תעודת בדיקה מס' 8414359237
בהתאם לסעיף 12 לחוק התקנים תשי"ג 1953

פרטי ההזמנה

שם המזמין: א.א.פ טכנולוגיות
כתובת: דרך בן צבי 84
עיר: תל אביב
תאריך ההזמנה: 19/08/2004
הדוגמה נבחרה ע"י בא כח המכון

בדיקה של:

גלאי חום קונבציונלי דגם US-323-2L מתוצרת חברת US V Tech

מהות הבדיקה:

לבדוק התאמה לדרישות ת"י 1220 חלק 4 - "מערכות לגילוי אש: גלאי חום " נובמבר 1988

תעודה זו מכילה 2 דפים ואין להשתמש בה אלא במלואה	תעודה זו מתייחסת לדוגמא שנבדקה בלבד ואין ליחסה לדוגמאות אחרות של אותו מוצר	מסמך זה בלבד לא ישמש לשחרור טובין ממכס

1. כללי
הובאה לבדיקה על ידי מזמין הבדיקה 12 גלאי חום קונבציונלי מדגם US-323-2L מתוצרת חברת US V Tech. להפעלת גלאי חום נעשה שימוש ברכזת מדגם FC-3000 (קוגר) מתוצרת חברת US V Tech ובנוריות סימון מדגם DJ1192 מתוצרת חברת צרברוס

2 מסקנה
גלאי החום שנבדקו מתאימים לדרישות התקן.

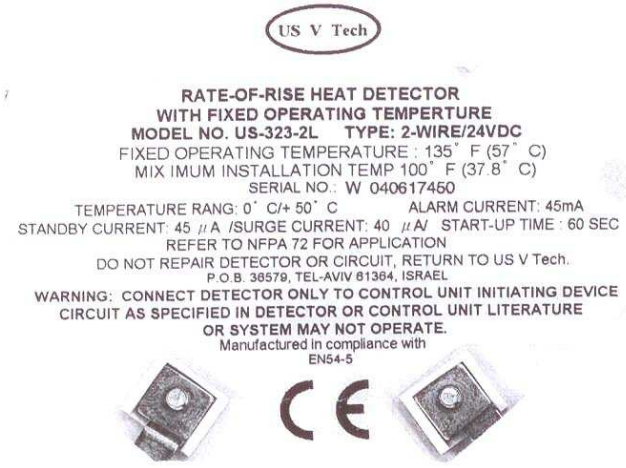
תאריך הדפסת המסמך: 21.11.2004

שם החותם: אלברט אזולאי
תפקידו: ראש מדור

תעודת בדיקה מס' 8414359237

3. <u>תאור המוצר:</u>

3.1 על גבי גלאי החום מסומן כלהלן:



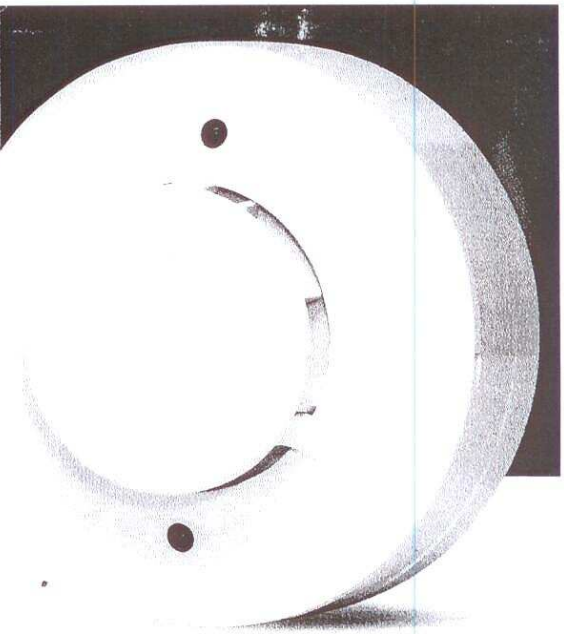
3.2 <u>מסקנה</u>

גלאי החום שנבדקו מתאימים לדרישות התקן.

