# **RGS**<sup>™</sup> Self-Regulating Heating Cable

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

RGS self-regulating heating cables are part of the Thermon SnoTrace<sup>™</sup> 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 polyolefin 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.

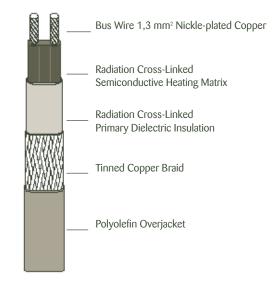
### **Product Specifications**

### Characteristics . . .

Minimum bend radius	32 mm
Supply voltage	230 Vac
Circuit protection 30 mA ground-fault	protection
Nominal power output	
In snow and ice	37 W/m
In dry air	19 W/m

### Note . . .

For asphalt roofs, a fluoropolymer outerjacket might be required.



### Certifications/Approvals ...

DVE CE





### **THERMON . . . The Heat Tracing Specialists**\* www.thermon.com

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## **RGS**<sup>™</sup> Self-Regulating Heating Cable

### **Product Specifications**

### Circuit Breaker Sizing and Type...

230 Vac Service Voltage		Max. Circuit Length vs. Breaker Size Meters (B and C-Type Breakers)				
Product Type	Start-Up Temp.	10A	16A	20A	25A	32A
RGS	-10° C	39 m	63 m	78 m	98 m	103 m
RGS	-20° C	31 m	50 m	62 m	78 m	93 m

### 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.

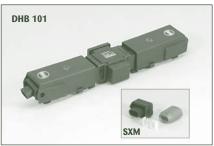
### DHB quick fitting components for cable connections within roof/internal areas



**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

**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. Kitincludes an M25 tracer gland (with locknut), power boot, end cap, RTV adhesive, yellow/green earth wire sleeve, the necessary wire pins/lugs 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 33 m
AL-20L	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.

