

Self-regulating electrical heating tape for freeze protection or temperature maintenance of industrial pipelines and vessels in safe and hazardous areas

- Automatically adjusts heat output in response to increasing or decreasing pipe temperature
- Can be cut to required length without damage to its properties
- Will not overheat or burnout even if self-overlapped

- High power output – up to 60 W/m
- Full range of controls and accessories
- Operating voltage 220–240 VAC (110–120 VAC on request)



1. 1.25 mm² Tinned copper conductors
2. Semi-conductive self-limiting matrix
3. Fluoroplastic insulation
4. Tinned copper braid
5. Fluoroplastic outer jacket

Design options

BTC...BP Fluoroplastic outer jacket over tinned copper braid provides protection where corrosive chemical solutions or vapors may be present.

Features

BTC is an industrial grade self-regulating heating tape that can be used for freeze protection of large diameter pipelines undergoing steaming and temperature maintenance of industrial pipelines and vessels where temperature up to 120 °C may exist and in systems with high heating tape exposure temperature

It can be cut to length on site and exact piping length can be matched without any complicated design considerations.

BTC is certified for use in safe and explosion hazardous environments against international standards as well as GOST R 51330 and GOST R IEC 62086 standards

Its self-regulating characteristics improve safety and reliability. BTC will not overheat or burnout even when overlapped upon itself. The heat output adjusts automatically in response to temperature change

The installation of BTC heating tape is quick and simple and requires no special skills or tools. Termination, splicing and power connection components are all provided in convenient kits

Technical data

Maximum temperature	120 °C
Maximum allowable temperature de-energized (1000 hours cumulative)	190 °C
Ambient temperature range	-60...+55 °C
Minimum installation temperature	-60 °C
Power supply (110–120 VAC on request)	220–240 VAC
Temperature classification	T4
Maximum resistance of the protective braid, not more than	10 Ohm/km

Dimensions and weights

Type	Nominal dimensions, mm	Weight, kg/100 m	Minimum bending radius*, mm
BTC...BP	12.1x5.4	15.2	35

* The minimum bending radius at -20 °C is shown.

Maximum length of heating section, m

(or overall length of sections of the same type, connected in parallel) vs circuit breaker type

Type	Turn-on temperature, °C	230 V		
		16 A	20 A	32 A
15BTC	10	165	189	–
	-25	117	152	189
30BTC	10	85	114	–
	-25	69	92	114
45BTC	10	70	82	–
	-25	49	66	82
60BTC	10	50	64	–
	-25	38	52	64

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

*An inrush current (starting current) appears at the moment of turning on the heating section. The current value stabilizes within 5 minutes after turning on. Maximum starting current can be 5–6 times higher than the rated current value of the circuit breaker

Approval details



Certificate of conformity IEC Ex for self-regulating heating tapes NdEEx CCVE 12.0002X.



Certificate of conformity to the requirements of Customs Union Technical Regulation No. 012/2011 «On safety of equipment intended for use in explosive atmospheres» TC RU C-RUБ05B.0528 for self-regulating heating tapes with explosion protection marking 1Ex e IIC T3...T6 Gb X.

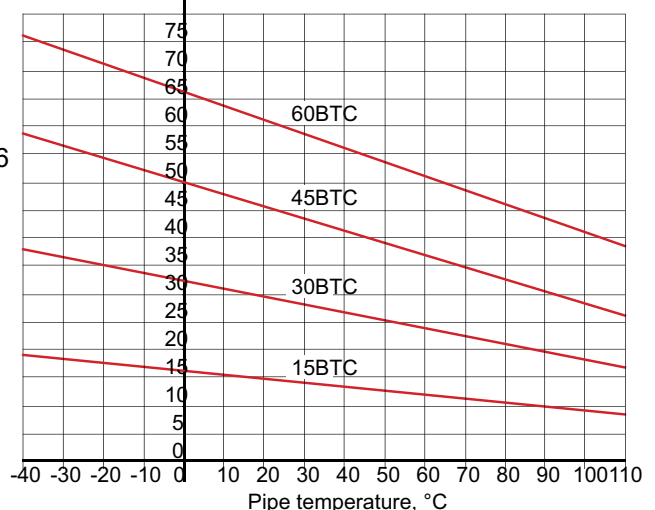


Certificate of Conformity to Technical Regulations on Fire Safety for self-regulating heating tapes No. C-RUБ37.B.01460.

Thermal ratings

Nominal heat output at operating voltage 115 V or 230 V, when self-regulating heating tapes operate in normal conditions.

Linear power output, W/m



Ordering information

Example: 45BTC2-BP

- Linear power output 45 W/m (according to IEC 60079-1-30)
- Type of self-regulating heating tape: BT—high temperature
- Tape design version: C – for industrial use
- Supply voltage: 1 – 110–120 VAC, 2 – 220–240 VAC
- Braid material: B – tinned copper wire
- Outer jacket material: P – fluoropolymer

Accessories

A range of accessories includes component parts for power supply, splice and termination of the heating tape and a control unit. We recommend using original accessories made by SST Company to ensure trouble-free operation and meeting safety standards and requirements.