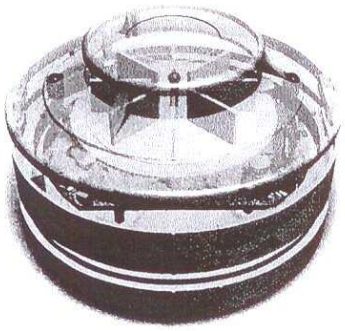
אלברט אזולאי
ראש מדור

NB323

Conventional Heat Detector



The EN-54 approved conventional NB-323 series of heat detectors are designed with precise CPU control and thermister detection. Its state-of-the-art combination of "Rate-of-Rise" and "Fixed-Temperature" operation ensures the best quality of heat detection in all environments. These heat detectors can be calibrated to either EN 54 or UL safety standards and comes with "Auto-Reset" model.



Product Features

- 2 or 4 wire models
- Advanced detection and discrimination algorithms
- Easy installation and maintenance
- Sleek low-profile housing design
- Durable sensor head, no need for replacement
- SMD circuit board design
- Satisfactory quality and reliability guaranteed
- Five-year limited warranty
- Dual LEDs for 360° visibility
- Detector base option: Regular 100 mm base or Big 125 mm base

EN-54 Approved

Conforms to **UL/ULC/VdS**

CE

Options

- Normally closed (N/C)-Normally open (N/O) selectable relay output remote LED
- Auto Reset (A/R) function for security systems (optional for 4 wire models)

The Range Includes

Model	2 wire	4 wire	Smoke Alarm	Heat Alarm	Remote LED	Buzzer	Auto Reset	12 VDC	24 VDC	UL Approval	EN 54 Approval	CE Approval
NB323-2	X			X					X		X	X
NB323-2L	X			X	X				X		X	X
NB323-4-12		X		X				X			X	X
NB323-4-24		X		X					X		X	X
NB323-AR-4-12		X		X			X	X				X
NB323-AR-4-24		X		X			X		X			X

Sensor Specification

Model	2/4 wire	Thermal	Voltage DC	Standby Current (Max)	Alarm Curent (Max)	Surge Current (Max)	Start-Up Time (Max)	Permissible Current (Max)	Frequency	Alarm Sound Leavel	Alarm contact	Base model
NB323-2	2		10~35 V	55 μA	50 mA	150 μA	60 sec	80 mA	4-6 sec			P/N 772912
NB323-2L	2		10~35 V	55 μA	50 mA	150 μA	60 sec	80 mA	4-6 sec			P/N 774912
NB323-4-12	4		10~15 V	55 μA	50 mA	150 μA	60 sec	80 mA	4-6 sec		Form A	P/N 774912
NB323-4-24	4		21~27 V	55 μA	50 mA	150 μA	60 sec	80 mA	4-6 sec		Form A	P/N 774912
NB323-AR-4-12	4		10~15 V	55 μA	50 mA	150 μA	60 sec	80 mA	4-6 sec		Form A Auto Reset	P/N 774912
NB323-AR-4-24	4		21~27 V	55 μA	50 mA	150 μA	60 sec	80 mA	4-6 sec		Form A Auto Reset	P/N 774912

Remarks
AR - auto reset function
LED - remote LED indicator output

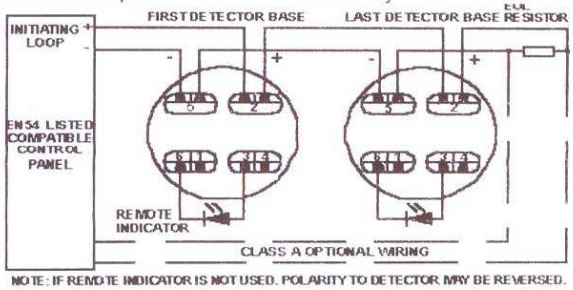
Heat Sensitivity :	EN 54-5:2000 Standard
Ceiling Spacing :	15 m rating for heat sensor
Start-Up Current :	500 μA maximum
Reset Voltage :	less than 1 volt
Reset Time:	less than 1 second
Alarm Indicator :	continuously emitting red light
Temperature range:	-10°C to 50°C
Remote Output :	15 uA maximum diode gate
Permissible current :	80 mA max
Humidity :	0 to 95% RH, non-condensing or icing
Alarm Contact :	(for 4-wire) N/O or N/C operation Form A: 1.0A@30VDC/0.5A@125VAC
Dimensions :	100 mm (dia) x 46 mm (ht) with base
Weight :	160 g with base
IP rating :	IP-42

US V Tech

US 323 series
Rate of Rise with Fixed Temperature Detector
Installation Wiring Diagram

TYPICAL WIRING DIAGRAM

Figure 1(a) shows the typical wiring diagram of the 2-wire multiple-station heat detector system.



