



Comply to
UL 268
Edition 8
and
UL 521

NB380-SH (UL)

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Smoke/Heat Detector

NB380-SH conventional photoelectric smoke/heat detectors are state-of-the-art detectors suitable for connection to conventional fire detection control and indicating equipment, or to addressable fire detection control and indicating equipment that can accept conventional type detectors. Advanced electronics combine a photoelectric smoke sensing chamber and an electronic thermistor to provide early detection of fire and high immunity against unwanted alarms.

The **NB380** range of conventional detectors provide fire detection and alarm system designers with a Standards compliant, economical fire detector for life safety and property protection applications.

Key Features

- Dual photoelectric smoke and heat sensors to detect either smoke, heat or a combination of the phenomena
- Advanced algorithms provide excellent detection discrimination
- Automatic drift compensation for long-term stability
- Ideal for both fast-flaming and smouldering fires
- Cooking nuisance immunity. High immunity against unwanted alarms
- Stable smoke sensing chamber equipped with two IR transmitter
- Wide operation voltage range to accommodate DC12V and DC24V supply
- Easy installation. No programming required
- Low maintenance
- Sleek low-profile housing design
- Dual LEDs for 360° visibility
- 2-wire and 4-wire models for DC 12 V and DC 24 V operation
- 4-wire models include a N/C or N/O alarm relay output
- 4-wire models available with auto-reset function
- Base options include
 - Low profile 100 mm diameter base new version
 - Low profile 100 mm diameter base with remote LED Connection
 - Low profile 100 mm diameter base 4 wire
- Connect to zone monitor for use with addressable control and indicating equipment

| TECHNICAL SPECIFICATIONS | NB380-SH2-UL NB380-SH2L-UL | NB380-SH4R-UL |
|---------------------------------|---|--|
| OPERATING VOLTAGE | DC (9 / 33) V | DC (10 / 28) V |
| START-UP CURRENT | ≤ 350 µA | |
| START-UP TIME | ≤ 8 s | |
| STANDBY CURRENT | ≤ 50 µA | |
| ALARM CURRENT (MAX) | 19 mA ^a @ 9 V 24 mA ^b @ 9 V 77 mA ^a @ 28 V 102 mA ^b @ 28 V | 12 mA @ 10 V 48 mA @ 28 V 40 mA @ 24 V |
| ^a without remote LED | 64 mA ^a @ 24 V 85 mA ^b @ 24V | |
| ^b with remote LED | | |

NB380-SH (UL)

Smoke/Heat Detector

| TECHNICAL SPECIFICATIONS | NB380-SH2-UL | NB380-SH2L-UL | NB380-SH4R-UL |
|----------------------------------|---------------------------------|---------------------------|--|
| | MAXIMUM PERMITTED CURRENT | 100 mA without remote LED | |
| SAMPLING TIME | 8 s | | |
| RESET VOLTAGE | ≤ 2.1 V | | |
| RESET TIME | ≤ 3 s | | |
| ALARM RESPONSE THRESHOLD (SMOKE) | 1.0 – 4.0 %/ft | | 1.0 – 4.0 %/ft |
| ALARM RESPONSE THRESHOLD (HEAT) | Ordinary - Group A - 138°F/59°C | | |
| ALARM RELAY (MAX) | | | SPST. N/O or N/C. 2.0 A @ DC 30 V / 0.5 A @ AC 125 V |
| OPERATING TEMPERATURE | -10 °C ~ +50 °C | | |
| OPERATING HUMIDITY | 0 % ~ 95 % RH, non-condensing | | |
| STORAGE TEMPERATURE | -25 °C ~ +80 °C | | |
| STORAGE HUMIDITY | 0 % ~ 98 % RH, non-condensing | | |
| ALARM INDICATOR | Two red LEDs | | |
| DIMENSIONS (EXCLUDING CONTACTS) | Ø 100 mm × 48 mm | | |

| ORDER CODE | 2-Wire | 4-Wire | Normal Operating Voltage | Remote LED Output | Alarm Relay Output |
|---------------|--------|--------|--------------------------|-------------------|--------------------|
| NB380-SH2-UL | ✓ | | 9-33V DC | | |
| NB380-SH2L-UL | ✓ | | 9-33V DC | ✓ | |
| NB380-SH4R-UL | | ✓ | 10-28V DC | | ✓ |