TFD-1271

INTELLIGENT ADDRESSABLE MULTI DETECTOR (OPTICAL SMOKE AND HEAT) WITH BUILT-IN ISOLATOR (Multisensor) Installation & User Manual



Release Date: 04/01/2020 Rev:01

Critical Warnings

General

- ✓ Read this manual with care before operating the device and keep it for further reference.
- ✓ Comply with all warnings and measures provided in the manual. Follow all respective operation and usage instructions.
- ✓ Keep the devices away from water and humidity.

Ambient Conditions

Do not operate the device under extreme temperature conditions that fall outside the following values.

Temperature: Between -10°C and +55°C

Relative Humidity: Max. 95% RH

Service

Do not attempt to repair the device on your own, you may be exposed to electric shock in case you open the device housing.

Contact your dealer or authorized service in case of a failure. Technical interventions to the device must be carried out by qualified personel of authorized service.

Warning: Do not attempt to take the card out of its plastic protection. It is sealed solely for your safety. Users must avoid intervention.

Failures That Require Service Intervention

Contact your authorized service or dealer in case of a failure or in following cases.

- ✓ If the power line or plug is damaged,
- ✓ If any liquid has leaked or a substance has fallen into the device,
- ✓ If the device is exposed to water or rain,
- \checkmark If the device is dropped or the housing is damaged,
- \checkmark If there is significant performance change in the device,
- ✓ If the device is not operating normally according to the operating instructions in the user manual Call the service since erroneous operations may cause further failures.

What You Can Do On Your Own

Do not attempt to repair the device on your own since you may be exposed to electric shock in case you open the device housing. Contact your dealer or authorized service in case of a failure. Technical interventions to the device must be carried out by qualified personel of authorized service. The device must be cleaned with a dry cloth. No chemical must be used for cleaning purposes.

Handling and Transportation

The device must be handled with care in manner that it does not get exposed to impacts and liquid influx. The damages that may occur during improper handling are out of guarantee.

Human and Environment Health

This device does not contain any chemical or biological substance that may harm human health.

General Features

- ✓ Advanced smoke detection algorithm that minimizes false alarms
- ✓ The alarm can be produced at 55°C within this frame if Detector fixed heat is selected.(A2S)
- ✓ Denial of temporary signals that may be perceived as alarm
- ✓ Adaptive protection by continuous sampling of the present environment
- ✓ Debris algorithm that perceives inoperability due to dirt accumulation and respective warning
- ✓ Easy to clean smoke chamber
- ✓ External notification light connection means
- ✓ Two LED's used for state indication purposes
- √ 15s starting time
- ✓ Three different sensitivity settings that can be selected on the panel
- ✓ Operation logic with and/or that can be adjusted on the panel
- ✓ Possibility to operate solely as heat or solely as smoke detector that can be adjusted on the panel
- ✓ Compatible with TFA-0120 Universal Detector Base

Technical Specifications

Power Input	18V(min) – 32V(max)
Average (Quiescent) Current Consumption	80uA (@32V)
Maximum Alarm Current	3mA (@32V)
Maximum External Device Current	10mA (@32V) – (2K2 resistance limit)
Alarm Levels (appr.)	H: 0.12, M: 0.15, L: 0.18 dB/m
Operating Temperature Range	-10°C ~ 55°C (14°F ~ 131°F)
Humidity	95% RH (max.)
Size (mm)	Ø110, h42
Housing Material	White Color, ABS Plastic
Attached Cable Cross-section	0.4mm ² ~ 1.5mm ²
Weight (wit base / without base)	183 gr / 125 gr
Starting Time	15 sec
	Isolator
Average Current Consumption (Normal Op.) @24V	15uA
Average Current Consumption (Normal Op.) @24V Vmax.	
	15uA
Vmax.	15uA 32V
Vmax. Vnom.	15uA 32V 28V
Vmax. Vnom. Vmin.	15uA 32V 28V 15V
Vmax. Vnom. Vmin. Vso_max.	15uA 32V 28V 15V 18V
Vmax. Vnom. Vmin. Vso_max. Vso_min.	15uA 32V 28V 15V 18V 9V
Vmax. Vnom. Vmin. Vso_max. Vso_min. Vsc_max.	15uA 32V 28V 15V 18V 9V 5V
Vmax. Vnom. Vmin. Vso_max. Vso_min. Vsc_max. Vsc_max. Vsc_min.	15uA 32V 28V 15V 18V 9V 5V
Vmax. Vnom. Vmin. Vso_max. Vso_min. Vsc_max. Vsc_min. Ic_max.	15uA 32V 28V 15V 18V 9V 5V 0,7V