NOTE: IF REMOTE INDICATOR IS NOT USED, POLARITY TO DETECTOR MAY BE REVERSED.

DO NOT PLACE LINKS BETWEEN THE WIRING POSITIONS OF TERMINALS 2 AND 5 TO PROVIDE POWER SUPERVISION

Figure 1(b) shows the typical wiring diagram of the 4-wire multiple-station heat detector system.

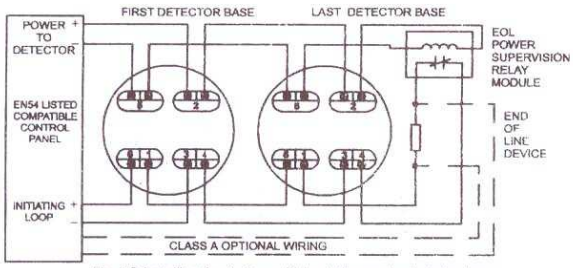


Fig. 1.B Installing the 4-wire multiple station smoke detector base

DO NOT PLACE LINKS BETWEEN THE WIRING POSITIONS OF TERMINALS 2 AND 5 TO PROVIDE POWER SUPERVISION

WARNING

TO PREVENT DETECTOR CONTAMINATION AND SUBSEQUENT WARRANTY CANCELLATION, THE SMOKE DETECTOR MUST REMAIN COVERED UNTIL THE AREA IS CLEAN AND DUST FREE.

INSTALLING THE BASE

1. To insure proper installation of the detector head to the base, all the wires should be properly addressed at installation:
   (A) Position all the wires flat against terminals.
   (B) Fasten the wires away from connector terminals.
2. If you use a 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.
3. The end-of-line device shown in fig. 1(a) and 1(b) should be compatible with the control unit. The end-of-line supervisory relay used should be rated for the DC power voltage used.
4. Open area smoke detectors are intended for mounting on a ceiling or a wall in accordance with the fire standard in your country.
5. The base of the smoke detector can be mounted directly onto an electrical junction box such as an octagonal (75mm, 90mm or 100mm), a round (75mm), or a square (100mm) box without using any type of mechanical adapter.

INSTALLING THE HEAD

1. Align the components as shown in Figure 2.
2. Mate the detector head onto the base and twist clockwise to secure it.
3. Do not install the detector head until the area is thoroughly cleaned of construction debris, dusts, etc. The maximum number of smoke detector installed in the same loop is 30 units.

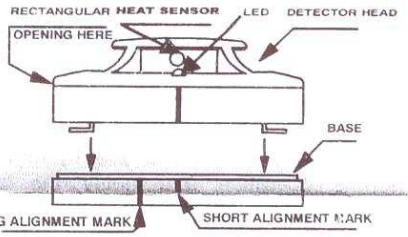


Fig. 2 Mating detector head onto base

ADJUSTMENT THE RELAY POSITION
ADJUSTING THE RELAY FOR NO/NC

The normal condition for the relay is "normally open" (NO).

1. To adjust the normal condition of the relay to "normally closed" (NC), insert a screwdriver into the rectangular hole located on the side between the front cover and base and rotate to remove the front cover.

2. Refer to figure 3. There is a jumper head next to the relay on the PCB. Remove the jumper head and reinsert it in the NC position.
3. Carefully replace the front cover.
   Relay contact rating:
   1A@30VDC,
   0.5A@125VAC.

