WeatherTrace

WTP, WTPM

Freeze Protection Heat Trace Panels

- Standard NEMA 4 Enclosures
- NEMA 4X Stainless Steel Enclosure Option
- Hand/Off/Auto Selector Switch
- 15, 20, 30, 40 and 50 Amp Single-pole and Double-pole 30mA Ground Fault Thermal-Magnetic Circuit Breakers
- Voltage Options:
  - 208/120 VAC 3-Phase, 4-Wire
  - 240/120 VAC Single Phase, 3-Wire
  - 480/277 VAC 3-Phase, 4-Wire
- 50 to 250 Amp Main Breaker
- Ambient, Line or Temp. & Moisture Sensing Control Options
- Enclosure Heater Options for Condensation Prevention or Freeze Protection on Outdoor Installations
- UL and cUL Third Party Approvals

WTP

WTPM

Description

The Chromalox WeatherTrace series freeze protection heat trace panels offer powerdistribution, ground-fault protection, individual circuit alarming and ambient sensing control.

The panels are housed in NEMA 4 enclosures for indoor/outdoor applications. NEMA 4X 304 stainless steel enclosures may be selected as an option for more harsh environments.

The WTP/WTPM units can be configured with 50 to 250 Amp main breaker ratings in Single and Three-Phase configurations. Branch circuit breakers are available in 15, 20, 30, 40 and 50 amp single-pole and two-pole configurations with 30mA ground-fault equipment protection.

WTP – Freeze Protection
Ambient Sensing Series
The WTP panels provide group control of multiple heat trace circuits for pipe freeze protection via an ambient sensing external thermostat or electronic controller. The WTP can also be configured for group control of snow melting or deicing applications using our internal temperature/moisture controller. Chromalox recommended controllers include: RTAS, RTBC or the TPR. The WTP may be operated in two modes; automatically with the external controller, or in manual override via the Hand/Off/Auto selector switch.

WTPM – Freeze Protection
Ambient Sensing Monitor Series
The WTPM WeatherTrace with the HMI Monitoring, continually monitors the supply voltage to each individual heat trace circuit. Loss of voltage or a ground fault condition will trigger an automatic alarm condition, alerting plant personnel of critical process problems and reducing downtime. An annunciator panel then identifies the faulted zone and a Common Alarm is activated with the re-ring feature.

The WTPM panels provide group control of multiple heat trace circuits for pipe freeze protection via an ambient sensing thermostat, electronic controller or door mounted HMI. The WTPM can also be configured for group control of snow melting or deicing applications using our internal temperature/moisture controller. Chromalox recommended controllers include: RTAS, RTBC, or TPR with HMI.

The WTPM may be operated in two modes; automatically with the external controller or in manual override via the Hand/Off/Auto selector switch.

WeatherTrace

WTP, WTPM

Freeze Protection Heat Trace Panels *(cont'd.)*

Ordering Information

To Order — Complete the Model Number using the Matrix provided.

Model	Product Description
WTP	WTP Series Ambient Sensing Heat Trace Panels are designed for group control of heat trace circuits for Commercial Freeze Protection or De-Icing/Snow Melting Applications. The Chromalox WTP Series offers the following standard features: NEMA 4 enclosure, Hand/Off/Auto Selector Switch, Load Energized Indicator Lamp, Main Power On Lamp, Main Contactor, Main Circuit Breaker/Disconnect, Thermal Magnetic Branch Circuit Breakers with 30mA Ground Fault Equipment Protection, and Thermostat Controlled Enclosure Heater. The WTP series panels have UL and cUL Third Party Approvals. Additional features & options available, please see below for more details or the Data Sheet.

Code	Circuits
06	6 Circuits
12	12 Circuits
18	18 Circuits
24	24 Circuits

Code	Line Voltage	Cable Voltage
1	208/120 VAC, 3 Phase 4 Wire	120 V- 1 Pole or 208 V - 2 Pole
2	240/120 VAC, Single Phase 3 Wire	120 V- 1 Pole or 240 V - 2 Pole
3	480/277 VAC, 3 Phase 4 Wire	277 V- 1 Pole or 480 V - 2 Pole

Code	Cable Load Circuit Breaker Rating (Select Breaker Amperage and *1P/2P to Select Breaker Voltage 1(1P)=15A, 120V Breakers)
0(*)	None
1(*)	15A Thermal Magnetic
2(*)	20A Thermal Magnetic
3(*)	30A Thermal Magnetic
4(*)	40A Thermal Magnetic
5(*)	50A Thermal Magnetic

