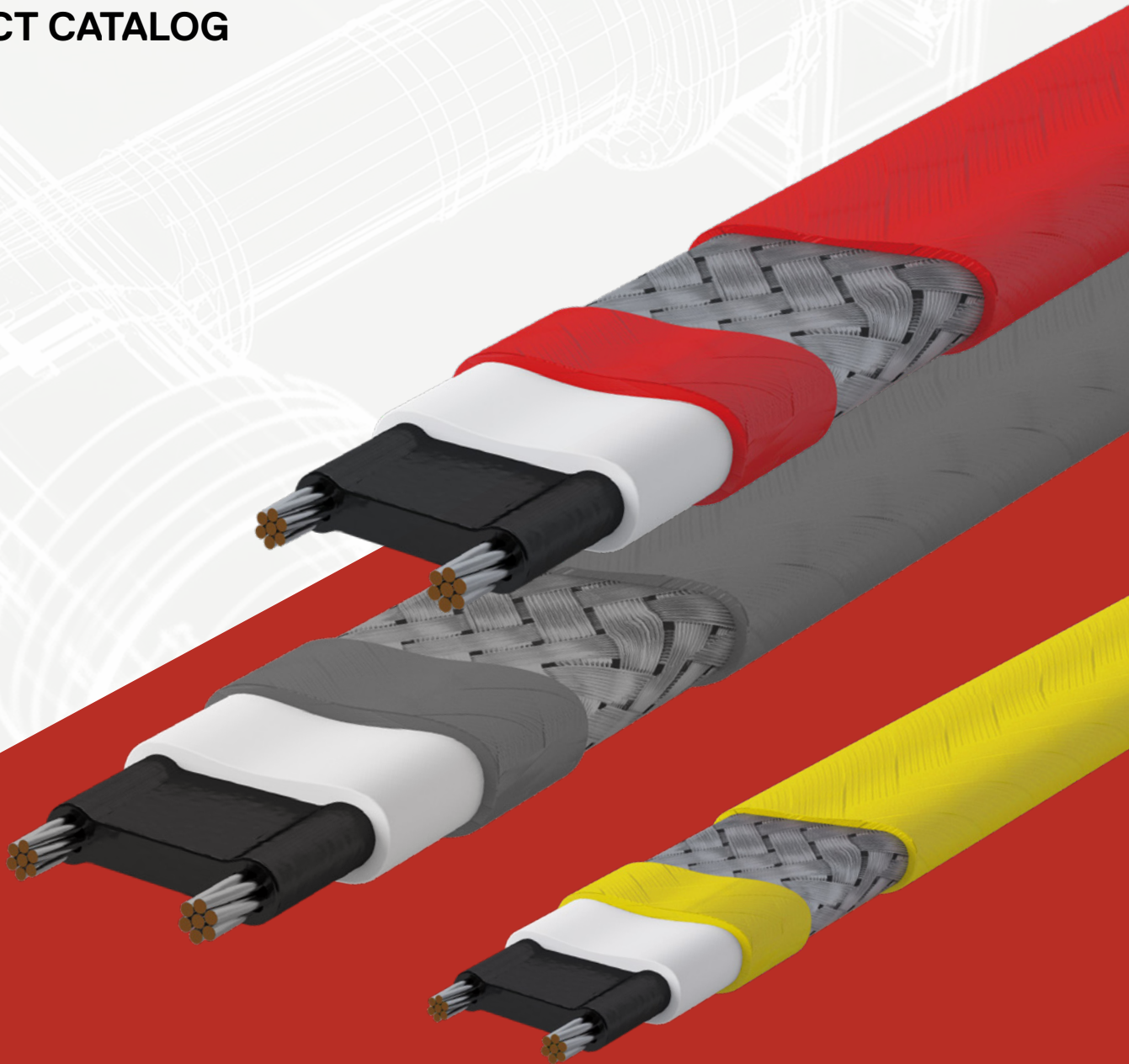


Heat Trace

PRODUCT CATALOG



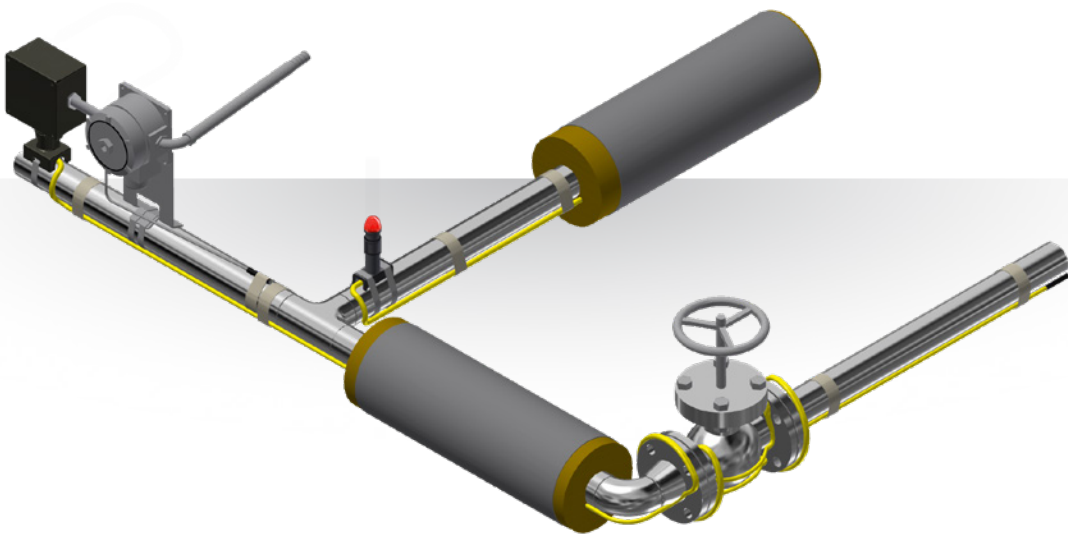
*Reliable, efficient and
built for protection*

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01

HEAT TRACE DESIGN GUIDE



HEATING CABLE GUIDE

Berko offers a comprehensive line of heat trace products engineered to meet the most demanding requirements for freeze protection, temperature maintenance, snow melting, de-icing, and specialty applications across industrial and commercial markets. Designed and manufactured to the highest industry standards, these products are third-party approved for use in hazardous industrial environments, delivering reliable performance and long-term durability you can trust.

Cables are available now!

CRGX



Heating cables designed for freeze protection of metal and plastic pipes as well as roof & gutter de-icing applications.

- **Temperature rating:** 150°F maintain / 185°F exposure
- **Voltage:** 120–277V
- **Power output:** 3, 5, 8, or 10 W/ft
- **Approvals:** FM (US & Canada), UL, cULus

LRSX



Heating cables designed for freeze protection and temperature maintenance of metal and plastic pipes.

- **Temperature rating:** 150°F maintain / 185°F exposure
- **Voltage:** 120–277V
- **Power output:** 3, 5, 8, or 10 W/ft
- **Approvals:** FM (US & Canada), UL, cULus

MSRX



Heating cables designed for freeze protection and temperature maintenance of metal pipes and tanks.

- **Temperature rating:** 250°F maintain / 392°F exposure
- **Voltage:** 120–277V
- **Power output:** 5, 10, 15, or 20 W/ft
- **Approvals:** FM (US & Canada), UL, cULus

HSRX



Heating cables designed for freeze protection and temperature maintenance of metal pipes and tanks.

- **Temperature rating:** 300°F maintain / 482°F exposure
- **Voltage:** 120–277V
- **Power output:** 5, 10, 15, or 20 W/ft
- **Approvals:** FM (US & Canada), UL, cULus

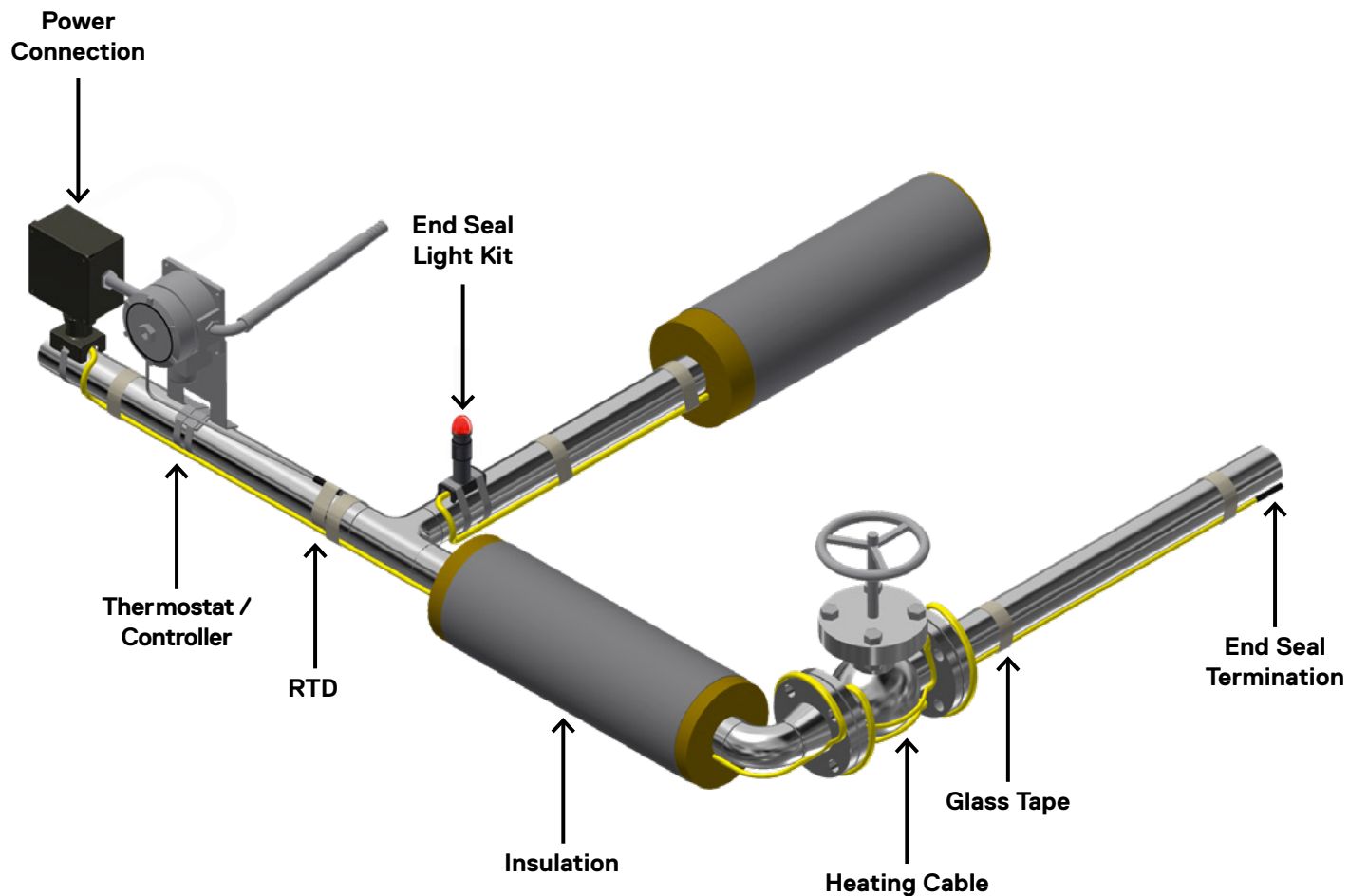
Mineral Insulated



Heating cables and accessories designed for high-temperature heat tracing applications.

- **Temperature rating:** 900°F maintain / 1100°F exposure
- **Voltage:** 120–600V
- **Power output:** Up to 50 W/ft

INSTALLATION OVERVIEW



Kits



Power Connections
QM-HT-IPC-1 (1 cable)
QM-HT-IMC-3 (3 cables)



Splice Or Tee Kit
QM-HT-IST-1



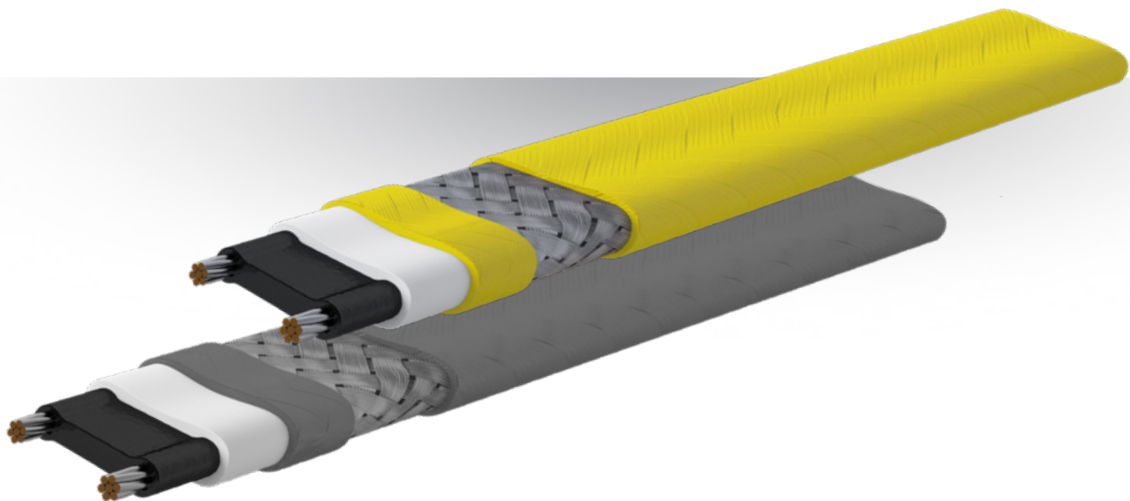
End Seals
QM-HT-IES-1

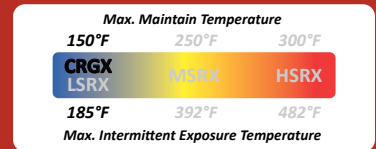


Lighted End Seals
QM-HT-IESL-R (Red)
QM-HT-IESL-G (Green)

02

HEATING CABLES





Product Description

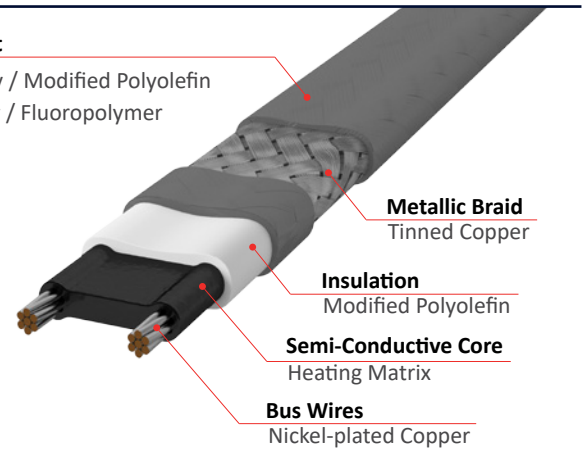
The CRIX Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

The unique PTC feature of CRIX 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 CRIX cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Marley Engineered Products system connection kits for quick and convenient installations.

CRIX 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 Marley Engineered Products connection kits for CRIX installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

Outer Jacket

- CR: Grey / Modified Polyolefin
- CT: Grey / Fluoropolymer



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

BK-CRIXa-bc

BK-CRIX = 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

Marley Engineered Products 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 Marley Engineered Products for more information on system components.

