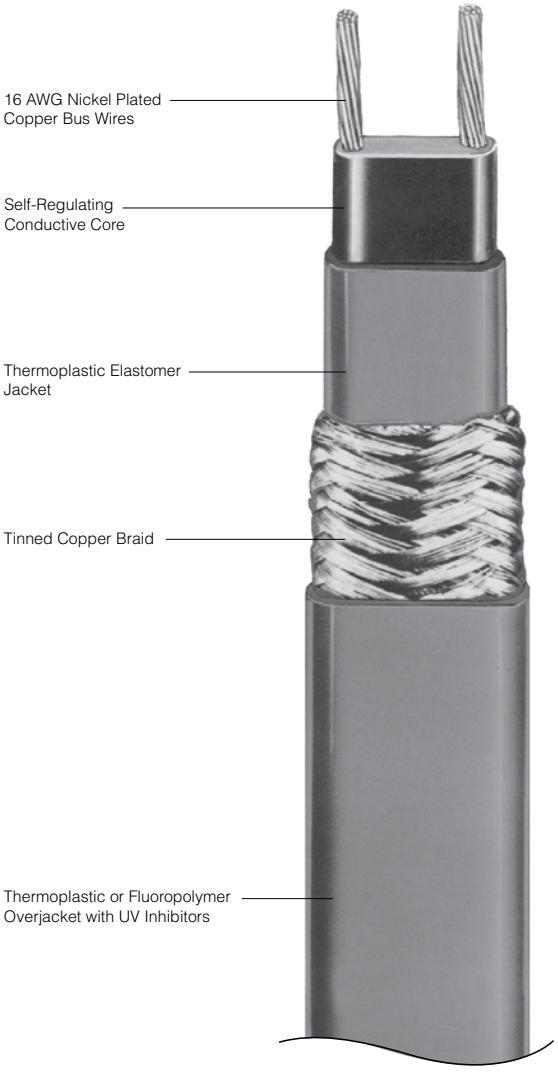
DELTA-THERM

INDUSTRIAL SERIES (IN) ROOF AND GUTTER DE-ICING CABLE

120 And 240 Volts 5 And 8 Watts/Ft. Above Standard Ratings Are Heat Output At 50°F (-10°C)



DESCRIPTION

Delta-Therm self-regulating heating cable increases heat output as temperature decreases, and conversely, decreases heat output as temperature increases. This cable is intended for roof and gutter applications.

Industrial Series cables contain two parallel bus wires electrically connected by a web of PTC (positive temperature coefficient) conductive polymer. A thermoplastic elastomer jacket surrounds the cable to provide mechanical protection and electrical isolation. The tinned copper braid provides additional mechanical protection as well as a ground path for fault currents. The thermoplastic (T) or optional fluoropolymer (F) overjacket has UV inhibitors which protect against damage from the sun. The overjacket also provides mechanical protection.

APPLICATION

Roof And Gutter Deicing

APPROVALS

CSA Wet: IN Series CBT or CBF cables are CSA certified for roof and gutter applications (2E Cable Designation) when used with PCK-RG connection kit.

WARNING

WARNING: This cable is designed for commercial applications and must be installed by a qualified electrician. Improper installation can result in property damage, serious injury, and/or death due to electric shock and fires.

DELTA-THERM Corporation, 6711 Sands Rd Suite A, Crystal Lake, IL 60014 (847) 526-2407 Fax (847) 526-4456 **(800) 526-7887**

TECHNICAL INFORMATION, INDUSTRIAL (IN) SERIES ROOF AND GUTTER DE-ICING CABLE

Breaker Sizing And Maximum Circuit Length Ft. (m)

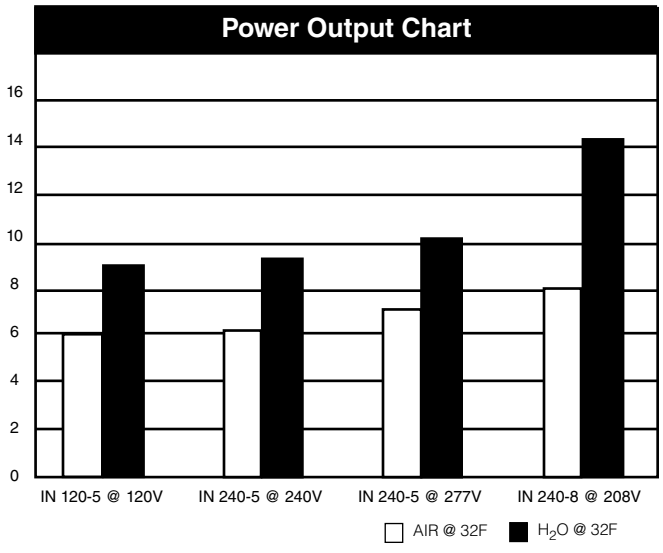
		Protective Device Rating		
		15A	20A	30A
Volts	Catalog Number			
120	IN 120-5-CBT	125' (38)	150' (46)	205' (62)
240	IN 240-5-CBT	250' (76)	300' (91)	335' (102)
277	IN 240-5-CBT	160' (49)	210' (64)	320' (98)
208	IN 240-8-CBT	190' (58)	225' (69)	260' (79)

