



TYPE APPROVAL CERTIFICATE



N. ELE242219CS

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

Description	Electrically Powered Hold-Open Devices for swing doors
Type	Series S50160 in conjunction with fixed keeper plates S02160 and SH2160 and S04160 Series S59150 in conjunction with fixed keeper plates S02150 and SH2150 and S04150
Applicant	ELFRI s.r.l. Via Friuli, 9 33050 Gonars, (Udine) Italia
Manufacturer	ELFRI s.r.l. Via Friuli, 9 33050 Gonars, (Udine) Italia
Testing Standards	EN 1155: 1997+A1: 2002+AC:2006

Issued in **Genova** on **December 23, 2019**

This certificate is valid until **December 23, 2024**

RINA Services S.p.A.

Giovanni Carratino

N. ELE242219CS

Description: Electrically Powered Hold-Open Devices for swing doors

Series S50160 in conjunction with fixing keeper plates type S02160 and SH2160 and S04160		Series S59150 in conjunction with fixing keeper plates type S02150 and SH2150 and S04150	
General specifications			
Core material	Zinc coated steel	Core material	Zinc coated steel
Fixing plate	Zinc coated steel	Fixing plate and Core Cover	AISI 316 L
Coil insulation	Self extinguishing resin	Coil insulation	Self extinguishing resin
Holding strenght	150 daN	Holding Strenght	150 daN
Degree of protection	IP 65	Degree of protection	IP 67
Electrical protection	Varistor	Electrical protection	Varistor
Isolation Class	B (130°C max.)	Isolation Class	B (130°C max.)
Operat. Ambient. temp.	-10 to 45°C	Operat. Ambient. temp.	-10 to 45°C
Electrical Specifications			
Voltage supply	24Vdc	Voltage supply	24Vdc
Rated current	100 mA @ 24Vdc	Rated current	100 mA @ 24Vdc
Insulation resistance	>5 Mohm (typ.) @ 500Vdc	Insulation resistance	>5 Mohm (typ.) @ 500 Vdc
Dielectric Strength	>2kV@50 Hz (2 mA)	Dielectric Strength	>2kV@50 Hz (2 mA)
Winding temp.	66°C @ T.a. 45°C / 24Vdc	Winding temp.	66°C @ T.a. 45°C / 24Vdc
Holding strength	170 daN 28.8 Vdc 125 mA	Holding strength	170 daN 28.8 Vdc 125 mA
	150 daN 24.0 Vdc 100 mA		150 daN 24.0 Vdc 100 mA
	130 daN 19.2 Vdc 80 mA		130 daN 19.2 Vdc 80 mA

Performance classification according to the following table:

3	5	4 to 7	1	1	4
---	---	--------	---	---	---

Digit	Characteristics	Possible values
1 st	Category of use	Grade 3: doors for use by the public, and others, with little incentive to take care, i.e. where there is some chance of misuse of the door.
2 nd	Number of test cycles	Grade 5: 50000 test cycles; Grade 8: 500000 test cycles
3 th	Test door mass	Grade 3: 60kg; Grade 4: 80kg; Grade 5: 100kg; Grade 6: 120kg; Grade 7: 160kg
4 th	Fire resistance	Grade 1: suitable for use on fire / smoke door assemblies, subject to satisfactory Assessment of the contribution of the electrically powered hold-open device to the fire resistance of specified fire/smoke door assemblies
5 th	Safety	Grade 1: all electrically powered hold-open devices are required to satisfy the essential requirement of safety in use
6 th	Corrosion resistance	Grade 0: no defined corrosion resistance; Grade 1: mild resistance; Grade 2: moderate resistance; Grade 3: high resistance; Grade 4: very high resistance

Technical description

Data Sheets: Electromagnetic fire doors Holders S50160 and S59150 and keeper plates S02150, SH2150, S02160, SH2160, S04150, and S04160
 n. S59150 Rev.0 (17/06/2019) ; S50160 Rev.0 (17/06/2019)
 n. DTS50 Ed.2020 Rev.00; DTS59 Ed.2020 Rev.00; DTS04 Ed.2020 Rev.00

Test reports

Istituto Giordano reports n. 201623/330/CPD (12/09/2005); 357014/11910/CPR (30/11/2018)

Certificate

Istituto Giordano Certificate: n. 0407-CPR-055 (IG-154-2005) Rev.8 06/12/18 (EN1155:1997+A1:2002+AC:2006).