

# 6100 1/16 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 6100 is a 1/16 DIN controller which combines sophisticated functionality and built-in versatility with ease of use.

The 6100 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 today's 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.



# 6100 Brief Specs:

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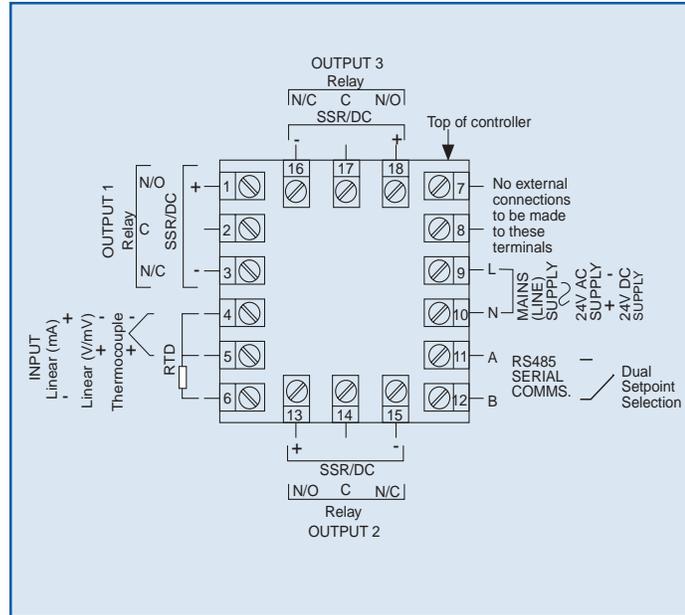
<b>Inputs:</b>	Thermocouple:	J, K, R, S, T, B, L, N
	RTD:	Pt 100
	DC Linear:	0-20mA, 4-20mA 0-50mV, 10-50mV 0-5V, 1-5V, 0-10V, 2-10V
	Dual Setpoint:	Voltage free contact or TTL compatible
<b>Output:</b>	Control Outputs:	Relay- SPDT 2A at 240V AC > 5 X 10 <sup>5</sup> operations SSR >4.0V DC in 1 K ohm 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
	Alarm Outputs:	2 Alarms as standard
	Communications:	2 Relay- 2A at 120/240V AC or 1 SSR >4.2V DC RS-485 2 wire
<b>Control and: Features</b>	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
	Manual Reset (Bias): Rate:	0 to 100% 0 to 99 minutes 59 seconds
<b>Operating and: Environmental</b>	Accuracy:	±0.25% of span ±1 LSD
	Ambient Temperature:	0°C to 55°C (Operating) -20°C to 80°C (Storage)
	Supply Voltage:	90 to 264V AC 50/60Hz
	Power Consumption:	4W Maximum
	Low Voltage Option:	20-50V AC, 22-65V DC
	EMI Immunity: EMI Emissions:	Meets with BS EN 50082-2 (1995) Meets with BS EN 50081-2 (1994)
<b>Dimensions and: Panel Cut Out</b>	Panel Cut-Out:	1/16 DIN - 45mm X 45mm
	Unit Dimensions:	48mm High X 48mm Wide X 110mm Deep

# 6100 Order Matrix:

<b>Order Code</b>	N	6	1	0	1	-	Z								
<b>Model</b>	_____														
<b>Standard Configuration</b>	_____														
<b>Input Type</b>	_____														
	<ul style="list-style-type: none"> <li>1 - 3 Wire RTD or DC mV</li> <li>2 - Thermocouple</li> <li>3 - DC mA</li> <li>4 - DC Voltage</li> </ul>														
<b>Output 1</b>	_____														
	<ul style="list-style-type: none"> <li>1 - Relay</li> <li>2 - DC for SSR</li> <li>3 - DC 0-10V</li> <li>4 - DC 0-20mA</li> <li>5 - DC 0-5V</li> <li>7 - DC 4-20mA</li> <li>8 - Triac</li> </ul>														
<b>Output 2</b>	_____														
	<ul style="list-style-type: none"> <li>0 - Not fitted</li> <li>1 - Relay</li> <li>2 - DC for SSR</li> <li>3 - DC 0-10V</li> <li>4 - DC 0-20mA</li> <li>5 - DC 0-5V</li> <li>7 - DC 4-20mA</li> <li>8 - Triac</li> </ul>														
<b>Output 3 (Alarm 1 or Recorder O/P)</b>	_____														
	<ul style="list-style-type: none"> <li>0 - Not fitted</li> <li>1 - Relay</li> <li>2 - DC for SSR</li> <li>3 - DC 0-10V</li> <li>4 - DC 0-20mA</li> <li>5 - DC 0-5V</li> <li>7 - DC 4-20mA</li> <li>8 - Triac</li> </ul>														
<b>Options</b>	_____														
	<ul style="list-style-type: none"> <li>10 - RS-485 Serial Communication</li> <li>02 - 24VAC/DC Power Supply</li> <li>30 - Dual Setpoint</li> <li>12 - RS-485 Serial Communication and 24VAC/DC Power Supply</li> <li>32 - Dual Setpoint and 24VAC/DC Power Supply</li> </ul>														
<b>Specials (Add suffix to part number if required)</b>	<ul style="list-style-type: none"> <li>S04 - Dual Color Display</li> <li>S12 - Blank Overlay</li> <li>AK - Blank Overlay with Dual Color Display</li> </ul>														

# 6100 Wiring Diagram and Notes:

## Wiring Diagram:



## Notes:

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