

XHU

Self-Regulating Heating Cable

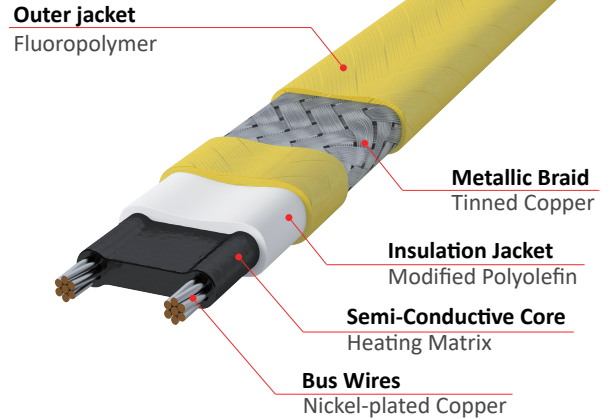
Max. Maintain Temperature			
150°F	230°F	250°F	300°F
XHT	XHL	XHU	XHK
185°F	275°F	392°F	482°F
Max. Intermittent Exposure Temperature			

Product Description

The Xarex XHU 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 XHU 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 XHU 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.

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



Specification

Max. Intermittent Exposure Temp.	392°F(200°C)
Max. Maintain or Continuous Exposure Temp.	250°F(120°C)
Supply Voltage	100-120V or 208 – 277V
Output Wattage	5, 10, 15, 20W/ft (@50°F on pipe)
Bus wire	16 AWG
Min. Bending Radius	1.2”(30mm) @70°F, 2.0”(50mm) @-40°F
Min. Installation Temperature	-76°F(-60°C)
Min. Start-up Temperature	-40°F(-40°C)
Maximum Circuit Breaker Size	40A
Outer Jacket Color	Yellow

Ordering Information

aXHUb-CT

a = 5, 10, 15, 20W/ft
 XHU = Model Name
 b = Voltage, 1 = 100-120V , 2 = 208-277V
 CT = Outer jacket, Fluoropolymer

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 T3;
 Class II/III, Division 2, Groups E, F and G T3;
 Class 1 Zone 1 AEx eb IIC Gb
 Zone 21 AEx tb IIIC T200°C Db
 Ta = -40°C to +55°C
 NEMA Type 4X, IP66



FM23ATEX0028U
 II 2 G Ex 60079-30-1 IIC T3 Gb
 II 2 D Ex 60079-30-1 IIIC T200°C Db

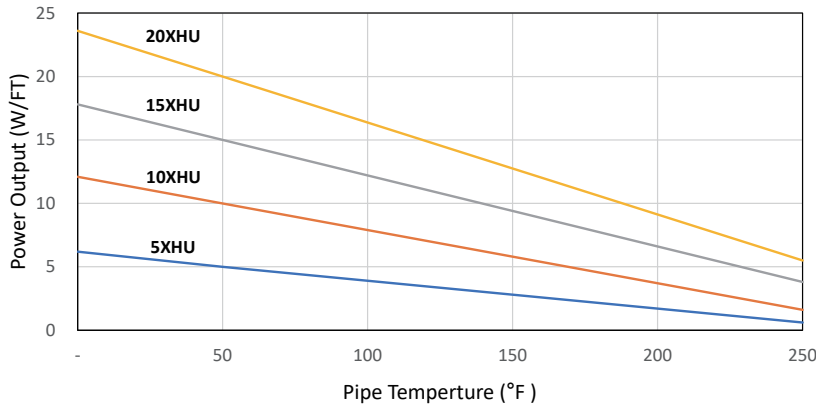


IECEx FMG 23.0024X
 Ex eb IIC T3 Gb
 Ex tb IIIC T200°C Db
 IP66

[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

XHU Power-Temperature Characteristics



Circuit length adjustment factor

Voltage	5XHU-2	10XHU-2	15XHU-2	20XHU-2
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	3XHT-2	5XHT-2	8XHT-2	10XHT-2
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]

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 Temperature °F (°C)	Maximum Circuit Length per Circuit Breaker, feet (meters)									
		120V					240V				
		15A	20A	30A	40A	50A	15A	20A	30A	40A	50A
5XHU-CT	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)
10XHU-CT	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)
15XHU-CT	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)
20XHU-CT	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 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.