Date : 2023-10-18

CERTIFICATE OF COMPLIANCE

This certificate of compliance validates the following			
TEST REPORT NUMBER 'Assessment Reports' are not acceptable	44AK00039 44AK00040 SS19-00046931-02 44AK00042 SS19-0046931-01 SS21-0065098-01 SS23-0092019-01	**CERTIFICATE NUMBER**	SN.X000RI
DATE OF ISSUE	2023-10-18	**DATE OF ISSUE**	2023-10-18
DATE OF EXPIRY	2026-10-17	**DATE OF EXPIRY**	2026-10-17
Manufacturer details			
NAME OF FACTORY/ MANUFACTURER	SV SISTEMI DI SICUREZZA S.r.l.	**NAME OF THE BRAND**	SV SISTEMI DI SICUREZZA
FACTORY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	Via Matteotti, 55/57 – 24050 Grassobbio (BG) – Italy	**MODEL / NO**	EXFIRE360 EX6EV-C
WEBSITE	http://www.svsistemidisicurezza.com	**LOGO ON THE PRODUCT**	
TEL	+39 035657055	**EMAIL**	vincenzo.polge@sistemidisicurezza.com

Product Details From Test Report		Reference Test Report page NO
DESCRIPTION OF THE PRODUCT **(TECHNICAL DETAILS FROM TEST REPORT, SUCH AS ACTUAL FIRE RATINGS/DIMENSIONS/THICKNESS/ SENSITIVITY ETC)**	The EUT is a Control and Indicating Equipment (CIE) with integrated Power Supply Equipment (PSE) and Electrical automatic control and delay device (ECD) intended to be used in fire detection and fire alarm systems. It consists of a box, IP30 degree of protection, containing: - No. 3 Power supply trademark TDK-Lambda, type FPS1000-24 rated 24 V – 40 A; - No. 1 System power supply controller trademark SV SISTEMI DI SICUREZZA, type LE-RA-SBC-24; - No. 2 Allocable batteries rated 12 V – 150 Ah; **and fully configurable by following parts:** - Control panel type MASTERLCD (PCB Rev. 3); - CPU board type EXCPU360 (PCB Rev. 2); - CPU board type EXCPU360 (PCB Rev. 2), optional, if less than 512 detectors or manual call points are used; - Housing board for CPU board, type BUSCPU (PCB Rev. 4); - Housing board type CANBUS (PCB Rev. 2); - Housing board type FRBUS (PCB Rev. 2); - Output board type EX8RO (PCB Rev. 0.2); - Output board type EX6SO (PCB Rev. 1.0H); - Loop board type EXLOOP-E (PCB Rev. 3), optional, if input board type EX8SI or EX2GSI is used; - Input board type EX8SI (PCB Rev. 0.2), optional, if input board type EXLOOP-E or EX2GSI is used; - Input board type EX2GSI (PCB Rev. 4C), optional, if input board type EX8SI or EXLOOP-E is used; - Extinction command board type EX6EV-C, combination of boards type EX6EV (PCB Rev. 0.3) + EX8SI (PCB Rev. 0.2), optional, up to 29 max; - Input/Output board type EX6EV (PCB Rev. 0.3), optional; - Digital input/Output board type EX8D I/O (PCB Rev. 0.1), optional; - Interface board type EXMULTIBUS (PCB Rev. 2), optional; - Display touch screen type MODLCD (PCB Rev. 3); - Supplementary acoustic local sounder trademark MENVIER CSA type FLASHNI. The Control and Indicating Equipment is also provided of the following external device, optional: - Remote input/output expansion type EXREMOTE PANEL with integrated Power Supply Equipment (see below), up to 16 max; - Remote control panel type EXRGR (PCB Rev. 03), up to 16 max. Hardware identification of CPU board type EXCPU360: NXP, LPC2468FBD208. Firmware identification of CPU board type EXCPU360: 2.0.	44AK00039 - Page 2 and 3 44AK00040 - Page 2 and 3 44AK00042 - Page 2 and 3