Indicator LED's

	Blue Led	Red Led	Yellow Led
Any error situation	Blinks with 4 sec. intervals	Χ	Χ
(Pollution etc)			
The device is in normal	Blinks with 20 sec. intervals	Χ	Χ
operation mode			
(can be turned off.)			
Alarm state	X	Constant	Χ
Short circuit state	X	Х	Constant

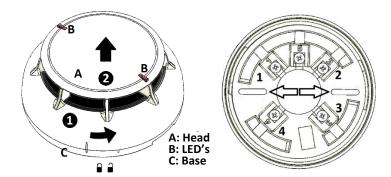
Terminals

No. 1	NEG.(-) supply input
No. 2	NEG.(-) supply output, NEG. (-) input of parallel notification light
No. 3	POS. (+) input of parallel notification light
No. 4	POS.(+) supply input, POS.(+) supply output
No. 5	Earth connection

Warning: The product operates only with Teknim TFP-121x, TFP-122x ve TFP-123x Intelligent Addressable Fire Alarm panels.

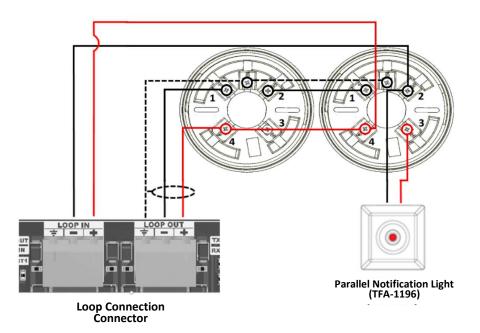
Installation and Connection

- 1. Turn (1) the detector head counterclockwise to the short line and pull (2) it up to disassemble from the base.
- 2. Mount the base part by using the mounting place shown (2).



- 3. Make the cable connections according to the following diagram. Make the connection by observing that the polarity of Leg No. 4 is (+) and Leg No. 1 is (-), and then by connecting (-) pole from No 2 and (+) pole from No. 4 of the current detector to No.1 of the next detector.
- 4. Use the connections No. 3(+) and 2(-) for the parallel notification light.
- 5. Install the detector head into its place. Make sure that the line on the head piece is aligned with the long line on the base.
- 6. Energize the detector. The LED on the detector will blink blue light once in every 20 seconds in the state without an alarm in order to indicate that the device is in operation. (This feature may be turned off from the panel)

7. Make the chasis(earth) connection of the cable continuously over the Leg No. 5 between the loop output and the last detector.



Test

Observable smoke flow must be provided in order to obtain correct results. In order to perform a smoke test, ensure that the smoke goes into the smoke detection chamber min. for 1 minute by using a burning material or test spray. The LED lights and indicates the alarm when sufficient amount of smoke enters into the chamber.

- 1. Fend of the smoke source when the device goes into the alarm state.
- 2. Check to see whether the red LED's light continuously. Reset the detector from the panel.
- 3. The detector must be sent to the service if it does not produce alarm within 1 minute.
- 4. The system may be activated after the test is performed.

Heat Testi:

Providing an air flow of appr. 70°C is sufficient for the detector test.

- 1. Start the hot air flow and check the temperature.
- 2. Apply the hot air into the detector. The detector must produce the alarm within 30 seconds.
- 3. Check to see whether the red LED's light continuously. Reset the detector from the panel.
- 4. The system may be activated after the test is performed.



Bilgi Elektronik San. ve Tic. A.Ş.

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> 20 1922-CPR-1459

EN 54-7:2000; EN 54-7:2000/A1:2002; EN 54-7:2000/A2:2006

Point smoke detectors (Scattered Light) EN 54-5:2000; EN 54-5:2000/A1:2002

Point heat detectors

Class A2S

EN 54-17:2005

Fire Detection and Fire Alarm Systems - Short Circuit Isolators

TFD-1271

Technical data: See BİLGİ-TEC-171128-1 kept by the

manufacturer.

Manufacturer Company and Main Service

Bilgi Elektronik San. ve Tic. A.Ş.

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- * In compliance with AEEE regulations. This product is manufactured from recyclable and reusable high quality parts and materials. Therefore, do not dispose of the product together with domestic or other wastes at the end of its service lifetime. Take it to a drop-off point for the recycling of electrical and electronic devices.
- * The consumer may apply to the Consumer Arbitration Board or Consumer Court of the place of residance or of the consumer transactions in case of disputes arising from exercising the rights granted by the guarantee.