



G003979

Fire Alarm System

TERRA ONE

Part no. 5100429-00B

System: TERRA ONE

General Description

The Fire Alarm System is a compact stand alone fire alarm panel with one analogue addressable sensor loop for smaller installations. The panel complements the high-end range of panels in situations where a limited capability is sufficient.

The panel is targeted to provide small fire alarm installations with robust every-day operation. Combined with a simple commissioning procedure and minimum need for support and maintenance after start-up, ease of operation is the primary target.

The panel is tested to the latest EN54-2, EN54-4 and EN54-13 standards with the following EN54-2 options included:

- 7.8 Output to fire alarm devices
- 7.9.1 Control of fire alarm routing equipment
- 7.11 Delays to outputs
- 7.12.3 Dependencies to more than one alarm signal, Type C.
- 7.13 Alarm counter
- 8.3 Fault signals from points
- 8.9 Output to fault warning routing equipment
- 9.5 Disablement of addressable points
- 10 Test condition

In addition to EN54, the Fire Alarm System also complies with the Swedish standard SS3654 (Fire Brigade Panel).

No external tools are needed to do a basic configuration and start up the installation. If there is a need to specify customer specific text for zones and/or detection points, this can be done from the panel or alternatively by connecting a PC to the panel via an Ethernet cable.

Setting addresses of line devices are done from the integrated device address programmer and can be easily done by a service engineer after removing the front cover of the panel. The address of the device is then selected from the user interface on the panel.

General Data

Mains supply	100-240 VAC, 50/60 Hz
Normal current consumption	100 mA (28 VDC)
Cable terminals	2,5 mm ²
Operating temperature range	-5°C to +40°C
Weight	1,6 kg (without batteries)
Colour	Front: Light gray (RAL7035) Backbox: Dark gray (Pantone Cool Gray 9)
Enclosure, material	Plastic (ABS/PC)
Ingress protection	IP30
Certified according to	CE 2531-CPR-232.1725 DOP no. 6301903

Battery¹

Capacity ²	12 Ah
Type ³	2x12V Sealed Lead Acid
Max dimensions	152(L) x 99(W) x 99(H)

Note 1: Batteries are not included in the delivery.

Note 2: Max operation on battery is 36h in normal operating condition followed by 30 minutes in fire alarm condition (fire indications and bells activated).

Note 3: Recommended batteries: Fiamm FG21202,
Yuasa NP 12-12.

Outputs

Bells/flashlight	3 × 24VDC/700mA Polarity switch when active. Cable short circuit & break detection. Usage: <ul style="list-style-type: none"> Flashlight output Bell output
Relay	4 × (24VDC/2A or 48VDC/1A) Single pole closing contact normally open. Usage: <ul style="list-style-type: none"> Alarm signal, alarm routing. Fault signal, alarm routing. Fire doors (fail-safe op.). Ventilation control.
Power	1 × 24VDC/180mA* (Rev. A06 and later) Power supply for alarm transmitter or door holding magnets. Cable is supervised for short circuit. * Rev. A05 and earlier: 130 mA.

Inputs

Alarm delay on/off	1 for closing contact. Cable is not supervised for cable short circuit or cable break.
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Mechanical Design

Lock/fire brigade key for access to panel keyboard.

Cable entry/glands are accessible from top and from back of cabinet (only upper area). Note that cable glands are not included in the delivery.

Drawings, manuals, protocols and other documents required to be stored by the panel is to be placed in a separate cabinet.

Network Access

The panel has as standard Ethernet port for secure web access, allowing for easy support and remote diagnostics.



NOTE!

The fire alarm system is a standalone panel and cannot be networked.

Loop

Max 1000 m cable length (max total length from loop out to loop in terminals).

Cable impedance per km: Max 50 Ohm and 100 nF.

Max 150 addresses which can be divided in a maximum of 24 zones.

Compatible line devices: CN-AIOI, CN-BI, CN-DPH, CN-H/A1R, CN-H/CS, CN-HIOP-BCN SCI, CN-HIOP-SB SCI, CN-HIOP-SDR SCI, CN-MCP2-DSCI, CN-MCP2-SCI, CN-MCP2-SCI-WP, CN-P, CN-PH, CN-PS, CN-PS-DSCI, CN-PYH, CN-SB-DSCI.

Built-in device programming base, for easy service when replacing devices on the loop.

Soft customer codes are not supported, please use the open code.

Configuration

Zone allocation and simple Cause&Effect for outputs is configurable from the panel.

Customer texts for zones and devices can be entered from the panel or through a connected PC (Ethernet port).

A PC could also be used to backup and restore the configuration.

Documentation

User Guide	5100502
Installation, Service and Maintenance manual	5100503
Quick Guide	5100504

User Functions, highlights

Zones, outputs and single individual line devices can be disabled.

Alarm delay can be set on/off from the panel or from the external alarm delay input.

One-man testing of devices (addressing/alarm) is available. A test list can be created in the panel at commissioning or at periodical testing.

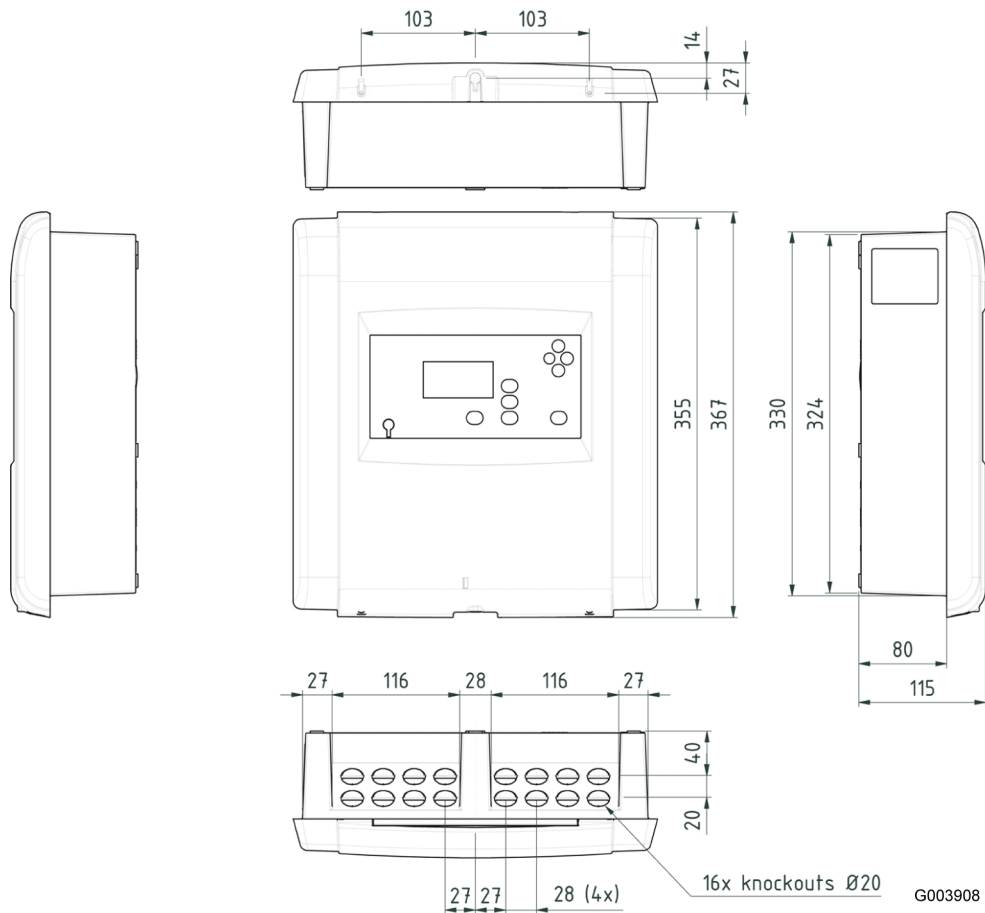
List of contaminated detectors for periodical service (replacements) is available from the panel or from the Ethernet interface.

Connections

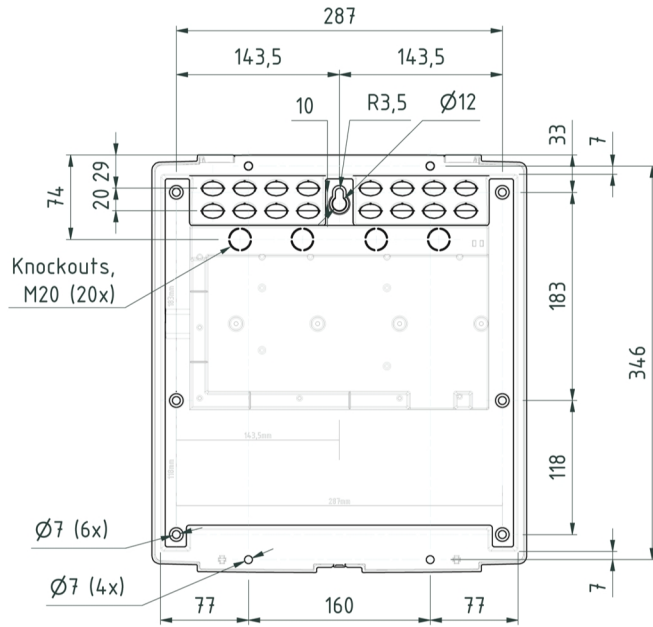
10	+	24VDC OUT		24	C	3 RELAY
11	-			25	NO	
12	+	IN		26	C	4 RELAY
13	-			27	NO	
14	+	1 BELL OUT		28	Tx-	ETHERNET
15	-			29	Tx+	
16	+	2 BELL OUT		30	Rx-	
17	-			31	Rx+	
18	+	3 BELL OUT		32	GND	RS485
19	-			33	A	
20	C	1 RELAY		34	B	
21	NO					
22	C	2 RELAY		35	+	LOOP OUT/A
23	NO			36	-	
				37	+	LOOP IN/B
				38	-	

Dimensional Drawings

Exterior dimensions

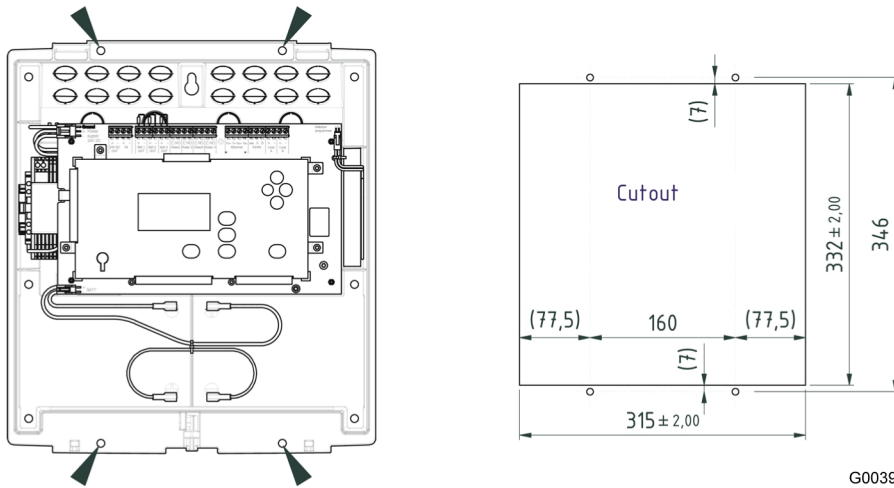


Exterior dimensions, rear view



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Dimensions, recessed mounting



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