

Combined optical smoke and heat detector configurable



Configurable combined detector, can be used with analogue addressed or conventional control panels. The detector consists of two separate and independent detection sections, an optical smoke detector and a Class A1-58°, Suffix R thermal detector. The detector integrates an NFC transceiver with which, by means of a smartphone and the Tecnofire ID App, it is possible to configure the device and view: identification data, the alarm counter, the graph of the last alarm detected (optical detector only) and the data required to manage the detector review service. Maximum precision in temperature detection and analysis of smoke captured by the optical chamber. Control and dynamic compensation of optical chamber sensitivity, automatic maintenance threshold management. Programmable functions: 3 sensitivity levels, excludable prealarm signalling, excludable optical detection section, formula association and management criterion for TFBASE-SIREN or TFRIP-SMART. The functional states of the detector can be used as operands in the formulas managed by the control panel. RSC® management: programming, remote management and control. Double line isolator. Universal base mounting TFBASE01. Protection rating IP22. ABS casing. Available colours white or black. Dimensions with mounting base (D x H) 100 x 52mm. EN 54-7:2018 - EN 54-5:2017 + A1:2018 - EN 54. Certification: 0051-CPR-3133.

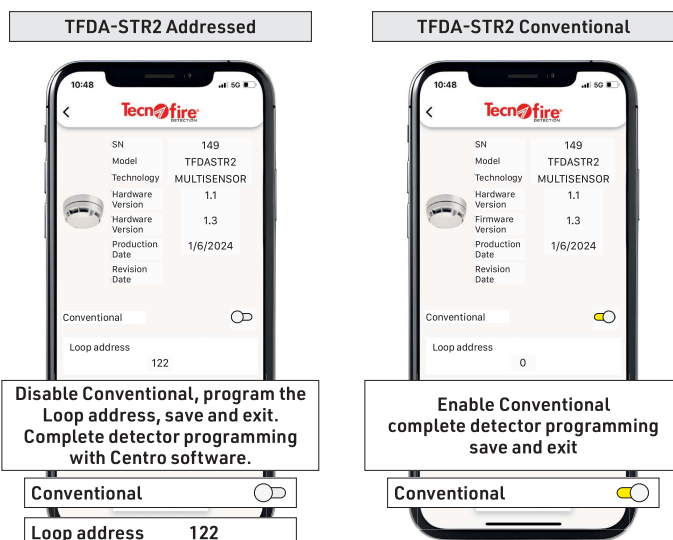
MODEL										
Name	Item no.									
TFDA-STR2	TF3TFDASTR2	White colour								
	TF3TFDASTR2BK	Black colour								

OBLIGATIONS AND NOTICES

The TFDA-STR2 detector can be used with Tecnofire analogue addressable control panels and conventional control panels of any brand (subject to verification of compatibility of standby and alarm thresholds). In the planning and installation phases, the regulations in force must be observed and applied.

DETECTOR CONFIGURATION

The TFDA-STR2 detector is configured with a smartphone equipped with NFC technology and the Tecnofire ID App. The configuration determines the type of detector: Addressed or Conventional. The App can only perform all NFC tag reading and writing operations if the detector is not powered.



TFDA-STR2

Configurable combined detector

ADDRESSABLE

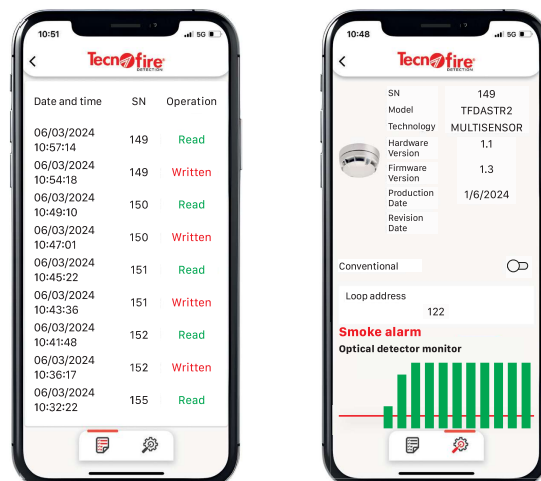
TFDA-STR2 ADDRESSED

FUNCTIONS OF THE TECNOFIRE ID APP

The address of the detector can only be programmed with the Tecnofire ID App, the programming of the detector must be completed with the software programming Centro.