Certification / Approvals

FM26US0013X, FM26CA0003X

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



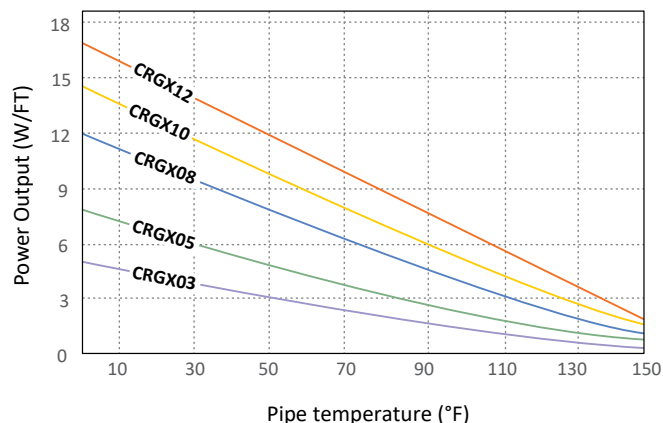
E515828 : Industrial and Commercial Pipe-Heating Cable†
E515829 : De-icing and Snow-Melting Equipment†
E552707 : Residential Pipe-Heating Cable†

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]

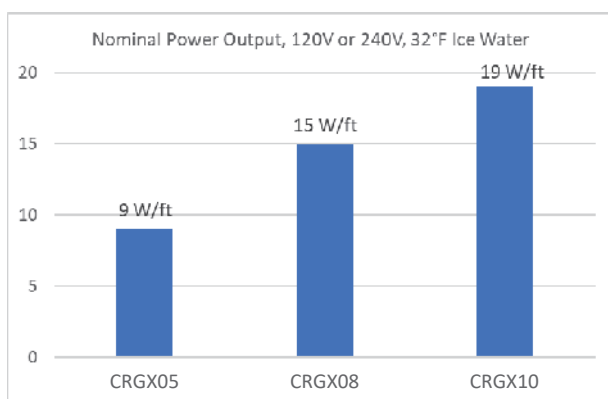
1. The circuit lengths are based on trip current characteristics of Type QO and Type QCB devices. For devices with different trip characteristics please consult Marley Engineered Products.
2. Use local electrical codes to select appropriate branch circuit breakers.
3. The total length of heating cables 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.
6. Standard 50-foot minimum length for all heat trace cables.

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 Roof and Gutter Applications



Circuit length adjustment factor

Voltage	CRIX05	CRIX08	CRIX10
208V	0.944	0.922	0.920
240V	1.000	1.000	1.000
277V	1.064	1.097	1.098

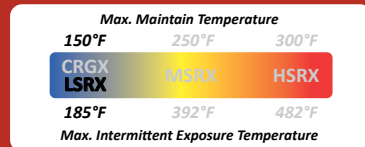
Power adjustment factor

Voltage	CRIX05	CRIX08	CRIX10
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
CRIX05	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)
CRIX08	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)
CRIX10	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.



Product Description

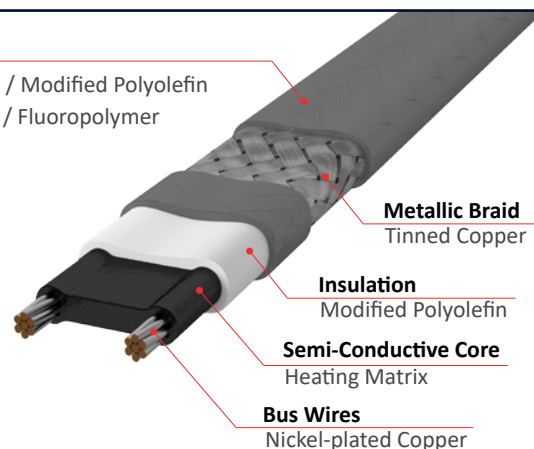
The LSRX Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

The unique PTC feature of LSRX 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 LSRX cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Marley Engineered Products system connection kits for quick and convenient installations.

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

Outer Jacket

- CR: Grey / Modified Polyolefin
- CT: Grey / Fluoropolymer



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 208 – 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

BK-LSRXa-bc

BK-LSRX = Model Name

- a = Output Wattage: 03, 05, 08, 10, 12* W/ft at 50 deg F
- 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

Marley Engineered Products 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 Marley Engineered Products for more information on system components.

Certification / Approvals

FM26US0013X, FM26CA0003X
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 T6 °C Db
Type 4X, IP66



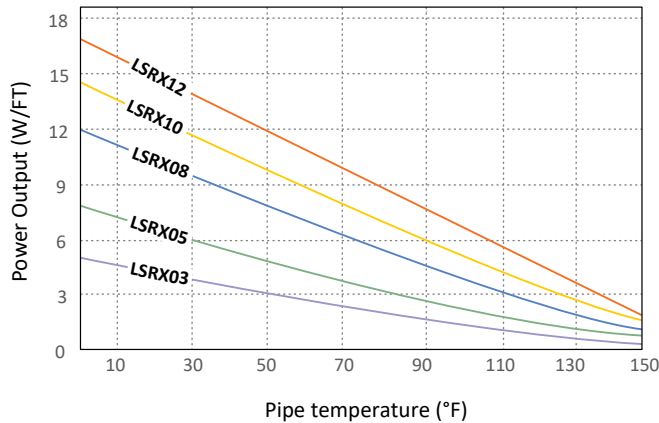
E515828 : Industrial and Commercial Pipe-Heating Cable†
E515829 : De-icing and Snow-Melting Equipment†
E552707 : Residential Pipe-Heating Cable†

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

LSRX Power-Temperature Characteristics



Circuit length adjustment factor

Voltage	LSRX03	LSRX05	LSRX08	LSRX10	LSRX12
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	LSRX03	LSRX05	LSRX08	LSRX10	LSRX12
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
LSRX03	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)
LSRX05	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)
LSRX08	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)
LSRX10	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)
LSRX12	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)

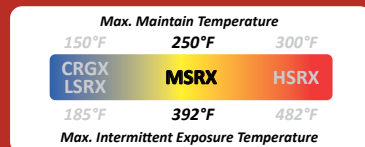
[Note]

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 Marley Engineered Products.
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.
6. Standard 50-foot minimum length for all heat trace cables.

Technical information subject to change without notification.

MSRX

SELF-REGULATING HEATING CABLE



Product Description

The MSRX 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 MSRX 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 MSRX cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Marley Engineered Products system connection kits for quick and convenient installations.

MSRX heating cable system is certified for ordinary and hazardous areas with maximum maintain temperature of 250°F (120°C) and intermittent exposure temperature of 392°F (200°C). Use of Marley Engineered Products connection kits for MSRX installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

Outer Jacket

Yellow / Fluoropolymer

Metallic Braid
Tinned Copper

Insulation
Fluoropolymer

Semi-Conductive Core
Heating Matrix

Bus Wires
Nickel-plated Copper

Specification

Max. Intermittent Exposure Temp.	392°F (200°C)
Max. Maintain or Continuous Exposure Temp.	250°F (120°C)
Supply Voltage	120V or 208 – 277V
Output Wattage	5, 10, 15, 20W/ft @50°F (16, 33, 49, 66W/m @10°C)
Bus wire	16 AWG
Min. Bending Radius	0.8" @70°F (20mm @20°C), 1.8" @-76°F (45mm @-60°C)
Min. Installation Temperature	-76°F (-60°C)
Min. Start-up Temperature	-40°F (-40°C)
Max. Circuit Breaker Size	50A
Outer Jacket Color	Yellow
Heating Cable Dimensions (Nominal)	0.43" x 0.20" (11.0mm x 5.0mm)
Heating Cable Weight	0.0753lb/ft (0.112kg/m)

Ordering Information

BK-MSRXa-bCT

BK-MSRX = Model Name

a = Output Wattage: 05, 10, 15, 20 W/ft at 50 deg F

b = Voltage: 1 = 120V , 2 = 208-277V

CT = Outer Jacket: Fluoropolymer

Connection Kits

Marley Engineered Products 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 Marley Engineered Products for more information on system components.

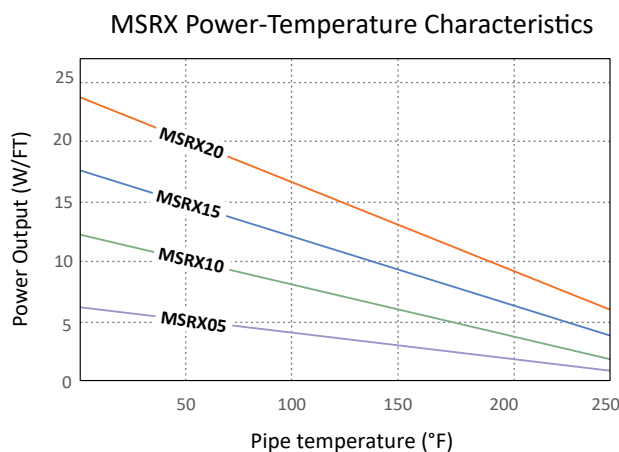
Certification / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors
Class I, Division 2, Groups A, B, C, and D T3
Class II/III, Division 2, Groups F and G T3
Class I, Zone 1, AEx/Ex 60079-30-1 IIC T3 Gb
Zone 21, AEx/Ex 60079-30-1 IIIC T200°C Db
Type 4X, IP66

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



Circuit length adjustment factor

Voltage	MSRX05	MSRX10	MSRX15	MSRX20
208V	0.94	0.94	0.93	0.94
240V	1.00	1.00	1.00	1.00
277V	1.09	1.09	1.11	1.11

Power adjustment factor

Voltage	MSRX05	MSRX10	MSRX15	MSRX20
208V	0.88	0.89	0.90	0.91
240V	1.00	1.00	1.00	1.00
277V	1.06	1.07	1.07	1.06

[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	50A	15A	20A	30A	40A	50A
MSRX05	50 (10)	180 (54)	240 (73)	358 (109)	358 (109)	358 (109)	360 (109)	480 (146)	709 (216)	709 (216)	709 (216)
	0 (-18)	141 (42)	187 (57)	281 (85)	358 (109)	358 (109)	281 (85)	375 (114)	562 (171)	709 (216)	709 (216)
	-20 (-29)	129 (39)	172 (52)	258 (78)	345 (105)	358 (109)	258 (78)	345 (105)	517 (157)	689 (210)	709 (216)
	-40 (-40)	120 (36)	159 (48)	239 (72)	319 (97)	358 (109)	239 (72)	319 (97)	478 (145)	638 (194)	709 (216)
MSRX10	50 (10)	107 (32)	142 (43)	213 (65)	253 (77)	253 (77)	213 (65)	284 (86)	427 (130)	502 (153)	502 (153)
	0 (-18)	87 (26)	116 (35)	174 (53)	232 (70)	253 (77)	174 (53)	232 (70)	348 (106)	464 (141)	502 (153)
	-20 (-29)	81 (24)	108 (32)	162 (49)	216 (65)	253 (77)	162 (49)	216 (65)	324 (98)	432 (131)	502 (153)
	-40 (-40)	76 (23)	101 (30)	152 (46)	202 (61)	253 (76)	152 (46)	202 (61)	303 (92)	404 (123)	502 (153)
MSRX15	50 (10)	78 (23)	104 (31)	156 (47)	203 (62)	203 (62)	156 (47)	208 (63)	312 (95)	400 (122)	400 (122)
	0 (-18)	65 (19)	87 (26)	130 (39)	174 (52)	203 (62)	130 (39)	174 (52)	261 (79)	347 (105)	400 (122)
	-20 (-29)	61 (18)	82 (24)	122 (37)	163 (49)	203 (62)	122 (37)	163 (49)	245 (74)	326 (99)	400 (122)
	-40 (-40)	58 (17)	77 (23)	115 (35)	154 (46)	192 (58)	115 (35)	154 (46)	230 (70)	307 (93)	384 (117)
MSRX20	50 (10)	58 (17)	78 (23)	117 (35)	155 (47)	174 (53)	117 (35)	155 (47)	233 (71)	311 (94)	348 (106)
	0 (-18)	50 (15)	67 (20)	100 (30)	134 (40)	167 (50)	100 (30)	134 (40)	200 (61)	267 (81)	334 (101)
	-20 (-29)	47 (14)	63 (19)	95 (28)	126 (38)	158 (48)	95 (28)	126 (38)	190 (57)	253 (77)	316 (96)
	-40 (-40)	45 (13)	60 (18)	90 (27)	120 (36)	150 (45)	90 (27)	120 (36)	180 (54)	240 (73)	300 (91)

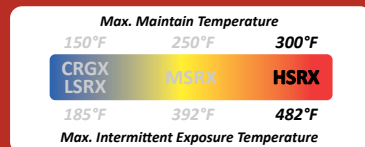
[Note]

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 Marley Engineered Products.
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.
6. Standard 50-foot minimum length for all heat trace cables.

Technical information subject to change without notification.

HSRX

SELF-REGULATING HEATING CABLE



Product Description

The HSRX Self-Regulating Heating Cable is designed for freeze protection and high process temperature maintenance of metal and non-metal pipes, vessels, and equipment where steam cleaning is required.

The unique PTC feature of HSRX 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 HSRX cables overlap. Another benefit of the cable is the ability to cut to length in the field, completed with Marley Engineered Products system connection kits for quick and convenient installations.

HSRX heating cable system is certified for ordinary and hazardous areas with maximum maintain temperature of 300°F(150°C) and intermittent exposure temperature of 482°F(250°C). Use of Marley Engineered Products connection kits for HSRX installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

Outer Jacket

Red / Fluoropolymer

Metallic Braid
Tinned Copper

Insulation
Fluoropolymer

Semi-Conductive Core
Heating Matrix

Bus Wires
Nickel-plated Copper

Specification

Max. Intermittent Exposure Temp.	482°F (250°C)
Max. Maintain or Continuous Exposure Temp.	300°F (150°C)
Supply Voltage	120V or 208-277V
Output Wattage	5, 10, 15, 20W/ft @50°F (16, 33, 49, 66W/m @10°C)
Bus wire	16 AWG
Min. Bending Radius	0.8" @70°F (20mm @20°C), 1.8" @-76°F (45mm @-60°C)
Min. Installation Temperature	-76°F (-60°C)
Min. Start-up Temperature	-40°F (-40°C)
Max. Circuit Breaker Size	50A
Outer Jacket Color	Red
Heating Cable Dimensions (Nominal)	0.50" x 0.20" (13.0mm x 5.0mm)
Heating Cable Weight	0.0902lb/ft (0.134kg/m)

Ordering Information

BK-HSRXa-bCT

BK-HSRX = Model Name

a = Output Wattage: 05, 10, 15, 20 W/ft

b = Voltage: 1 = 120V , 2 = 208-277V

CT = Outer Jacket: Fluoropolymer

Connection Kits

Marley Engineered Products 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 Marley Engineered Products for more information on system components.

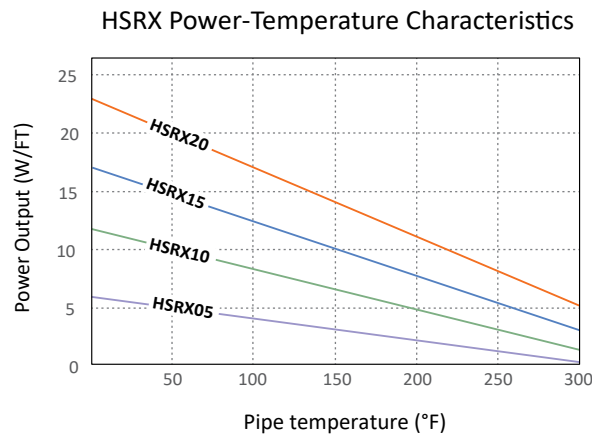
Certification / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors
Class I, Division 2, Groups A, B, C, and D T3A or T2D (at 20W/ft)
Class II/III, Division 2, Groups F and G T3A or T2D (at 20W/ft)
Class I, Zone 1, AEx/Ex 60079-30-1 IIC T3A or T2D (at 20W/ft) Gb
Zone 21, AEx/Ex 60079-30-1 IIC T180°C or T215°C (at 20W/ft) Db
Type 4X, IP66

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



Circuit length adjustment factor

Voltage	HSRX05	HSRX10	HSRX15	HSRX20
208V	0.93	0.94	0.94	0.94
240V	1.00	1.00	1.00	1.00
277V	1.10	1.10	1.11	1.11

Power adjustment factor

Voltage	HSRX05	HSRX10	HSRX15	HSRX20
208V	0.93	0.94	0.94	0.94
240V	1.00	1.00	1.00	1.00
277V	1.10	1.10	1.11	1.11

[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	50A	15A	20A	30A	40A	50A
HSRX05	50 (10)	180 (54)	240 (73)	358 (109)	358 (109)	358 (109)	360 (109)	480 (146)	709 (216)	709 (216)	709 (216)
	0 (-18)	141 (42)	187 (57)	281 (85)	358 (109)	358 (109)	281 (85)	375 (114)	562 (171)	709 (216)	709 (216)
	-20 (-29)	129 (39)	172 (52)	258 (78)	345 (105)	358 (109)	258 (78)	345 (105)	517 (157)	689 (210)	709 (216)
	-40 (-40)	120 (36)	159 (48)	239 (72)	319 (97)	358 (109)	239 (72)	319 (97)	478 (145)	638 (194)	709 (216)
HSRX10	50 (10)	107 (32)	142 (43)	213 (65)	253 (77)	253 (77)	213 (65)	284 (86)	427 (130)	502 (153)	502 (153)
	0 (-18)	87 (26)	116 (35)	174 (53)	232 (70)	253 (77)	174 (53)	232 (70)	348 (106)	464 (141)	502 (153)
	-20 (-29)	81 (24)	108 (32)	162 (49)	216 (65)	253 (77)	162 (49)	216 (65)	324 (98)	432 (131)	502 (153)
	-40 (-40)	76 (23)	101 (30)	152 (46)	202 (61)	253 (76)	152 (46)	202 (61)	303 (92)	404 (123)	502 (153)
HSRX15	50 (10)	78 (23)	104 (31)	156 (47)	203 (62)	203 (62)	156 (47)	208 (63)	312 (95)	400 (122)	400 (122)
	0 (-18)	65 (19)	87 (26)	130 (39)	174 (52)	203 (62)	130 (39)	174 (52)	261 (79)	347 (105)	400 (122)
	-20 (-29)	61 (18)	82 (24)	122 (37)	163 (49)	203 (62)	122 (37)	163 (49)	245 (74)	326 (99)	400 (122)
	-40 (-40)	58 (17)	77 (23)	115 (35)	154 (46)	192 (58)	115 (35)	154 (46)	230 (70)	307 (93)	384 (117)
HSRX20	50 (10)	58 (17)	78 (23)	117 (35)	155 (47)	174 (53)	117 (35)	155 (47)	233 (71)	311 (94)	348 (106)
	0 (-18)	50 (15)	67 (20)	100 (30)	134 (40)	167 (50)	100 (30)	134 (40)	200 (61)	267 (81)	334 (101)
	-20 (-29)	47 (14)	63 (19)	95 (28)	126 (38)	158 (48)	95 (28)	126 (38)	190 (57)	253 (77)	316 (96)
	-40 (-40)	45 (13)	60 (18)	90 (27)	120 (36)	150 (45)	90 (27)	120 (36)	180 (54)	240 (73)	300 (91)

[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 Marley Engineered Products.
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.
6. Standard 50-foot minimum length for all heat trace cables.

Technical information subject to change without notification.

MINERAL INSULATED

TYPE K & B INCOLOY SHEATH HEATING CABLE

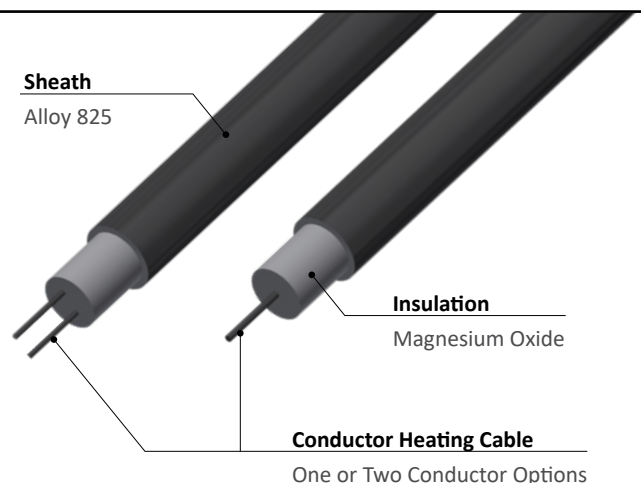
Product Description

The Mineral Insulated type K & B heating cable is ideal for a wide range of industrial and commercial heating applications.

It has resistive heating conductors embedded in highly compressed magnesium oxide insulation and covered with a stainless Alloy 825 sheath. The sheath is fully annealed and is easily hand formable. The low resistance metallic sheath is an ideal ground path.

MI heating cable is totally inorganic and will not deteriorate with age. All heating units are factory fabricated to a specified length and rigorously tested to IEEE standards.

MI heating cable system is certified for ordinary and hazardous areas with maximum maintain temperature of 900°F(482°C) and intermittent exposure temperature of 1100°F(593°C). Use of Berko connection kits for MI installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.



Specification (Table 1)

300 Volt, 2 Conductor 3/16" OD .07 lbs/ft			600 Volt, 2 Conductor 5/16" OD .22 lbs/ft			600 Volt, 1 Conductor 3/16" OD .07 lbs/ft		
Size	Ohms/ft	Max Exp Temp °F	Size	Ohms/ft	Max Exp Temp °F	Size	Ohms/ft	Max Exp Temp °F
K556	.043*	600	B588	.0071*	600	K145	.0046*	600
K658	.058*	600	B614	.0149*	600	K189	.0090*	600
K674	.074*	600	B627	.027*	600	K216	.0165*	600
K693	.093*	600	B640	.040*	600	K239	0.039	1100
K712	.117*	600	B670	0.065	1100	K250	0.05	1100
K715	.147*	600	B710	0.104	1100	K279	0.079	1100
K721	.213*	600	B715	0.162	1100	K310	0.095	1100
K732	0.319	1100	B720	0.205	1100	K316	0.157	1100
K742	0.416	1100	B732	0.325	1100	K326	0.26	1100
K752	0.52	1100	B750	0.5	1100	K333	0.33	1100
K766	0.66	1100	B774	0.735	1100	K346	0.457	1100
K774	0.74	1100	B810	1.162	1100	K372	0.73	1100
K810	1	1100	B819	1.87	1100	K412	1.17	1100
K813	1.3	1100	B830	2.97	1100	K415	1.48	1100
K818	1.8	1100	B840	4.3	1100	K423	2.36	1100
K824	2.34	1100	B859	5.98	1100	K430	2.8	1100
K830	2.96	1100				K447	4.5	1100
K838	3.7	1100						
K846	4.72	1100						
K860	5.6	1100						
K866	6.6	1100						
K894	9	1100						
K919	18	1100						

Ordering Information

BK-MIHT-a-b-c-d-e

BK-MIHT = Model Name

a = Heater Unit Hot Section Size (see Table 1)

b = Heater Unit Form (see Table 2)

c = Hot Section Length (ft)

d = Cold Section Length (ft)

