



PRODUCT DATASHEET

RGS™

SELF-REGULATING HEAT TRACING

APPLICATION: SNOW AND ICE MELTING

RGS self-regulating trace heaters 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.

Due to its self-regulating feature, RGS will increase power when exposed to ice and snow. When the area has been cleared the power output will decrease to reduce energy consumption.

EASY TO DESIGN AND INSTALL

The layout of RGS for a roof and gutter snow and ice melting system is easy. The step-by-step design guide leads the reader through determining the heating requirements, selecting the trace heater spacing and establishing the number of heating circuits and accessories required to complete the SnoTrace RGS system (for more information, refer to the SnoTrace RGS Design Guide, Form CPD1037).

With cut-to-length parallel circuitry field dimensions of the areas requiring protection are not required.

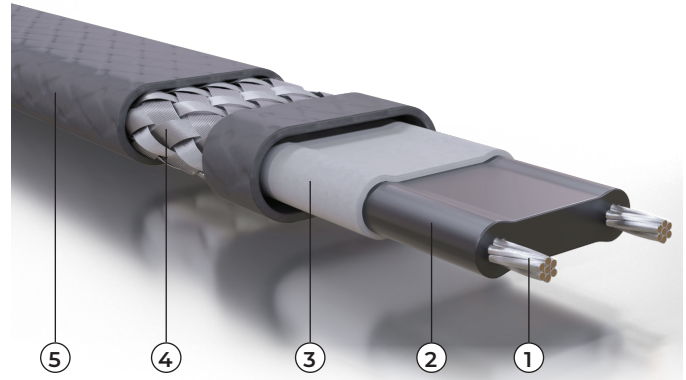
RGS may be simply pulled from the supply reel, cut to length and terminated in the field with ordinary hand tools. Easy-to-use roof and gutter accessory materials, plus Thermon circuit fabrication kits, complete an installation.

RUGGED AND RELIABLE

RGS self-regulating trace heaters are protected by a tinned copper braid for grounding plus a thick, abrasion resistant, polyolefin outer jacket containing a UV inhibitor. These components maximize protection during installation and enable years of exposure to the elements.

RGS is inspected along its entire length to verify performance. RGS trace heaters are designed and manufactured to meet the needs of the commercial construction industry.

CERTIFICATIONS/APPROVALS



CHARACTERISTICS

1. 1.3 mm² (16 AWG) Nickel-Plated Copper Bus Wire
2. E-Beam Cross-Linked Polyolefin Semiconductive Heating Matrix
3. E-Beam Cross-Linked Polyolefin Primary Dielectric Insulation
4. Tinned Copper Metallic Braid
5. Abrasion Resistant Polyolefin Outer Jacket with UV Inhibitor

RATINGS

Supply voltages 230 Vac
 Minimum bend radius 32 mm (1.25")
 Circuit protection 30 mA ground-fault protection
 Nominal power output @ 0°C (32°F)
 In snow and ice 37 W/m (12 W/ft)
 In dry air 19 W/m (6 W/ft)
 30 mA Ground-Fault Protection Required ¹

CIRCUIT BREAKER SIZING AND TYPE

Type RGS-2 Circuit Breakers						
230 Vac Service Voltage		Max. Circuit Length vs. Breaker Size B and C-Type Breakers metres				
Product Type	Start-Up Temperature °C	10A	16A	20A	25A	32A
RGS-2	-10°C	39m	63	78	98	103
RGS-2	-20°C	31m	50	62	78	93

DETERMINING REQUIRED LENGTH

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.

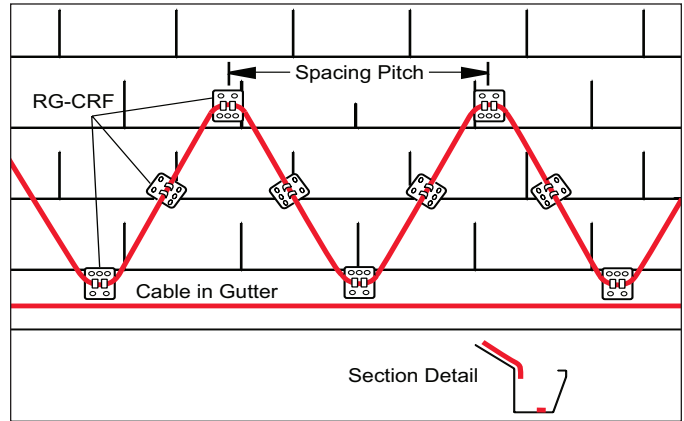


COMPONENTS

Thermon provides a full range of components for sealing and connecting these cables. Contact Thermon for full details.

INSTALLATION INSTRUCTIONS

Detailed installation instructions Form No. CPD1020 are available on request.



Typical Shingle Roof Installation

