TFM-1661
INTELLIGENT ADDRESSABLE CONVENTIONAL ZONE AND SIREN MODULE WITH BUILT-IN ISOLATOR
Installation & User Manual

teknim®

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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%

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,
- ✓ If the device is dropped or the housing is damaged,
- ✓ 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 Information
TFM-1661 Intelligent Addressed Conventional Input Module, is a module that is designed for being used with TFP-12xx Intelligent Addressable Fire Alarm panels, capable of connecting to the loop, allowing conventional devices in addressed systems and transmitting the alarm information created on conventional devices through the loop on regional basis and providing siren output. Users may make their choices of conventional input state amongst the event types of "Alarm, Release, Reset, Mute, Error, N/A". Besides, it is possible to make the choice of siren output amongst the event types of "General Alarm, General Siren, General Error, Regional Alarm, Regional Siren, Regional Error, N/A". 24V external feeding inlet is available on the module. External feeding is used for feeding and siren outputs of conventional devices. External feeding is monitored against feeding interruptions.
TFM-1661 modules are addressed with TFCM-1801 programing device. Using the module avoids address duplication error. The addressed detector may be put into operation in a fast and easy manner by being added to the loop as described in "TFP-12xx Series Intelligent Addressable Fire Alarm Control Panel Installation & User Manual".

General Features
- Adjustable short circuit, open circuit and alarm circuit values
- Adjustable reset time
- 32 detectors and unlimited number of buttons per region
- Region monitoring input can be adjusted as alarm, release, error
- Siren output can ve activated in cases of regional alarm, general alarm, error
- Dual-processor and insulated equipment design
- 4 LED indicators for power, communication alarm and short circuit indications
- Wall and rail mounting compatible
- Short circuit isolator

Technical Specifications

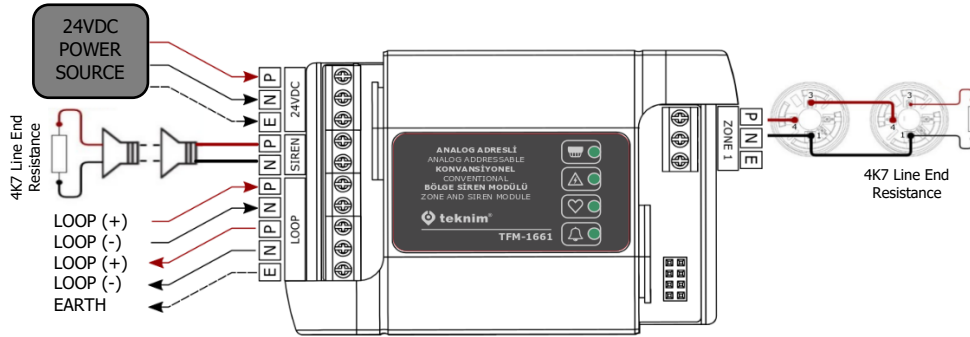|	
Applicable Standard	EN 54-18
Operating Temperature Range	-10°C ~ 55°C (14°F ~ 131°F)
Humidity	95% RH (max)
Size (H,W,D) (mm)	31,1x90x61,6mm
Housing Material	White Color, ABS Plastic
Weight (incl. Base / excl. base)	140 gr
Loop	
Power Input	18V – 32VDC
Average (Quiescent) Current Consumption	150uA (@32V)
Maximum Alarm Current	1,5mA (@32V)
Communication Protocol	Flashlink
Conventional	
Power Input	18V – 32VDC
Average (Quiescent) Current Consumption	150uA (@24V) + Regional Current + Siren Current
Region	
Number of Detectors	32 pieces per region (Unlimited buttons)
Default Alarm Current	20mA (@24V)
Cable Resistance	40ohm (max)
Cable Length	1,5km 1,5mm² (max)
Cable Type	2 x 1,5mm² J-Y(St)Y…Lg (Recommended)
Siren	
Siren Output Current	500mA (F1 Fuse)
Siren Line End Resistance	4K7 ohm, %5, 1/4W
Cable Type	2 x 1,5mm² J-Y(St)Y…Lg (Recommended)
LED's	
Red LED (Constant)	Indicates the availability of conventional alarm input
Red LED (Blinking / 4sn)	Indicates active siren output
Blue LED (Blinking / 20sn)	Indicates the availability of module-loop communication
Blue LED (Blinking / 4sn)	Indicates availability of error states on the module (Short circuit, open circuit, power source)
Green LED (Constant)	Indicates normal external feeding
Yellow LED (Constant)	Indicates availability of short circuit on the device

Note : Purple color occurs when blue and red LED's light at the same time.

Technical Specifications; Isolator

Average Current Consumption (Normal Op) @24V	15uA
Vmax.	32V
Vnom.	28V
Vmin.	15V
Vso_max.	18V
Vso_min.	9V
Vsc_max.	5V
Vsc_min.	0,7V
Ic_max.	0,5A
Is_max.	3A
IL_max.	0,026A
Zc_max.	0,026Ω

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

Installation and Connection

Manufacturer Company and Main Service

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EN 54-18: 2005, EN 54-18:2005/AC:2007
Input/ Output devices

EN 54-17: 2005
Fire Detection and Fire Alarm Systems – Short Circuit Isolators

TFM-1661
Technical data: See BİLGİ-TEC-171128-2 kept by the manufacturer.