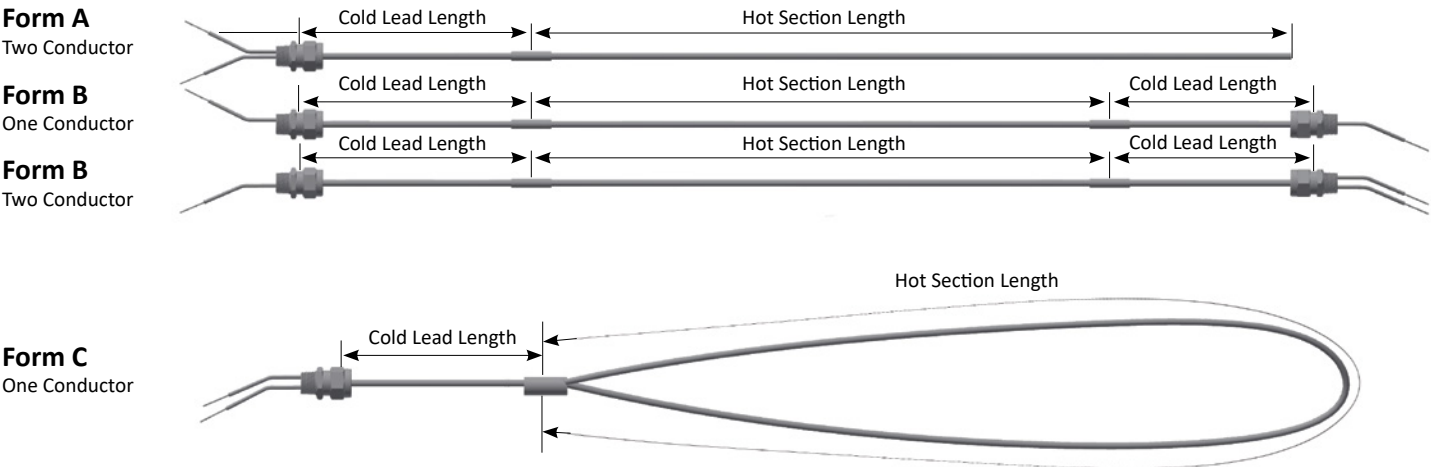
e = Special Features (see Table 3)

Connection Kits

Berko 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 Berko for more information on system components.

Heater Forms (Table 2)



Special Features (Table 3)

Option	Description
C1	1/2" reversed gland on hot to cold joint
C2	3/4" reversed gland on hot to cold joint
E	Puller eye end cap
P	P.V.C.jacketed cold section
Q	High temperature adapter
R	Heater on non-returnable reel
U	Listed NEMA 7 termination fitting
X	Other, specify

03

CONNECTION KITS



BK-HT-IPC-1

POWER CONNECTION; SINGLE HEATING CABLES

Product Description

The BK-HT-IPC-1 is designed for pipe mounted power connection, splice or tee of up to (3) CRGX, LSRX, MSRX or HSRX cables. Third party approved for ordinary area and DIV 2 hazardous areas. Provided with cold applied core sealing, 3/4 inch NPT conduit hole and spring terminals to accept up to #8 AWG wiring.

Certifications / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors

Class I, Division 2, Groups A, B, C, and D*

Class II/III, Division 2, Groups F and G*

Class I, Zone 1, AEx/Ex eb IIC* Gb

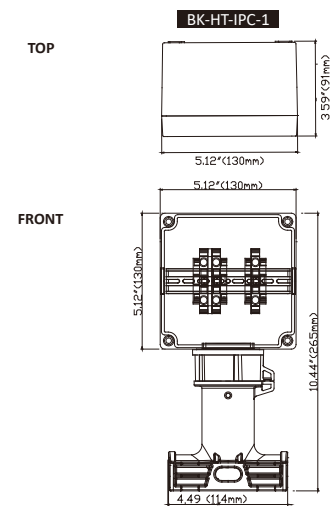
Zone 21, AEx/Ex tb IIIC* Db

Type 4X, IP66

* For T-rating please refer to cable documentation



Dimensions



Specification

Kit number	BK-HT-IPC-1
Application	Power Connection for single heating cable
Heating cable capability (No. of heating cable entry)	LSRX, CRGX, MSRX, HSRX (One heating cable)
Supply voltage	100 ~ 277V
Ingress protection	NEMA Type 4X, IP66
Ambient temperature range	-40°F ~ 131°F
Minimum installation temperature	-40°F (-40°C)
Through hole for conduit	3/4" NPT
Maximum conductor sizes	8AWG
Maximum circuit breaker size	50A

[Note] HT-IPC-1 requires Indeeco HT-SPK-NPT34 Sealing Plug Kit for splice, tee connection or end termination.

Material Information

Contents	1 BK-HT-IPC-1 series junction box assembly with terminal blocks 1 Pipe stand and O-ring 1 Compression cap, square-ring, locknut 3 Grommets(S, M, L) for different cable sizes 1 Core sealer	1 Insulation tube 1 RTV sealant 1 Wrench 1 Cable tie
Enclosure material	Glass reinforced polymer junction box Glass reinforced polymer lid with stainless steel screws Glass reinforced polymer box stand	
Installation accessories (Sold separately)	Conduit and fittings Sealing plug kit Pipe straps Fiberglass tape Aluminum tape	
Tools required	Wire cutters, Utility knife, Marking pen Large slotted screwdriver 3/16"(or 5mm) hex key Adjustable pliers, Needle nose pliers	

[NOTE] Refer to the HT Kit Installation Instructions for full and current material details.

BK-HT-IMC-3

POWER CONNECTION; MULTIPLE HEATING CABLES

Product Description

The BK-HT-IMC-3 is designed for pipe mounted power connection of CRGX, LSRX, MSRX and HSRX cables. Third party approved for ordinary area and DIV 2 hazardous areas. Provided with cold applied core sealing, 3/4 inch NPT conduit hole and spring terminals to accept up to #8 AWG wiring.

Certifications / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors

Class I, Division 2, Groups A, B, C, and D*

Class II/III, Division 2, Groups F and G*

Class I, Zone 1, AEx/Ex eb IIC* Gb

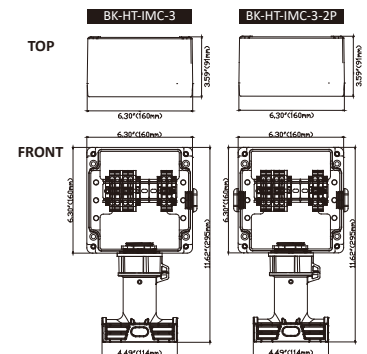
Zone 21, AEx/Ex tb IIIC* Db

Type 4X, IP66

* For T-rating please refer to cable documentation



Dimensions



Specification

Kit number	BK-HT-IMC-3	BK-HT-IMC-3-2P
Application	Power Connection for a maximum of three self-regulating heating cables	Dual Power Connection for two self-regulating heating cable circuits
Heating cable capability (No. of heating cable entry)	LSRX, CRGX, MSRX, HSRX (Up to three heating cables)	LSRX, CRGX, MSRX, HSRX (Two heating cable circuits)
Supply voltage	100 ~ 277V	100 ~ 277V
Ingress protection	NEMA Type 4X, IP66	NEMA Type 4X, IP66
Ambient temperature range	-40°F ~ 131°F (-40°C ~ 55°C)	-40°F ~ 131°F (-40°C ~ 55°C)
Minimum installation temperature	-40°F (-40°C)	-40°F (-40°C)
Through hole for conduit	3/4NPT X 1	3/4NPT X 2
Maximum conductor sizes	8AWG (10mm ²)	8AWG (10mm ²)
Maximum circuit breaker size	50A	50A

[Note] HT-IMC-3 requires Indeeco HT-SPK-NPT34 Sealing Plug Kit for splice, tee connection or end termination.

