

ThermTrace Regular (TTR) Self-Regulating parallel heating tape

up to 85°C

Overjacket
Earth braiding
tinned copper
Insulation
Self-Regulating
heating element
1.25 mm² Buswires

THERMTRACE REGULAR SELF-REGULATING H



Description of heating tape

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

Applications:

ThermTrace Regular is a construction / light 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, embeded 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. Conversely, 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:

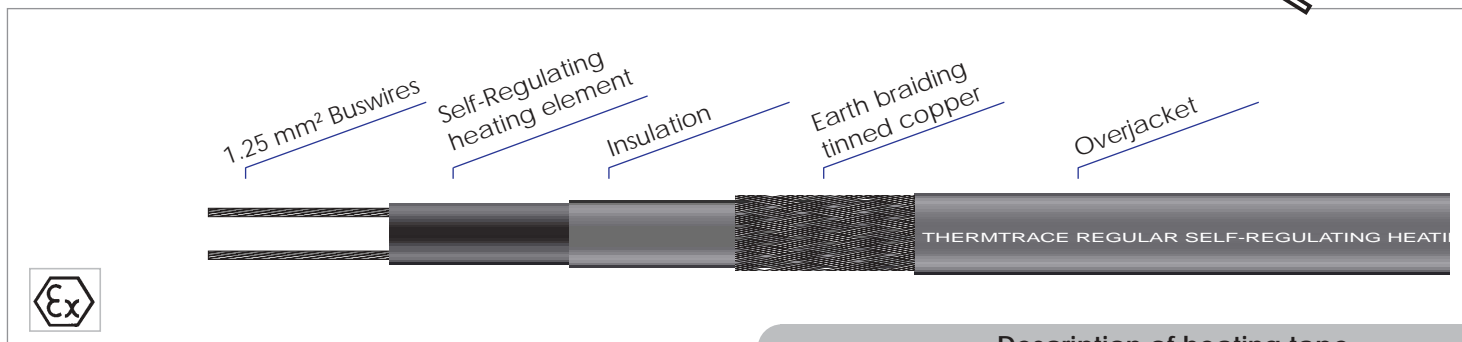
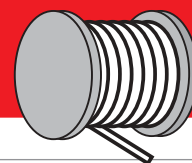
Maximum exposure temperature (unpowered)	85°C
Maximum operating temperature (powered)	65°C
Nominal voltage	230V (120V available to order)
Minimum bending radius	TTR-BO 25mm TTR-BOT 25mm
Minimum installation temperature	-30°C
Maximum resistance of braid	18.2 Ohms/km
Fluoropolymer Overjacket	optional
T-Rating 10,15,25 W/m	T6
T-Rating 33 W/m	T5

Name	Power Output on Insulated Metal Pipes at 10°C (W/m)	Maximum Permissible Ambient Temperature energised de-energised (°C) (°C)		Earth Braid Description	Nominal Dimensions (mm)	Nominal Weight kg/100m
10TTR-2-BO	10	65	85	tinned copper	11.5 x 5.5	12
10TTR-2-BOT	10	65	85	tinned copper	11.5 x 5.5	12
15TTR-2-BO	15	65	85	tinned copper	11.5 x 5.5	12
15TTR-2-BOT	15	65	85	tinned copper	11.5 x 5.5	12
25TTR-2-BO	25	65	85	tinned copper	11.5 x 5.5	12
25TTR-2-BOT	25	65	85	tinned copper	11.5 x 5.5	12
33TTR-2-BO	33	65	85	tinned copper	11.5 x 5.5	12
33TTR-2-BOT	33	65	85	tinned copper	11.5 x 5.5	12

BO: Braid and thermoplastic overjacket
BOT: Braid and fluoropolymer overjacket

up to 85°C

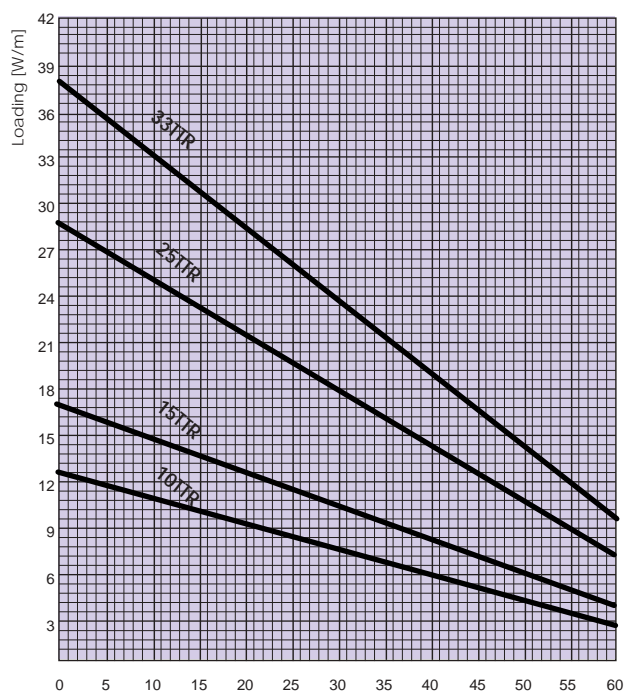
ThermTrace Regular (TTR) Self-Regulating parallel heating tape



Description of heating tape

TTR exposure up to 85°C

Temperature/Loading diagram TTR



Surface temperature on insulated metal pipes [°C]

Start-up temp.	16A	230V 20A	30A	16A	120V 20A	30A
10 TTR +10	205			95		
-15	140	186	195	69	90	95
-25	123	165	195	60	81	95
15 TTR +10	145	162		67	80	
-15	93	125	160	45	61	80
-25	82	111	160	40	54	80
25 TTR +10	88	117	126	43	58	63
-15	60	75	117	27	33	51
-25	50	70	105	27	33	51
33 TTR +10	70	90	108	33	45	54
-15	50	65	95	25	33	53
-25	45	58	85	22	30	43

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

Approval Details

Kema Quality B.V.

Certificate No.

Ex-02.E.2164U

Standard

EN 50014, EN 50019

Area Approval

EEx e II (T5, T6)

Product Ordering Information

Power output + TTR-Voltage-(Overjacket)

Example 33W/m@10°C with tinned copper braiding and fluoropolymer jacket (230V):

33 TTR-2-BOT

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

15 TTR-1

B: tinned copper braid

BO: Braid and thermoplastic overjacket

BOT: Braid and fluoropolymer overjacket

