SV SISTEMI DI SICUREZZA

ITALY

EXFIRE360/ MINI-EXFIRE360

EX8RO TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION

REVISION 07 OF 13/10/2020

TS-0009-EN-REV07

SV Sistemi di Sicurezza - Headquarters: Via Matteotti, 55/57, 24050, Grassobbio (Bergamo) Tel.+39.035.65.70.55

PROPERTY RIGHTS

* * * * *

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	20/09/2010
Revision.04	Revised for certification scope	03/08/2011
Revision.05	Revised for certification scope	21/12/2011
Revision.06	Revised for IMQ certification scope	10/01/2017
Revision.07	Revised for updating company address	13/10/2020

* * * * *

INDEX

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

EX8RO 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.
EX8RO 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".

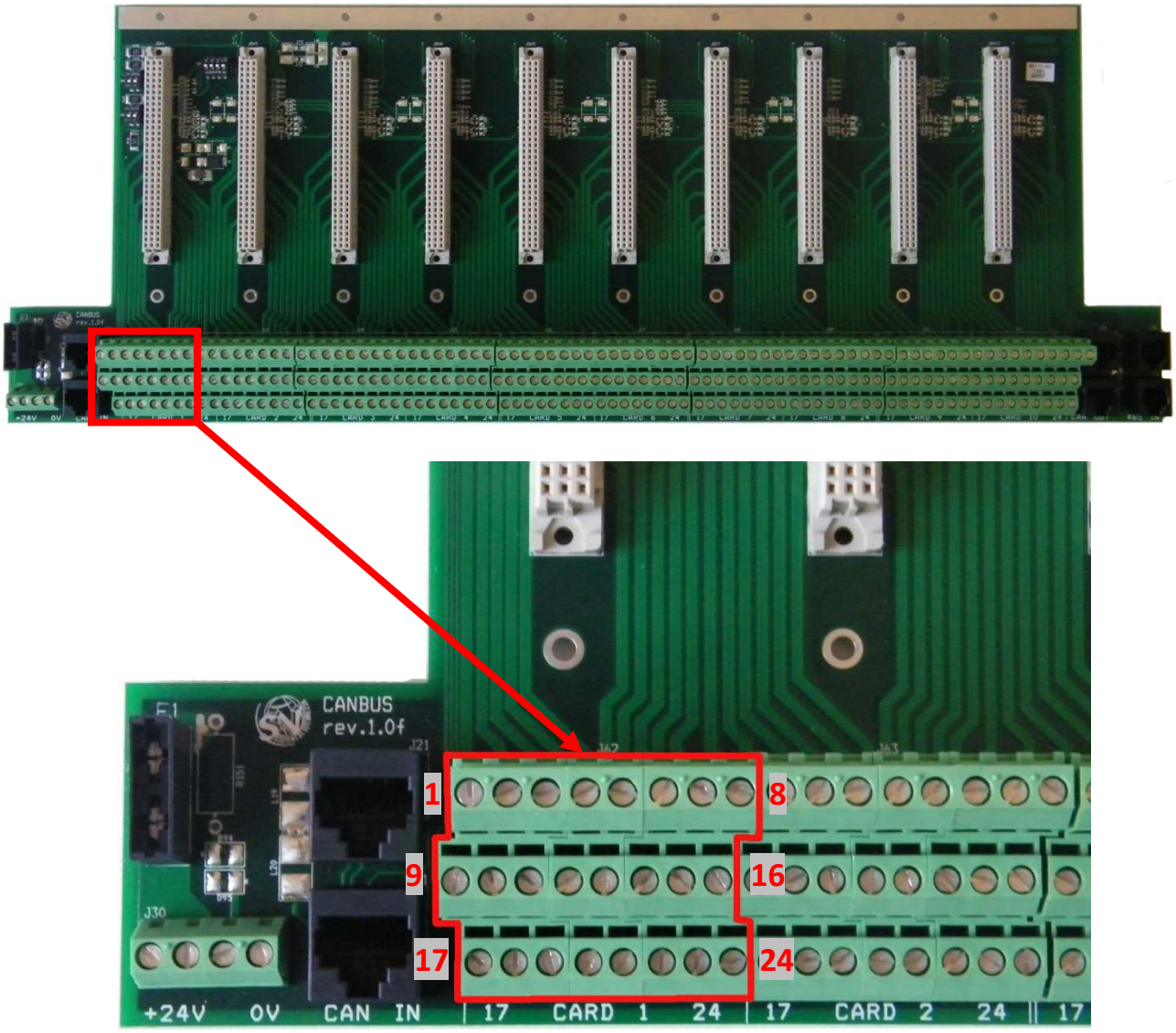
2 EX8RO PRESENTATION

EX8RO card controls eight SPDT volt-free relays, configurable through the programming software SV Protection. Each output can be activated independently and associated to events or states in the panel.

2.1 MAIN FEATURES

- "hot-swap" insertion in a CANBUS slot;
- automatic card addressing;
- execution of diagnostic functions;
- control of eight volt-free relays (4 A max);
- 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: 70 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;
- five LEDs on card;
  - POWER ON (green): active when card Is powered;
  - ALARM (red): active in case of alarm or supervisory condition (input activated)
  - FAULT (yellow): active in case of any fault condition;
  - DISABLED (green): active when an I/O has been disabled by operator;
  - CANBUS (green/red): identifies the CANbus status.

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
EX8RO	1	1	Volt-free relay 1 – common terminal
	2		Volt-free relay 2 – common terminal
	3		Volt-free relay 3 – common terminal
	4		Volt-free relay 4 – common terminal
	5		Volt-free relay 5 – common terminal
	6		Volt-free relay 6 – common terminal
	7		Volt-free relay 7 – common terminal
	8		Volt-free relay 8 – common terminal
	9	2	Volt-free relay 1 – normally open terminal
	10		Volt-free relay 2 – normally open terminal
	11		Volt-free relay 3 – normally open terminal
	12		Volt-free relay 4 – normally open terminal
	13		Volt-free relay 5 – normally open terminal
	14		Volt-free relay 6 – normally open terminal
	15		Volt-free relay 7 – normally open terminal
	16		Volt-free relay 8 – normally open terminal
	17	3	Volt-free relay 1 – normally closed terminal
	18		Volt-free relay 2 – normally closed terminal
	19		Volt-free relay 3 – normally closed terminal
	20		Volt-free relay 4 – normally closed terminal
	21		Volt-free relay 5 – normally closed terminal
	22		Volt-free relay 6 – normally closed terminal
	23		Volt-free relay 7 – normally closed terminal
	24		Volt-free relay 8 – normally closed terminal

NOTE: all volt-free relays **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.

4 MAINTENANCE

EX8RO 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.