

# SBS-R-EM Control Panel for Roof & Gutter De-Icing and Surface Snow Melting



nVent RAYCHEM SBS-R-EM control panels provide an integrated solution for the control of RAYCHEM self-regulating heating cables and constant wattage heating mats for roof & gutter de-icing and surface snow melting applications. The control panels comprise the energy efficient, multi-sensor RayStat-M2 controller. The control panels monitor the surface temperature and surface moisture and switch on the snow melting system only when required. The SBS-R-EM panels are available in 1, 3, 6 and 9 heating circuit versions, with 20A switching capability per circuit. The panels also include electrical circuit protection devices (C-type circuit breakers and RCD protection) for safety, peace of mind, and electrical regulation compliance.

## FEATURES

Integrated electrical safety and control, panel for single/multiple heating circuits from the heat tracing manufacturer

Designed specifically for RAYCHEM self-regulating heating cables and constant wattage heating mats.

Multi-sensor control system for energy efficiency optimisation

Everything in a single control panel. Simply add a power supply.

Complete warrantied solution from the manufacturer.

## SPECIFICATIONS

|                                 |                                            |
|---------------------------------|--------------------------------------------|
| <b>Phase Quantity:</b>          | 3                                          |
| <b>Protection:</b>              | Miniature- / Earth Leakage Circuit Breaker |
| <b>Mounting:</b>                | Wall Mounted                               |
| <b>Over Voltage Protection:</b> | Yes                                        |

Table 1/3

| Catalog Number | Item Name      | E-Number   | IP Rating | Group Quantity | Circuit Breaker Quantity | Circuit Breaker |
|----------------|----------------|------------|-----------|----------------|--------------------------|-----------------|
| 1244-016636    | SBS-R-EM-1X20A | 9935007137 | IP65      | 1              | 1                        | 20 A, Type C    |
| 1244-016637    | SBS-R-EM-3X20A | 9935007140 | IP65      | 1              | 3                        | 20 A, Type C    |
| 1244-021413    | SBS-R-EM-1X10A |            | IP65      | 1              | 1                        | 10 A, Type C    |
| 1244-021414    | SBS-R-EM-3X10A |            | IP65      | 1              | 3                        | 10 A, Type C    |
| 1244-021417    | SBS-R-EM-1X16A |            | IP65      | 1              | 1                        | 16 A, Type C    |
| 1244-021418    | SBS-R-EM-3X16A |            | IP65      | 1              | 3                        | 16 A, Type C    |
| 1244-016638    | SBS-R-EM-6X20A | 9935007153 | IP66      | 2              | 6                        | 20 A, Type C    |
| 1244-021415    | SBS-R-EM-6X10A |            | IP66      | 2              | 6                        | 10 A, Type C    |
| 1244-021419    | SBS-R-EM-6X16A |            | IP66      | 2              | 6                        | 16 A, Type C    |
| 1244-021416    | SBS-R-EM-9X10A |            | IP66      | 3              | 9                        | 10 A, Type C    |
| 1244-021420    | SBS-R-EM-9X16A |            | IP66      | 3              | 9                        | 16 A, Type C    |
| 1244-021421    | SBS-R-EM-9X20A |            | IP66      | 3              | 9                        | 20 A, Type C    |

Table 2/3

| Catalog Number | Item Name      | E-Number   | Main Switch Current Rating | Circuit Breaker Quantity, 30 mA | Height | Width |
|----------------|----------------|------------|----------------------------|---------------------------------|--------|-------|
| 1244-016636    | SBS-R-EM-1X20A | 9935007137 | 40                         | 1                               | 436    | 310   |

| CatalogNumber | Item Name      | E-Number   | Main Switch<br>Current Rating | Circuit Breaker<br>Quantity, 30mA | Height | Width |
|---------------|----------------|------------|-------------------------------|-----------------------------------|--------|-------|
| 1244-016637   | SBS-R-EM-3X20A | 9935007140 | 40                            | 1                                 | 586    | 310   |
| 1244-021413   | SBS-R-EM-1X10A |            | 40                            | 1                                 | 436    | 310   |
| 1244-021414   | SBS-R-EM-3X10A |            | 40                            | 1                                 | 586    | 310   |
| 1244-021417   | SBS-R-EM-1X16A |            | 40                            | 1                                 | 586    | 310   |
| 1244-021418   | SBS-R-EM-3X16A |            | 40                            | 1                                 | 436    | 310   |
| 1244-016638   | SBS-R-EM-6X20A | 9935007153 | 40                            | 2                                 | 600    | 600   |
| 1244-021415   | SBS-R-EM-6X10A |            | 40                            | 2                                 | 600    | 600   |
| 1244-021419   | SBS-R-EM-6X16A |            | 40                            | 2                                 | 600    | 600   |
| 1244-021416   | SBS-R-EM-9X10A |            | 40                            | 3                                 | 800    | 800   |
| 1244-021420   | SBS-R-EM-9X16A |            | 40                            | 3                                 | 800    | 800   |
| 1244-021421   | SBS-R-EM-9X20A |            | 40                            | 3                                 | 800    | 800   |

| Table 3/3      |                |            |       |                  |
|----------------|----------------|------------|-------|------------------|
| Catalog Number | Item Name      | E-Number   | Depth | Housing Material |
| 1244-016636    | SBS-R-EM-1X20A | 9935007137 | 148   | Plastic          |
| 1244-016637    | SBS-R-EM-3X20A | 9935007140 | 148   | Plastic          |
| 1244-021413    | SBS-R-EM-1X10A |            | 148   | Plastic          |
| 1244-021414    | SBS-R-EM-3X10A |            | 148   | Plastic          |
| 1244-021417    | SBS-R-EM-1X16A |            | 148   | Plastic          |
| 1244-021418    | SBS-R-EM-3X16A |            | 148   | Plastic          |

| Catalog Number | Item Name      | E-Number   | Depth | Housing Material |
|----------------|----------------|------------|-------|------------------|
| 1244-016638    | SBS-R-EM-6X20A | 9935007153 | 210   | Metal            |
| 1244-021415    | SBS-R-EM-6X10A |            | 210   | Metal            |
| 1244-021419    | SBS-R-EM-6X16A |            | 210   | Metal            |
| 1244-021416    | SBS-R-EM-9X10A |            | 800   | Metal            |
| 1244-021420    | SBS-R-EM-9X16A |            | 800   | Metal            |
| 1244-021421    | SBS-R-EM-9X20A |            | 800   | Metal            |

## WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at [www.nvent.com](http://www.nvent.com) and from your nVent customer service representative. Improper installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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