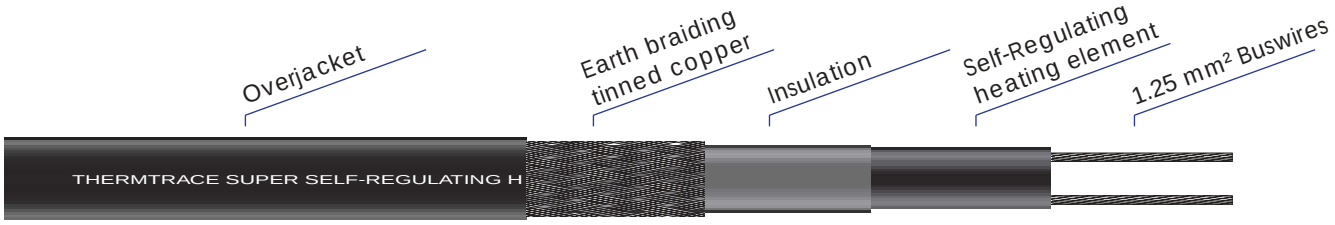
ThermTrace Super (TTS)
Self-Regulating parallel heating tape

up to 200°C



Description of heating tape

- Self-regulating
- 7 power output ranges
- Cut to length

Applications:

ThermTrace Super is a construction and industrial grade self-regulating heating tape that may be used for freeze protection, or low temperature maintenance of pipework and vessels.

Function:

Self-regulating heating tapes consist of two parallel buswires, embedded semi-conductive self-regulating matrix. This means that the heating cable automatically responds to changes in ambient conditions.

With increase in temperature, the synthetic material expands by molecular force, and the connections between the carbon particles diminish, reducing the load. Conversley, as the temperature decreases, so the load increases as the connections between the carbon particles increases accordingly.

Thus, the heating power varies according to the temperature of the surface the heating tape is applied to.

Self-regulating heating tapes will not overheat or burnout - even when overlapped.

Technical Data:

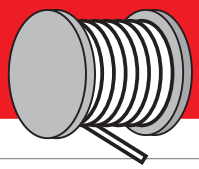
Maximum exposure temperature (unpowered) *maximal 1000 hours exposure time	200°C*
Maximum operating temperature (powered)	120°C
Nominal voltage	230V (120V available to order)
Minimum bending radius	25mm
Minimum installation temperature	-30°C
Maximum resistance of braid	18.2 Ohms/km
T-Rating	T3

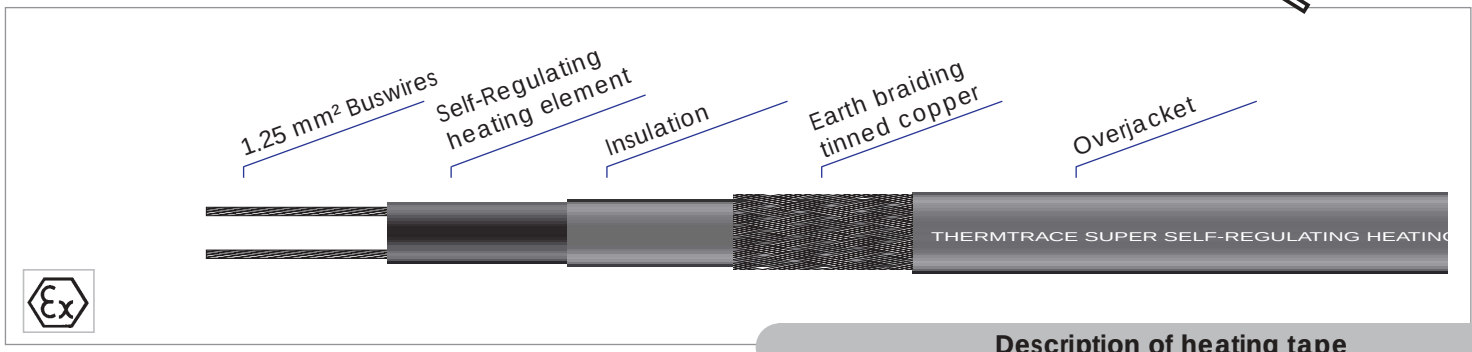
Part Number	Power Output on Insulated Metal Pipes at 10°C (W/m)	Maximum Permissable Ambient Temperature energised (°C)	de-energised (°C)	Earth Braid Description	Nominal Dimensions (mm)	Nominal Weight kg/100m
10TTS-2-B	10	120	200	tinned copper	9.5 x 4.0	12
10TTS-2-BOT	10	120	200	tinned copper	10.5 x 5.0	12
15TTS-2-B	15	120	200	tinned copper	9.5 x 4.0	12
15TTS-2-BOT	15	120	200	tinned copper	10.5 x 5.0	12
20TTS-2-B	20	120	200	tinned copper	9.5 x 4.0	12
20TTS-2-BOT	20	120	200	tinned copper	10.5 x 5.0	12
25TTS-2-B	25	120	200	tinned copper	9.5 x 4.0	12
25TTS-2-BOT	25	120	200	tinned copper	10.5 x 5.0	12
30TTS-2-B	30	120	200	tinned copper	9.5 x 4.0	12
30TTS-2-BOT	30	120	200	tinned copper	10.5 x 5.0	12

