cu o suprafață totală protejată de mai mult de 20 m2 trebuie efectuată numai în conformitate cu documentația de projectare

activitatea principală a comisiei sunt determinate de legislația în vigoare. De asemenea, în cadrul 4.4 Luarea deciziilor privind punerea în funcțiune a ISAI se face de către o comisie. Structura și comisiei, pentru obiectele, indiferent de tipul de proprietate ar trebui să fie incluse:

reprezentantul organului central al spupravegherii de stat a másurilor contra incendiilor.

- reprezentantul organului serviciilor de salvatori și pompieri - (la stația cărora se prevede transmiterea semnalului de incendiu);

 reprezentantul organizației de întreținerea tehnică (cu condiția să nu fie o organizație care a efectuat lucrări de instalare și punere în funcțiune);

- expertul tehnic, atestat în domeniu dat (care nu este nici investitor, nici instalatorul ISAI), care elibirează avzizul privind corespunderea instalației cu cerințele prezentului document normativ, documentele de proiect și cerințele standardelor în vigoare

(art. 232 Legii №267-XIII privind apărarea împotriva incendiilor) fără avizul pozitiv a expertului tehnic Nu este permisă recepționarea și punerea în exploatare ISAI la obiectivele obiectivele de grupa I și II atestat în domeniul dat 4.5 Organizațiile pentru instalare și punere în funcțiune la efectuarea lucrărilor trebuie să respecte (în cazul în care nu contravin cerințelor normativelor) cerințele documentației de proiect 4.6 Inspecția tehnică a ISAI la obiectele de grupele I și II (conform art.23² din Legea nr. 267-XIII privind tehnic atestat în domeniu, care nu reprezintă interesele beneficiarului și a organizației care deservește siguranța la foc) trebuie efectuată peste 5 ani de la data punerii în funcțiune a instalației și apoi periodic, ținând cont de uzura instalației, cel puțin o dată la 5 ani. Certificarea tehnică este efectuată de un expert ISAI

diverselor părți ale SM EN 54. Toate componentele trebuie să aibă certificat de conformitate eliberat de 4.7 Componentele ISAI trebuie sa Indeplineasca cerințele prezentului document normativ, precum și organismele acreditate în certificare în RM pe baza încheierii pozitive a unui laborator de testare acreditat și recunoscut în Uniunea Europeană sau certificat de conformitate eliberat de autoritatea, de asemenea, acreditată și recunoscută în Uniunea Europeană.





CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 - CPR - 0542

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Conventional fire alarm control panel MAG8

For specifications see Annex to this certificate

placed on the market under the name or trade mark of

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

and produced in the manufacturing plant

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 54-2: 1997 EN 54-2: 1997/AC: 1999 EN 54-2: 1997/A1: 2006 EN 54-4: 1997 EN 54-4: 1997/AC: 1999 EN 54-4: 1997/A1: 2002 EN 54-4: 1997/A2: 2006

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on April 11th, 2017 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.



Marek Hudák Director NB

Nova Dubnica, April 11th, 2017

053084

EVPŰ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 1 / 2 FCO 425-13 Rev.1

Annex to Certificate No. 1293 - CPR - 0542 from April 11th, 2017

Technical Specifications

MAG8 is a conventional fire alarm panel providing 8 fixed zones. Up to 20 (32SensoMAG Series) fire detectors can be connected to every fire zone. Unlimited number of call points can be connected to every of the fire zones.

Products parameters:

Main Power supply. Maximum curent for standby power supply Maximum charging current for the battery: Auxiliary output: Operating temperature: Storage temperature: Humidity: Weight (without battery)

230V AC 4.5A (battery 1 x 12V / 7Ah) 0.3A 24V DC, 0.3A fuse -5 to 40°C -20 to 60°C 0 to 95% 2,4kg

List of optional functions with requirements included in the c.i.e EN 54-2:

- Description: Output to the fire alarm device Clause: 7.8
- Description: Delay to outputs Clause: 7.11 Description: Co-incidence detection

Clause: 7.12 Description: Test condition 10 Clause:

