

GENERAL DESCRIPTION

SNC-300 series detector is designed to provide open area protection and to be used with compatible almost fire control panels. Two LEDs on each detector provide local 360° visible alarm indication. They flash about every three seconds indicating that power is applied and the detector is working properly. The LEDs latch on in alarm. LEDs will be off when a trouble condition exists indicating that the detector sensitivity is outside the listed limit. The alarm can be reset only by a momentary power interruption.



TYPICAL WIRING DIAGRAM

Figure 1. shows the typical wiring diagram of 2-wire multiple-station smoke detector system.

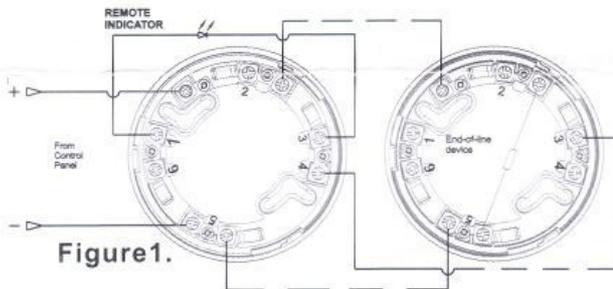


Figure 1.

Figure 2. shows the typical wiring diagram of 4-wire (internal relay) multiple-station smoke detector system.

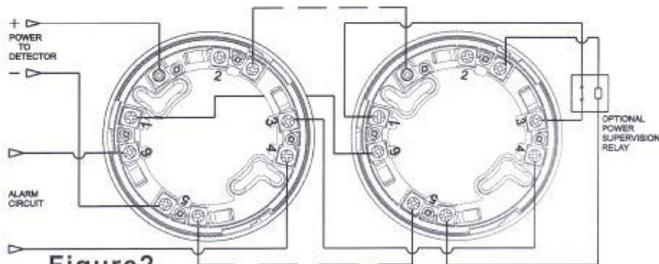


Figure 2.

Figure 3. shows the typical wiring diagram of X-wire (External relay) multiple-station smoke detector system.

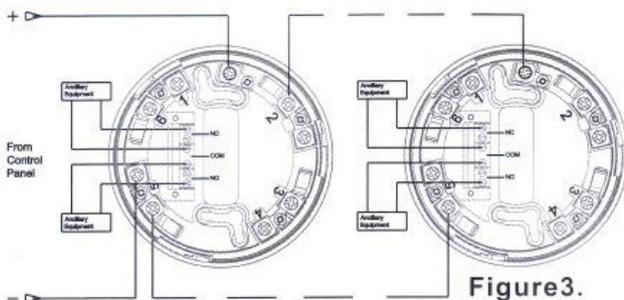


Figure 3.

INSTALLING THE BASE

★ NOTE: All wiring must conform to applicable local codes, ordinances, and regulations.

WARNING

REMOVE POWER FROM INITIATING-DEVICE CIRCUITS BEFORE THE INSTALLING DETECTORS

- To insure proper installation of the detector head to the base, all the wires should be properly addressed at installation:
 - Position all the wires flat against terminals.
 - Fasten the wires away from connector terminals.
- If you use the jumper wire to connect the poles of terminal "2" and "5" when testing the detector loop continuity, be sure to remove the jumper wire prior to the installation of the detector head.
- The end-of-line device shown in Figure 1. should be compatible with the control unit. The end-of-line supervisory relay shown in Figure 2. and ancillary equipment shown in Figure 3 used should be rated for the DC power voltage used.
- Per UL listing, open area smoke detectors are intended for mounting on a ceiling no less than 6 inches from a wall or mounting on a wall that no less than 4 inches and no more than 12 inches from a ceiling.
- The base of smoke detector can be mounted directly onto electrical junction box such as octagonal (3", 3.5" or 4"), round (3"), and square (4" length) box without using any type of mechanical adapter.

★ NOTE: Verify that all detector bases are installed, that the initiating-device circuits have been tested, and the wiring is correct.

INSTALLING THE HEAD

★ NOTE: Do not install the detector head until the area is thoroughly cleaned of construction debris, dusts, etc. Detectors fit into bases one way only and require clockwise rotation without push force to be plugged in.

- Place the detector head onto the detector base.
- Turn the detector head clockwise until the detector head drops into place.
- Continue turning detector clockwise to lock it in place.
- After all detectors have been installed, apply power to the control unit.
- Test the detector under TESTING
- Rest the detector at the system control panel

CAUTION

DUST COVERS MUST BE REMOVED BEFORE THE SENSORS CAN SENSE SMOKE

TESTING

All the alarm signal services, releasing device and extinguisher system should be disengaged during the test period and must be re-engaged immediately at the conclusion of testing.

After energizing the detector head for approximately one minute, check to see the indicator red LED flashing once every 3 seconds. If the LED fails to flash, it indicates the non-functioning of the detector or faulty wiring. Re-check

WARNING

TO PREVENT DETECTOR CONTAMINATION AND SUBSEQUENT WARRANTY CANCELLATION, DETECTOR MUST REMAIN COVERED UNTIL AREA IS CLEAN

the wiring or replace the detector if necessary.