The App allows you to view all read and write operations performed on the detectors, the consultation of the list facilitates the tracking of the already assigned addresses. The detector stores a graph that depicts with a series of vertical bars, the trend of the last alarm event detected.

The alarm counter stores the number of events detected. The alarm graph and counter can be viewed by reading the detector memory with the Tecnofire ID App.



DIAGNOSTIC FUNCTIONS

Tecnofire control units manage a set of specialised test and diagnostic functions for each type of detector.

The functions available for the detector TFDA-STR2 are shown in the following table.

DIAGNOSTIC FUNCTIONS DETECTOR TECNO - combo 2T	
Identification	Turns on the device's LEDs for its identification
Self declaration	Self-declaration of the detector type
Hardware release	Self-declaration of the hardware version
Firmware release	Self-declaration of the firmware version
Production date	Indicates the date of manufacture of the detector
Revision date	Indicates the revision date of the detector
Maintenance	Displays the percentage of chamber saturation
Level reading	Detection of electrical operating values
Analogue monitor	View analogue monitor graph
Statistics	Statistical values concerning communication
Activation	Activates the base sounder or Smart Repeater

Consumption
Power supply level
Zero level
Consumption level
Loop resistance

Strings sent
Errors
Percentage of success
Percentage of error
Latency

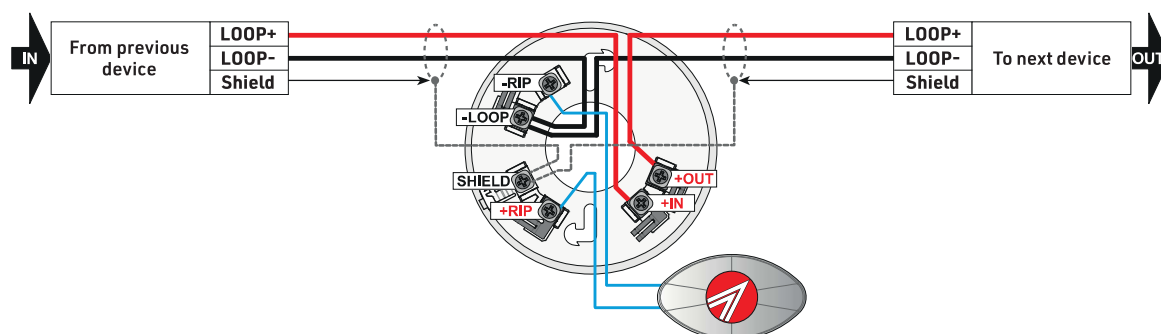
31/03/2024	Access level 3	08:00:00
Test menu detector 1 Loop 1		
Identification	TECNO - combo 2T	
Self declaration		
Hardware release	1.1	
Firmware release	1.3	
Production date		
Revision date		
Maintenance		
Level reading		
Analogue monitor		
Statistics		

31/03/2024	Access level 3	08:00:00
Level analysis detector 1 Loop 1		
Consumption	51 mA	
Power supply level	26.44 V	
Zero level	0.51 V	
Consumption level	5.49 V	
Loop resistance	<1.00 Ohm	
active		

LOOP ISOLATOR

The detector is equipped with a line separator with double isolator. In the event of a short circuit in the Loop line, the separator intervenes by isolating the line section affected by the fault, ensuring the correct operation of the devices connected upstream and downstream. The intervention of the line separator preserves the regular operation of the loop and generates the fault signal "Separator open".

