

SV SISTEMI DI SICUREZZA

ITALY



ELITE-FIRE

EXMICRO TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION

REVISION 03 OF 13/10/2020

TS-0022-EN-REV03

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INDEX OF REVISIONS

REVISION	DESCRIPTION	DATE
Revision.01	Preliminary version	21/07/2017
Revision.02	Revised for certification scope	05/02/2020
Revision.03	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

EXMICRO has the environmental classification of ELITE-FIRE and EX-NET units.

EXMICRO provides connection for up to 4 I/O cards and up to 2 MODLCD display via 20-way IDC connectors.

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.

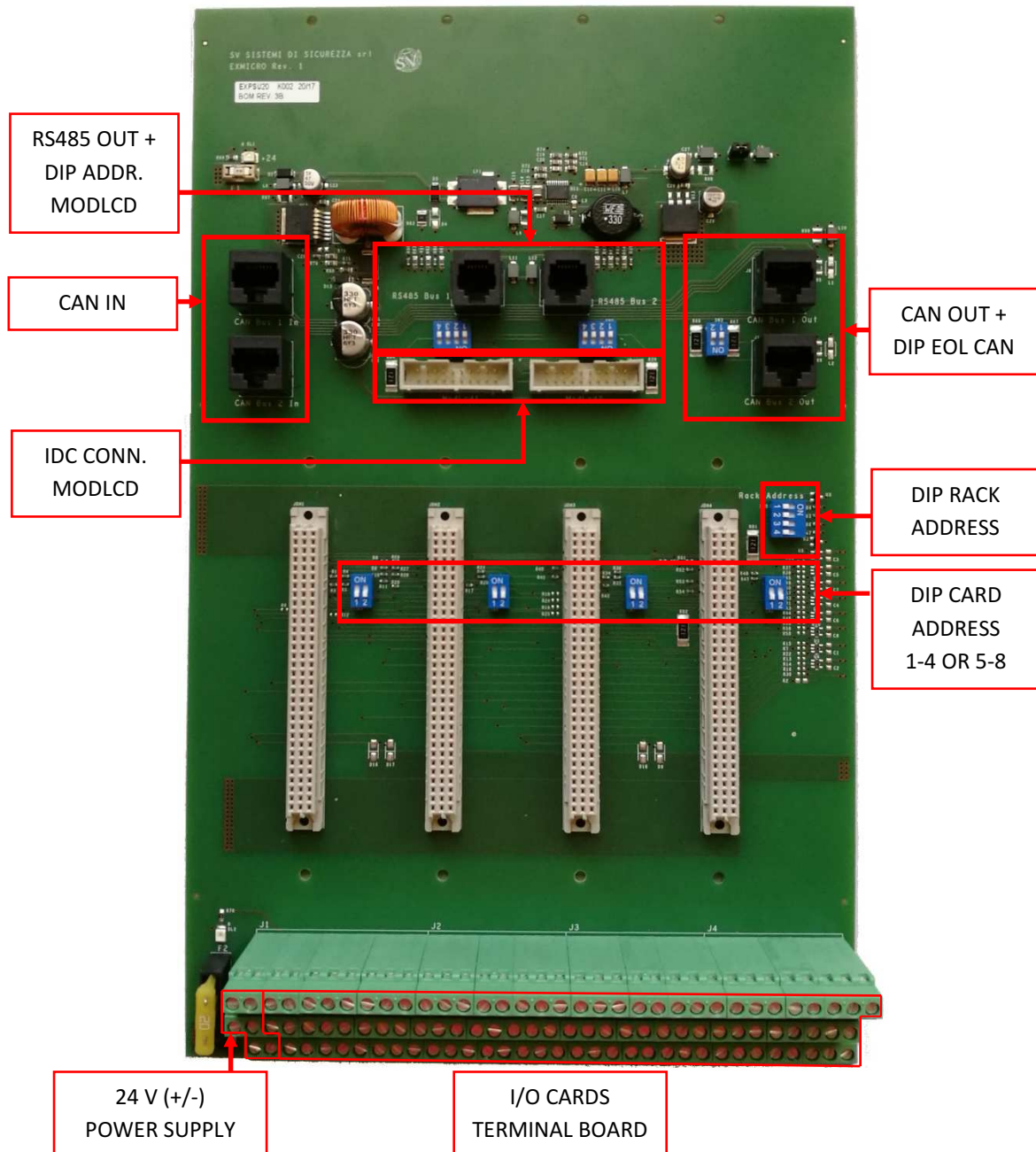
1.6 INDICATIONS SHOWN ON ALPHANUMERIC DISPLAYS

EXMICRO has no further indications.

