

XHT

Self-Regulating Heating Cable

Max. Maintain Temperature			
150°F	230°F	250°F	300°F
XHT	XHL	XHU	XHK
185°F	275°F	392°F	482°F
Max. Intermittent Exposure Temperature			

Product Description

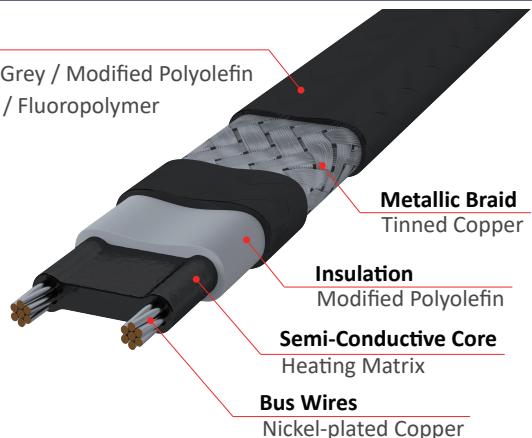
The XHT Self-Regulating Heating Cable is designed for freeze protection and process temperature maintenance of metal and non-metal pipes, vessels, and equipment.

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

XHT 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 PJB connection kits for XHT installation is required to comply with system approval, ensuring safe operation and reliable thermal performance.

Outer Jacket

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



Specification

Max. Intermittent Exposure Temp.	185°F (85°C)
Max. Maintain or Continuous Exposure Temp.	150°F (65°C)
Supply Voltage	100-120V or 200-277V
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	CR : Dark Grey, CT : Black
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

aXHT-bc

- a = Output Wattage, 3, 5, 8, 10, 12* W/ft
 XHT = Model Name
 b = Voltage, 1 = 100-120V , 2 = 200-277V
 c = Outer Jacket, CR = Polyolefin, CT = Fluoropolymer

* 12W/ft(39W/m) only available for 200 – 277V

Connection Kits

E&S TEC 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 E&S TEC for more information on system components.

Certification / Approvals

FM23US0087X, FM23CA0061X

Class I, Division 2, Groups A, B, C, and D T6;
 Class II/III, Division 2, Groups E, F and G T6;
 Class 1 Zone 1 AEx/Ex eb IIC Gb
 Zone 21 AEx/Ex tb IIIC T85°C Db
 Ta = -40°C to +55°C
 Type 4X, IP66



FM23ATEX0047X

II 2 G Ex 60079-30-1 IIC T6 Gb
 II 2 D Ex 60079-30-1 IIIC T85°C Db
 Ta = -40°C to +55°C
 IP66



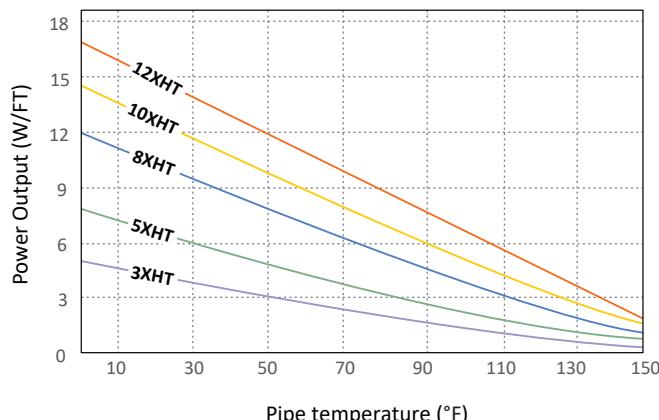
IECEx FMG 23.0024X

Ex 60079-30-1 IIC T6 Gb;
 Ex 60079-30-1 IIIC T85°C Db

[NOTE] T-ratings is based on product classification method per IEC/IEEE 60079-30-1:2015

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

XHT Power-Temperature Characteristics



Circuit length adjustment factor

Voltage	3XHT-2	5XHT-2	8XHT-2	10XHT-2	12XHT-2
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	3XHT-2	5XHT-2	8XHT-2	10XHT-2	12XHT-2
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]

- Thermal outputs above are tested in accordance with IEC/IEEE 60079-30-1:2015, with each model on a metallic pipe insulated with a fiberglass insulation.
- The power output will be derated by 25% on plastic pipes. GAT-L164 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
3XHT	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)
5XHT	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)
8XHT	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)
10XHT	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)
12XHT	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]

- The circuit lengths are based on trip current characteristics of Type QO and Type QCB devices. For devices with different trip characteristics please consult E&S TEC.
- Use local electrical codes to select appropriate branch circuit breakers.
- 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.
- 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.
- 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.

Technical information subject to change without notification.