A. SMOKE SENSOR TESTING

Allow The GEMINI model 501 aerosol generator can be used for smoke entry testing. Set the generator to represent 4%/ft to 5%/ft obscuration as described in the GEMINI 501 manual. When sufficient smoke has entered the chamber, an alarm signal will take place by indicating with a continuous illumination of the LED. After it alarms, Reset each detector and/or control unit before attempting to test the additional detectors in the same zone. If the alarm fails in this step, it indicates a defective unit, which requires service.

B. HEAT SENSOR TESTING

The detector to be tested should be subject to a flow of warm air at a temperature between 140°F and 180°F. Some domestic hair dryers can meet such requirement. Proceed as follows:

1. Switch on the warm airflow and check that temperature is correct and stable.
2. From a distance of inches, direct the airflow at the guard protecting the thermistor. The detector should alarm within 30 seconds.
3. When alarm is on, immediately remove the heat source and check that the detector's red LED is lit. Reset the detector from the control panel.
4. If the detector fails to go into alarm within 30 seconds

SPECIFICATION

Model	Smoke Alarm	Heat Alarm	2/4 Wire	Voltage (DC)	Standby Current	Alarm Current	Cycle Time	Remote LED	Relay Output	Sound Output	Auto-Reset	Base Model	Certificated
SNC-300-S2	√	-	2	10.8~33V	60uA	50mA/24V	3S	-	-	-	-	CN3021	EN, CE
SNC-300-SL	√	-	2	10.8~33V	60uA	50mA/24V	3S	√	-	-	-	CN3041	EN, CE
SNC-300-C2	√	√/57°C	2	10.8~33V	60uA	50mA/24V	3S	-	-	-	-	CN3021	EN, CE
SNC-300-CL	√	√/57°C	2	10.8~33V	60uA	50mA/24V	3S	√	-	-	-	CN3041	EN, CE
SNC-300-SR	√	-	4	12~24V	60uA	30mA/12V	3S	-	√/INT	-	-	CN3041	EN, CE
SNC-300-CR	√	√/57°C	4	12~24V	60uA	30mA/12V	3S	-	√/INT	-	-	CN3041	EN, CE
SNC-300-SA	√	-	4	12~24V	60uA	30mA/12V	3S	-	√/INT	-	√	CN3041	CE
SNC-300-CF	√	√/57°C	4	12~24V	60uA	30mA/12V	3S	-	√/INT	√	√	CN3041	CE
SNC-300-SP	√	-	X	12~24V	60uA	30mA/12V	3S	-	1/EXT	-	-	CN30X1	CE
SNC-300-SB	√	-	X	12~24V	60uA	30mA/12V	3S	-	2/EXT	-	-	CN30X2	CE

Remark: S-Smoke Sensor; C- Smoke & Heat Sensor ; L- Remote Indicator Output; R-Internal Relay Output; P- External Relay Output (one set); B- External Relay Output (Double set); A-Auto-reset with Internal Relay Output ; F-Sound with Internal Relay Output; Internal Relay contact with Form A (NO); External Relay contact with Form C (1C or 2C);

LIMITED WARRANTY STATEMENT

Ningbo Ambest Electronics Co., Ltd the maker of NUMENS brand warrants its enclosed smoke detector to be free from defects in materials and workmanship under normal use and service for a period of twelve (12) months from date of manufacture. NUMENS makes no other express warranty for this smoke detector. No agent, representative, dealer, or employee of the company has the authority to increase or alter the obligations or limitations of this warranty. The company's obligation of this warranty shall be limited to the repair or replacement of any part of the fire detector which is found to be defective in materials or workmanship under normal use and service during the 12 months period commencing with the date of manufacture. Contact NUMENS directly for a return merchandise authorization (RMA) number, send defective units postage prepaid to the factory in Ningbo City, China. Please include a note describing the malfunction and suspected cause of failure. The company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture.

CN-SM-300,VER1.0

Manufacturer:



Ningbo Ambest Electronics Co., Ltd.

Add: #70, Huangsu West Road, Industrial Zone Of Dongqianhu Tourist Resort District, Ningbo, China

Code: 315121

Tel: 86-574-8281 7218 Fax: 86-574-8300 1379

Web: <http://www.numens.net>

it is too insensitive and needs to be returned to the distributor for servicing.

After testing check that the system is set for normal operation and notify the appropriate authorities that the testing operation is complete and the system is active again.

NOT SUITABLE FOR INSTALLATION IN AREAS WHERE AIR VELOCITIES EXCEED 300 ft/min.

MAINTENANCE

The recommended minimum requirement for detector maintenance consists of an annual cleaning of dust from the detector head by using a vacuum cleaner cleaning program should be agreed to the individual environment in conformance with NFPA-72A standard.

CAUTION: DO NOT ATTEMPT TO REMOVE THE SCREWS, WHICH HOLD THE ASSEMBLY OF SMOKE-SENSING CHAMBER AND PRINTED CIRCUIT BOARD (PCB). THIS ASSEMBLY IS SEALED FOR YOUR PROTECTION AND IS NOT INTENDED TO BE SEPARATED FOR SERVICING BY USERS. OPENING SUCH ASSEMBLY WILL VOID THE WARRANTY.

REFER TO THE TECHNICAL BULTTIN ISSUE NO. CN-STB-300, VER1.0.