	Harmonised technical specification		Performance	
Essential characteristics	EN 54-2:1997 EN 54-2:1997 /AC:1999 EN 54-2:1997 /A1:2006	EN 54-4:1997 EN 54-4:1997 /AC:1999 EN 54-4:1997 /A1:2002 EN 54-4:1997 /A2:2006		
	cl. 4, 5, 7		Pass	
Performance under fire conditions	Cl. 4, 5, 7	cl. 4, 5, 6	Pass	
Performance of power supply	cl. 7.1, 7.7, 7.11, 7.12		Pass	
Response delay (response time to fire) Operational reliability	cl. 4, 5, 6, 7, 8, 9, 10, 11=N/A, 12, 13, 14	cl. 4, 5, 6, 7, 8	Pass	
Durability of operational reliability and response delay: temperature resistance	cl. 15.4	cl. 9.5	Pass	
Durability of operational reliability:	cl.15.6,15.7,15.15	cl. 9.7, 9.8, 9.15	Pass	
vibration resistance Durability of operational reliability:	cl. 15.8, 15.9 to 15.12=N/A, 15.13	cl. 9.9, 9.10 to 9.13=N/A	Pass	
electrical stability Durability of operational reliability: humidity resistance	cl. 15.5, 15.14	cl. 9.6, 9.14	Pass	



Marék Hudák Director NB

EVPÜ a.s., Trenčlanska 19, SK 018 51 Nová Dubnica, Slovak Republic, www.evpu.sk Page 2/2 FCO 425-13 Rev.1

Nová Dubnica, April 11th, 2017





CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 - CPR - 0546

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Conventional fire alarm control panel MAG8Plus, MAG4Plus, Fire Line MAG8Plus, Fire Line MAG4Plus, AE/C5-8-16

For specifications see Annex to this certificate

placed on the market under the name or trade mark of

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

and produced in the manufacturing plant

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 54-2: 1997 EN 54-2: 1997/AC: 1999 EN 54-2: 1997/A1: 2006 EN 54-4: 1997 EN 54-4: 1997/AC: 1999 EN 54-4: 1997/A1: 2002 EN 54-4: 1997/A2: 2006

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on April 13th, 2017 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.



Marek Hudák **Director NB**

Nová Dubnica, April 13th, 2017

053090

EVPÚ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 1 / 2 FCO 425-13 Rev.1

Annex to Certificate No. 1293 - CPR - 0546 from April 13th, 2017

The MAG4Plus is a conventional microprocessor fire control panel. The panel provides for monitoring and reporting fire events in up to 16 separate zones, depending on the installed configuration.

Products parameters:

Main Power supply. Auxiliary output: Back-up Power Supply: Operating temperature: Humidity: Storage temperature:

230V AC 24V DC, 0.3A fuse battery 12V/18Ah -5°C to +40°C 0 to 93% (non condensing) -20°C to + 60°C

	Harmonised technical spe	Performance		
Essential characteristics	EN 54-2:1997 EN 54-2:1997 /AC:1999 EN 54-2:1997 /A1:2006	EN 54-4:1997 EN 54-4:1997 /AC:1999 EN 54-4:1997 /A1:2002 EN 54-4:1997 /A2:2006		
	A second se		Pass	
Performance under fire conditions	cl. 4, 5, 7	cl. 4, 5, 6	Pass	
Performance of power supply		01111010	Pass	
Response delay (response time to fire) Operational reliability	cl. 7.1, 7.7, 7.11, 7.12 cl. 4, 5, 6, 7, 8, 9, 10, 11=N/A, 12, 13, 14	cl, 4, 5, 6, 7, 8	Pass	
Durability of operational reliability and response delay: temperature resistance	cl. 15.4	cl. 9.5	Pass	
Durability of operational reliability:	cl.15.6,15.7,15.15	cl. 9.7, 9.8, 9.15	Pass	
vibration resistance Durability of operational reliability:	cl. 15.8, 15.9 to 15.12=N/A, 15.13	cl. 9.9, 9,10 to 9.13=N/A	Pass	
electrical stability Durability of operational reliability: humidity resistance	cl. 15.5, 15.14	cl. 9.6, 9.14	Pass	



