

Panels for pipe freeze protection and temperature maintenance

DESCRIPTION



The nVent RAYCHEM SBS control panel range provides a complete solution for nVent RAYCHEM self-regulating heating cables for pipe freeze protection and temperature maintenance. It offers control with a pipe line sensor and / or a PASC (Proportional Ambient Sensing Control) option.

The models in this series control up to 12 heating circuits. To ensure safe operation, the control panel is equipped with circuit breakers (C-type) and residual current protection for safe operation. The installed Elexant 450c control unit can operate 2 zones with different parameters independently of one another. The controller SBS-MONT-ELEXANT-450c needs to be ordered separately.

The control panel is pre-wired and only needs to be connected to a main power supply (400/230V, 3P/N/PE).

ADVANTAGES

- Fast connection of multiple heating circuits directly to the control panel
- No additional connections or junction boxes required
- Connection of 3–12 heating circuits to a single control panel
- Circuit over-current and RCD protection integrated directly into the control panel
- No separate safety devices required
- Complete system directly from the manufacturer
- The system and components have been selected for optimal use as a pipe freeze protection and temperature maintenance systems.
- Collective error / alarm

TECHNICAL DATA

Control setting	Each controller can control up to 2 separate groups of 3 circuits with independent parameters and control mode (second sensor sold separately). <ul style="list-style-type: none"> • SBS-FP-MONT-ELEXANT-450c electronic control with max. 2 sensors making 2 zone control possible; <ul style="list-style-type: none"> – Ambient temperature-dependent control in the PASC process and / or – Control with pipe line sensor
Voltage Operation panel	400/230V 3P/N/PE
Voltage Heating circuit	230 V AC, 50/60 Hz
Sensor	NTC-Type is used as ambient temperature sensor (PASC) and/or pipe line sensor
Approvals	CE (approval according to IEC 61439)
Main switch	According to selected model (32–100 A)
RCD	30 mA
Circuit breaker	16A, C-type, per heating circuit
Alarm feature	1 potential free alarm contact in panel; 1 alarm light in the door
Operation mode switch	Auto/Manual Auto = Control in function (Standard mode) Manual = all heating circuits switched on (uncontrolled operation)

RELATED PRODUCTS

The control panel SBS-FP-xx-16A can be operated with the following freeze protection heating cables from nVent RAYCHEM:

10XL-ZH – 204 meter per heating circuit

15XL-ZH – 153 meter per heating circuit

26XL-ZH – 116 meter per heating circuit

31XL-ZH – 91 meter per heating circuit

FS-C10-2X – 150 meter per heating circuit

(Startup temperature of +5°C minimum. For heating circuits with longer lengths or lower startup temperatures, please contact nVent)

INSTALLATION

The product is supplied with complete circuit and connection diagrams. A qualified electrician must carry out all work on electrical systems in compliance with the applicable regulations and standards.

TECHNICAL DATA

Color	Textured paint, RAL 7035, light-grey
Enclosure	Sheet steel wall-mounted enclosure; IP65 (For indoor installation)
Installation location	Exposure temperatures +10°C to +35°C
Power supply	3-phase 400V/230V, 50 Hz with N and PE
Heating cable	3 Terminals for max. 10 mm ²

Panel type			SBS-FP-3x16A	SBS-FP-6x16A	SBS-FP-9x16A	SBS-FP-12x16A	
Max. quantity of heating circuits			3	6	9	12	
Max. quantity of controller Elexant 450c			1	1	2	2	
Max. power output			kW	11	22	33	44
Circuit breaker on-site			max. A	3 x 25A	3 x 32A	3 x 63A	3 x 80A
Enclosure mounting			Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	
Dimension	Width	mm	400	600	800	800	
	Height	mm	600	600	800	800	
	Depth	mm	210	210	210	210	
Weight	Approx..	kg	20	32	54	56	

REFERENCE DATA

Product name	Item number	Product description
SBS-FP-3x16A	1244-022467	Control panel for max. 3 heating circuits (Note: Without controller – Controller SBS-FP-MONT-ELEXANT-450c must be ordered separately)
SBS-FP-6x16A	1244-022468	Control panel for max. 6 heating circuits (Note: Without controller – Controller SBS-FP-MONT-ELEXANT-450c must be ordered separately)
SBS-FP-9x16A	1244-022469	Control panel for max. 9 heating circuits (Note: Without controller – Controller(s) SBS-FP-MONT-ELEXANT-450c must be ordered separately)
SBS-FP-12x16A	1244-022470	Control panel for max. 12 heating circuits (Note: Without controller – Controller(s) SBS-FP-MONT-ELEXANT-450c must be ordered separately)
SBS-FP-MONT-ELEXANT-450c	1244-022471	Electronic controller Elexant 450c, with installation in the control panel; can operate 2-heating zones independently (Controller(s) must be ordered separately)
SENSOR-NTC-10M	1244-015847	Additional sensor for 2nd heating zone (to be ordered separately)

Note: customized panels can be ordered, please contact nVent.

Europe, Middle East, Africa

Tel +32.16.213.502
Fax +32.16.213.604
thermal.info@nVent.com

Asia Pacific

Tel +86.21.2412.1688
Fax +86.21.5426.3167
cn.thermal.info@nVent.com



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER