicators
- Configuration via PC
- RS485 comms
- PV retransmit option



### **Technical Data**

#### **Features**

**Output Configuration** 

Alarm 1 & 2 Types

Limit Action

Output Reset Action

Annunciator Reset Action

Human Interface

PC Configuration

## Input

Thermocouple

RTD

DC Linear

Impedance

Accuracy

Sampling

Sensor Break Detection

#### **Outputs & Options**

Limit Trip Relay Alarm Relays

Retransmit Outputs

Communications

Remote Reset option

#### **Operating & Environmental**

Temperature & RH

Power Supply

Front Panel Protection

Approvals and Certification

Up to 3 Total. 1 latching trip relay, max 2 alarms relays,

max 1 DC linear retransmit (PV or limit value)

Process high, process low, setpoint deviation, band, logical OR alarms or trip annunciator.

Latching relay output when PV exceeds set value. Selectable for high or low trip activation.

Limit output can be reset only when exceed condition is absent. Local or remote reset options.

Annunciator output can be reset at any time. Local or remote reset options.

4 button operation, dual 4 digit 13mm & 10mm high LED displays. Exceed, output & alarm indicators

Off-line configuration from serial port to dedicated config socket (comms option not required)

J, K, R, S, T, B, L, & N.

3 Wire PT100,  $50\Omega$  per lead maximum (balanced)

0-20/4-20mA, 0-50/10-50mV, 0-5/1-5/0-10/2-10V. Scaleable -1999 to 9999, dec point

>100M $\Omega$  for Thermocouple and mV ranges, 47K $\Omega$  for V ranges and 4.7 $\Omega$  for mA ranges

+/- 0.25% of input span +/- 1 LSD (T/C CJC better than 0.7°C)

4 per second, 14 bit resolution approximately

<2 secs (except zero based DC ranges), control O/P's turn off, high alarms activate for T/C and mV ranges, low alarms activate for RTD, mA or V ranges.

Contacts SPDT 5Amp resistive at 240V AC, >100,000 operations

Contacts SPDT 2Amp resistive at 240V AC, >500,000 operations

0-20/4-20mA into 500 $\Omega$  max, 0-10/0-5V into 500 $\Omega$  min. Accuracy typically +/- 0.25%

2 Wire RS485, 1200 to 9600 Baud, West ASCII

Allows remote latched relay and annunciator reset, using volt free or TTL

0 to 55°C (-20 to 80°C storage), 20% to 95%RH non-condensing

100 to 240V 50/60Hz 7.5VA (optional 20 to 50V AC 7.5VA/22 to 65V DC 4W)

IEC IP66 (Behind panel protection is IP20)

CE, UL & Ulc

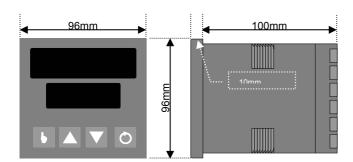
#### West Instruments

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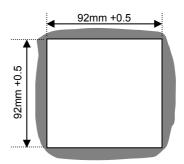
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**e-mail:** info@westinstruments.com **Web:** www.westinstruments.com

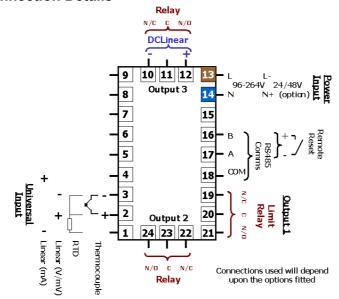
#### **Dimensions**



## **Cut out**



#### **Connection Details**



# **Field Reconfiguration**

#### Input

Configurable to any type, no extra parts required

#### **Output 1**

Type is fixed as Limit Relay

#### Output 2

Configurable as Alarm or Annunciator, via plug-in Relay

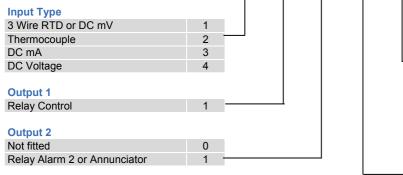
#### **Output 3**

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

# **Option Slot**

Configurable as RS485 comms or Remote Reset, via plug-in modules

# Order Code N4700 - x - 7



Options & Power Supply
No Options/100-240V AC line supply
No Options/24-48V AC or DC line supply
RS485 Comms/100-240V AC line supply
RS485 Comms/24-48V AC or DC supply
Remote Reset/100-240V AC line supply
Remote Reset/24-48V AC or DC supply
Output 3

0 Not fitted
1 Relay Alarm or Annunciator
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

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

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4700 Spec Sheet - 08/03



