

## ADJUSTING FROST GUARD THERMOSTAT EJV 24

EJV 24 is a safety device for water radiators in ventilating units for protecting radiators against freezing.

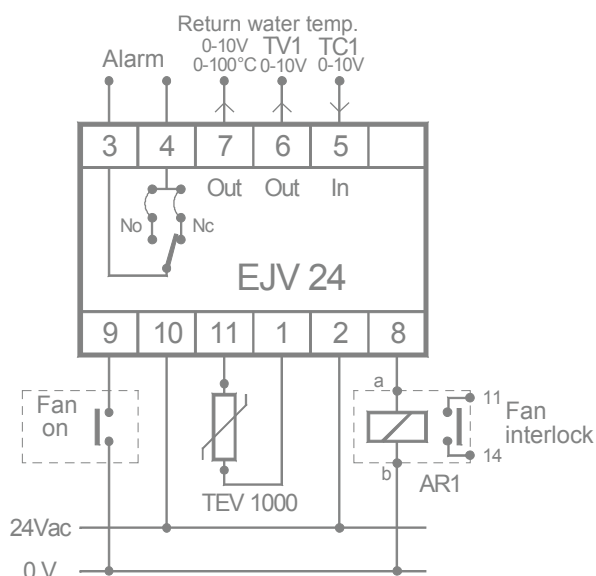
When the ventilating unit is ON, EJV 24 monitors and, if necessary, controls the radiator return water temperature. TEV PT 1000 sensor detects the temperature and EJV 24 transmits the signal to the control system. When the temperature approaches the alarm set point within the range of restriction, the frost guard adjusts the signal from control system to the actuator (green light). When the temperature drops below the alarm set point, EJV 24 stops the ventilating unit and triggers an alarm (red light). Alarm is reset by the reset button or by breaking supply voltage from the EJV 24.

When the ventilating unit is OFF, EJV 24 controls the return water temperature to meet the Off-time temperature set point.

**NOTE:** A sensor fault triggers an alarm and EJV 24 opens the actuator (control valve) completely. The break of EJV 24 supply voltage stops the ventilating unit, but the alarm is not triggered.

**NOTE:** For connection of 230 Vac control output, the auxiliary relay AR 1 or other compatible relay must be used.

### Wiring:



### Technical data:

Supply	24 Vac, 2 VA
Control relay contact	6 A / <50 Vac
Alarm relay	1 A / 24 Vdc
Temperature sensor	1000 or 2000 $\Omega$ / 25 $^{\circ}\text{C}$
Return water temperature measurement	0...100 $^{\circ}\text{C}$ = 0...10 V, 10 mA
Control signal from controller (TC1)	0(2)...10 Vdc, 0,5 mA
Actuator signal (TV1)	0(2)...10 Vdc, 10 mA
Alarm set point	0...20 $^{\circ}\text{C}$
P-band of restricted signal	1...8 $^{\circ}\text{C}$
Off time temp. set point	0...50 $^{\circ}\text{C}$
Start point temp. of restriction	3...16 $^{\circ}\text{C}$ before alarm
Housing	11-pole relay housing, IP20
Dimensions (w x h x d)	35 x 79 x 95 mm

### Ordering guide:

Model	Product number	Description
EJV 24	1110020	adjusting frost guard for thermistor sensor (1000 $\Omega$ / 25 $^{\circ}\text{C}$ )
AR 1	1183010	relay; delivered with EJV 24

Products fulfill the requirements of directives 2006/95/EC and 2004/108/EC and are in accordance with the standards EN60730-1, EN61000-6-3 (Emission) and EN61000-6-2 (Immunity).