	The remote input/output expansion type EXREMOTE PANEL with integrated Power Supply Equipment consists of a metal enclosure, IP30 degree of protection, containing: **Power supply section:** - No. 2 Power supply trademark TDK-Lambda, type SWS600L-24 rated 24 V; - No. 1 System battery controller board trademark SV SISTEMI DI SICUREZZA, type EXPSU20 (PCB Rev. 3); - No. 1 LED board type EXPSU20-LED (PCB Rev. 1); - No. 1 Display touch screen type MODLCD (PCB Rev. 3), optional; - No. 2 Allocable batteries rated 12 V – 55 Ah; **and fully configurable by following parts:** - Housing board type CANBUS (PCB Rev. 2); - Housing board for LCD, type FRBUS (PCB Rev. 2); - Output board type EX8RO (PCB Rev. 0.2); - Output board type EX6SO (PCB Rev. 1.0H); - Loop board type EXLOOP-E (PCB Rev. 3); - Input board type EX8SI (PCB Rev. 0.2); - Input board type EX2GSI (PCB Rev. 4C); - Extinction command board type EX6EV-C, combination of boards type EX6EV (PCB Rev. 0.3) + EX8SI (PCB Rev. 0.2), up to 8 max; - Input/Output board type EX6EV (PCB Rev. 0.3); - Digital input/Output board type EX8D I/O (PCB Rev. 0.1); - Interface board type EXMULTIBUS (PCB Rev. 2); - Display touch screen type MODLCD (PCB Rev. 3).	

TEST STANDARD **(SUCH AS ASTM/BS EN/ DN ETC)**	EN 54-2: 1997 + A1: 2006 EN 54-4: 1997 + A1:2002 + A2: 2006 EN 12094-1:2003	44AK00039 - Page 1 44AK00040 - Page 1 SS19-0046931-02 - Page 1 44AK00042 - Page 1 SS19-0046931-01 - Page 1 SS21-0065098-01 - Page 1 SS23-0092019-01 - Page 1
TEST DESCRIPTION	EN 54-2: 1997 + A1: 2006 Clause 5.1 Display of functional conditions Clause 5.2 Display of indications Clause 5.3 Indications on alphanumeric displays Clause 5.4 Indication of the supply of power Clause 5.5 Audible indications Clause 5.6 Additional indications Clause 6 The quiescent condition Clause 7.1 Reception and processing of fire signals Clause 7.2 Indication of the fire alarm condition Clause 7.3 Indication of the zones in alarm Clause 7.4 Audible indication Clause 7.5 Other indications during the fire alarm condition Clause 7.6 Reset from the fire alarm condition Clause 7.7 Output of the fire alarm condition Clause 7.8 Output to fire alarm device (option with requirements) Clause 7.9 Control of fire alarm routing equipment (options with requirements) Clause 7.10 Output to fire protection equipment (option with requirements) Clause 7.11 Delays to outputs Clause 7.12 Dependencies on more than one alarm signal (options with requirement) Clause 7.12.1 Type C dependency Clause 8.1 Reception and processing of fault signals Clause 8.2 Indication of faults Clause 8.3 Fault signals from points Clause 8.5 System fault Clause 8.6 Audible indication Clause 8.7 Reset of fault indications Clause 8.8 Fault output Clause 8.9 Output to fault warning routing equipment (option with requirements) Clause 9/9.1 Disabled condition/ General requirements Clause 9.2 Indication of the disabled condition	44AK00039 - Page 6 to 47

	Clause 9.3 Indication of the disabled condition Clause 9.4 Disablements and their indication Clause 9.5 Disablement of addressable points (options with requirements) Clause 10/10.1 Test condition/ General requirements Clause 10.2 Indication of the test condition Clause 10.3 Indication of zones in the test state Clause 11 Standardized input/output interface (option with requirements) Clause 12.1 General requirements and manufacturer's declarations Clause 12.2 Documentation Clause 12.3 Mechanical design requirements Clause 12.4 Electrical and other design requirements Clause 12.5 Integrity of transmission path Clause 12.6 Accessibility of indications and controls Clause 12.7 Indications by means of light emitting indicators Clause 12.8 Indications on alphanumeric displays Clause 12.9 Colours of indications Clause 12.10 Audible indications Clause 12.11Testing of indicators Clause 13/13.1 Additional design requirements for software controlled control and indication equipments/ General requirements and manufacturer's declarations Clause 13.5.1 The storage of program and data Clause 14 Marking Clause 15.2 Functional test Clause 15.4 Cold (operational) Clause 15.5 Damp heat, steady state (operational) Clause 15.6 Impact (operational) Clause 15.7 Vibration, sinusoidal (operational) Clause 15.8 Electromagnetic Compatibility (EMC), Immunity test (operational) Clause 15.13 Supply voltage variation (operational) Clause 15.14 Damp heat, steady state (endurance) Clause 15.15 Vibration, sinusoidal (endurance) ANNEX ZA – CLAUSES OF THIS EUROPEAN STANDARD ADDRESSING ESSENTIAL REQUIREMENTS OF THE CONSTRUCTION PRODUCTS OR OTHER PROVISIONS OF EU DIRECTIVES <u>EN 54-4: 1997 + A1:2002 + A2: 2006</u> Clause 4.2 Power source Clause 5.1 Power supply from the main power source Clause 5.2 Power supply from the standby power source (battery) Clause 5.3 Charger Clause 5.4 Faults Clause 6.1 Manufacturer's declaration Clause 6.2 Mechanical design Clause 6.3 Electrical design Clause 7.1 User's documentation Clause 7.2 Design documentation Clause 8 Marking	44AK00040 - Page 6 to 23

	Clause 9.2 Functional tests (Test 1 to Test 9) Clause 9.3 Test of the charger and the standby power source Clause 9.4 Environmental tests Clause 9.5 Cold (operational) Clause 9.6 Damp heat, steady state (operational) Clause 9.7 Impact (operational) Clause 9.8 Vibration, sinusoidal (operational) Clause 9.9 Electromagnetic Compatibility (EMC), Immunity test (operational) Clause 9.14 Damp heat, steady state (endurance) Clause 9.15 Vibration, sinusoidal (endurance) ANNEX ZA – CLAUSES OF THIS EUROPEAN STANDARD ADDRESSING ESSENTIAL REQUIREMENTS OF THE CONSTRUCTION PRODUCTS OR OTHER PROVISIONS OF EU DIRECTIVES <u>EN 12094-1:2003</u> Clause 4.3 Signal processing and indication Clause 4.4 Reception and processing of input triggering signals Clause 4.5 Transmission of extinguishing signal Clause 4.6 Activation of alarm devices Clause 4.7 Indication of the supply with power Clause 4.8 Activated condition Clause 4.9 Indication of activated condition Clause 4.10 Released condition Clause 4.11 Indication of Released condition Clause 4.12 Resetting of the Activated condition and the Released condition Clause 4.13 Fault warning condition Clause 4.14 Indication of Fault warning condition Clause 4.15 Disabled condition Clause 4.16 Indication of Disabled condition Clause 4.17 Delay of extinguishing signal (Option with requirements) Clause 4.18 Signal representing the flow of extinguishing agent (Option with requirements) Clause 4.19 Monitoring of the status of components (Option with requirements) Clause 4.20 Emergency hold device (Option with requirements) Clause 4.22 Initiation of secondary flooding (Option with requirements) Clause 4.23 Manual only mode (Option with requirements) Clause 4.24 Triggering signals to equipment within the system (Option with requirements) Clause 4.25 Extinguishing signals to spare cylinders (Option with requirements) Clause 4.26 Triggering of equipment outside the system (Option with requirements) Clause 4.27 Emergency abort device (Option with requirements) Clause 4.29 Release of the extinguishing media for selected flooding zones (Option with requirements) Clause 4.30 Activation of alarm devices with different signals (Option with requirements)	44AK00042 - Page 6 to 59

	Clause 5/5.1 Design requirements/ General Clause 5.2 Mechanical design Clause 5.3 Manual controls Clause 5.4 Visible indicators Clause 5.5 Audible indicators Clause 5.6 Electrical design of components Clause 5.7 Circuit design Clause 6/6.1 Additional design requirements for software controlled e.c.d.s./ General Clause 6.2 Software design Clause 6.3 Program monitoring Clause 6.4 Storage of program and data Clause 6.5 Monitoring of memory contents Clause 6.6 Software documentation Clause 7 Marking Clause 8 Documentation Clause 9.2 Functional test Clause 9.3 Environmental tests Clause 10/10.1 Evaluation of conformity/ General Clause 10.2 Initial type testing Clause 10.3 Factory production control (FPC) ANNEX ZA – CLAUSES OF THIS EUROPEAN STANDARD ADDRESSING THE PROVISIONS OF THE EU CONSTRUCTION PRODUCTS DIRECTIVE	
SPECIFICATION OF TEST SPECIMEN	The EUT, provided with all the units described in the section “DESCRIPTION OF THE PRODUCT”, as stated in clause 15.1 of standard EN 54-2 and in clause 9.1 of standards EN 54-4 and EN 12094-1, has been subjected to all the above mentioned tests.	44AK00039 - Page 2 and 3 44AK00040 - Page 2 and 3 44AK00042 - Page 2 and 3
TEST RESULT **(SUCH AS PASSED CRITERIA___/ COMPLIED TO___/ DURATION___/OBSERVATION___/ETC)**	Tests results are satisfactory	44AK00039 - Page 5 44AK00040 - Page 5 SS19-0046931-02 - Page 3 44AK00042 - Page 5 SS19-0046931-01 - Page 3 SS21-0065098-01 - Page 6 SS23-0092019-01 - Page 9

PRODUCT APPLICATION GUIDELINE (END USE) **(CLEARLY STATE THE END USE WITH SPECIFIC APPLICATION, SUCH AS EXACT FIRE RATING/TO BE INSTALLED IN___/TO BE INSTALLED AT____/TO BE CONNECTED WITH____/TO BE INSTALLED WITH___ ETC ALONG WITH ANY WARNINGS SUCH AS NOT TO BE USED IN___/NOT TO BE INSTALLED AT___/ NOT TO BE INSTALLED WITH___ETC.**	This product must be installed, connected up and used in accordance with current legislation and/or installation standards. The information regarding standards, specifications and design developments contained in this publication may not be up to date. Always contact us to obtain the latest information. The staff in charge of installation, commissioning and start-up of this equipment must be aware of the correct working procedures to ensure safety and proper use. The Control and Indicating Equipment will be derived directly from an electrical switchboard via a reserved line, this line will be protected by a disconnecting device in compliance with local regulations. The minimum size recommended for the earth connection is 2.5 mm^2, unless otherwise specified in the respective documentation. The EXFIRE360 has a front panel with keypad, LCD, LED and function keys, this model is suitable for installation in sites where they are needed visual and manual checks. EXFIRE360 is a central analog addressable fire alarm that runs a loop which can be connected to devices of different types (sensors, input modules, output, buttons, sirens, etc.). In addition to the loop, EXFIRE360 presents supervised outputs which ensure the monitoring of the operation of the device (eg .: siren). The control center is able to identify abnormal situations and diagnose them with a wide range of signals: alarm, pre-alarm, fault, bypass, test, monitor. All signaling is indicated on the display and on LEDs. It can be connected to central up to 16 remote control panel, for replication of alerts and management of emergency services at the level 2 (silencing, reset) throughout the building. It can be connected a board that operates the plant gas extinguishing. Features: • Up to 300 zones (32 detectors and/or manuals call points for each zone); • Up to 29 extinction zones (1 for each extinction command board); • Switching power supply with battery charging capabilities; • Output to fire alarm device; • Output to fire alarm routing equipment; • Output to fire protection equipment; • Output to fault warning routing equipment; • 24 V output for powering external devices. Other: • internal use; • ratings: 230 V~ +10% / -15%; 50/60 Hz; 10 A – Output: 27.6 V-; 40 A; • permanent connection to the mains; • equipment mobility: stationary (floor mounting); • Class I equipment; • Over voltage category II; • IP 30 protection class; • pollution degree PD2; • ambient temperature of -5 °C ÷ +40 °C.	44AK00039 - Page 6 to 47 44AK00040 - Page 6 to 23 44AK00042 - Page 6 to 59

Laboratory and Certification body details			
NAME OF CERTIFICATION BODY	IMQ S.p.A.	**NAME OF TEST FACILITY**	IMQ S.p.A.
CERTIFICATION BODY ADDRESS / REGION (STREET / TOWN / CITY / COUNTRY)	I-20138 Milano – Via Quintiliano, 43	**TEST FACILITY ADDRESS / REGION** (STREET / TOWN / CITY / COUNTRY)	I-20138 Milano – Via Quintiliano, 43
WEBSITE	www.img.it	**WEBSITE**	www.img.it
TEL	+39 0250731	**TEL**	+39 0250731
EMAIL	cecilia.cantaluppi@img.it	**EMAIL**	cecilia.cantaluppi@img.it
ACCREDITED BY (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE CERTIFICATION BODY, ALONG WITH WEBSITE)	ACCREDIA – Ente Italiano di Accreditamento www.accredia.it	**ACCREDITED BY** (NAME OF ACCREDITATION BODY WHICH ISSUED ACCREDITATION TO THE LABORATORY, ALONG WITH WEBSITE)	ACCREDIA – Ente Italiano di Accreditamento www.accredia.it
AS PER (STANDARD TO WHICH THE CERTIFICATION BODY IS ACCREDITED TO)	EN ISO/IEC 17065:2012	**AS PER** (STANDARD TO WHICH YOUR ORGANIZATION IS ACCREDITED TO)	EN ISO/IEC 17025:2017
VALIDITY (EXPIRY DATE OF CERTIFICATION BODY ACCREDITATION)	2025/03/09	**VALIDITY** (EXPIRY DATE OF LABORATORY ACCREDITATION)	2024/07/05
REFERENCE NUMBER: (CERTIFICATION BODY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	0005PRD	**REFERENCE NUMBER:** (THE LABORATORY ACCREDITATION REFERENCE NUMBER TO VERIFY ON THE ACCREDITOR'S WEBSITE)	121L
CERTIFICATION MARK	IMQ SPA		

(ENDORSEMENT) TO BE SIGNED BY MANUFACTURER			
NAME OF MANUFACTURER'S SIGNATORY	Vincenzo Polge	**SIGNATURE**	
EMAIL / TEL	vincenzo.polge@sistemidisicurezza.com +39 035657055	**FACTORY OFFICIAL SEAL**	
NOTES: I Undertake that all data and information provided are genuine and accurate			

(ENDORSEMENT) TO BE SIGNED BY CERTIFICATION BODY			
NAME OF CERTIFICATION BODY SIGNATORY	Mauro Casari	**SIGNATURE**	
EMAIL / TEL	mauro.casari@img.it +39 025073707	**CERTIFICATION BODY OFFICIAL SEAL**	
NOTES: I Undertake that all data and information provided are genuine and accurate			

ATTACHMENTS:

- **COPY OF 'CERTIFICATE OF COMPLIANCE' ISSUED BY CERTIFICATION BODY (OLD OR NEW)**