2 PRESENTAZIONE SCHEDA EXMICRO

EXMICRO provides connection for up to four input/output cards and up to MODLCD displays. It's assembled on the rear section of the rack EXMICRO, distributing 24V power supply and connecting the I/O cards towards EXCPU360 control units (via CANbus) and MODLCD (via RS485 lines).

The board can be addressed using a 4-position dip switch (on the right) with a binary encode; furthermore a 2-position dip switches can enable the end of line resistor for the CAN buses (on the terminal board). Four 2 position dip switches (near each I/O card connector) enables the addressing of the cards in the 1-4 or 5-8 slot. For last, two 4-position dip switches address MODLCD units and disables EOL resistor on RS485 lines (when MODLCD units must be installed remotely).



2.1 CARATTERISTICHE PRINCIPALI

- installed in the rear section of the EXMICRO rack;
- four 96 pins connectors for "hot-swap" insertion of input/output cards;

Reproduction is forbidden

- six terminals for power supply;
- 24 terminals for each card slot;
- 20 A fuse on power supply line;
- 4 RJ45 connectors for redundant CAN buses;
- 2 RJ11 connectors for redundant RS485 serial lines;
- 2 20-poles IDC connectors for MODLCD;
- one 4-position dip switch for board addressing;
- one 2-position dip switch for enabling CAN end-of-line resistor;
- four 2 position dip switches for I/O cards addressing;
- two 4 position dip switches for MODLCD addressing and RS485 EOL disablement;
- working temperature: -5 to +40°C;
- storage temperature: -10 to +50°C;
- humidity range (UR): <= 95% non-condensing;
- dimensions: 316 mm x 200 mm.

2.2 DIP SWITCH SETTINGS

DIP SLOT	SETTING	DIP CONFIGURATION
<i>SW1/SW2 MODLCD ADDRESSING + RS485 EOL</i>	MODLCD ADDR. 1 (SCHEDE I/O 1-2)	DIP 1: ON; DIP 2: ON; DIP 3: ON
	MODLCD ADDR. 2 (SCHEDE I/O 3-4)	DIP 1: OFF; DIP 2: ON; DIP 3: ON
	MODLCD ADDR. 3 (SCHEDE I/O 5-6)	DIP 1: ON; DIP 2: OFF; DIP 3: ON
	MODLCD ADDR. 4 (SCHEDE I/O 7-8)	DIP 1: OFF; DIP 2: OFF; DIP 3: ON
	MODLCD ADDR. 5 (SCHEDE I/O 9-10)	DIP 1: ON; DIP 2: ON; DIP 3: OFF
	EOL RS485 ENABLEMENT (only for locally connected units)	DIP 4: ON
<i>SW3 CANBUS EOL</i>	CANBUS EOL ENABLED	DIP 1: ON; DIP 2: ON
<i>SW4, SW6, SW7, SW8 I/O CARDS ADDRESSING (UNITS VALUE)</i>	SLOT 1: 1 SLOT 2: 2 SLOT 3: 3 SLOT 4: 4	DIP 1: OFF; DIP 2: OFF DIP 1: OFF; DIP 2: OFF DIP 1: OFF; DIP 2: OFF DIP 1: OFF; DIP 2: OFF
	SLOT 1: 5 SLOT 2: 6 SLOT 3: 7 SLOT 4: 8	DIP 1: ON; DIP 2: OFF DIP 1: ON; DIP 2: OFF DIP 1: ON; DIP 2: OFF DIP 1: ON; DIP 2: OFF
	SLOT 1: 9 SLOT 2: 10	DIP 1: OFF; DIP 2: ON DIP 1: OFF; DIP 2: ON
<i>SW5 RACK ADDRESSING (DECINE VALUE FOR CARD ADDRESS)</i>	0 FOR 1 TO 10 ADDRESSES 1 FOR 11 TO 20 ADDRESSES ADMITTED VALUES: 0-12	BINARY CODING (DIP 1: LESS SIGNIFICANT BIT)

3 MANUTENZIONE

When a replacement of EXMICRO is required, for first disconnect the fuse, then unplug the communication cables and lastly remove all the wires connected to the terminals.

Being a component necessary for the ELITE-FIRE or EX-NET operation, any maintenance procedure implies that the complete protection of the system cannot be guaranteed until the end of the maintenance activity, so all the required actions must be taken in account.