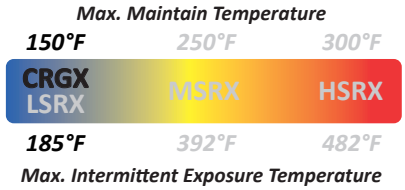
INDEECO

CRGX Self-Regulating Heating Cable

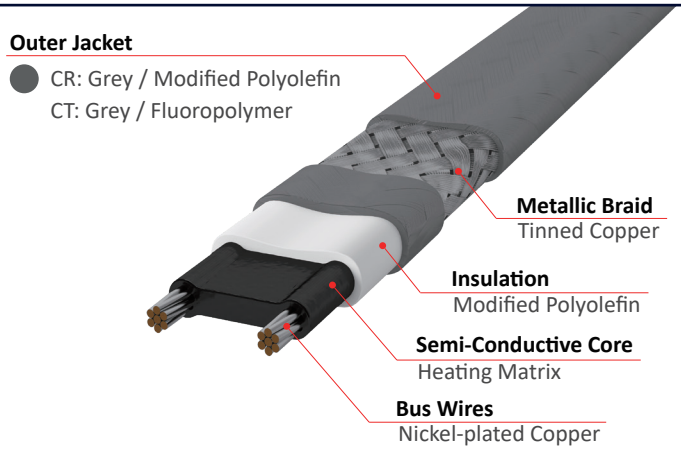


Product Description

The CRGX Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

The unique PTC feature of CRGX self-regulating core elements adjusts its heat output in response to the surrounding temperature along the entire circuit, delivering more heat where and when required. This self-regulating feature also serves to prevent overheating, even in cases where CRGX cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Indeeco system connection kits for quick and convenient installations.

CRGX heating cable system is certified for ordinary areas with maximum maintain temperature of 150°F (65°C) and intermittent exposure temperature of 185°F (85°C). Use of Indeeco connection kits for CRGX installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.



Specification

Max. Intermittent Exposure Temp.	185°F (85°C)
Max. Maintain or Continuous Exposure Temp.	150°F (65°C)
Supply Voltage	120V or 208-277V
Output Wattage	3, 5, 8, 10, 12* W/ft @50°F (10, 16, 26, 33, 39W/m @10°C) (* 12W/ft only available in Supply Voltage 200 – 277V)
Bus wire	16 AWG
Min. Bending Radius	0.5" @68°F (13mm @20°C), 1.6" @-58°F (40mm @-50°C)
Min. Installation Temperature	-58°F (-50°C)
Min. Start-up Temperature	-40°F (-40°C)
Max. Circuit Breaker Size	40A
Outer Jacket Color	Grey
Heating Cable Dimensions (Nominal)	CR : 0.49" x 0.25" (12.5mm x 6.0mm), CT : 0.46" x 0.21" (11.8mm x 5.0mm)
Heating Cable Weight	CR : 0.0741lb/ft(0.110kg/m), CT : 0.0695lb/ft(0.103kg/m)

Ordering Information

CRGX*a-bc*

CRGX = Model Name
a = Output Wattage: 03, 05, 08, 10, 12* W/ft
b = Voltage: 1 = 120V , 2 = 208-277V
c = Outer Jacket: CR = Polyolefin, CT = Fluoropolymer

*12W/ft(39W/m) only available for 208 – 277V

Connection Kits

Indeeco offers system components for power connections, splice or tee connections and end terminations to ensure proper functioning of the products and comply with warranty and approvals requirements.

For easier installation and safe operation, use of substituted parts are not recommended. Please contact Indeeco for more information on system components.

Certification / Approvals

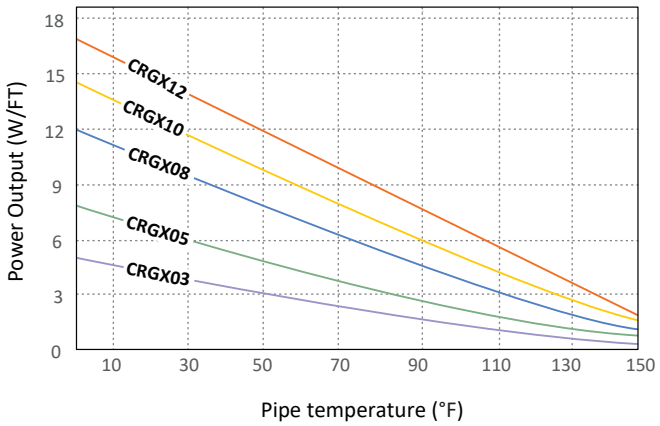
FM25US0350X, FM25CA0121X
Hazardous (classified) locations, indoors and outdoors
Class I, Division 2, Groups A, B, C, and D T6
Class II/III, Division 2, Groups F and G T6
Class I, Zone 1, AEx/Ex 60079-30-1 IIC T6 Gb
Zone 21, AEx/Ex 60079-30-1 IIIC T85°C Db
Type 4X, IP66