CONNECTION TO THE LOOP



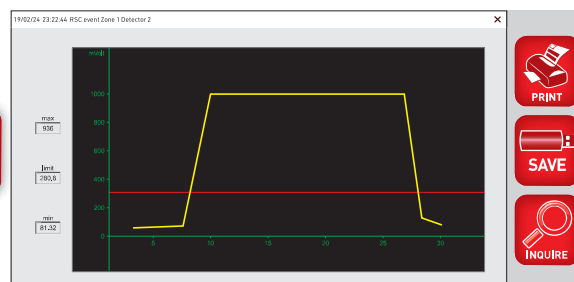
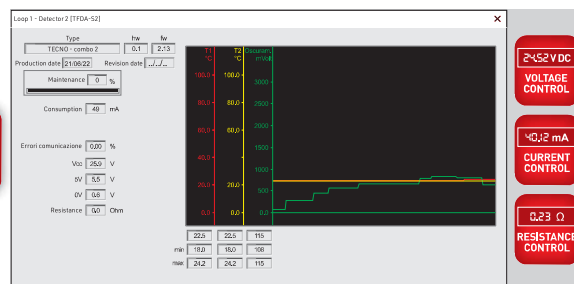
RSC® ANALYSIS FUNCTIONS

The Centro software is equipped with analysis tools with which it is possible to monitor the functioning of the detector.

DEVICE MONITOR

The device monitor function panel displays:

- The data identifying the detector
- The maintenance threshold of the optical chamber
- The detector consumption
- The percentage of communication errors with the control panel
- The electrical reference values of the Loop interface
- The min. and max. temperature values detected
- The obscuration values detected by the optical camera
- The graph with the dynamic trend of the detected signal.



ALARM GRAPH

The alarm detected by the optical smoke detector is digitised in graphic form and stored in the event log of the control unit. The alarm trace photo displays, the signal trend and the reference, minimum and maximum values of the detected alarm. The analysis of the alarm trace photo allows the alarm event to be verified and investigated with objective tools. The photos downloaded and archived by the Centro software can be saved to document the detected event.

TFDA-STR2 CONVENTIONAL

FUNCTIONS OF THE TECNOFIRE ID APP

The conventional detector can only be programmed with the App.

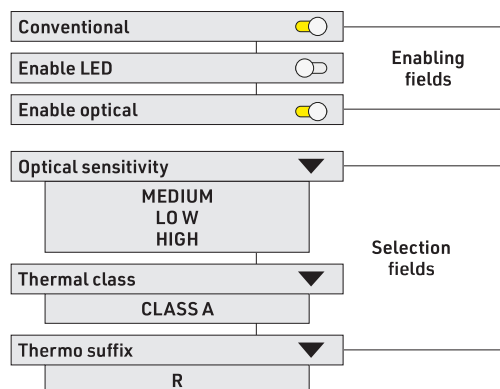
The App identifies the detector model and displays the corresponding programming fields. The TFDA-STR2 detector has three enabling and three selection fields.

The detector stores a graph depicting, with a series of vertical bars, the trend of the last alarm event detected (optical detector only).

The alarm counter stores the number of detected events. The graph and alarm counter can be viewed by reading the detector memory with the Tecnofire ID app.

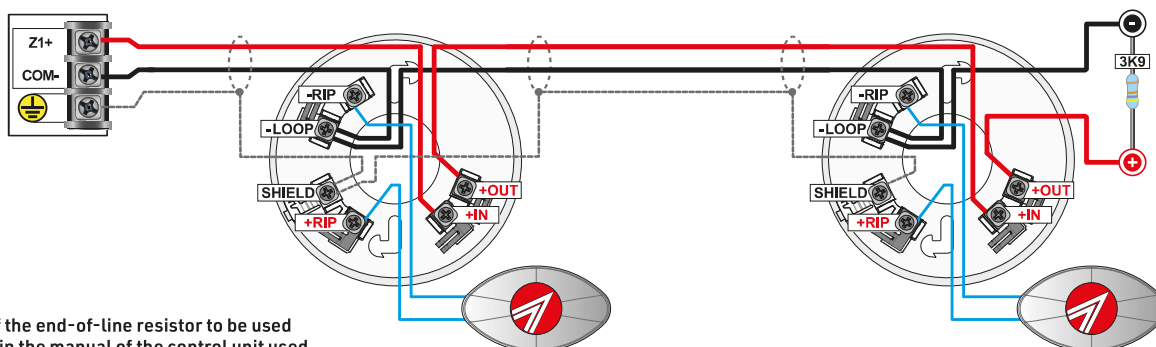
SHORT-CIRCUIT ISOLATOR

The detector is equipped with a line separator with double isolator. In the event of a short circuit in the line, the separator intervenes by isolating the detector and generating the line fault.



