

# RGS™ Self-Regulating Heating Cable

## Product Specifications

### Application: Roof & Gutter, Snow and Ice Melting

RGS self-regulating heating cables are part of the Thermon SnoTrace™ family of snow and ice melting systems. Designed and approved specifically for roof and gutter applications, RGS withstands direct exposure to harsh environmental conditions.

Prevents Ice and Snow build up/damage to roof, roofgutters and downpipes. Stops water ingress/damage, burst down pipes, gutter cracking or deformation, and dangerous snow or ice falls from the roof. RGS self-regulating cables are protected by a tinned copper braid for grounding plus a heavy-duty fluoropolymer outer jacket. These components maximize protection during cable installation and enable years of exposure to the outside environment.

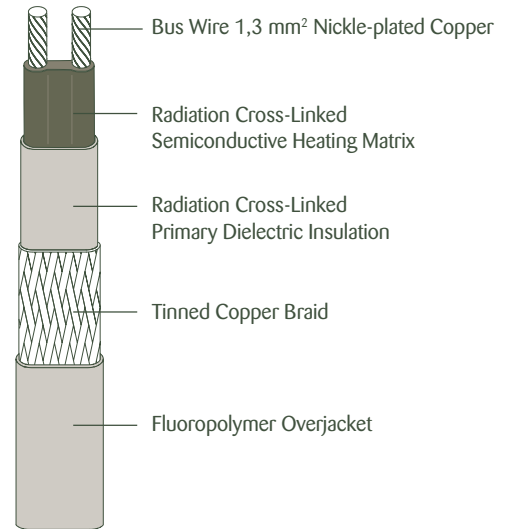
### Easy to Design and Install . . .

Layout of RGS cable for a roof and gutter snow and ice melting system is easy. With cut-to-length parallel circuitry, RGS cables do not require field dimensions of the areas requiring protection.

The cable may be simply pulled from the supply reel, cut to length and terminated in the field with ordinary hand tools. Easy-to-use roof and gutter accessory materials, plus Thermon circuit fabrication kits, complete an installation. See overleaf for cable length requirements. This single product approach provides complete installation requirements.

### Characteristics . . .

Minimum bend radius ..... 32 mm  
Supply voltage ..... 230 Vac  
Circuit protection ..... 30 mA ground-fault protection



### Certifications/Approvals . . .



ISO 9001  
REGISTERED

[www.heattracing.co.uk](http://www.heattracing.co.uk)

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**Circuit Breaker Sizing and Type . . .**

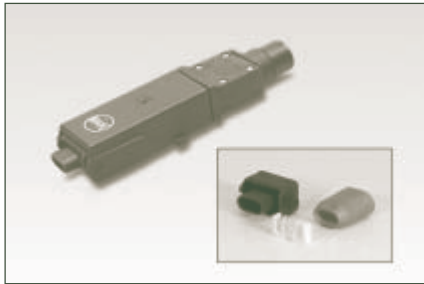
Product Type	230 Vac Service Voltage		Max. Circuit Length <sup>1</sup> vs. Breaker Size				
	Heating Cable Output		Metres (B and C-Type Breakers)				
	In Snow and Ice	In Dry Air	10 A	16 A	20 A	25 A	32 A
RGS	35 W/m	18 W/m	39 m	64 m	82 m	106 m	121 m

**Note . . .** 1. Circuit length based on start-up at -20°C.

**Determining the Length of Heating Cable Required . . .**

For gutters and down pipes simply measure and add 1 meter to downpipe to go below ground into drain. For north facing gutters install two cables, i.e. loop and return cable along gutter. For roofs, loop the cable 1 meter minimal up the roof with 1 meter spacing. Allow 300 mm for each termination point.

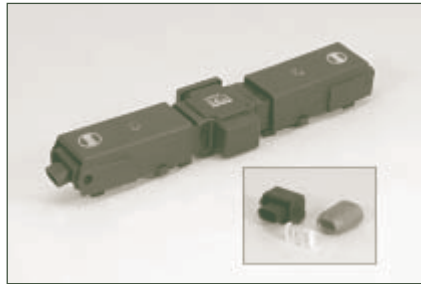
**DHB quick fitting components for cable connections within roof/internal areas**



**DHB-100**...power connection kit is designed to terminate one self-regulating heating cable for connection to power.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110 °C  
Type of protection: IP54

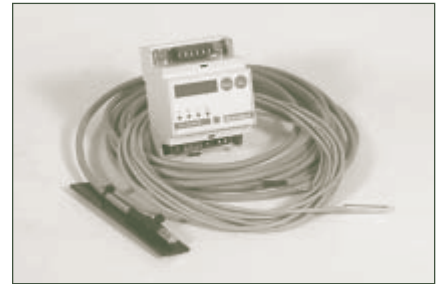
Note: Separate kit required to connect RGS cable to the DHB fitting, must order separate. SXM kit for DHB10X



**DHB 101**...splice kit is designed to terminate two self-regulating heating cables.

Nominal voltage: 230 V  
Nominal current: 20A  
Temperature resistance: 110 °C  
Type of protection: IP54

Note: Separate kit required to connect RGS cable to the DHB fitting, must order separate. SXM kit for DHB10X



**DHB 350**...ice-control, 230 Vac, 13A consisting of a combined control unit with humidity and temperature probe. The control unit switches the heating cable on when the ambient temperature is below 3 deg. C, and icy water/snow is present in the gutter.

**Standard cable connections for external and internal areas.**



**PETK-SXM-OJ-IND**...circuit fabrication kit terminates SX heating cables in a JB-K-1 (or other) junction box. Kit includes an M25 tracer gland (with locknut), power boot, end cap, RTV adhesive, yellow/green earth wire sleeve, the necessary wire pins/lugs plus plus an insulation entry kit.



**JB-K-1, JB-K-2**...rugged, impact-resistant nonmetallic junction boxes for use in nonhazardous environments and have an IP65 degree of protection.

Item	Electrical	Size (mm)
JB-K-1	5-pt strip-34 Amps	98x98x58
JB-K-2	5-pt strip-43 Amps	139x119x70



**FT-1L**...fixing tapes for circumferential banding cable to piping every 30 cm or as required by code or specification.

**AL-20P**...aluminium tapes for continuous (longitudinal) covering and/or circumferential banding cable to piping and/or equipment.

Item	Material	Max. Temp.	Size
FT-1L	Poly. Fibre	85°C	12mm x 55m
AL-20P	Aluminium	150°C	50mm x 45m



**KS-1**...edge protection for down pipe and snow rail. Heating cable mounting for north light guttering.

**HT-1**...heating cable mounting for eaves tile.



**ESC**...heating cable end connection. End connection made of plastic with enclosed silicone socket. The heating cable is clamped mechanically and the tensile strength is guaranteed.

