



DP672

Series 670 Intrinsically Safe Optical Smoke Detector

General

The DP672 is an intrinsically safe, optical smoke detector and forms part of the 670 series of intrinsically safe conventional detector line.

The DP672 is regarded as particularly suitable for smouldering fires and escape routes as its performance is good in black as well as in white smoke. The device is designed to reduce the incidence of false alarms through over-sensitivity to transient phenomena significantly, and are therefore recommended for use as general purpose smoke detectors for early warning of fire in most areas.

Classification

II 1G Ex ia IIC $-40^{\circ}\text{C} < T_a < +40^{\circ}\text{C}$ (T5)
 $-40^{\circ}\text{C} < T_a < +60^{\circ}\text{C}$ (T4)

BASEEFA Certificate number

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



Standard Features

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

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Specifications

| Operation | |
|--------------------------------------|---|
| Sampling frequency | Once every 4 s |
| 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 microA @ 24 VDC |
| Average quiescent current | 85microA @ 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 |
| Mechanical | |
| Material | Moulded white polycarbonate. |
| Alarm Indicator | Integral indicator, 360° visibility |
| Dimensions (dia x h) | 100 mm x 42 mm |
| Weight | 75 g |
| 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 |

* Restrictions apply depending on operation class

Ordering Information

| Part No. | Description |
|----------|--|
| DP672 | Series 670 Intrinsically Safe Optical Smoke Detector |
| DB670 | Series 670 Intrinsically Safe TimeSaver Base |
| AI671 | Mini disc remote indicator |