Scan the QRCode to view the programming video tutorial.

CONNECTION TO THE CONVENTIONAL ZONE











The value of the end-of-line resistor to be used is indicated in the manual of the control unit used

TFDA-STR2

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Accessories

	TFRIP-R Optical repeater, red LED. 360° visibility. Surface mounting. ABS casing. IP22. White colour. Dimensions (L x H x D) 78 x 45 x 25mm. Item no. TF3TFRIPR		TFRIP-SMART Smart optical repeater, red LED. 360° visibility. Formula-managed signaling. 3 wire connection to detector. ABS casing. IP22. Colour white. Dimensions (W x H x D) 78 x 45 x 25mm. Item no. TF3TFRIPSMART
	TFBOX-B Junction box for fixing a detector base. Fittings for 20mm tubes. ABS casing. White colour. Dimensions (D x H) 101 x 38mm. Item no. TF6TFBOXB		TFBOX-SB / TFBOX-SBWP Junction box for mounting base TFBASE01. Plugs for PG9 pipe couplings. Item no. TF5TFBOXSB (IP44) Item no. TF5TFBOXSBWP (IP65)
	TFBASE01 / TFBASE01-BK Mounting base. Material ABS V0. Dimensions (D x H) 100 x 19mm. Item no. TF6TFBASE01N (white) Item no. TF6TFBASE01BKN (black)		TFBASE-SIREN Mounting base for addressable detectors, with integrated acoustic alarm device. Polycarbonate casing. White colour. Dimensions (D x H) 108 x 52mm. Item no. TF6TFSOUNDERN
	TFDA-REMOVAL Tool for removing Tecnofire detectors. Articulated head to facilitate the removal and fitting of the detector. Standard telescopic pole coupling. Item no. TF3TFDAREMOVAL		TFRIP-R INC Optical repeater, red LED. 360° visibility. Flush mounting. Protection rating IP67. Item no. TF3TFRIPRINC

TFDA-STR2 addressed - Technical and functional specifications

General information	Combined optical smoke and heat detector configurable	TFDA-STR2	Electrical specifications	Nominal voltage	24V DC
	Detector configuration	Addressable or conventional		Operating voltage	18V...30V DC
Management App	iPhone - Android	Tecnofire ID		Consumption	400µA @ 24V DC
	NFC Protocol	Encrypted		Consumption in alarm	5mA @ 24V DC
	Programming	Reading / Writing		Repeater output	9,4V DC 3mA
	Logged data	Optical alarm graph Alarm counter Detector ID Revision management	Physical specifications	Operating temperature	-10°C...+55°C
Programmable functions	Polling frequency	Programmable		Relative humidity (non-condensing)	10%...93%
	Polling signaling Led	Excludable		Protection class	IP22 (EN 60529)
	Sensibility	3 levels		Casing	ABS
	Prealarm	Excludable		Dimensions (H x D)	100 x 52mm
	Optical detection section	Excludable	Conformity	Weight	100g
	Thermovelocimetric detector	Category A1-58° Suffix R		Standards	EN 54-5:2017 + A1:2018 EN 54-7:2018 EN 54-17:2005
	Formula association	Programmable		System Compatibility	EN 54-13:2020
	Operating criterion	Programmable		Certification number	0051-CPR-3133
Loop interface	Addressing	Software		Year of CE marking	23
	Communication protocol	FIRE-SPEED		Number of declaration of performance	053_TFDA-STR2
	Loop isolator	Double insulator		Notified body	IMQ

N.B. Declarations of conformity and performance are available on www.tecnofire.com



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The product features can be subject to change without notice.

MADE IN ITALY

TFDA-STR2 - DATA SHEET - REL. 1.2