

**1.1 Description of Ambient Distribution Panel**

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 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 manual override. The panel can also be completely turned off during off-season periods.

**1.2 Description of System Components**

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 (AP6), 30 (AP14) and 42 (AP20)-pole options. Branch

breakers are available 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 indicating light and a panel energized indicating light. Options are provided for external door disconnect and energy savings proportional ambient control.

**1.3 Standard Features**

**Enclosures:**

- NEMA 4 Powder Coated Steel
- NEMA 4X Stainless Steel

**Branch Circuit Breakers:**

- 1-Pole, 15-60A Standard
- 1-Pole, 15-60A GFEPD (requires 2-pole space)
- 2-Pole, 15-60A Standard
- 2-Pole, GFEPD (Not Available)

**Main Bus Sizes:**

- 12-Pole (AP6) Option, 225A
- 30-Pole (AP14) Option, 225A
- 42-Pole (AP20) Option, 225A

**Voltage Options:**

- 277/480 Three Phase Power

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

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 “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.

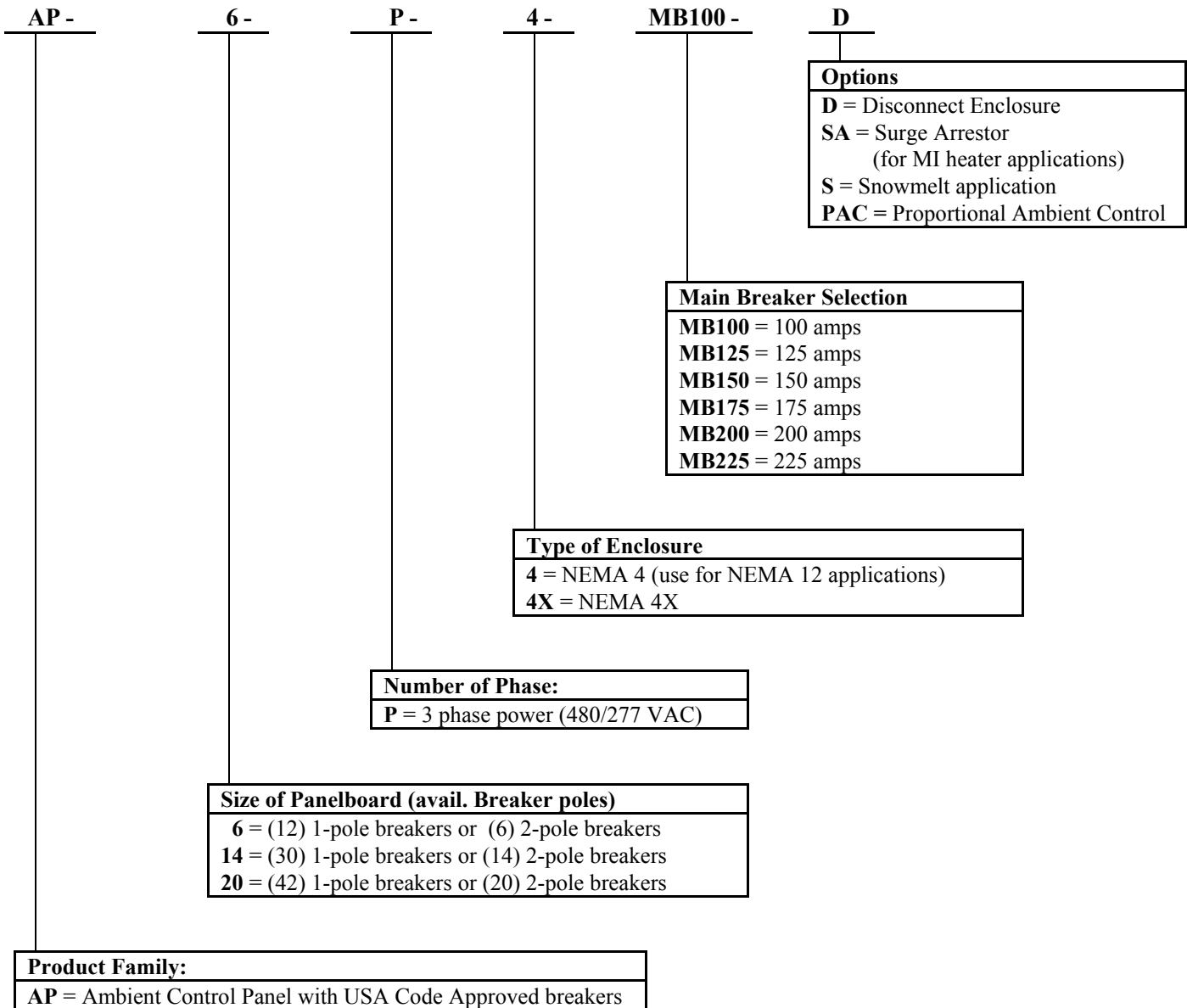
Since the heat input is continually adjusted, distribution, control and operational costs can be reduced over conventional grouped control methods.

# NELSON™ TYPE AP-480VAC MAXIMUM

## SPECIFICATION/APPLICATION

## NELSON AMBIENT/CONTACTOR CONTROLLED DISTRIBUTION PANEL

## INFORMATION



Nelson Heat Tracing Systems products are supplied with a limited warranty. Complete Terms and Conditions may be found on Nelson's website at [www.nelsonheaters.com](http://www.nelsonheaters.com).

