DT673

Series 670 Intrinsically Safe Heat Detector, Grade A2S

General

The DT673 is a fixed temperture, intrinsically safe heat detector with an operating temperature rating at Grade A2 (up to 50°C) and forms part of the 670 series of intrinsically safe conventional detector line.

Heat detectors are normally used in applications where smoke detectors are unsuitable or if there is a danger of nuisance alarms from smoke detectors.

Heat Detector Classification

Heat detectors are classified according to the highest ambient temperature in which they can safely be used without risk of false alarm. The classes are identified by the letters A to G. (Class A is subdivided into A1 and A2.) In addition to the basic classification, detectors may be identified by a suffix to show that they are rate-of-rise (suffix R) or fixed temperature (suffix S) types.

Detector Class	Max. Application Temperture	Static Responce Temperture
A1	50°C	54- 65°C
A2	50°C	54- 70°C
B	65°C	69- 85°C
C	80°C	84-100°C
D	95°C	99-115°C
E	110°C	114-130°C
F	125°C	129-145°C
G	140°C	144-160°C

All heat detectors in the 630/670 range are tested as static or rate-of-rise detectors and are classified as A1R, A1S, A2S, BR, BS, CR and CS.

Classification

II 1G Ex ia IIC –40°C < Ta < +40°C (T5)
　　　　　　　　–40°C < Ta < +60°C (T4)

BASEEFA Certificate number

ATEX—Baseefa 06 ATEX 0007X
IECEx—IECEx BAS 06.0002X

Details

- Elegant slim-line design
- EN54 and BASEEFA approved
- Installer friendly design

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Technical specifications

Electrical

Supply wiring	2 wires, polarity sensitive
Supply voltage	14-28 VDC
Minimum 'detector active' voltage	12 VDC
Minimum voltage to light alarm LED	6 VDC
Minimum holding voltage	5 VDC
Alarm reset voltage	< 1 VDC
Switch-on surge current	105 µA @ 24 VDC
Average quiescent current	80µA @ 24 VDC
Alarm load	325 Ohm in series with a 1.0 V drop
Remote output LED (-) characteristic	4.7 kOhm connected to negative supply
Power-up time	< 20 s
Alarm reset time	1 s

Environmental

Operating and storage temperature*	-40°C to +70°C (no condensation or icing)
Humidity	0% to 98% RH (no condensation)
Wind speed	Unaffected
Atmospheric pressure	Insensitive
IP rating	23D

Operation

Sampling frequency	Once every 2 s

Mechanical

Material	Moulded white polycarbonate.
Alarm Indicator	Integral indicator, 360° visibility
Dimensions (dia x h)	100 mm x 42 mm
Weight	70 g