

SV SISTEMI DI SICUREZZA

ITALY



**EXFIRE360/
MINI-EXFIRE360
EXLOOP-E TECHNICAL SPECIFICATION**

TECHNICAL SPECIFICATION

REVISION 06 OF 13/10/2020

TS-0010-EN-REV06

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INDEX OF REVISIONS

REVISION	DESCRIPTION	DATE
Revision.01	Preliminary version	17/01/2010
Revision.02	Revised for certification scope	08/03/2010
Revision.03	Revised for certification scope	19/10/2010
Revision.04	Revised for certification scope	22/12/2011
Revision.05	Revised for IMQ certification scope	10/01/2017
Revision.06	Revised for updating company address	13/10/2020

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1 GENERAL INFORMATION

1.1 CODES AND STANDARDS

Design of hardware and software have been developed according to the following reference standards.

Construction Products Regulation (CPR) – Regulation 305/2011.

“Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC”.

EN 54-2

“Fire detection and fire alarm systems - Part 2: Control and indicating equipment”

EN 54-4

“Fire detection and fire alarm systems - Part 4: Power supply equipment”

EN 12094-1

“Fixed firefighting systems - Components for gas extinguishing systems - Part 1: Requirements and test methods for electrical automatic control and delay devices (only for EX6EV-C card)”

EN 60079-29-1

“Explosive atmospheres - Gas detectors - Performance requirements of detectors for flammable gases”

1.2 DESIGN REQUIREMENTS

EXLOOP-E has the environmental classification of the EXFIRE360 control panel.

1.3 MANUAL CONTROLS

Card is not equipped with manual controls.

1.4 VISIBLE INDICATIONS

Alarm, fault and other supervisory or monitoring indications are visible on the Master display, light emitting indicators adjacent to the display and on ModLcd displays installed on each module.

Touch-screen operations on Master display give access to the panel functions (at access levels 1/2/3).

Visible indications are clearly identified at access level 1 for their specific function.

1.5 DISTINCT LIGHT INDICATIONS

Visible indications are clearly identified at access level 1 for their specific function. Mandatory visible indications could be fully tested through “Test LED” function available at level 2.

EXLOOP-E is also equipped with 5 LEDs that identify the card status.

1.6 INDICATIONS SHOWN ON ALPHANUMERIC DISPLAYS

MODLCD display shows the information about two adjacent input/output cards, including all the visible indications of the status of each input/output line: “Activate”, “Alarm”, “Supervisory”, “Fault”, “Isolate”, “Test”.

Information about the status of diagnostics and card settings can be retrieved in the card “Menu”.

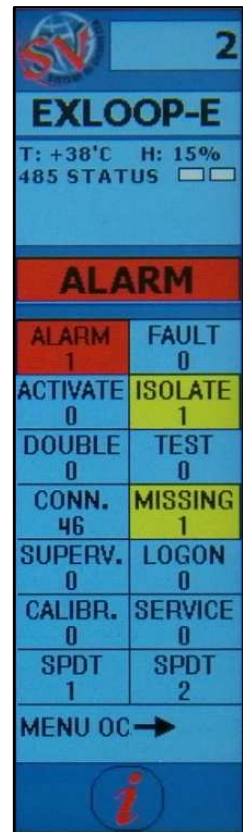
2 EXLOOP-E PRESENTATION

EXLOOP-E controls the Hochiki ESP addressable devices connected on a loop circuit. Card manages a maximum of 127 devices, selectable between detectors, notification appliances and input/output modules.

