

**SV SISTEMI DI SICUREZZA**

**ITALY**



**EXFIRE360/  
MINI-EXFIRE360  
BUSCPU TECHNICAL SPECIFICATION**

**TECHINICAL SPECIFICATION**

REVISION 06 OF 13/10/2020

TS-0004-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	20/10/2010
Revision.04	Revised for certification scope	26/01/2012
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**

BUSCPU 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.

BUSCPU is also equipped with 5 LEDs that identify the card status.

### **1.6 INDICATIONS SHOWN ON ALPHANUMERIC DISPLAYS**

BUSCPU has no further indications.

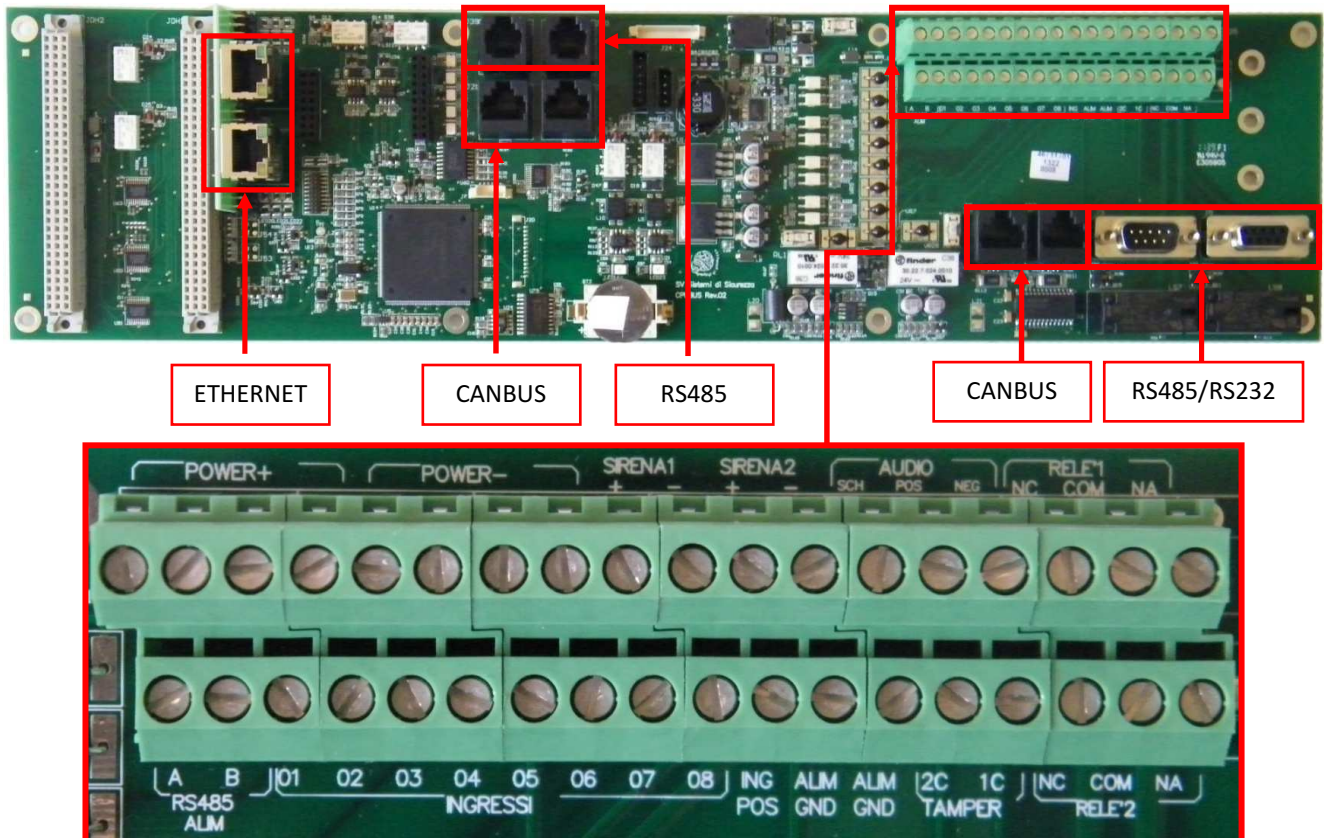
### **1.7 BATTERY REPLACEMENT**

BUSCPU is equipped with a CR2032, lithium 3,3 V battery, that allows to preserve hour/date value.

ATTENTION: risk of explosion in case of not correct type of battery. Please replace the battery following the instructions.

## 2 BUSCPU PRESENTATION

BUSCPU is the main board of the EXFIRE360 control panel and interfaces EXCPU360 control units with the input/output cards. It's mounted on the back plate of the CPU rack, that acts as protection against external EMC interferences. Besides the 96 pins female connectors for connecting two EXCPU360 units, the board is equipped with Ethernet, RS485 and RS232 ports that can be used for communicating with the graphic supervision system or third parties' devices.



### 2.1 MAIN FEATURES

- installed on the back-plate of the CPU rack;
- two 96 pins connectors for "hot-swap" insertion of EXCPU360 units;
- eight opto-isolated, digital inputs;
- two unsupervised 24 Vdc outputs and two volt-free relays;
- six RJ45 connectors (four for two redundant CAN buses + two for Ethernet communication);
- two RJ11 + two DB9 connectors for RS485/RS232 serial lines;
- supply voltage: 21÷30 Vdc;
- standby current consumption: 200 mA;
- working temperature: -5 to +40°C;
- storage temperature: -10 to +50°C;
- humidity range (UR): ≤ 95% non-condensing;
- dimensions: 420 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 TERMINALS

TERMINAL	DESCRIPTION
POWER +	Power supply 24 Vdc – positive (4 shorted terminals)
POWER -	Power supply 24 Vdc – negative (4 shorted terminals)
SIRENA 1 +	Unsupervised 24 Vdc output 1 - positive
SIRENA 1 -	Unsupervised 24 Vdc output 1 - negative
SIRENA 2 +	Unsupervised 24 Vdc output 2 - positive
SIRENA 2 -	Unsupervised 24 Vdc output 2 - negative
AUDIO SCH	Audio output - shield
AUDIO POS	Audio output – positive
AUDIO NEG	Audio output - negative
RELE' 1 NC	Volt-free relay 1 – normally closed terminal
RELE' 1 COM	Volt-free relay 1 – common terminal
RELE' 1 NA	Volt-free relay 1 – normally open terminal
RELE' 2 NC	Volt-free relay 2 – normally closed terminal
RELE' 2 COM	Volt-free relay 2 – common terminal
RELE' 2 NA	Volt-free relay 2 – normally open terminal
TAMPER 1C	Digital input 1 (for tamper connection – under development)
TAMPER 2C	Digital input 2 (for tamper connection – under development)
ALIM GND	Digital inputs negative reference
ALIM GND	Digital inputs negative reference
ING POS	Digital inputs positive reference
INGRESSI 01	Digital input 1
INGRESSI 02	Digital input 2
INGRESSI 03	Digital input 3
INGRESSI 04	Digital input 4
INGRESSI 05	Digital input 5
INGRESSI 06	Digital input 6
INGRESSI 07	Digital input 7
INGRESSI 08	Digital input 8
RS485 ALIM A	RS485 port - A
RS485 ALIM A	RS485 port - B

**NOTE:** all outputs **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

Being a component necessary for the EXFIRE360 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.