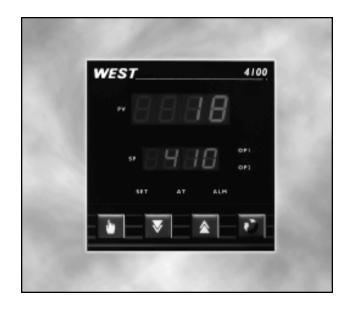
# 4100 1/4 DIN Controller

- Two Auto-tune algorithms: Pre-tune plus Self-tune.
- Plug and Play Technology allows field upgradeability.
- Dedicated configuration port allows configuration directly from PC for fast and repeatable configurations.
- Password protection limiting operator access and providing process security.
- Multiple setpoint strategies which allows selection of the way information is presented.





The 4100 is a 1/4 DIN controller which combines sophisticated functionality and built-in versatility with ease of use.

The 4100 incorporates our advanced tuning algorithms, with selectable pre-tune and self-tuning. Pre-tune is used on start-up and is a one step tuning algorithm designed to get you to setpoint fast with self-tuning being enabled near setpoint and normal operating conditions to control overshoot. The self-tune is a continuous tuning algorithm sometimes referred to as *adaptive tuning*. This control can also be manual fine tuned for specific applications.

Our *Plug and Play* Technology allows you the ability to easily add to the controller's features including communication by simply installing additional plug-in boards. Inputs, Outputs, Alarms, and Communications

are all field upgradeable! This capability also allows the user to pay for only the options that are required on todays applications.

The controller is also easy to setup, with an innovative configuration port for off line programming directly from a PC or through a simplified operator's front panel, which also makes accessing information quick and easy. Access can also be limited by either a security code or by setpoint options.



### 4100 Brief Specs:

#### **Brief Specs:**

Thermocouple: Inputs: J, K, R, S, T, B, L, N

RTD: Pt 100

DC Linear: 0-20mA, 4-20mA

0-50mV, 10-50mV 0-5V, 1-5V, 0-10V, 2-10V

**Dual Setpoint:** Voltage free contact or TTL compatible

Outputs: **Control Outputs:** Relay- SPDT 2A at 240V AC > 5 X 105 operations

SSR >4.0V DC in 1 K ohm minimum

DC Linear-0-20mA, 4-20mA 500 ohm max and

0-10V are all 0-5V 500 ohm max

Triac- 1amp @ 40°C, Derate to 1/2amp @ 80°C

2 Alarms as standard Alarm Outputs:

2 Relay- 2A at 120/240V AC or 1 SSR >4.2V DC

RS-485 2 wire Communications:

Control and: **Features** 

Tuning: Pre-Tune and Self Tune

Auto/Manual with "bumpless" transfer Proportional Band: 0.5% to 999.9% of input span and ON-OFF Auto Reset: 1 second to 99 minutes 59 seconds and OFF

±0.25% of span ±1 LSD

0 to 100% Manual Reset (Bias):

0 to 99 minutes 59 seconds Rate:

Operating and:

Accuracy:

**Environmental** Ambient Temperature: 0°C to 55°C (Operating) -20°C to 80°C (Storage)

90 to 264V AC 50/60Hz Supply Voltage:

Power Consumption: 4W Maximum

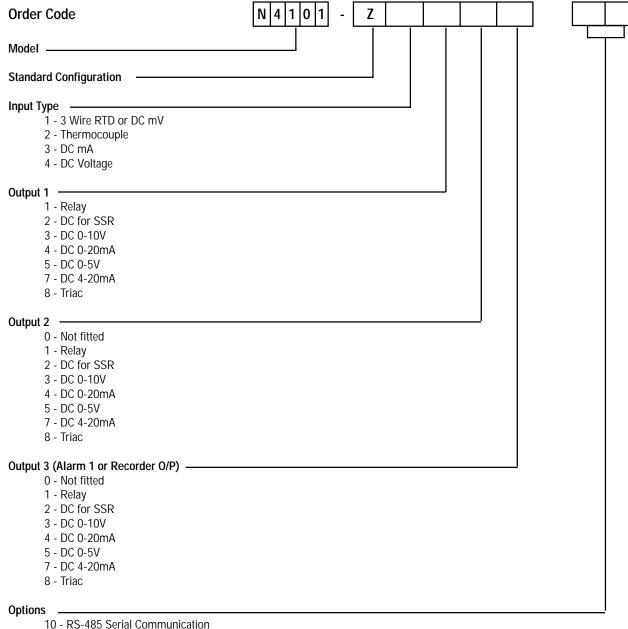
Low Voltage Option: 20-50V AC, 22-65V DC

EMI Immunity: Meets with BS EN 50082-2 (1995) EMI Emmissions: Meets with BS EN 50081-2 (1994)

Dimensions and: Panel Cut-Out: 1/4 DIN - 92mm X 92mm

**Panel Cut Out Unit Dimensions:** 96mm High X 96mm Wide X 100mm Deep

### 4100 Order Matrix:



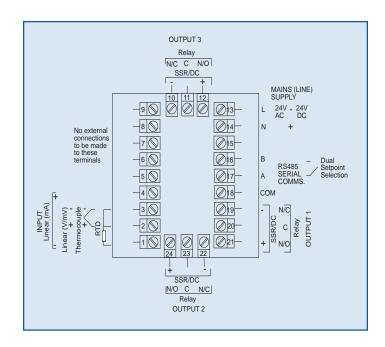
- 02 24VAC/DC Power Supply
- 30 Dual Setpoint
- 12 RS-485 Serial Communication and 24VAC/DC Power Supply
- 32 Dual Setpoint and 24VAC/DC Power Supply

#### Specials (Add suffix to part number if required)

- AI Blank Overlay
- AL Dual Color Display (Red and Green)
- AK Blank Overlay with Dual Color Display

## 4100 Wiring Diagram and Notes:

### Wiring Diagram:



Notes:			