B: tinned copper braid
BOT: Braid and fluoropolymer overjacket

up to 200°C

ThermTrace Super (TTS)
Self-Regulating parallel heating tape



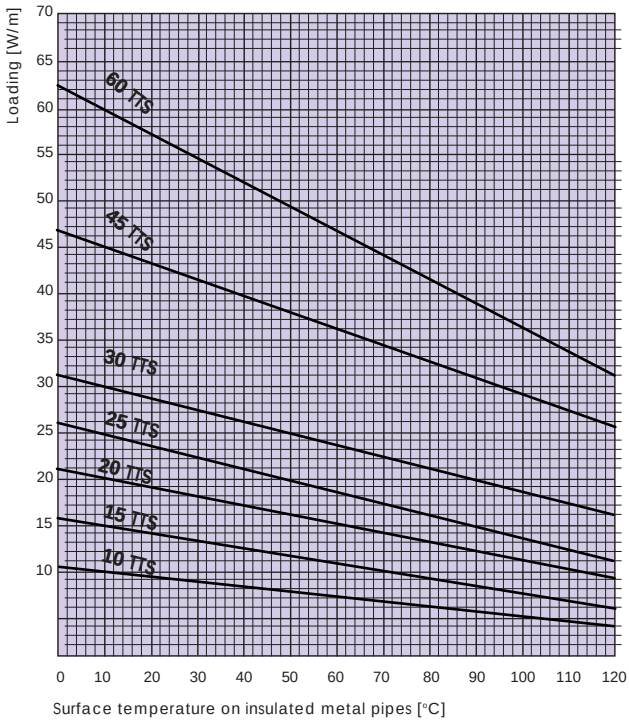


Description of heating tape

Name	Power Output on Insulated Metal Pipes at 10°C (W/m)	Maximum Permissable Ambient Temperature energised (°C)	de-energised (°C)	Earth Braid Description	Nominal Dimensions (mm)	Nominal Weight kg/100m
45TTS-2-B	45	120	200	tinned copper	9.5 x 4.0	12
45TTS-2-BOT	45	120	200	tinned copper	10.5 x 5.0	12
60TTS-2-B	60	120	200	tinned copper	9.5 x 4.0	12
60TTS-2-BOT	60	120	200	tinned copper	10.5 x 5.0	12

B: tinned copper braid
BOT: Braid and fluoropolymer overjacket

Temperature/Loading diagram TTS



TTS exposure up to 200°C (maximal 1000 hours exposure time)

Start-up temp.		230V 16A	230V 20A	230V 30A	120V 16A	120V 20A	120V 30A
10 TTS	+10	200	235		100	120	
	-25	175	235		89	120	
15 TTS	+10	165	189		80	95	
	-25	117	152	189	56	75	95
20 TTS	+10	135	160		67	80	
	-25	100	130	160	50	65	80
25 TTS	+10	120	140		60	69	
	-25	88	120	140	44	59	69
30 TTS	+10	85	114		44	58	
	-25	69	92	114	35	45	58
45 TTS	+10	70	82		35	41	
	-25	49	66	82	24	33	41
60 TTS	+10	50	64		25	32	
	-25	38	52	64	20	25	32

Maximum recommended length of heating circuit at 230VAC using Type-C circuit breakers.

Approval Details

Kema Quality B.V.

Certificate No.	Ex-02.E.2165U
Standard	EN 50014,EN 50019
Area Approval	EEx e II T3

Product Ordering Information

Power output + TTS-Voltage-(Overjacket)

Example 60W/m@10°C with tinned copper braiding and fluoropolymer jacket (230V):

60 TTS-2-BOT

Example 15W/m@10°C with only insulation (120V):

15 TTS-1

B: tinned copper braid
BOT: Braid and fluoropolymer overjacket

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