

2000 Series Self Regulating Heating Cable



Description

The 2000 series of self-regulating heating cables are designed to supply a specified amount of heat at any point along their length in direct response to local temperature variations. These cables can maintain requiring very high levels of heat temperatures up to 375°F (190°C) and will withstand 190 psig saturated steam purging and intermittent temperature excursions to 475°F (250°C) with power applied.

2000 series cables can be cut to length and terminated in the field, and will not overheat or burnout when overlapped.

Applications

The industrial grade 2000 cables provide freeze protection and process temperature maintenance for Class I, Div 2, Groups B, C, D fluid transport and storage systems output or exposure to elevated temperatures.

The bus wires, jackets and metallic braids can be configured for both ordinary (non-classified) locations and hazardous (classified), including areas where exposure to corrosive or organic materials is possible.

Performance Ratings

Output wattage:

5 through 30w/ft @ 50°F (other wattages also available)

Supply voltages:

110 - 120 or 208V - 277Vac Continuous maintenance temperature: 375°F (190°C) max

Intermittent exposure temperature: 450°F (232°C) max

T Rating*:

T-2C

Braid resistance:

Tinned copper: 0.003 /ft Stainless steel: 0.125 /ft

*T-Rating per the 1999 NEC, Tables 500-5(d) and verified by FM and

Approvals/Certifications

Factory Mutual:

Ordinary locations Hazardous locations

Class I, Div 1*, Groups B, C, D

Class I, Div 2, Groups A, B, C, D

Class II/III, Div 1*, Groups E, F, G

Class II/III, Div 2, Groups F, G

Class I, Zone 1*, Group IIB + H2,

Class I, Zone 2, Group IIC

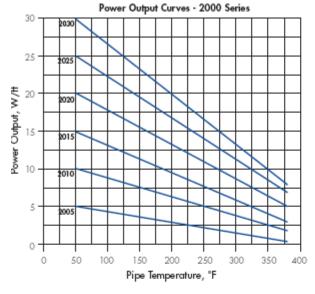
CSA:

Ordinary locations 3(A,B,C), 5(A,B) Hazardous locations Class I, Div 1*/2, Groups B, C, D Class II, Div 2, Groups F, G SEMCO - (CE mark): *Contact Heat Trace Products for information on Division 1 Hazardous location systems.

Accessories

Heating Elements Plus carries a full line of approved accessories, including Power connection kits, terminations, splices, end seals and controls.

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120 Volt Circuit Breaker Sizing vs. Max Circuit Length (FT)

| Series | Starting Temp. | 15A | 20A | 30A |
|--------|----------------|-----|-----|-----|
| 2005-1 | 50°F (10°C) | 180 | 240 | 335 |
| | 0°F (-20°C) | 165 | 220 | 330 |
| | -50°F (-45°C) | 150 | 200 | 300 |
| 2010-1 | 50°F (10°C) | 120 | 160 | 180 |
| | 0°F (-20°C) | 105 | 140 | 180 |
| | -50°F (-45°C) | 90 | 120 | 180 |
| 2015-1 | 50°F (10°C) | 80 | 105 | 135 |
| | 0°F (-20°C) | 70 | 90 | 135 |
| | -50°F (-45°C) | 60 | 80 | 120 |
| 2020-1 | 50°F (10°C) | 60 | 90 | 120 |
| | 0°F (-20°C) | 55 | 70 | 110 |
| | -50°F (-45°C) | 50 | 65 | 100 |
| 2025-1 | 50°F (10°C) | 45 | 60 | 85 |
| | 0°F (-20°C) | 40 | 50 | 80 |
| | -50°F (-45°C) | 40 | 50 | 80 |
| 2030-1 | 50°F (10°C) | 40 | 50 | 70 |
| | 0°F (-20°C) | 35 | 45 | 70 |
| | -50°F (-45°C) | 35 | 45 | 70 |

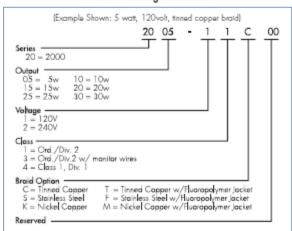
Power Adjustment Factor

| Part No. | 208 Volts | 277 Volts |
|----------|-----------|-----------|
| 2010-2 | .88 | 1.14 |
| 2020-2 | .94 | 1.08 |
| 2030-2 | .99 | 1.01 |

240 Volt Circuit Breaker Sizing vs. Max Circuit Length (FT)

| Series | Starting Temp. | 15A | 20A | 30A |
|--------|---|----------|-------------------|-------------------|
| 2005-2 | 50°F (10°C) | 360 | 480 | 540 |
| | 0°F F20°C) | 325 | 430 | 540 |
| | -50°F F45°C) | 290 | 385 | 540 |
| 2010-2 | 50°F (10°C) | 240 | 320 | 360 |
| | 0°F F20°C) | 230 | 305 | 360 |
| | -50°F F45°C) | 225 | 300 | 360 |
| 2015-2 | 50°F (10°C) | 160 | 210 | 270 |
| | 0°F +20°C) | 140 | 185 | 270 |
| | -50°F +45°C) | 120 | 160 | 240 |
| 2020-2 | 50°F (10°C) | 115 | 150 | 230 |
| | 0°F F20°C) | 110 | 145 | 220 |
| | -50°F F45°C) | 105 | 140 | 210 |
| 2025-2 | 50°F (10°C) 0°F F20°C) -50°F F45°C) | 80 80 | 120 100 100 | 170 160 160 |
| 2030-2 | 50°F (10°C) | 80 | 100 | 140 |
| | 0°F F20°C) | 70 | 90 | 140 |
| | -50°F F45°C) | 70 | 90 | 140 |

Product Ordering Information



NOTE: Recommended circuit breakers to minimize the effect of transit startup currents.

Westinghouse: Types BA, EB, EHB, FB, HFB. General Electric: E100 Type TEB, E150, Types

TED, THED. Square D: Types BH, FAIF. The National Electric Code requires ground fault protection of equipment for each branch circuit supplying electrical heating cobies or devices.