Marek Hudák Director NB

Nová Dubnica, April 13th, 2017

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CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 - CPR - 0655

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Conventional manual call point SensoMAG MCP50, SCP-2R, Jade MCP50, Precise MCP50, Herald MCP50, RunwayLeo MCP50

For specifications see Annex to this certificate

placed on the market under the name or trade mark of

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

and produced in the manufacturing plant

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 54-11:2001 EN 54-11:2001/A1:2005

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on August 16th, 2019 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.



Marek Hudák Director NB

Nová Dubnica, August 16th, 2019

EVPŰ a.s., Trenčlanska 19, SK 018 51 Nová Dubnica, Slovak Republic, www.evpu.sk

Annex to Certificate No. 1293 - CPR - 0655 from August 16th, 2019

General Information

SensoMAG MCP50 and derived variants are manual call points, designed to work with conventional fire panels.

In stand-by mode, the resettable (flexible) call point element is in a middle position. The call point is powered off and the LED is off. When pressed on, the resettable element is moving down and a color strip is shown on at its upper side. The call point is powered on and the LED is on - this is a "Fire alarm" condition. The resetting of the flexible element back in stand-by mode is done with the special key tool.

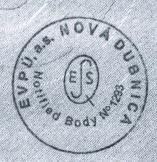
Products parameters

Operating voltage Nominal operating voltage Current consumption in alarm state Installation wires Operation temperature Relative humidity Degree of protection Dimensions Weight Material (plastic), colour Type (according to EN 54-11) Type of the frangible element Indication "Fire alarm"

9+30VDC 24VDC 23mA/15V, 38mA/24V, 48mA/30V 0.4+2.0 mm² -10°C + +60°C ≤ 93% @ +40°C IP40 90x90x56mm ≤150g ABS, red A

Resettable (flexible) red LED

Essential characteritics	Test specification	Harmonised technical specifications	Performance	
Nominal activation conditions / Sensitivity and Performance under fire conditions	cl. 4.3.2, 4.4, 4.7.1, 4.7.4=N/A, 5.2, 5.3	EN 54-11:2001 EN 54-11/A1:2005	Pass	
Operational reliability	cl. 4.2, 4.3.1, 4.5, 4.6, 4.7.2, 4.7.3, 4.7.5, 4.8=N/A, 5.4, 5.5	EN 54-11:2001 EN 54-11/A1:2005	Pass	
Durability of operational reliability: temperature resistance	cl. 5.7, 5.8=N/A, 5.9	EN 54-11:2001 EN 54-11/A1:2005	Pass	
Durability of operational reliability: vibration resistance	cl. 5.14 to 5.17	EN 54-11:2001 EN 54-11/A1:2005	Pass	
Durability of operational reliability: humidity resistance	cl. 5.10, 5.11=N/A, 5.12, 5.19=N/A	EN 54-11:2001 EN 54-11/A1:2005	Pass	
Durability of operational reliability: corrosion resistance	cl. 5.11=N/A, 5.13	EN 54-11:2001 EN 54-11/A1:2005	Pass	
Durability of operational reliability: electrical stability	cl. 5.6, 5.18	EN 54-11:2001 EN 54-11/A1:2005	Pass	



árek Hudák Director NB

Nová Dubnica, August 16th, 2019

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CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 - CPR - 0637

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Conventional fire alarm optical-smoke detector SensoMAG S30, Precise S30, Herald S30, RunwayLeo S30

For specifications see Annex to this certificate

placed on the market under the name or trade mark of

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

and produced in the manufacturing plant

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on March 19th, 2019 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.



Nová Dubnica, March 19th, 2019 053393

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Annex to Certificate No. 1293 - CPR - 0637 from March 19th, 2019

General Information

The detector SensoMAG S30 and derived variants are compatible with any conventional Fire Panel with fire alarm threshold between 10mA and 15mA (between 10mA and 30mA with B24RD fire base). The detector can be used with 4 base types:

B12L/U - Base with relay output (not covered by EN54-7);

B24 - Standard base;

B24D - Standard base with Schottky diode;

B24RD - Standard base with Schottky diode and increased alarm state current.

Technical specifications

Operating voltage range Average current consumption in quiescent state Alarm state current - with base type B24 and B24D - with base type B24RD - with base type B12L/U Output in alarm state at terminal RI Operation temperature Relative humidity Degree of protection Dimensions Weight (incl. base) 9 - 30 V DC (Nom. 12/24VDC) < 50µA

20 mA / 12+30V 33 mA / 12V; 49mA/24V; 57mA/30V 18 mA / 9V; 29mA/12V; 32mA/15V 20mA (max) / -3.3V -10°C + +60°C (93±3)% @ +40°C (P30 Φ 102mm h 42mm 160g

Essential characteritics	Test specification	Harmonised technical specifications	Performance	
Nominal activation conditions / Sensitivity, response delay (response rime) and Performance under fire conditions	cl. 4.8, 5.2, 5.3, 5.4, 5.6, 5.7, 5.18	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Operational reliability	cl. 4.2 to 4.5, 4.6=N/A, 4.7, 4.9 to 4.11	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Tolerance to supply voltage	cl. 5.5	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Durability of operational reliability and response delay: temperature resistance	cl. 5.8, 5.9	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Durability of operational reliability: vibration resistance	cl. 5.13 to 5.16	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Durability of operational reliability; humidity resistance	cl. 5.10, 5.11	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Durability of operational reliability; corrosion resistance	cl. 5.12	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	
Durability of operational reliability: electrical stability	cl. 5.17	EN 54-7:2000 EN 54-7:2000/A1:2002 EN 54-7:2000/A2:2006	Pass	



Nová Dubnica, March 19th, 2019

Marek Hudák Director NB

EVPŰ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 2 / 2 FCO 425-13 Rev.1





CERTIFICATE OF CONSTANCY OF PERFORMANCE

No. 1293 - CPR - 0639

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction products Regulation or CPR), this certificate applies to the construction product

Conventional fire alarm Rate-of-Rise Heat Detector SensoMAG R20, Precise R20, Herald R20, RunwayLeo R20

For specifications see Annex to this certificate

placed on the market under the name or trade mark of

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

and produced in the manufacturing plant

Teletek Electronics JSC 14A Srebarna Str., 1407 Sofia, Bulgaria

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 54-5:2000 EN 54-5:2000/A1:2002

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on March 19th, 2019 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.



Márek Hudák Director NB

Nová Dubnica, March 19th, 2019

053394

EVPŰ a.s., Trenčianska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 1 / 2 FCO 425-13 Rev.1

Annex to Certificate No. 1293 - CPR - 0639 from March 19th, 2019

General Information

The detector SensoMAG R20 and derived variants are compatible with any conventional Fire Panel with fire alarm threshold between 10mA and 15mA (between 10mA and 30mA with B24RD fire base). The detector can be used with 4 base types:

B12L/U - Base with relay output (not covered by EN54-5);

B24 - Standard base;

B24D - Standard base with Schottky diode;

B24RD - Standard base with Schottky diode and increased alarm state current.

Technical specifications

Operating voltage range Average current consumption in quiescent state Alarm state current - with base type B24 and B24D - with base type B24RD - with base type B12L/U Class (in accordance with EN 54-5) Output in alarm state at terminal RI Operation temperature Relative humidity Degree of protection Dimensions Weight (incl. base) 9 - 30 V DC (Nom. 12/24VDC) < 50µA

20 mA / 12+30V 33 mA / 12V; 49mA/24V; 57mA/30V 18 mA / 9V; 29mA/12V; 32mA/15V A1/R 20mA (max) / -3.3V -10°C + +60°C (93±3)% @ +40°C IP30 Φ 102mm h 42mm 160g

