

Control panels for hot water temperature maintenance systems

PRODUCT DESCRIPTION



The Raychem SBS-HWAT control panel for hot water temperature maintenance systems provides an integrated solution for the control of Raychem self-regulating HWAT heating cables.

The control panel comprises the energy efficient Elexant 550c-Modbus controller with standard, economy, and "Tap time" set-back functions. The controller also includes monitoring of the boiler output temperature and low temperature alarm in the event of low boiler output temperature. The Elexant 550c-Modbus is also allowing flexible Modbus connectivity for remote monitoring, configuration, and ease of integration in a Building Management System (BMS).

The SBS-HWAT panels are available in 3, 6 and 9 circuit switching versions. The panel also includes electrical circuit protection devices (C-type circuit breakers and RCD protection) for safety, peace of mind, and electrical regulation compliance.

ADVANTAGES

- Integrated electrical safety and control device for single/multiple heating circuits from the heat tracing manufacturer
- Alarm function for system monitoring
- Controller with large touch screen for easy programming and start-up
- Boiler monitoring sensor for low temperature alarm
- Complete system directly from the manufacturer
- Collective error/alarm
- The panel is equipped with a RS485 port for Modbus
- Communication to a BMS system which can be used for configuration, monitoring and alarm purposes

TECHNICAL DATA

Control setting	Each Elexant 550c-Modbus controller can control up to 2 separate groups of 3 circuits with independent parameters and control mode.
Set temp.	Customer specific at first set-up (Quick and easy menu driven set-up)
Sensor	Boiler output temperature sensor (Line sensor) NTC type

COMMUNICATION (ELEXANT 550C-MODBUS)

Communication port	RS-485
Type	2-wire RS-485
Cable	One shielded twisted pair (not included)
Length	1,200 m (4,000 ft.) maximum
Quantity	Up to 247 devices per port
Data rate	2400, 4800, 9600, 19200 baud
Parity	None, even, odd
Stop bits	1, 2
Protocol	Modbus RTU

RELATED PRODUCTS

The SBS-HWAT control panel is compatible with the Raychem hot water temperature maintenance cables:

- HWAT-L
- HWAT-M
- HWAT-R

The recommended connection components are Raychem RayClic fast connection devices.

PANEL TECHNICAL DATA

Control	Raychem Elexant 550c-Modbus controller
Panel colour	Light grey
Protection class	IP65
Installation location	Indoor
Ambient temperatures	+10°C to +35°C
Cable apertures	Metal panel with metric apertures to cut out
Power supply	230Vac, 50Hz or 400V/230Vac, 50Hz, 3L/N/PE (depending on panel selected)
Panel material	Metal enclosure
Panel approval	CE (Approved to IEC 61439-1)
Main switch	40A
RCD	30mA
Line circuit breakers	13, 16, 20A (Type C) per heating circuit
Approvals	CE marked, UKCA marked

DETAILED PANEL DATA

	SBS-HWAT-E550C-3X16A	SBS-HWAT-E550C-3X20A	SBS-HWAT-E550C-6x13A	SBS-HWAT-E550C-6X16A	SBS-HWAT-E550C-6X20A	SBS-HWAT-E550C-9X16A	SBS-HWAT-E550C-9X20A
Max. quantity of heating circuits	3	3	6	6	6	9	9
Quantity of contactors	2	2	2	2	2	3	3
Max. quantity of Elexant 550c-Modbus controllers	1	1	1	1	1	2	2
Max. power output kW	28	28	43	43	43	75	75
Circuit breaker on-site max. A	3 pole x 40A	3 pole x 40A	3 pole x 80A	3 pole x 80A	3 pole x 80A	3 pole x 100A	3 pole x 100A
Enclosure mounting	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted	Wall-mounted
Width (mm)	400	400	600	600	600	800	800
Height (mm)	600	600	600	600	600	800	800
Depth (mm)	210	210	210	210	210	210	210
Weight (kg)	32	32	38	38	38	45	45

REFERENCE DATA

Product name	Item	EAN Code	Comments
SBS-HWAT-E550C-3X16A	2000005054	5414506026054	Control panel for max. 3 heating circuits, 16 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-HWAT-E550C-3X20A	2000005055	5414506026061	Control panel for max. 3 heating circuits, 20 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-HWAT-E550C-6x13A	2000005056	5414506026078	Control panel for max. 6 heating circuits, 13 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-HWAT-E550C-6X16A	2000005057	5414506026085	Control panel for max. 6 heating circuits, 16 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-HWAT-E550C-6X20A	2000005058	5414506026092	Control panel for max. 6 heating circuits, 20 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-HWAT-E550C-9X16A	2000005059	5414506026108	Control panel for max. 9 heating circuits, 16 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-HWAT-E550C-9X20A	2000005060	5414506026115	Control panel for max. 9 heating circuits, 20 A (including 1 controller Elexant 550c-Modbus with Modbus connectivity)
SBS-MONT-ELEXANT-550C	2000004521	5414506025231	Optional additional electronic controller Elexant 550c-Modbus for SBS-HWAT-E550c-9XXXXA, with installation in the control panel; can operate 2-heating zones independently (this item must be ordered separately)
SENSOR-NTC-10M	1244-015847	5414506015119	Additional sensor without enclosure, 10 m, NTC type

MOST COMMON POSSIBLE ADDITIONAL OPTIONS

- Installation outdoors
- Installation of a heater
- Rain sheet cover
- Lightning protection

INSTALLATION INSTRUCTIONS

Complete panel wiring information and schematics are provided with the product. All electrical installations must be carried out by an approved electrician in compliance with local electrical requirements and norms.

UK/Ireland

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