Material Information

Contents	1 BK-HT-IMC-3 series junction box assembly with terminal blocks 1 Pipe stand and O-ring 1 Compression cap, square-ring, locknut 3 Grommets(S, M, L) for different cable sizes 1 Core sealer	1 Insulation tube 1 RTV sealant 1 Wrench 1 Cable tie
Enclosure material	Glass reinforced polymer junction box Glass reinforced polymer lid with stainless steel screws Glass reinforced polymer box stand	
Installation accessories (Sold separately)	Conduit and fittings Sealing plug kit Pipe straps Fiberglass tape Aluminum tape	
Tools required	Wire cutters, Utility knife, Marking pen Large slotted screwdriver 3/16"(or 5mm) hex key Adjustable pliers, Needle nose pliers	

[NOTE] Refer to the HT Kit Installation Instructions for full and current material details.

BK-HT-IST-1

SPLICE OR TEE CONNECTION, END TERMINATION

Product Description

The BK-HT-IST-1 is designed for pipe mounted splice or tee of up to (3) CRGX, LSRX, MSRX and HSRX cables. Third party approved for ordinary area and DIV 2 hazardous areas. Provided with cold applied core sealing and spring terminals to accept up to #8 AWG wiring.

Certifications / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors

Class I, Division 2, Groups A, B, C, and D*

Class II/III, Division 2, Groups F and G*

Class I, Zone 1, AEx/Ex eb IIC* Gb

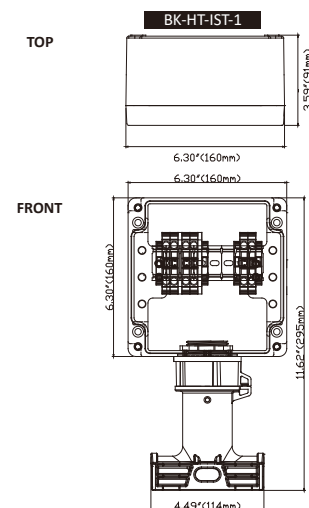
Zone 21, AEx/Ex tb IIIC* Db

Type 4X, IP66

* For T-rating please refer to cable documentation



Dimensions



Specification

Kit number	BK-HT-IST-1
Application	Splice or Tee Connection, End Termination
Heating cable capability (No. of heating cable entry)	LSRX, CRGX, MSRX, HSRX (Up to three heating cables)
Supply voltage	100 ~ 277V
Ingress protection	NEMA Type 4X, IP66
Ambient temperature range	-40°F ~ 131°F (-40°C ~ 55°C)
Minimum installation temperature	-40°F (-40°C)
Through hole for conduit	N/A
Maximum conductor sizes	8AWG (10mm ²)
Maximum circuit breaker size	50A

Material Information

Contents	1 BK-HT-IST-1 series junction box assembly with terminal blocks 1 Pipe stand and O-ring 1 Compression cap, square-ring, locknut 3 Grommets(S, M, L) for different cable sizes 1 Core sealer	1 Insulation tube 1 RTV sealant 1 Wrench 1 Cable tie
Enclosure material	Glass reinforced polymer junction box Glass reinforced polymer lid with stainless steel screws Glass reinforced polymer box stand	
Installation accessories (Sold separately)	Conduit and fittings Sealing plug kit Pipe straps Fiberglass tape Aluminum tape	
Tools required	Wire cutters, Utility knife, Marking pen Large slotted screwdriver 3/16"(or 5mm) hex key Adjustable pliers, Needle nose pliers	

[NOTE] Refer to the HT Kit Installation Instructions for full and current material details.

BK-HT-IES-1

END SEAL OR IN-LINE SPLICE CONNECTION

Product Description

The BK-HT-IES-1 is designed for pipe mounted, above insulation, end termination or splice of up to (2) CRGX, LSRX, MSRX and HSRX cables. Third party approved for ordinary area and DIV 2 hazardous areas. Provided with cold applied end sealing cap.

Certifications / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors

Class I, Division 2, Groups A, B, C, and D*

Class II/III, Division 2, Groups F and G*

Class I, Zone 1, AEx/Ex tb IIC* Gb

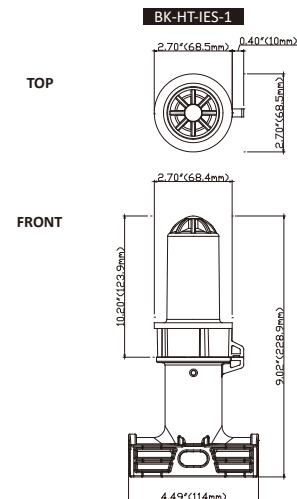
Zone 21, AEx/Ex tb IIC* Db

Type 4X, IP66

* For T-rating please refer to cable documentation



Dimensions



Specification

Kit number	BK-HT-IES-1
Application	End Seal / In-line Splice Connection
Heating cable capability (No. of heating cable entry)	LSRX, CRGX, MSRX, HSRX (Up to two heating cables)
Supply voltage	100 ~ 277V
Ingress protection	NEMA Type 4X, IP66
Ambient temperature range	-40°F ~ 131°F (-40°C ~ 55°C)
Minimum installation temperature	-40°F (-40°C)

Material Information

Contents	1 End cap 1 Pipe stand and O-ring 3 Grommets(S, M, L) for different cable sizes 2 Rubber end caps	1 RTV sealant 1 Wrench 1 Cable tie
Required for splice connection (Sold separately)	HT-SK-1, consists of: 2 Core sealers (S) 2 Insulation tubes Y/G (S) 3 Closed end connectors 1 RTV sealant	
Enclosure material	Glass reinforced polymer end cap Glass reinforced polymer pipe stand	
Installation accessories (Sold separately)	Pipe straps Fiberglass tape Aluminum tape	
Tools required	Wire cutters, Utility knife, Marking pen Large slotted screwdriver Adjustable pliers, Needle nose pliers Molex RHT-7000 crimp tool or equivalent; 10-16AWG slot (For in-line splice connection only)	

[NOTE] Refer to the HT Kit Installation Instructions for full and current material details.

BK-HT-IESL-R/G

LIGHTED END SEAL

Product Description

The BK-HT-IESL is an above insulation lighted end seal kit for use with CRGX, LSRX, MSRX and HSRX self-regulating heating cables, to terminate Indeeco heating cables with red or green light indicator.

The Kit series utilizes pipe stand for on-pipe installation to allow heating cables to directly enter the enclosure without the use of insulation while protecting the cables from exposure. For heating cable terminations, PJB series connection kits use core sealer and RTV adhesive without the need for heatgun for installation.

Certifications / Approvals



FM26US0013X, FM26CA0003X

Hazardous (classified) locations, indoors and outdoors

Class I, Division 2, Groups A, B, C, and D*

Class II/III, Division 2, Groups F and G*

Class I, Zone 1, AEx/Ex eb IIC* Gb

Zone 21, AEx/Ex tb IIIC* Db

Type 4X, IP66

* For T-rating please refer to cable documentation



BK-HT-IESL-R



BK-HT-IESL-G

Specification

Kit number	BK-HT-IESL-R, BK-HT-IESL-G
Application	Lighted End Seal
Heating cable capability (No. of heating cable entry)	LSRX, CRGX, MSRX, HSRX (One heating cables)
Supply voltage	100 ~ 240V
Ingress protection	NEMA Type 4X, IP66
Ambient temperature range	-40°F ~ 131°F (-40°C ~ 55°C)
Minimum installation temperature	-40°F (-40°C)

Material Information

Contents	1 Lighted end cap 1 Pipe stand and O-ring 3 Grommets(S, M, L) for different cable sizes 2 Closed end connectors	1 Core Sealer (S) 1 RTV sealant 1 Wrench 1 Cable tie
Enclosure material	Glass reinforced polymer end cap Glass reinforced polymer pipe stand	
Installation accessories (Sold separately)	Pipe straps Fiberglass tape Aluminum tape	
Tools required	Wire cutters, Utility knife, Marking pen Large slotted screwdriver Adjustable pliers, Needle nose pliers Molex RHT-7000 crimp tool or equivalent; 10-16AWG slot	

[NOTE] Refer to the HT Kit Installation Instructions for full and current material details.