Essential characteritics	racteritics Test specification Harmonised technical specifications		Performance
Nominal activation conditions / Sensitivity, Response delay (response rime) and Performance under fire conditions	cl. 4.2, 4.3, 5.2 to 5.4, 5.5=N/A, 5.6, 5.8, 6.1=N/A, 6.2	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass
Operational reliability			Pass
Tolerance to supply voltage	cl. 5.7	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass
Durability of operational reliability and response delay: temperature resistance	cl. 5.9, 5.10=N/A	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass
Durability of operational reliability: vibration resistance	cl. 5.14 to 5.17	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass
Durability of operational reliability: humidity resistance	cl. 5.11, 5.12	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass
Durability of operational reliability: corrosion resistance	cl. 5.13	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass
Durability of operational reliability: electrical stability	cl. 5.18	EN 54-5:2000 EN 54-5:2000/A1:2002	Pass



Marek H u d á k Director NB

Nová Dubnica, March 19th, 2019

EVPŮ a.s., Trenčlanska 19, SK 018 51 Nová Dubnica, Slovak Republic, <u>www.evpu.sk</u> Page 2 / 2 FCO 425-13 Rev.1



Notified body No. 1922 Bulgaria, 8230 Nesebar Mladost #50

CERTIFICATE of constancy of performance

1922 - CPR - 1230

In compliance with Regulation (EU) 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Fire detection and fire alarm systems. Fire alarm devices. Sounders. Conventional indoor fire alarm sounder - SV2002F and SF105

(For list of controlled characteristics and models, see Annexes I and II to 1922-CPR-1230 that are an inseparable part of this certificate)

placed on the market under the name or trade mark of

Safety Technics and Systems

No.31 "3020" Str., 1360 Sofia, Bulgaria

and produced in the manufacturing plant of

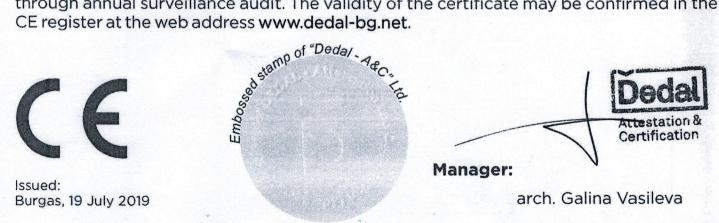
Safety Technics and Systems No.31 "3020" Str., 1360 Sofia, Bulgaria

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 54-3:2001, EN 54-3:2001/A1:2002, EN 54-3:2001/A2:2006

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the constancy of performance of the construction product.

This certificate was first issued on 19.07.2019 and will remain valid until 19.07.2020 as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body. The certificate is supported through annual surveillance audit. The validity of the certificate may be confirmed in the CE register at the web address www.dedal-bg.net.



Dedal Attestation & Certification

ANNEX I TO CERTIFICATE OF CONSTANCY OF PERFORMANCE 1922 - CPR - 1230/19.07.2019

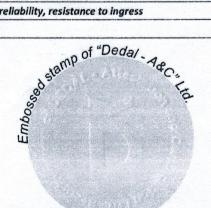
Model SV2002F - Conventional indoor fire alarm sounder

Performance list, acc. to EN 54-3:2001, EN 54-3:2001/A1:2002, EN 54-3:2001/A2:2006