E515829 : Industrial and Commercial Pipe-Heating Cable†
E552707 : Residential Pipe-Heating Cable†
E515828 : De-icing and Snow-Melting Equipment†

Approval is valid only if the cable is installed with certified connection kits as a system.
†UL certification excludes 12 W/ft cables as well as fluoropolymer outer jacket cables.

Nominal Power Output Ratings on Insulated Metal Pipes at 120/240 V

CRGX Power-Temperature Characteristics



Circuit length adjustment factor

Voltage	CRGX03	CRGX05	CRGX08	CRGX10	CRGX12
208V	0.969	0.957	0.925	0.920	0.915
240V	1.000	1.000	1.000	1.000	1.000
277V	1.054	1.065	1.088	1.120	1.130

Power adjustment factor

Voltage	CRGX03	CRGX05	CRGX08	CRGX10	CRGX12
208V	0.800	0.820	0.880	0.910	0.943
240V	1.000	1.000	1.000	1.000	1.000
277V	1.190	1.170	1.120	1.100	1.071

[Note]
The power output will be derated by 25% on plastic pipes. HTAT-1 aluminum tape is required for installation on plastic pipes.

Max. Circuit Length based on Circuit Breaker Selection

Catalog Number	Start-Up Temperature °F (°C)	Maximum Circuit Length per Circuit Breaker, feet (meters)							
		120V				240V			
		15A	20A	30A	40A	15A	20A	30A	40A
CRGX03	50 (10)	327 (99)	377 (115)	377 (115)	377 (115)	654 (199)	732 (223)	732 (223)	732 (223)
	32 (0)	262 (80)	350 (106)	377 (115)	377 (115)	525 (160)	700 (213)	732 (223)	732 (223)
	0 (-18)	200 (60)	266 (81)	377 (115)	377 (115)	400 (121)	533 (162)	732 (223)	732 (223)
	-20 (-29)	173 (52)	231 (70)	346 (105)	377 (115)	346 (105)	461 (140)	692 (210)	732 (223)
	-40 (-40)	152 (46)	203 (61)	305 (92)	377 (115)	305 (92)	406 (123)	610 (185)	732 (223)
CRGX05	50 (10)	200 (60)	267 (81)	302 (92)	302 (92)	400 (121)	533 (162)	604 (184)	604 (184)
	32 (0)	166 (50)	222 (67)	302 (92)	302 (92)	333 (101)	444 (135)	604 (184)	604 (184)
	0 (-18)	126 (38)	168 (51)	252 (76)	302 (92)	252 (76)	336 (102)	504 (153)	604 (184)
	-20 (-29)	110 (33)	146 (44)	220 (66)	293 (89)	220 (66)	293 (89)	439 (133)	586 (178)
	-40 (-40)	97 (29)	130 (39)	195 (59)	259 (79)	195 (59)	259 (79)	389 (118)	519 (158)
CRGX08	50 (10)	154 (46)	205 (62)	243 (74)	243 (74)	307 (93)	409 (124)	482 (147)	482 (147)
	32 (0)	131 (40)	175 (53)	243 (74)	243 (74)	262 (80)	350 (106)	482 (147)	482 (147)
	0 (-18)	104 (31)	138 (42)	207 (63)	243 (74)	207 (63)	276 (84)	415 (126)	482 (147)
	-20 (-29)	92 (27)	122 (37)	184 (55)	243 (74)	184 (55)	245 (74)	367 (111)	482 (147)
	-40 (-40)	82 (25)	110 (33)	165 (50)	219 (66)	165 (50)	219 (66)	329 (100)	439 (133)
CRGX10	50 (10)	125 (38)	167 (50)	207 (63)	207 (63)	250 (76)	334 (101)	410 (125)	410 (125)
	32 (0)	110 (33)	146 (44)	207 (63)	207 (63)	220 (66)	293 (89)	410 (125)	410 (125)
	0 (-18)	90 (27)	120 (36)	179 (54)	207 (63)	179 (54)	239 (72)	359 (109)	410 (125)
	-20 (-29)	81 (24)	107 (32)	161 (49)	207 (63)	161 (49)	215 (65)	322 (98)	410 (125)
	-40 (-40)	73 (22)	97 (29)	146 (44)	195 (59)	146 (44)	195 (59)	292 (89)	390 (118)
CRGX12	50 (10)					222 (67)	295 (89)	322 (98)	322 (98)
	0 (-18)					156 (47)	209 (63)	313 (95)	322 (98)
	-20 (-29)					140 (42)	187 (56)	280 (85)	322 (98)
	-40 (-40)					127 (38)	169 (51)	253 (77)	322 (98)