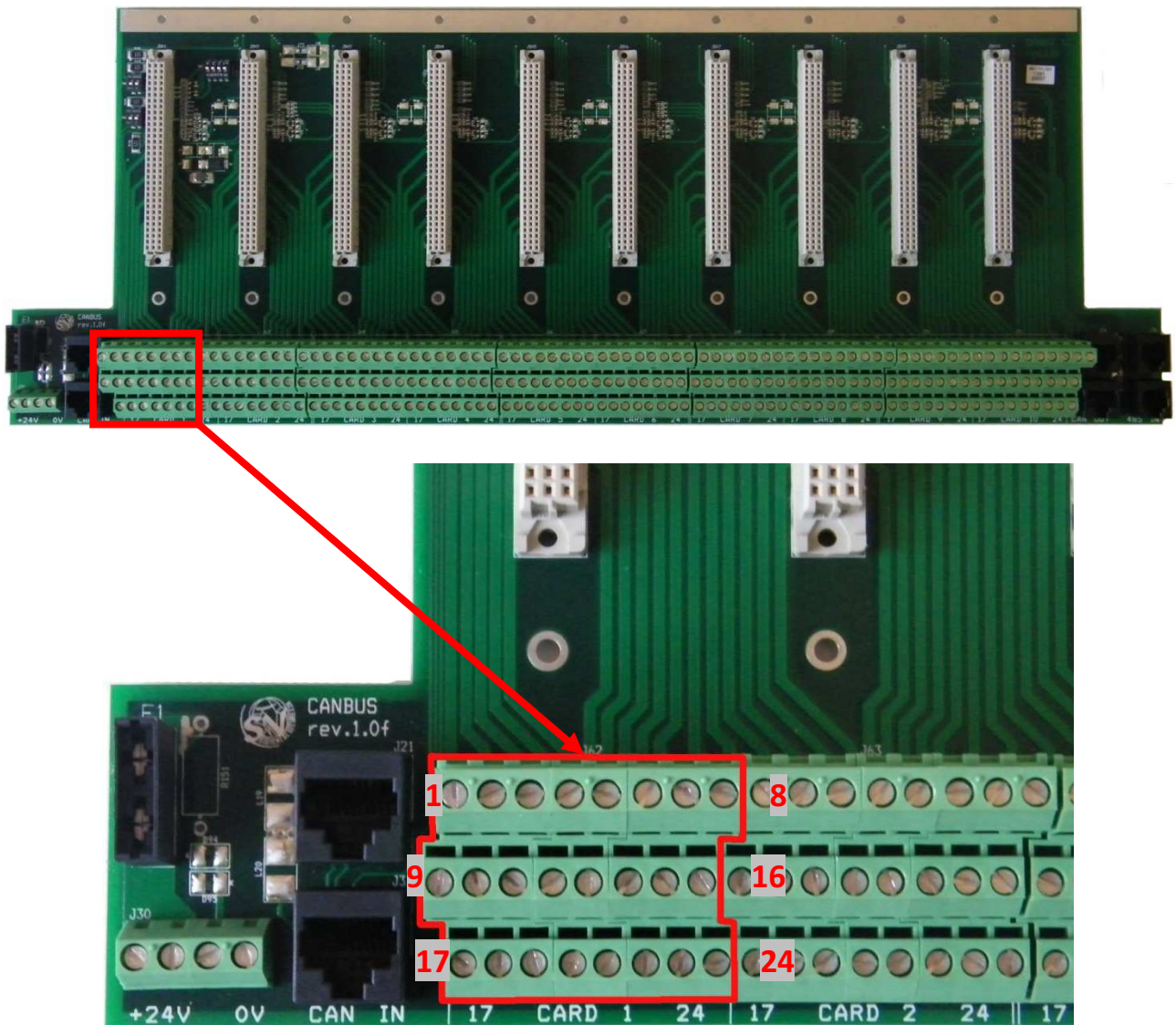
Quantity, type and operating modes of the addressable devices can be configured using the programming software SV Protection. Please refer to “TM-0006 Programming Manual” for details.

