

SPECIFICATION GUIDELINE FROST PROTECTION FOR PIPES



MULTI-CIRCUIT CONTROL & MONITORING

- All sprinkler frost protection trace heating circuits shall be controlled and monitored via an integrated electrically protected, multi circuit control panel, nVent RAYCHEM SBS-xx-SNR, by nVent
- The panel shall provide control and monitoring functionality for a multiple circuit pipe frost protection system including the provision of all electrical and circuit protection devices. The electrical panel shall be certified and approved by the manufacturer for use with the trace heating system. The panel must provide control for redundant heating circuits in compliance with the requirements of BS EN12845, the standard for sprinkler systems. The control panel shall be available, as standard, in the following variants:

SBS-02-SNR (1 sprinkler line control and monitoring with redundant circuit)

SBS-04-SNR (2 sprinkler line control and monitoring with redundant circuit)

SBS-06-SNR (3 sprinkler line control and monitoring with redundant circuit)

SBS-08-SNR (4 sprinkler line control and monitoring with redundant circuit)

SBS-10-SNR (5 sprinkler line control and monitoring with redundant circuit)

SBS-12-SNR (6 sprinkler line control and monitoring with redundant circuit)

- The control panel shall monitor individual sprinkler pipe circuits by way of an ambient temperature sensing and line temperature sensor configuration. In the event of a heating circuit failure, the control panel shall automatically switch to the redundant circuit whilst providing an audible alarm.
- The control and monitoring panel shall have, as a minimum:
 - EN60204-1/EN60439-1 compliance, CE approved for use with heat tracing systems
 - Redundant circuit switching capabilities to allow compliance with BS EN 12845
 - RAL7035 (Light Grey) Coated Metal Housing – IP54 rated

- Audible alarm, activated when: Loss of power to the panel.
 - Low voltage at panel
 - Loss of an electrical phase (from the 3 phase supply.)
 - Redundant circuit has been activated
 - RCD or circuit breaker failure mode detected
- Manual over-ride switch to allow system override or testing
 - Main heating circuit on
 - Redundant circuit on (main heating circuit off.)
 - Automatic mode (controlled via sensor inputs.)
- Digital display of ambient temperature and sprinkler line temperature per circuit
- A system reset button and an audible alarm reset button
- Lights to indicate when circuits are on (green) and when redundant circuit has been powered (yellow)
- All electrical connections between the electrical supply, control panel, and the heating circuits shall be installed by an approved electrical contractor.

IN ENGINEERING NOTES COLUMN

- All sprinkler frost protection heat tracing circuits shall be controlled and monitored via a multi-circuit control panel, SBS-xx-SNR, by nVent, with integrated circuit protection, MCB's (BS EN 60898 type C/D) and RCD (30 mA sensitivity, tripping within 100 ms).
- The panel must provide control for redundant heating circuits, compliant with BS EN12845 requirements.
- The control panel shall be EN60204-1/EN60439-1 compliant, CE approved for use with heat tracing systems.
- The panel shall include, for ambient sensing, an integrated proportional ambient sensing controller (PASC), or for line sensing, a line sensing controller with a minimum of 1 sensor per 3 heating circuits.

United Kingdom

Tel 0800 969 013
Fax 0800 968 624
salesthermalUK@nvent.com

Ireland

Tel 1800 654 241
Fax 1800 654 240
salesIE@nvent.com



[nVent.com](https://www.nvent.com)

Our powerful portfolio of brands:

CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER