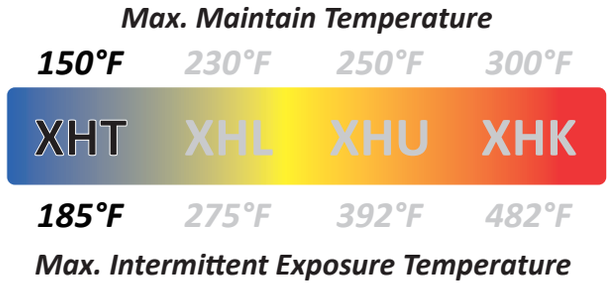
XHT

Self-Regulating Heating Cable

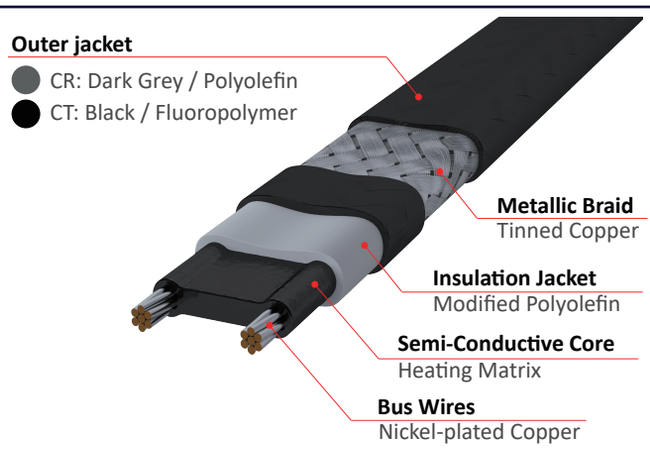


Product Description

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

The unique PTC feature of XHT self-regulating core elements adjust 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 Xarex connection kits for XHT 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	100-120V or 200-277VAC
Output Wattage	3, 5, 8, 10, 12* W/ft @50°F (* 12W/ft only available in Supply Voltage 200 – 277VAC)
Bus wire	16 AWG
Min. Bending Radius	0.75” (19mm) @5°F (-15°C) , 1.60” (40mm) @-40°F (-40°C)
Min. Installation Temperature	-58°F (-50°C)
Min. Start-up Temperature	-40°F(-40°C)
Maximum Circuit Breaker Size	40A

Ordering Information

aXHT-bc

a =	3, 5, 8, 10,12* W/ft (10, 16, 26, 33, 39* W/M)
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 2(200 – 277V)

Connection Kits

E&S Tec offers system components for power connections, splice or tee connections and end terminations to ensure proper funtioning 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

E330224 : Industrial and Commercial Pipe-heating Cable*
E488383 : Residential Pipe-heating Cable*
E482897 : De-icing and Snow-melting Equipment*

* Approval is valid only if the cable is installed with certified connection kits as a system.

FM18US0229X*, 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 eb IIC Gb
Zone 21 AEx tb IIIC T85°C Db
NEMA Type 4X, IP66
-40°C ≤ Ta ≤ +55°C

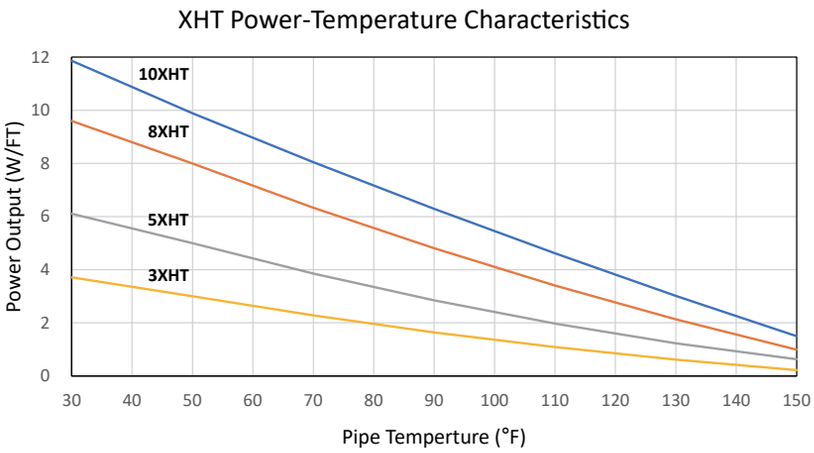
* System approval with Metal connection kit.
**System approval with GRP Metal connection kit.

FM23ATEX0028U
II 2 G Ex 60079-30-1 IIC T6 Gb
II 2 D Ex 60079-30-1 IIIC T85°C Db

IECEx FMG 23.0024X
Ex eb IIC T6 Gb
Ex tb IIIC T85°C Db
IP66

[NOTE] T-ratings is based on product classification method per IEEE515 and IEC60079-30.

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



Circuit length adjustment factor

Voltage	3XHT-2	5XHT-2	8XHT-2	10XHT-2
208V	0.969	0.957	0.925	0.920
240V	1.000	1.000	1.000	1.000
277V	1.054	1.065	1.088	1.120

Power adjustment factor

Voltage	3XHT-2	5XHT-2	8XHT-2	10XHT-2
208V	0.800	0.820	0.880	0.910
240V	1.000	1.000	1.000	1.000
277V	1.190	1.170	1.120	1.100

[Note]
1. Thermal outputs above are tested in accordance with IEEE 515, with each model on a metallic pipe insulated with a fiberglass insulation.
2. For plastic pipe installations, the power output will be derated by 35% and use aluminum tape install method.

Max. Circuit Length based on Circuit Breaker Selection

Catalog Number	Start-Up Temperture °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)

[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 E&S TEC CO LTD.
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 do 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.

** Technical Information Subject to change without notification.*

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