2.1 MAIN FEATURES

- “hot-swap” insertion in a CANBUS slot;
- automatic card addressing;
- execution of diagnostic functions;
- control of a maximum of 127 Hochiki ESP addressable devices;
- configurable operating modes and options;
- supervision against loop open, loop short or loop fault conditions;
- control of two volt-free relays (2 A max);
- control of seven Open Collectors (max. 500 mA);
- monitoring of card temperature;
- monitoring of card humidity;
- monitoring of CANbus communication;
- monitoring of supply voltages (24 Vdc/ 5 Vdc / 3.3 Vdc);
- supply voltage: 21÷30 Vdc;
- standby current consumption: 150 mA;
- maximum loop current: 500 mA;
- working temperature: -5 to +40°C;
- storage temperature: -10 to +50°C;
- humidity range (UR): ≤ 95% non-condensing;
- dimensions: standard Eurocard 160 mm x 100 mm.



3 WIRING DETAILS



All the terminals must have a limited power to avoid dangerous conditions caused by over-heating or short conditions. Here below the characteristics of CANBUS terminals:

- Angle of cable entry: horizontal;
- Maximum operational temperature: 110° C;
- Admitted sections of the wire: AWG 12, 14, 16, 18, 20, 22, 24 – mm² 0.05 - 2.50;
- Maximum admitted current: 17,5A;
- Maximum admitted voltage: 300V.

3.1 TERMINALS

CARD	TERM.	ROW	DESCRIPTION
EXLOOP-E	1	1	Loop IN - positive
	2		Loop OUT - positive
	3		Shield
	4		-
	5		Volt-free relay 1 – common terminal
	6		Volt-free relay 1 – common terminal
	7		Volt-free relay 2 – common terminal
	8		Volt-free relay 2 – common terminal
	9	2	Loop IN - negative
	10		Loop OUT - negative
	11		Shield
	12		-
	13		Volt-free relay 1 – normally open terminal
	14		Volt-free relay 1 – normally closed terminal
	15		Volt-free relay 2 – normally open terminal
	16		Volt-free relay 2 – normally closed terminal
	17	3	Open Collector 1
	18		Open Collector 2
	19		Open Collector 3
	20		Open Collector 4
	21		Open Collector 5
	22		Open Collector 6
	23		Open Collector 7
	24		Open Collectors – common negative

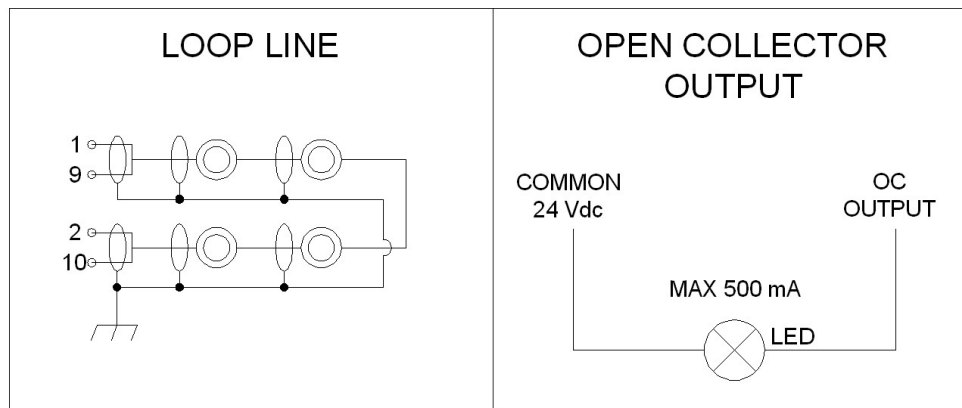
NOTE: all volt-free relays and Open Collectors **HAVE NOT TO** be used for connecting fire alarm sounders (type C), fire alarm or fault routing equipment (type E and J) or automatic fire protection equipment (type G).

Volt-free relays **MUST** be connected to SELV circuits.

At least two isolator bases or modules with isolator **MUST** be connected every 32 devices.

If the number of connected addressable devices is higher than 32, then a loop circuit **MUST** be used.

3.2 WIRING DETAILS



4 MAINTENANCE

EXLOOP-E can be connected or disconnected when desired; in case of removal, panel will display the message "CARD XXX MISSING". Please wait 30 seconds before inserting the card again, to let the card electronic discharge completely. Once the card will be connected anew the panel will cancel the fault indication.