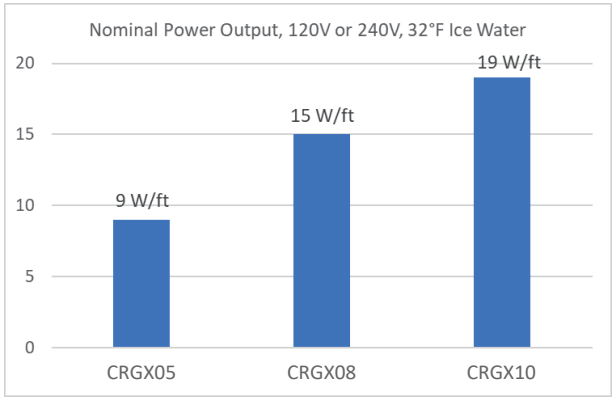
[Note]
1. The circuit lengths are based on trip current characteristics of Type QO and Type QCB devices. For devices with different trip characteristics please consult Indeeco.
2. Use local electrical codes to select appropriate branch circuit breakers.
3. The total length of heating cables connected to the circuit breaker is the sum of all cables that have been spliced or interconnected in parallel. Ensure that the total length does not exceed the maximum circuit length as indicated above.
4. Ground fault protection of equipment is required for heat tracing branch circuits with typical trip level of 30mA. Thermal magnetic breakers are recommended to reduce nuisance tripping.
5. It is recommended to start up the circuits at higher temperatures, when possible, to avoid large start-up or in-rush current which may trip the circuit breaker.

Self-Regulating Heating Cable for Roof & Gutter Deicing

Product Description

CRGX is also designed for roof and gutter de-icing applications in ordinary locations. Cut-to length spools with system components allow easy and safe installation on site. Pre-assembled products are also available upon request. Factory-assembled with power splice and end seal, plug-in power cord allows instant operation.

Nominal Power Output Ratings on Insulated Metal Pipes at 120/240 V



Circuit length adjustment factor

Voltage	CRGX05	CRGX08	CRGX10
208V	0.944	0.922	0.920
240V	1.000	1.000	1.000
277V	1.064	1.097	1.098

Power adjustment factor

Voltage	CRGX05	CRGX08	CRGX10
208V	0.820	0.880	0.910
240V	1.000	1.000	1.000
277V	1.170	1.120	1.100

Max. Circuit Length based on Circuit Breaker Selection

Catalog Number	Start-Up Temperature °F (°C)	Maximum Circuit Length per Circuit Breaker, feet (meters)							
		120V				240V			
		15A	20A	30A	40A	15A	20A	30A	40A
CRGX05	32 (0) ice	100 (30)	133 (40)	200 (60)	213 (64)	200 (60)	266 (81)	400 (121)	410 (124)
	0 (-18) ice	76 (23)	101 (30)	152 (46)	203 (61)	152 (46)	203 (61)	304 (92)	410 (124)
CRGX08	32 (0) ice	73 (22)	96 (29)	146 (44)	167 (50)	200 (60)	266 (81)	400 (121)	410 (124)
	0 (-18) ice	53 (16)	70 (21)	104 (31)	140 (42)	152 (46)	203 (61)	304 (92)	410 (124)
CRGX10	32 (0) ice	62 (18)	83 (25)	125 (38)	150 (45)	125 (38)	166 (50)	250 (76)	301 (91)
	0 (-18) ice	50 (15)	67 (20)	101 (30)	134 (40)	101 (30)	135 (41)	202 (61)	269 (81)

Technical information subject to change without notification.

Questions? Reach out to start a conversation at **indeeco.com**

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