Application

The BAE72-S Thermoelectric tripping device operates in conjunction with a spring-return actuator to drive a motorized fire damper to its “safe” position in the event of the preset maximum temperature being exceeded.

The device is normally connected to the BKN230-24… communications and power unit. In systems with no such unit, the BAE72-S device is connected in series with the power supply of the spring-return actuator (use only 24 V actuators).

Mode of operation

The BAE72-S tripping device employs two thermal trips Tf1 and Tf2.

Thermal trip Tf1 operates if the ambient temperature exceeds 72 °C. Replaceable thermal trip Tf2 operates if the temperature inside the duct exceeds 72 °C. Both trips cause the power supply to be interrupted permanently so that it cannot be uncancelled. If the power supply is interrupted, the energy stored in the spring moves the damper back to its safe position.

Local function check

This version of the BAE tripping device incorporates a test button for performing a local function check on the safety damper.

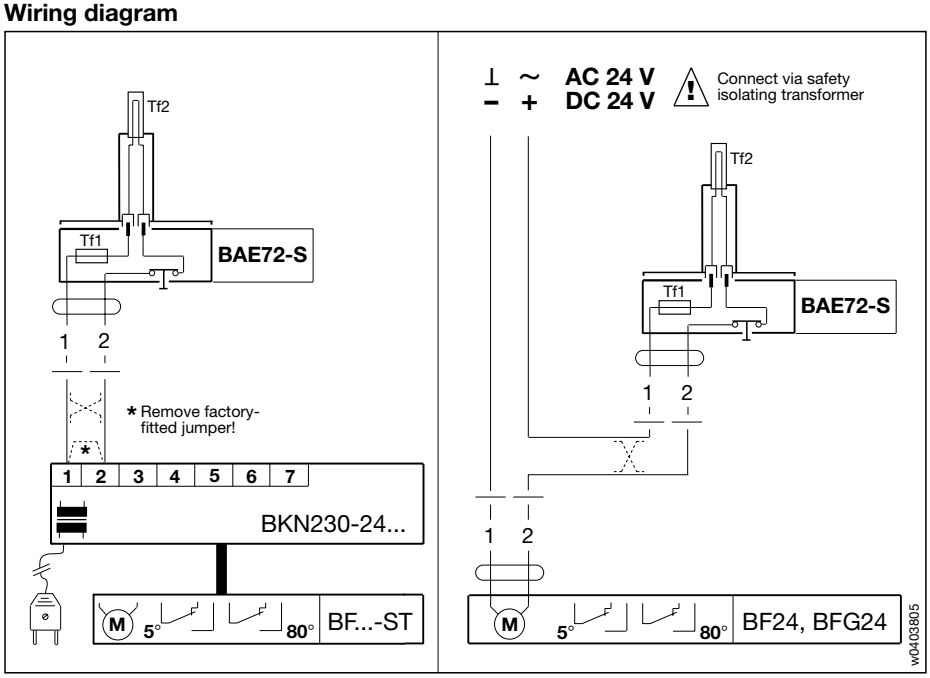
The operating of the thermal trips Tf1 or Tf2 can be simulated like this.

Note: In an installation incorporating a BKN230-24… unit, the BAE test is followed by an automatic check routine performed by BKS24-… device which then initiates a fault alarm.

Installation

The Thermoelectric tripping device must be mounted on the duct or on the side of the damper by means of the prefixed self-tapping screws in such a manner that there is an unobstructed flow of air to thermal trip from the appropriate source.

Wiring diagram



Technical data	BAE72-S	
Rated voltage	AC/DC 24 V	
Rated current	max. 3 A	
Through resistance	< 1Ω	
Connection	cable 1.2 m long, 2 × 0.5 mm², BETAflam 145 (interchangeable wires)	
Operating temperature thermal trips	Tf1: duct outside temperature 72 °C Tf2: duct inside temperature 72 °C (replaceable)	
Testing	– VdS	Verband der Sachversicherer, D-Köln, to DIN 4102, Part 06
	– CNPP	Centre National de Prévention et Protection, F-Vernon, to NF S61-937
Protection class	⧫ (safety extra-low voltage)	
Degree of protection	IP 54	
Ambient temperature range Non-operating temperature Humidity test	–30… +50 °C –40… +50 °C to EN 60335-1	
EMC	CE according to 89/336/EEC, 92/31/EEC, 93/68/EEC	
Maintenance	maintenance-free	
Weight	85 g	

Spare parts

	(Order-N°)
Thermal trip Tf2	(ZBAE72)
Thermal trip Tf2/95 °C	(ZBAE95)

Dimensions / Drilling template