Alternate 240 VAC Voltages

Delta-Therm 240V self-regulating heating cable is multi-voltage. It can be used in 208V, 240V, and 277V applications. (Please refer to the thermal rating row on the Electric Specifications Table)

IN Series Electrical Specifications

Catalog Number	IN120-5	IN240-5	IN240-5	IN240-8
Voltage	120	240	277	208
Maximum Circuit Length Ft. (m)	205' (62)	335' (102)	320' (98)	260' (79)
Thermal Rating At 32°F (Watts/Ft.) Air 0°C (Watts/m) Air	6 (20)	6 (20)	7 (23)	8 (26)
Thermal Rating At 32°F (Watts/Ft.) H_2O 0°C (Watts/m) H_2O	9 (30)	9 (30)	10 (33)	14 (46)
Maximum Exposure Temperature °F (°C)	185° (85°)	185° (85°)	185° (85°)	185° (85°)



Accessories

PCK-RG	Power Connection Kit
IMP	Ice Melt Panel
DT-AS-50	Roof Clips For Asphalt Or Metal Roofs (50 count)
RM-25-AL	Aluminum Clips For Metal Roofs (25 Count)
Specialty Clips	Specialty Clips Roof Materials Other Than Metal or Asphalt
DSH	Down Spout Hanger

Controls

DTC120-G	Roof Deicing Control
MPS	Roof Deicing Control

Panels

DT-XXPXXX	Enclosed Contactor Panel
GFPE-X-X	Power Control Panel w/GFPE
LNR-X	Low Noise Relay Panel
Custom Control/Monitor/Alarm Panels	

Circuit Breakers

Do not use magnetic-type circuit breakers. Delta-Therm recommends using the following thermal-magnetic circuit breakers (or equivalent) to prevent nuisance tripping caused by inrush currents:

Westinghouse:	Types BA, EB, EHB, FB, HFB
Gen. Electric:	Types TEB, THED
Square D:	Types EH, FA

Use Of Ground Fault Protective Devices And Tinned Copper Braid

NEC CODE 2005, ARTICLE 426-27

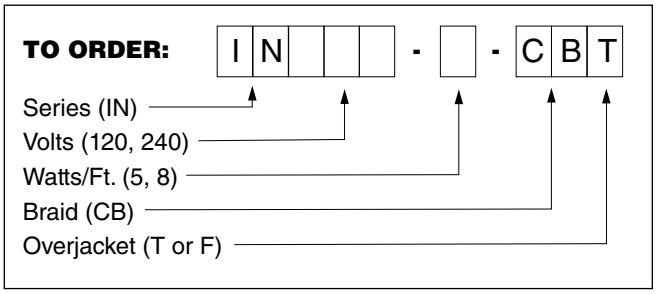
Grounding Braid or Sheath. Grounding means, such as copper braid, metal sheath, or other approved means, shall be provided as part of the heated section of the cable, panel, or unit.

NEC CODE 2005, ARTICLE 426-28

Equipment Protection. "Ground-fault protection of equipment shall be provided for fixed outdoor electric deicing and snow-melting equipment..."

It requires that fixed outdoor snow-melting and deicing equipment be protected by a device that provides ground-fault protection of equipment (GFPE). A GFPE trips at 30 milliamperes or greater. This is not the same as a ground-fault circuit-interrupter (GFI) used for personnel protection that trips at 5 milliamperes (+/- 1 milliampere).

The material contained in this document is presented in good faith and believed to be reliable and accurate. However, because testing conditions may vary and material quality or information that may be provided in whole or in part by others may be beyond our control, no warranty, expressed or implied, is given. Delta-Therm can assume no liability for results obtained or damages incurred through the application of the data and tests presented.



DELTA-THERM Corporation, 6711 Sands Rd Suite A, Crystal Lake, IL 60014 (847) 526-2407 Fax (847) 526-4456 **(800) 526-7887**