Code	Main Circuit Breaker	Typical Voltage
0	None	None
1	50A Thermal Magnetic	120/208V 3P, 120/240V 1P, 277/480V 3P
2	100A Thermal Magnetic	120/208V 3P, 120/240V 1P, 277/480V 1P
3	150A Thermal Magnetic	120/208V 3P
4	200A Thermal Magnetic	120/240V 1P, 277/480V 3P
5	250A Thermal Magnetic	120/208V 3P, 120/240V 1P, 277/480V 3P
X	Other (Consult Sales for assistance)	

Code	Enclosure Heater (Anti-Condensation Heater Required at a Minimum)
1	Thermostat Controlled Enclosure Heater (Anti-Condensation Heater)
2	Thermostat Controlled Enclosure Heater (Needed for 0°F (18°C) Min. Ambient temp.)
3	Thermostat Controlled Enclosure Heater (Needed for -40°F/°C) Min. Ambient temp.)

Code	Temp. Controller
1	None (Requires mechanical T-stat. Use TPR, RTAS or RTBC)
2	ETI Internal Snow Switch (SnowOwl, GIT-1, SIT-6E)
3	6040-R00000 1/16 DIN Controller (RTD controller-requires external RTD sensor-LN,LA or AS-BM)
4	Chromalox Snow Sensor Switch (CS-AS, CS-GS, CS-PS)

Code	Enclosure (Size determined by Table 2)
1	NEMA 4 Steel, Wall-Mount Enclosure 30 x 30 x 12
2	NEMA 4 Steel, Wall-Mount Enclosure 42 x 36 x 12
3	NEMA 4 Steel, Wall-Mount Enclosure 60 x 36 x 12
4	NEMA 4 Steel, Wall-Mount Enclosure 72 x 36 x 12
A	NEMA 4X 304 Stainless Steel, Wall-Mount Enclosure 30 x 30 x 12
B	NEMA 4X 304 Stainless Steel, Wall-Mount Enclosure 42 x 36 x 12
C	NEMA 4X 304 Stainless Steel, Wall-Mount Enclosure 60 x 36 x 12
D	NEMA 4X 304 Stainless Steel, Wall-Mount Enclosure 72 x 36 x 12

WTP-	☐	☐	☐	☐	☐	☐	☐	Typical Model Number

WeatherTrace

WTP, WTPM

Freeze Protection Heat Trace Panels *(cont'd.)*

Ordering Information

To Order — Complete the Model Number using the Matrix provided.

Model **Product Description**

WTPM WTPM Series Ambient Sensing Heat Trace Panels are designed for group control of heat trace circuits for Commercial Freeze Protection or De-Icing/Snow Melting Applications. The Chromalox WTPM series offers the following standard features: 7" HMI for monitoring ground fault alarms on each circuit, NEMA 4 enclosure, Main Contactor, Main Circuit Breaker/Disconnect, Hand/Off/Auto Selector Switch, Load Energized Indicator Lamp, Main Power On Lamp, Thermal Magnetic Branch Circuit Breakers with 30mA Ground Fault Equipment Protection, and Thermostat Controlled Enclosure Heater. The WTPM series panels have UL and cUL Third Party Approvals. Additional features & options available, please see below for more details or the Data Sheet.

Code	Circuits
06	6 Circuits
12	12 Circuits
18	18 Circuits
24	24 Circuits

Code	Line Voltage	Cable Voltage
1	208/120 VAC, 3 Phase 4 Wire	120 V- 1 Pole or 208 V - 2 Pole
2	240/120 VAC, Single Phase 3 Wire	120 V- 1 Pole or 240 V - 2 Pole
3	480/277 VAC, 3 Phase 4 Wire	277 V- 1 Pole or 480 V - 2 Pole

Code	Cable Load Circuit Breaker Rating (Select Breaker Amperage and *1P/2P to Select Breaker Voltage 1(1P)=15A, 120V Breakers)
0(*)	None
1(*)	15A Thermal Magnetic
2(*)	20A Thermal Magnetic
3(*)	30A Thermal Magnetic
4(*)	40A Thermal Magnetic
5(*)	50A Thermal Magnetic

Code	Main Circuit Breaker	Typical Voltage
0	None	None
1	50A Thermal Magnetic	120/208V 3P, 120/240V 1P, 277/480V 3P
2	100A Thermal Magnetic	120/208V 3P, 120/240V 1P, 277/480V 1P
3	150A Thermal Magnetic	120/208V 3P
4	200A Thermal Magnetic	120/240V 1P, 277/480V 3P
5	250A Thermal Magnetic	120/208V 3P, 120/240V 1P, 277/480V 3P
X	Other (Consult Sales for assistance)	

Code	Enclosure Heater (Anti-Condensation Heater Required at a Minimum)
1	Thermostat Controlled Enclosure Heater (Anti-Condensation Heater)
2	Thermostat Controlled Enclosure Heater (Needed for 0°F, -18°C Minimum Ambient Temperature)
3	Thermostat Controlled Enclosure Heater (Needed for -40°F/°C Minimum Ambient Temperature)

