

July 2022

MastMinder Smoke Detector installation



NQ12

Resettable Type Smoke Detector

Characteristics

- Used widely in fire alarm systems or security systems.
- High accuracy IR diode sensor to detect the ambient smoke level more effectively.
- Several power regulators on PCB to stabilize the operation of detectors.
- New design on minified chamber makes so easy for maintenance.

Multi-purpose Resettable Type

This unit has designed for relay output feature with optional individual power source and it has been used widely in the current market. This resettable detector is not only use as a fire alarm system but will also supervise input power via an optional relay output for power breakdown or wire break. Fault relay contact will open when power breakdown occur and fire alarm signal will transmitted to connected system or computer terminal when detector is activated. When the alarm signal is absent the detector will automatically return to standby status. Optional built-in buzzer can sound a warning at the first sign of fire. This detector is currently used quite often in security systems and is also promoted for use in communications, banking, shipping or the art business.

Effective alert area

Building Height	Area Covered
Under 4M	150 M ²
4 ~ 20M	75 M ²

Approval

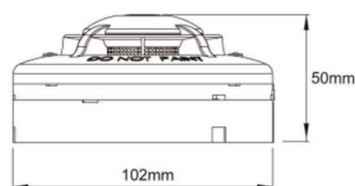


Specifications

Model	NQ12S	NQ12BS	NQ12BPS
Voltage Range	12V DC		
Standby Current	20uA (pulsing current under 450 uA)		15mA
Alarm Current @12V DC	15mA	20mA	30mA
Sensitivity Setting	Comply to UL 268		
Sound	85dB/3M		
Ambient Temperature	-10°C ~ +55°C		
Material	Fire-proof plastic		
Dimensions	102mm(Dia.) x 50mm(H)		
Color	White		
Weight	135g	140g	155g

Order information

NQ12S	+ Relay Output
NQ12BS	+ Buzzer + Relay Output
NQ12BPS	+ Buzzer + Power off & Wire Disconnection Warning + Relay Output



Wiring Diagram

NQ12S / NQ12BS

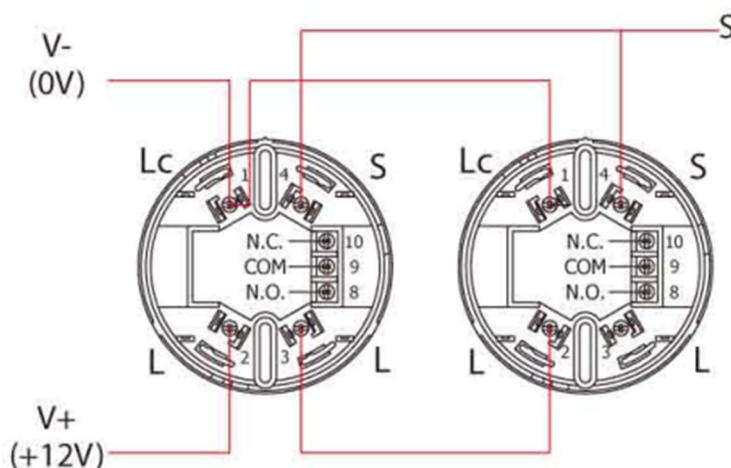
Relay output :

Contact Ratings

0.8A@30VDC

0.4A@125VAC

(Refer to Security System Application)



Connections as above.

Term 2 - +ve 12 volt DC supply directly from the F400E/G unit

Term 1 - -ve (ground) directly from the F400E/G unit

Term 9 – Common contact on relay

Term 10 – Normally Closed contact on relay (opens on alarm)

Connection to F400E/G unit.

Term 2 - +ve 12 volt – connect to term 23 or 33 whichever is more convenient

Term 1 - -ve ground – connect to term 1, 12, 20, 21 or 31 whichever is more convenient

Term 9 - ground – connect to term 1, 12, 20, 21 or 31 whichever is more convenient

Term 10 – will be connected to any free digital input terminal in the range 4 to 11 inclusive

Note that one or more sensors may be connected in series as per above, with the alarm wires also in series, so that any sensor may break the circuit to activate the alarm.

The F400E/G unit then needs to be configured accordingly to accommodate the new alarm.

