



STANDARD 12, 30 AND 42 POLE VERSIONS

- Power Available Light
- Panel Energized Light
- Three Position Selector Switch
- NEMA 4 or 4X Enclosure

**1.1 Description of Ambient Distribution Panel**

<p>This ambient distribution panel has been specifically designed for use in freeze protection heat tracing systems operating in conjunction with a single control source. This control source can</p>	<p>be in the form of an ambient thermostat, snow sensing controller or any similar device. The ambient distribution panel can operate in two modes, automatically with the use of a control device or in</p>	<p>manual override. The panel can also be completely turned off during off-season periods.</p>
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**1.2 Description of System Components**

<p>The ambient distribution panel is supplied in a NEMA 4 or 4X enclosure that can be wall or rack mounted. Standard versions are available in 12, 30 and 42 -pole options, both three-phase and single-phase. Branch breakers are available</p>	<p>in standard trip or ground fault equipment protection devices. Main breaker and contactor combinations are selectable from 100 Amp up to a maximum of 225 Amp. The panel is supplied with a three-position selector switch; power available</p>	<p>indicating light and a panel energized indicating light. Options are provided for external door disconnect and energy savings proportional ambient control.</p>
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**1.3 Standard Features**

<b>Enclosures:</b> NEMA 4 Powder Coated Steel NEMA 4X Stainless Steel	<b>Branch Circuit Breakers:</b> 1-Pole, 15-40A Standard 1-Pole, 15-30A GFEPD 2-Pole, 15-50A Standard 2-pole, 15-50A GFEPD	<b>Main Bus Sizes:</b> 12-Pole Option, 100A 30-Pole Option, 225A 42-Pole Option, 225A
<b>Voltage Options:</b> 120/208 Three Phase Power 120/240 Single Phase Power		

**1.4 PAC Option for AP Series Control Panels**

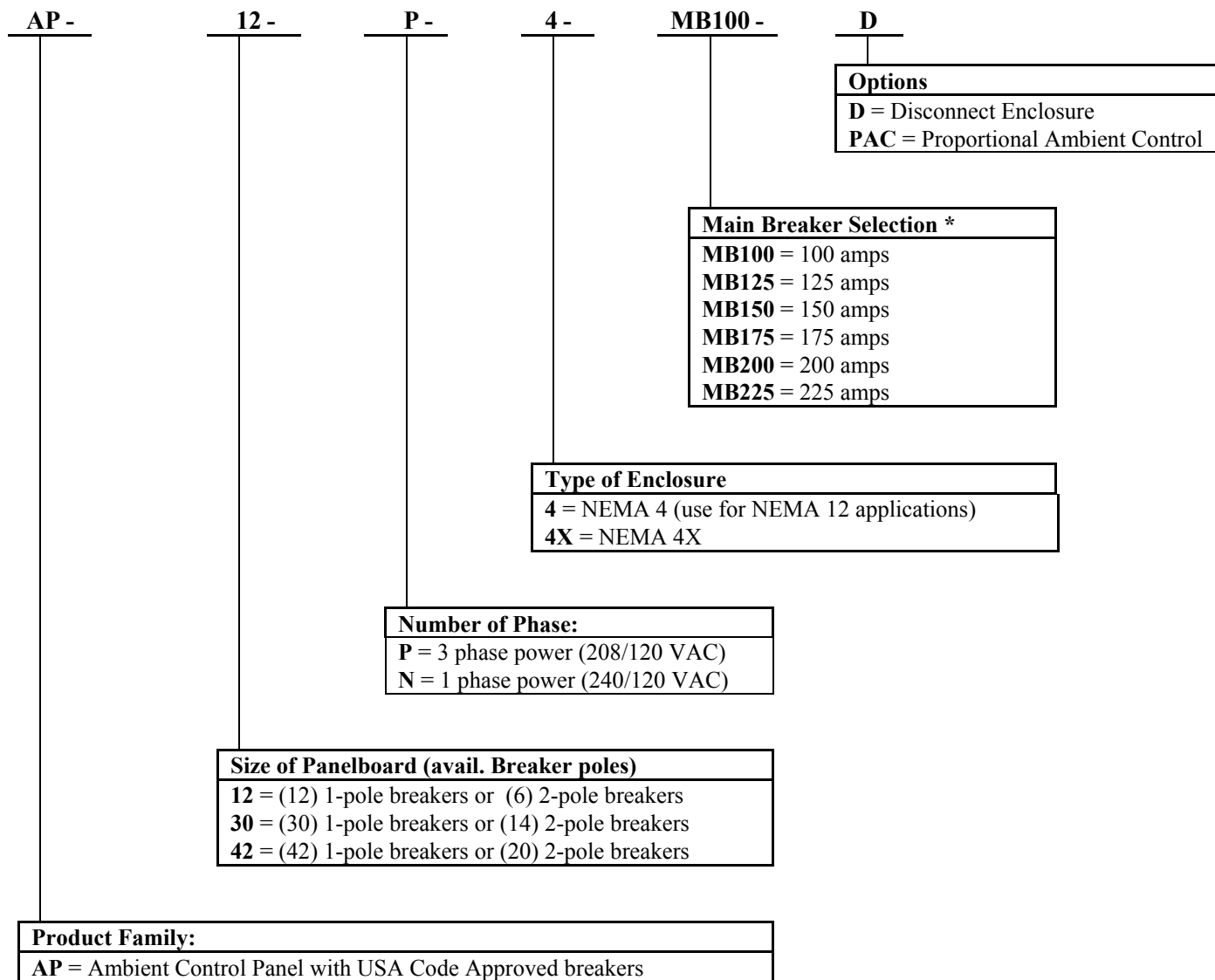
<p>This control option utilizes a simple algorithm to control the heat tracing system based on ambient air temperature. The user inputs values for maintenance temperature, minimum ambient temperature, cycle time and minimum</p>	<p>“on” time. Based on the actual air temperature, the controller will adjust the cycle time to control the heat input requirements in freeze protection and broadband process maintenance applications. Since the heat input is</p>	<p>continually adjusted, distribution, control and operational costs can be reduced over conventional grouped control methods.</p>
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# NELSON™ TYPE AP-240VAC MAXIMUM

NELSON AMBIENT/CONTACTOR CONTROLLED DISTRIBUTION PANEL

SPECIFICATION/APPLICATION

INFORMATION



\*Note: Standard 12-Pole option is limited to 100A maximum main breaker sizing.

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