Code	Temp. Controller
1	None (Requires mechanical T-stat. Use TPR, RTAS or RTBC)
2	ETI Internal Snow Switch (SnowOwl, GIT-1, SIT-6E)
3	6040-R00000 1/16 DIN Controller (RTD controller-requires external RTD sensor-LN,LA or AS-BM)
4	Chromalox Snow Sensor Switch (CS-AS, CS-GS, CS-PS)

Code	Enclosure (Size determined by Table 2)
1	NEMA 4 Steel, Wall-Mount Enclosure 30 x 30 x 12
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B	NEMA 4X 304 Stainless Steel, Wall-Mount Enclosure 42 x 36 x 12
C	NEMA 4X 304 Stainless Steel, Wall-Mount Enclosure 60 x 36 x 12
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WTPM- ☐ ☐ ☐ ☐ ☐ ☐ ☐ Typical Model Number

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Freeze Protection Heat Trace Panels

Specifications

Power Source	208/120 VAC 3-Phase, 4-Wire 240/120 Single Phase, 3-Wire 480/277 VAC 3-Phase, 4-Wire
Ambient Operating Temperature	-40°F to 104°F (with Enclosure Heater)
Incoming Wire Size	50 - 100A MCCB, 14 - 3/0 AWG 200 - 250 A MCCB, 3/0 AWG - 350 kcmil
Load Wire	18 - 8 AWG (15 - 30 Amp C.B), 18 - 6 AWG (40-50 Amp C.B)
Ground Fault Breaker Type	30mA Ground Fault Equipment Protection
Enclosure	NEMA 4 or NEMA 4X 304 Stainless Steel (option)
Main Breaker Size	50-250 Amp Two-Pole Main Disconnect Switch with through Door Rotary Handle 50-250 Amp Three-Pole Main Disconnect Switch with through Door Rotary Handle
Approvals	UL and cUL

Model Number Note:

An "X" in the WTP/WTPM Model Number indicates the design has deviated from standard order table parameters and is considered custom. Consult Sales for pricing and feasibility. Custom options may include special tagging, labeling, materials, venting, cooling, indications, alarms, or third-party approvals. Please note that custom panels typically require additional lead time for engineering, procurement, manufacturing, and quality assurance testing.

Table 2: Enclosure Size Selection

Table 2: WeatherTrace Panel Enclosure Size Selection (H"xW"xD")				
Panel Size: # of Circuits - Pole	**DISC < 150A, No HMI Breaker Trip**	**DISC> 150A, NO HMI Breaker Trip Monitoring**	**With HMI Breaker Trip Monitoring**	**WITH HMI Breaker Trip Monitoring and 480/277V Line Voltage**
6-1P	30x30x12	30x30x12	42x36x12	42x36x12
6-2P	30x30x12	30x30x12	42x36x12	42x36x12
12-1P	30x30x12	30x30x12	42x36x12	42x36x12
12-2P	30x30x12	30x30x12	42x36x12	42x36x12
18-1P	42x36x12	42x36x12	42x36x12	60x36x12
18-2P	42x36x12	42x36x12	42x36x12	60x36x12
24-1P	42x36x12	42x36x12	60x36x12	60x36x12
24-2P	42x36x12	42x36x12	60x36x12	60x36x12
Note: Table 2 is a general guideline for Enclosure Size selection. Adding certain options could cause enclosure size to differ. If Panel dimensions are critical, Consult Sales for exact selection.				

Technical Notes:

1. Refer to PK602 for Installation and Operation details.
2. Standard Panel Short Circuit Rating (SCCR) is 5 kAIC. Consult Sales if a different rating is needed.

Spare/Replacement Parts

Part Number	Description
0017-43857	15A 1P Circuit Breaker (120V or 277V)
0017-43858	20A 1P Circuit Breaker (120V or 277V)
0017-43859	30A 1P Circuit Breaker (120V or 277V)
0017-43860	40A 1P Circuit Breaker (120V)
0017-43861	50A 1P Circuit Breaker (120V)
0017-43865	15A 2P Thermal Mag Circuit Breaker (208/240V or 480V)
0017-43866	20A 2P Thermal Mag Circuit Breaker (208/240V or 480V)
0017-43867	30A 2P Thermal Mag Circuit Breaker (208/240V or 480V)
0017-43868	40A 2P Thermal Mag Circuit Breaker (208/240V or 480V)
0017-43869	50A 2P Thermal Mag Circuit Breaker (208/240V or 480V)
0017-43761	120V, 208V/240V Ground Fault Protection
0017-43762	277V/480V Ground Fault Protection