04

ADDITIONAL PRODUCTS



THERMOSTATS & CONTROLLERS



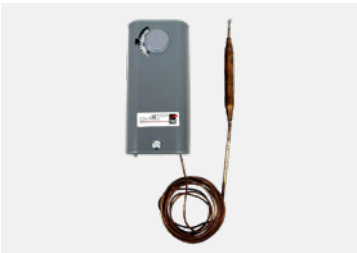
- DESCRIPTION:** Mechanical Thermostat
- 22 amp switching current SPDT, 120/250/480 V
 - Non-hazardous area
 - HTTS-A: ambient sensing
 - HTTS-L: line sensing

PART NUMBER:
HTTS-A
HTTS-L



- DESCRIPTION:** Mechanical Thermostat
- 22 amp switching current SPDT, 120/250/480 V
 - Class I, Division 1 and 2, Group B,C,D
 - HTTS-EPA: ambient sensing
 - HTTS-EPL: line sensing

PART NUMBER:
HTTS-EPA
HTTS-EPL



- DESCRIPTION:** Single-Stage Heavy-Duty Thermostat
- Liquid filled sensing element with snap-acting contacts
 - Range: -300° to 1000°F
 - Differential: 3 to 120 F between stages
 - Bulb Dimensions: 3/8" x 4"
 - Capillary Length: 8"
 - Resistive Rating: 22 amps, 120-277 V

PART NUMBER:
1023953



- DESCRIPTION:** Heat Trace Microprocessor Temperature Controller
- 30 amp switching current SSR, 85-280 V
 - Class I, Division 2, Group B,C,D
 - Ground fault current alarm and trip
 - Alarm and communication capabilities
 - Single (-1) and dual circuit (-2)

PART NUMBER:
HTCTRLR-1
HTCTRLR-2



- DESCRIPTION:** Master Trace Multi-Circuit Temperature Control Panel
- 30 amp switching current SSR, 280 V max
 - Class I, Division 2, Group A,B,C,D
 - Ground fault current alarm and trip
 - Alarm and communication capabilities
 - 5 circuit (-5), 10 circuit (-10), custom circuit quantity (-X)

PART NUMBER:
HTCTRLUNIT-5
HTCTRLUNIT-10
HTCTRLUNIT-X



- DESCRIPTION:** Armored RTD Cable and Cord Grip with 25' Leads

PART NUMBER:
HTRTD-25

ACCESSORIES



DESCRIPTION: Plug-in Connection Kit with GFEP

PART NUMBER:
HT-CPCGFEP1



DESCRIPTION: Hard Wired Connection Kit w/ Metal Gland

PART NUMBER:
HT-CPCG-1



DESCRIPTION: Tee and Splice Connection Kit

PART NUMBER:
HT-CTS-1



DESCRIPTION: End Seal Kit

PART NUMBER:
HT-CES-1

05

DATA FORMS

INDEECO
6700 Shadybrook Industrial Court
St. Louis, MO 63134
314-640-1000
www.indeeco.com

DATE _____
Company Name _____
Address _____
City _____ State _____ Zip _____
Customer Contact _____
Phone No. _____
E-Mail Address _____
Installation Description _____

Heat Trace Design Guide
Download the form and fill out all known information. Once complete, email to HeatTraceOrders@in.com

INSTALLATION INFORMATION
Site Use Ambient Temperature _____
Site High Ambient Temperature _____
Overall Quantity _____
Installation Lengths Required (If applicable) _____

HEAT TRACE DATA
Pipe Diameter _____ Pipe Type (metal/plastic) _____
Pipe Length _____ Insulation Type _____
Insulation Thickness _____ Insulation / Jacketing Location _____
Minimum Temperature _____ Minimum Jacketing Temperature _____
Maximum Temperature _____ Operating Voltage (208,240,277V) _____
Site Heating Control _____ Ambient Heating Control _____
Heatloss Area / Data & Division _____ Heatloss Area / Rating _____
of valves in line (if known) _____ # of tanks in line (if known) _____
of pipes in line (if known) _____ # of tanks in line (if known) _____

CONTROL METHOD (IF APPLICABLE)
Line Sensing Thermostat _____ Electronic Controller _____

SPECIAL NOTES

Inspection Report
Project Name _____
Inspector Name _____
Inspector Title _____
Inspector Company _____
Inspector License Number _____
Inspector State _____
Inspector Date _____
Inspector Signature _____
Inspector Title _____
Inspector Company _____
Inspector License Number _____
Inspector State _____
Inspector Date _____
Inspector Signature _____

Certificate of Compliance
Project Name _____
Certificate Number _____
Certificate Date _____
Certificate Issued By _____
Certificate Title _____
Certificate Company _____
Certificate License Number _____
Certificate State _____
Certificate Date _____
Certificate Signature _____
Certificate Title _____
Certificate Company _____
Certificate License Number _____
Certificate State _____
Certificate Date _____
Certificate Signature _____



470 Beauty Spot Road East
Bennetttsville, SC 29512
www.MarleyMEP.com

Date _____ Job Reference _____
Company Name _____
Address _____
City _____ State _____ Zip _____
Customer Contact _____
Phone No. _____
E-Mail Address _____
Site Delivery Requirement: _____

Heat Trace Design Guide

Download the form and fill out all known information. Once complete, email to HeatTraceOrders@spx.com

INSTALLATION INFORMATION:

Site Low Ambient Temperature: _____
Site High Ambient Temperature: _____
Overall Quantity: _____
Individual Lengths Required (if applicable): _____

HEAT TRACE DATA

Pipe Diameter: _____	Pipe Type (metal/plastic): _____
Pipe length: _____	Insulation Type: _____
Insulation Thickness: _____	Indoor / Outdoor Location: _____
Maintain Temperature: _____	Minimum Ambient Temperature: _____
Maximum Exposure Temperature: _____	Operating Voltage (120,208,240,277): _____
Line Sensing Control: _____	Ambient Sensing Control: _____
Hazardous Area / Class & Division: _____	Hazardous Area T-Rating: _____
# of valves in line (if known): _____	# of flanges in line (if known): _____
# of pipe supports in line (if known): _____	# of tees in line (if known): _____

CONTROL METHOD (IF APPLICABLE)

Line Sensing Thermostat: _____ Electronic Controller: _____

SPECIAL NOTES:

Installation & Maintenance Form

Location: _____ System: _____ Reference Drawing(s): _____

CIRCUIT INFORMATION

Heater Cat. No.: _____	Circuit Length: _____	Bkr. Panel No.: _____
Power Connection: _____	Design Voltage: _____	Bkr. Pole(s) No.: _____
Tee Connection: _____	Ground-Fault Protection (type): _____	
Splice Connection: _____	Ground-Fault Trip Setting: _____	
Heater Control: _____	Operating Voltage: 120 208 240 277	

VISUAL

Panel Number	Circuit #					
	Date					
	Initial					
Thermal Insulation						
Damaged Insulation / Lagging						
Water Seal Good						
Insulation / Lagging Missing						
Presence of Moisture						
Heating System Components						
Enclosures, Boxes Sealed						
Presence of Moisture						
Sign of Corrosion						
Heater Lead Discoloration						
Heating and/or High Limit Controller						
Operating Properly						
Controller Setpoint						

ELECTRICAL

Dielectric Insulation Resistance (Bypass Controller) Refer to IEEE-2017 for test voltages and pass/fail criteria						
Test Voltage						
Megger Value						
Heater Supply Voltage						
Value at Power Source						
Value at Field Connection						
Heater Circuit Current Reading						
Pipe Temperature						
Amps Reading at 2-5 min.						
Amps Reading After 15 min.						
Ground-Fault Current						
Comments and Actions:						
Performed by:	Company:		Date:			
Approved by:	Company:		Date:			

We have the experience and expertise to provide you with the personalized support to arrive at customized solutions.

Email HeatTraceOrders@spx.com
or visit marleymep.com/contact-us
to find your nearest Berko representative.

**HEAT.
ANYTIME.
ANYWHERE.**