Essential characteristics	Performance	Clause
Performance parameters under fire conditions		
- Sound level	- Pass	4.2
- Frequencies and sound pattern	Pass	4.3
- Reproducibility	Pass	5.2
- Operational performance	Pass	5.3
- Attention drawing signal and message broadcast sequence	es N/A	C.3.1
- Synchronization	N/A	C.3.2
- Broadcast message performance	N/A	C.5.1
- Attention drawing signal/silence/message sequence timin	N/A	C.5.2
- Message synchronization testing	N/A	C.5.3
Operational reliability		
- Durability	Pass	4.4
- Construction	Pass	4.5
- Marking and data	Pass	4.6
- Durability	Pass	5.4
- General testing	N/A	
Durability of operational reliability, temperature resistance		
- Dry heat (operational)	Pass	5.5
- Dry heat (endurance)	N/A	5.6
- Cold (operational)	Pass	5.7
- Damp heat, cyclic (operational)	Pass	5.8
- Damp heat, steady state (endurance)	Pass	5.9
Durability of operational reliability, humidity resistance		
- Damp heat, cyclic (operational)	Pass	5.8
- Damp heat, steady state (endurance)	Pass	5.9
- Damp heat, cyclic (endurance)	N/A	5.10
Durability of operational reliability, corrosion resistance		
- Sulphur dioxide (SO2) corrosion (endurance)	Pass	5.11
Durability of operational reliability, shock and vibration resi	stance	
- Shock (operational)	Pass	5.12
- Impact (operational)	Pass	5.13
- Vibration, sinusoidal (operational)	Pass	5.14
- Vibration, sinusoidal (endurance)	Pass	5.15
Durability, electrical stability		
- Electromagnetic compatibility (EMC), immunity (operation	onal) Pass	5.16
Durability of operational reliability, resistance to ingress		
- Enclosure protection	Pass	5.17

CE

Issued: Burgas, 19 July 2019





Manager:

arch. Galina Vasileva

Dedal Attestation & Certification

ANNEX II TO CERTIFICATE OF CONSTANCY OF PERFORMANCE 1922 - CPR - 1230/19.07.2019

Model SF105 - Conventional indoor fire alarm sounder

Performance list, acc. to EN 54-3:2001, EN 54-3:2001/A1:2002, EN 54-3:2001/A2:2006

	Performance	Clause	
Performance parameters under fire conditions			
- Sound level	• Pass	4.2	
- Frequencies and sound pattern	Pass	4.3	
- Reproducibility	Pass	5.2	
- Operational performance	Pass	5.3	
 Attention drawing signal and message broadcast sequences 	N/A	C.3.1	
- Synchronization	N/A	C.3.2	
- Broadcast message performance	N/A	C.5.1	
- Attention drawing signal/silence/message sequence timing	N/A	C.5.2	
- Message synchronization testing	N/A	C.5.3	
Operational reliability			
- Durability	Pass	4.4	
- Construction	Pass	4.5	
- Marking and data	Pass	4.6	
- Durability	Pass	5.4	
- General testing	N/A	C.4	
Durability of operational reliability, temperature resistance			
- Dry heat (operational)	Pass	5.5	
- Dry heat (endurance)	* N/A	5.6	
- Cold (operational)	Pass	5.7	
- Damp heat, cyclic (operational)	Pass	5.8	
Damp heat, steady state (endurance)	Pass	5.9	
Durability of operational reliability, humidity resistance			
Damp heat, cyclic (operational)	Pass	5.8	
 Damp heat, steady state (endurance) 	Pass	5.9	
Damp heat, stellar, stell	N/A	5.10	
Durability of operational reliability, corrosion resistance		-l	
Sulphur dioxide (SO2) corrosion (endurance)	Pass	5.11	
Durability of operational reliability, shock and vibration resistance			
Shock (operational)	Pass	5.12	
- Impact (operational)	Pass	5.13	
- Vibration, sinusoidal (operational)	Pass	5.14	
- Vibration, sinusoidal (operational)	Pass	5.15	
Durability, electrical stability			
Electromagnetic compatibility (EMC), immunity (operational)	Pass	5.16	
Durability of operational reliability, resistance to ingress			
	Pass	5.17	
- Enclosure protection	1	1	



Issued: Burgas, 19 July 2019



arch. Galina Vasileva

ELAN s.r.l. - Via Osimana, 70 - 60021 Camerano (AN) - Italy R.E.A. AN n 152242 - C. F. e P. IVA IT 01572590428 - Cap. Soc. € 98.940,00 i.v. Tel. +39.071.7304258 - Fax +39.071.7304282 Sito Web: www.elan.an.it - E-mail: info@elan.an.it



Camerano, January 2021

Certificate of Conformity

ELANFIRE CEI 20-36, 20-37, EN50200

We, ELAN SRL, **CERTIFY** that the cables marked with:

