Alarm
EBST-5

HVAC CONTROLS AND POWER

Fire and High-temperature Alarm

EBST is a series of fire and high-temperature alarms for protection against high temperatures caused by fire or the over-heating of electric heating coils.

EBST is a safe and reliable alarm system for both large and small heating and ventilation systems.

EBST has been successfully used in many large industrial installations. It is used to monitor electric heating coils in ventilation systems. It is also used for fire protection purposes in installations that are not protected by a central system or in which a decentralised redundant system is required, e.g. large centrally-monitored server rooms.

EBST is designed to provide our customers with an advantageous combination of high quality, reliability and low life-cycle costs.

EBST FUNCTIONS

Independent Sensor Location
As EBST is designed for use with an external temperature sensor, the sensor can be positioned independently of the thermostat. Various sensor types may be used, depending on whether temperature is to be monitored inside a ventilation duct, on the outside of a pipe or on a flat surface.

Double Relay Output
EBST has two relay outputs, one make contact and one change-over contact, allowing several actions to be initiated in case of an alarm without a need for individual components to be electrically connected. For example, in case of fire, a damper can be closed simultaneously with the fan being stopped. If fumes are to be extracted, a separate fume extractor can be activated.

Local and External Reset
Alarms can be cancelled by pressing the reset button on the front of the unit or by means of an external switch. EBST can thus be automatically reset by a CTS system when the temperature has fallen below the alarm level. This allows the entire system to be centrally controlled, without the need for service technicians to be called to reset the alarm.
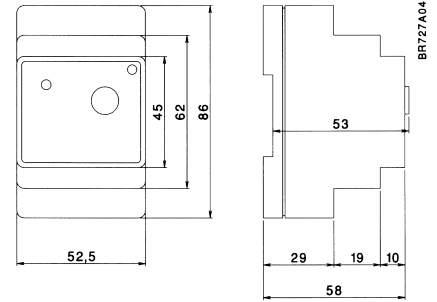
Adjustable Alarm Level
The alarm level can be adjusted between 40 and 80 °C. The level can thus be adjusted to suit specific applications and measuring points.

OJ ELECTRONICS
taking comfort further
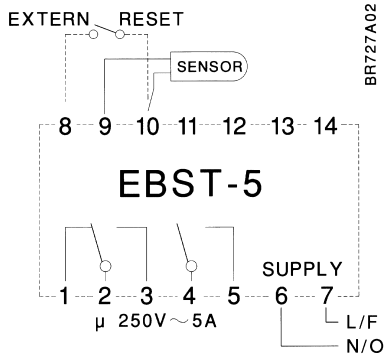
Wiring
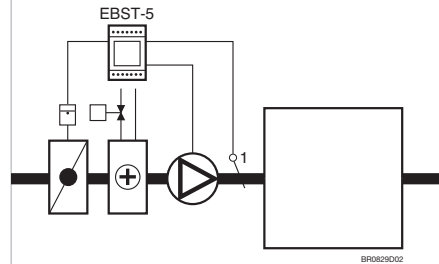
Application example

Dimensions

EBST FUNCTIONS

Sensor Monitoring
The alarm is activated in case of sensor failure.

Low Life-cycle Costs
The alarm is activated in case of sensor failure.
Alarms in the EBST series are extremely robust and require no regular maintenance. As long as the sensor is not disconnected, the unit will provide trouble-free operation for many years. Where critical installations are concerned, the EBST alarm can be tested by blowing hot air onto the sensor when servicing the installation.

TECHNICAL DATA

SUPPLY VOLTAGE	SENSOR INPUT	ALARM RANGE
230 V AC ±10 % 50/60 Hz	NTC	+40 to 80 °C

RELAY OUTPUTS	AMBIENT TEMPERATURE	POWER CONSUMPTION
1 SPCO 1 SPST NO	-10 to +50 °C	3 VA

ENCLOSURE	DIMENSIONS (W/D/H)	WEIGHT
IP20	52.5 x 58 x 86 mm	215 g

CE MARKING
EBST meets the requirements contained in the following standards:

EMC DIRECTIVE	LOW VOLTAGE DIRECTIVE
EN 61000-6-2 EN 61000-6-3	EN 60730-2-9

INSTALLATION

Controller Installation
Alarms in the EBST series are designed to be mounted on a DIN rail inside an enclosure with a suitable rating.

Cable Connection
The control signal cable from an external controller may be up to 50 m in length. The sensor cable must be kept separate from mains-carrying cables as voltages may be produced that can interfere with alarm function.

The control signal cable need not be screened, but the use of screened cable increases EBST resistance to interference, which is particularly important in industrial installations. The screen must be connected to an earthed metal backplate or direct to an earth terminal using a bracket.

PRODUCT PROGRAM

TYPE	PRODUCT
EBST-5-1221	Fire and high-temperature alarm 230 V AC, +40 to 80 °C, 10 A relay.

ALARM ACCESSORIES

TYPE	PRODUCT
ETF-x22	Temperature sensor, -40 to 120 °C, NTC[1]

[1]
For further information on sensor types and code numbers, see sensor catalogue or www.ojelectronics.com.