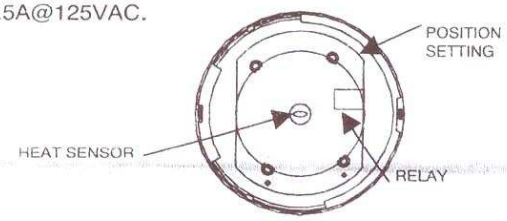


Fig. 3 Schematic of detector structure
When front cover is open.

TESTING

1. 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.
2. After energizing the detector head for approximately one minute, check to see the indicator red LED flashing once every 5 seconds. If red LED fails to flash, it indicates the non-functioning of the detector or faulty wiring. Re-check the wiring or replace the detector if necessary.
3. The detector to be tested should be subject to a flow of warm air at a temperature of between 65°C and 80°C. (This requirement can be met by some domestic hair dryers).

Proceed as follows:

(1). Switch on the warm airflow and check that temperature is correct and stable.

(2). From a distance of several inches, direct the airflow at the guard protecting the thermistor. The detector should alarm within 30 seconds.

(3). Upon alarm immediately remove the heat source and check that the red LED of the detector is illuminated. Reset the detector from the control panel.

(4). If detector fails to go into alarm mode within 30 seconds it is too insensitive and needs to be returned to the distributor for servicing.

(5). 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.

● **CAUTIONS**

This heat detector is particularly designed to **initiate and activate** emergency action, but will do so only when it is used in conjunction with an authorized fire alarm system. This detector must be installed in accordance with NFPA Standard 72.

The purpose of design of heat detectors is meant to protect property, not life. The heat detectors do not provide early warning of fire and cannot detect smoke, gas, combustion particles, or flame. They will alarm when temperature at the heat detector reach 57°C (135°F) or above. Given the rapid growth of certain types of fires, heat detectors cannot be expected to provide adequate warning of fires resulting from smoking in bed, inadequate fire protection practices, violent explosions, escaping gas, and improper storage of flammable liquids like cleaning solvents, other safety hazards, or arson.

Heat detectors do not always detect fires because the fire may be a slow-smoldering, low-heat type (producing smoke), or because they may not be mean where the fire occurs, or because the heat of the fire may bypass them. Heat detectors will not detect smoke, gas, flames, or combustion particles.

Heat detectors are components in professionally installed fire alarm systems. **They will not function if they have been improperly wired into the fire alarm system or if power to them is disconnected for any reason.**

Heat detectors cannon last forever. They should be tested and maintained following the instructions in this manual. To be safe, they should be replaced after they have been installed for ten years.

Refer to NFPA 72 for application.

CAUTION: DO NOT ATTEMPT TO DISASSEMBLY OF THE FACTORY SEALED HEAT DETECTOR. THIS ASSEMBLY IS SEALED FOR YOUR PROTECTION AND IS NOT INTENDED TO BE OPENED FOR SERVICING BY USERS. TO OPEN THE DETECTOR HEAD WILL VOID THE WARRANTY.

SPECIFICATION

Model	2/4 wire	Voltage DC	Standby Current (Max.)	Alarm Current (Max.)	Surge Current (Max.)	Star-Up Time (Max.)	Permissible Current (Max.)	Frequency	Alarm contact	Base model
US 323-2	2	10~30V	45 μ A	70mA	80 μ A	60 Seconds	80mA	5Seconds	—	P/N852001
US 323-2-L	2	10~30V	45 μ A	70mA	80 μ A	60 Seconds	80mA	5Seconds	—	P/N854001
US 323-4-12	4	10~15V	45 μ A	45mA	80 μ A	60 Seconds	80mA	5Seconds	Form A	P/N854001
US 323-4-24	4	21~27V	45 μ A	45mA	80 μ A	60 Seconds	80mA	5Seconds	Form A	P/N854001
US 323-4-AR-12	4	10~15V	45 μ A	45mA	80 μ A	60 Seconds	80mA	5Seconds	Form A /Auto Reset	P/N854001
US 323-4-AR-24	4	21~27V	45 μ A	45mA	80 μ A	60 Seconds	80mA	5Seconds	Form A /Auto Reset	P/N854001

US V Tech

US V Tech
P.O.B 36579, TEL-AVIV 61364, ISRAEL
Tel: +972 3 5181 444
Fax: +972 3 5181 445