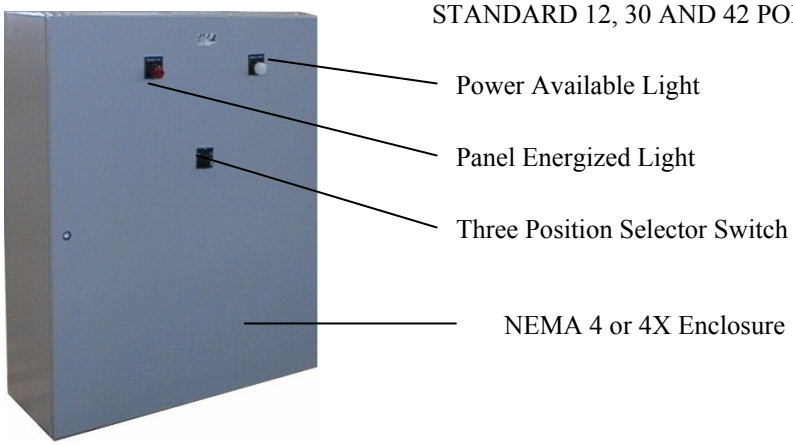

1.1 Description of Ambient Distribution Panel

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

Voltage Options:
277/480 Three Phase Power

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

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.

AP - 6 - P - 4 - MB100 - D

Options
D = Disconnect Enclosure
SA = Surge Arrestor (for MI heater applications)
S = Snowmelt application
PAC = Proportional Ambient Control

Main Breaker Selection
MB100 = 100 amps
MB125 = 125 amps
MB150 = 150 amps
MB175 = 175 amps
MB200 = 200 amps
MB225 = 225 amps

Type of Enclosure
4 = NEMA 4 (use for NEMA 12 applications)
4X = NEMA 4X

Number of Phase:
P = 3 phase power (480/277 VAC)

Size of Panelboard (avail. Breaker poles)
6 = (12) 1-pole breakers or (6) 2-pole breakers
14 = (30) 1-pole breakers or (14) 2-pole breakers
20 = (42) 1-pole breakers or (20) 2-pole breakers

Product Family:
AP = Ambient Control Panel with USA Code Approved breakers