

FROST GUARD JVA 24

APPLICATION:

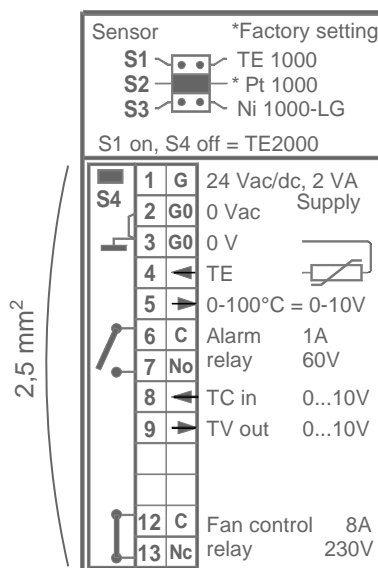
JVA 24 is a safety device of the air handling unit protecting water radiators against freezing. JVA 24 is assembled on the 35 mm DIN-rail. Plug connectors make service and commissioning easy. The sensor of PTC1000/2000 ohm, Pt1000 or Ni1000-LG may be selected at the commissioning by coding connectors S1...S3 on the circuit card behind the front plate.

FUNCTION:

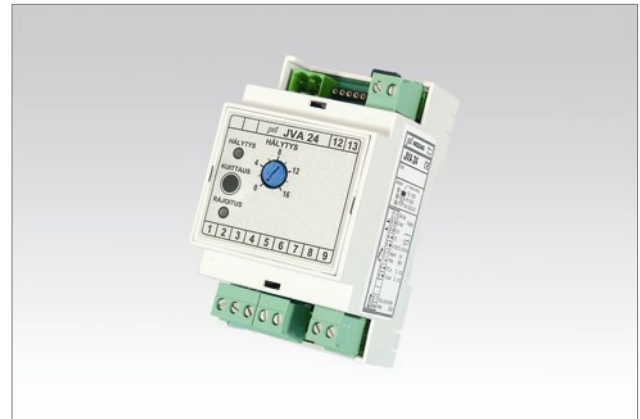
JVA 24 is monitoring and, if necessary, controlling temperature of return water from the radiator. The TEV- sensor is detecting temperature and JVA 24 is transmitting the signal to the control system. When temperature is approaching the alarm set point within the range of restriction (= set point + 3 °C), the frost guard starts adjusting the signal of the control system to the actuator (green light). When temperature is dropping below alarm set point JVA 24 is stopping the unit and triggering alarm (red light). Alarm is reset by the Reset-button or by breaking the supply.

ATTENTION! Measured > 130 °C temperature or faulty sensor circuit (cut or short circuit) is triggering alarm and JVA 24 is opening the actuator (control valve) completely. The break of supply voltage of JVA 24 is stopping the air handling unit and triggering alarm.

WIRING:



IMPORTANT: The device must be installed inside a suitable housing that cannot be opened without using tools.



Technical data:

Supply	24 Vac/dc, 2 VA
Connectors, plugs	2.5 mm ²
Control relay, NC contact	8 A / 230 Vac
Alarm relay, NO contact	1 A / 60 V
Sensor type	selectable, factory setting Pt1000
Alarm setting	0...+16°C
Start point of adjusting (fixed)	3 °C > alarm
P-band (fixed)	2 °C
Return water temperature output	0...100 °C = 0...10 V
Master controller signal (TC in)	0...10 Vdc
Actuator signal (TV out)	0...10 Vdc
Faulty sensor alarm	>130 °C temperature or cut / short sensor circuit
Housing	IP 20
Dimensions (w x h x d)	53 x 90 x 59 mm

Ordering guide:

Model	Product number	Description
JVA 24	1110110	frost guard; fixed P-band, sensor type selectable (1000/2000, Pt1000, Ni1000-LG)
TEV Pt1000	1174020	Pt1000 sensor
TEV Ni1000-LG	1178020	Ni1000-LG sensor