"ELANFIRE <Sect. >- CEI 20-22/III CEI 20-36 - CEI 20-37- EN 50200 PH120 - CEI 36762 C-4 (U₀=400V) - CE <date of production>"

are manufactured in accordance with the following requirements: CEI 20-22 III; CEI 20-11; CEI 20-29; (IEC 60332-3; BSEN 50265); CEI 20-36 (IEC 60331; BS 6387 CWZ; EN50200); CEI 20-37 (IEC 60754; IEC 61034; BSEN 50267; BSEN 50268) CEI UNEL 36762: Directive 2002/95/CE (RoHS)

MANUFACTURING TECHNICAL FEATURES

1. UNIPOLAR WIRES:

Unipolar wires (0,50 - 1,00 - 8/10 - 10/10 - 13/10) are insulated in glass/mica fire resistant tape and LSZH cross-link E29 fire retardant compound. They have good resistance to low and high temperatures and they are fire resistant according to CEI 20-36; IEC 60331; BS 6387; EN50200 (PH120).

They pass the test of voltage according to CEI 20-20 standard: 5 minutes with 2000 V. in dry current without any crack of insulation covering

2. SHIELDING:

The wires are twisted and the shielding is made of:

- Coupled ribbon of aluminium/polyester foil 9/12 microns.
- Drainage wire in tinned copper braid conductors.
- Polyester ribbon 12 micron thick placed on joined cables according to CEI 46-5 standard.

3. JACKET:

The jacket is in red **LSZH** compound (M1 type according to CEI 20-11) and it is fire retardant according to CEI 20-22/III (IEC 60332-3; BSEN 50265) Standards and with low smoke and zero halogen according CEI 20-37 (IEC 60754; IEC 61034; BSEN 50267; BSEN 50268).

Cables marked as C-4 (U_0 =400V) owing to their technical characteristics and the positive results obtained by passing the tests and can be installed with electrical power cables marked both 450/750V, and 0,6/1 Kv according to CEI UNEL 36762.

Elan Sal

ELAN s.r.l. - Via Osimana, 70 - 60021 Camerano (AN) - Italy R.E.A AN n.152242 - C.F. e P.IVA IT 01572590428 - Cap. Soc. €98.940,00 i.v. Tel. +39.071.7304258 - Fax +39.071.7304282 www.elan.an.it - info@elan.an.it



SCHEDA TECNICA - TECHNICAL DATA SHEET

Gen. 2021

ELANFIRE SCHERMATO EN50200 (PH120) RIGIDO ELANFIRE SHIELDED EN50200 (PH120) RIGID







Caratteristiche elettriche

Conduttore interno	rigido in rame rosso
Conductor	solid red copper
filo di 8/10	rame rosso 8/10
single wire 8/10	red copper 8/10
My and R a	diametro - diameter Ø 2,30 mm
ilo di 10/10	rame rosso 10/10
single wire 10/10	red copper 10/10
	diametro - diameter Ø 2,60 mm
ilo di 13/10	rame rosso 13/10
single wire 13/10	red copper 13/10
	diametro - diameter Ø 3.00 mm.
4 according to CEI 20-105	orma CEI 20-105 tape and crosslinked compound
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10	orma CEI 20-105 tape and crosslinked compound
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10 0/10	orma CEI 20-105 tape and crosslinked compound Spessore - Thickness >0.50mm
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10	orma CEI 20-105 tape and crosslinked compound
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10 0/10	orma CEI 20-105 tape and crosslinked compound Spessore - Thickness >0,50mm Spessore - Thickness >0,50mm Spessore - Thickness >0,60mm
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10 0/10 3/10 ssemblaggio - Assembly 2x8/10 passo-80m	Twisted pairs
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10 0/10 3/10 ssemblaggio - Assembly 2x8/10 passo-80m 2x10/10 passo-85m	Spessore - Thickness >0.50mm Spessore - Thickness >0.50mm Spessore - Thickness >0.60mm Spessore - Thickness >0.60mm Twisted pairs Im spire/metro-13 m spire/metro-12
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 6/10 0/10 3/10 ssemblaggio - Assembly 2x8/10 passo-80m 2x10/10 passo-85m 2x13/10 passo-85m	Spessore - Thickness >0.50mm Spessore - Thickness >0.50mm Spessore - Thickness >0.60mm Spessore - Thickness >0.60mm Twisted pairs Im spire/metro=13 m spire/metro=12 m spire/metro=12 m spire/metro=12
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 8/10 0/10 3/10 ssemblaggio - Assembly 2x8/10 passo-80m 2x10/10 passo-85m 2x13/10 passo-85m chermatura - Shielding (coverage	Spessore - Thickness >0.50mm Spessore - Thickness >0.50mm Spessore - Thickness >0.60mm Spessore - Thickness >0.60mm Twisted pairs Im spire/metro-13 m spire/metro-12 m spire/metro-12
n mescola reticolata tipo E4 a no nsulation mica/glass fire resistant 4 according to CEI 20-105 6/10 0/10 3/10 ssemblaggio - Assembly 2x8/10 passo-80m 2x10/10 passo-85m 2x13/10 passo-85m	Spessore - Thickness >0.50mm Spessore - Thickness >0.50mm Spessore - Thickness >0.60mm Spessore - Thickness >0.60mm Twisted pairs Im spire/metro=13 m spire/metro=12 e 100%) Ø 0.8 mm

(IEC 60754; IEC 61034; BSEN 50267; BSEN 50268) e CEI UNEL 36762. Semi-pressed jacket in red LSZH compound fire retardant according to CEI 20-22I III (IEC 60332-3)standards and low smoke and zero halogen according CEI 20-37 (IEC 60754;IEC 61034; BSEN 50267;BSEN 50268) and CEI UNEL 36762 standards.

Guaina rossa - Red Jacket

Electrical characteristics		
Parametro - Parameter	Valo	ore - Value
Tensione d'esercizio - nominal voltage		<u>, , , , , , , , , , , , , , , , , , , </u>
Filo - wire: 8/10 - 10/10 - 13/10	1	≤100V
Tensione di prova - Test voltage (1min/50Hz)		
Filo - wire: 8/10 - 10/10 - 13/10		2000V
Resistenza elettrica max a 20°C Max electrical resistance 20°C	8/10 10/10	36 Ω /km
electrical resistance 20 C		22 Ω /km
Tabella colori - colours table	13/10	13 Ω /km
8/10 - 10/10 - 13/10		
1. rosso - red 3. bianco - white		
2. nero - black 4. blu - blue		
Guaina - Jacket		
Resistenza min isolamento 20°C Min.insulation resistance 20°C	20	oMΩ∕km
Tensione conforme CEI 36762 C-4 (U0=400V) Voltage according to CEI 36762 C-4 (U0-400V)		400V
Caratteristiche meccaniche - Mechanical Characte	eris	
Temperatura d'esercizio Operating Temperature Range	-15	°C→+80°C
Raggio minimo di curvatura Min. Bend Radius (Install)		10 x Ø

Marcatura/Marking

ELANFIRE 'Sect.' - CEI 20-22/3-5 - CEI EN 60332-3-25 - CEI 20-37 -EN 50200 (PH120) - CEI 20-105 - UNI 9795 - CEI 36762 C-4 (U0-400V) - CE - "date"

Codice	Descrizione	Diametro [mm]	Spessore Guaina	Peso [kg/km]	Confezione
Code	Description	Diameter	Tickness [mm]	Weight	Packaging
28280-R	2 x 8/10 + SCH.	7,20	>0,80	45,00	100/500mt
28480-R	2 X 2 x 8/10 + SCH.	9,40	>0,80	86,00	100/500mt
28290-R	2 x 10/10 + SCH.	7,20	>0,80	60,00	
28230-R	2 X 13/10 + SCH.	7,60	>0,90	70,00	100/500mt

Il costruttore si riserva di apportare modifiche al prodotto senza preavviso - The manufacturer reserves the right to modify the product without notice.