

Self-regulating heating cable BTC

- Automatically adjusts heat generation in response to changes in the pipe temperature
- Can be cut to the desired length without compromising on performance
- Will not overheat or burn even when overlapping
- High heat generation – up to 60 W/m
- Full set of control tools and accessories
- Operating voltage ~220–240 V (~110–120 V available on request)



1. 1.25 mm² nickel-plated copper conductors
2. Semi-conductive self-regulating matrix
3. Matrix insulation
4. Tinned copper braid
5. Overjacket fluoropolymer

Versions

- BTC...BP** Design with a fluoroplastic jacket over tinned copper wire armor for added protection in locations exposed to corrosive chemicals or vapors.

Approvals

- № Sira 17ATEX3335U
- № Sira 18ATEX3038X
- № IECEx CCVE 17.0006U
- № IECEx CCVE 17.0007X
- № 16.00338.120
- № TC RU C-RU.AA87.B.00340
- № C-RU.ПБ37.B.02047

Key features

BTC is an industrial-grade self-regulating heating cable used to protect against freezing large diameter pipelines that require steaming and to maintain the desired temperature of industrial pipelines and tanks up to 120 °C, as well as in systems where the heating cable is exposed to high temperatures.

It can be easily cut to the desired length in place to exactly match the pipeline length.

BTC cable is approved for installation in safe and explosive areas pursuant to international standards, as well as the Russian standards GOST R IEC 60079-0-2011, GOST R IEC 60079-7-2012, GOST IEC 60079-30-1-2011.

Self-regulation properties enhance the safety and reliability of the cable. BTC will neither overheat nor burn, even when overlapping. Heat generation is self-regulated in response to changes in temperature.

Installation is straightforward, requires little time and does not require any special skills or tools. All components for connecting or splicing the ends and connecting to a power source are available in convenient kits.



High-temperature cables

Technical specifications

Maximum continuous operating temperature (energized)	120 °C
Maximum continuous exposure temperature (de-energized)	200 °C
Ambient temperature range	-60...+55 °C
Minimum installation temperature	-60 °C
Rated voltage	~220-240 B
Ex marking	Ex 60079-30-1 IIC T3 Gb Ex 60079-30-1 IIIC T200°C Db
Temperature class	T3
IP rate	IP67
Maximum braiding resistance	10 Ohm/km

Weight and dimensions

Type	Nominal size, mm	Weight, kg/100 m	Minimum bending radius ^o , mm
BTC...BP	10.6×5.3	12.0	25

^o The minimum bending radius is given for a temperature of -20 °C.

Accessories

(to be ordered separately)

Junction boxes of series PTB 401, 402 (see pp. 48–55); PTB 601, 602 (see pp. 64–71)

TKL, TKW connection kit for junction boxes – see p. 88

TKR/J, TKW/J connection kit for junction boxes without terminal glands – see p. 89

TKT/M kit for connection to the installation wire (without boxes, up to +125 °C) – see p. 89

CP-7 kit for connecting two heating cables (for maintenance, etc.) – see p. 90

Cable fasteners – see pp. 98-99

Ordering information

Example: 45BTC2-BP

① ② ③④ ⑤⑥

1. Linear power 45 W/m (to IEC 60079-1-30)
2. Type of self-regulating heating cable:
BT – high temperature
3. Cable version: C – for industrial applications
4. Power supply voltage: 1 – ~110–120 V, 2 – ~220–240 V
5. Braiding material: B – copper tinned wire
6. Outer jacket material: P – fluoropolymer

Max. heating circuit length

(or combined length of a section of same grade connected in parallel) depending on the type of automatic circuit breaker:

Type	Activation temperature, °C	230 V		
		16 A	20 A	32 A
15BTC	10	165	200	–
	-25	117	152	189
24BTC	10	126	147	147
	-25	92	126	147
30BTC	10	90	120	–
	-25	73	97	120
37BTC	10	79	106	–
	-25	64	85	106
45BTC	10	70	82	–
	-25	49	66	82
60BTC	10	51	66	–
	-25	39	53	66

For use with type C circuit breakers to GOST R 50345-2010 (IEC 60898-1:2003)

^o When the heating section is switched on, there is a surge of current (starter current). Within 5 minutes after switching on, the current stabilizes. The maximum value of the starter current can exceed by a factor of 5 to 6 the nominal current of the automatic circuit breaker.

Power output curve

Nominal power output at rated voltage 230 VAC.

Linear power, W/m

