ZERTIFIKAT | CERTIFICATE | CERTIFICAT | CERTIFICADO | СЕРТИФИКАТ | شهادة | 证书 | 인증서

TÜV AUSTRIA

Certificate no. TAI-FS-C-24-0039

WE HEREBY CERTIFY THAT

Product description	**FIRE EXTINGUISHING AEROSOL GENERATOR**
Brand	**FIRE KLOUD**
Models	**SERIES FKA** **(including models FKa 20, FKa 50, FKa 100, FKa 200, FKa 400, FKa 800, FKa 1000 E, FKa 1000 EF, FKa 2000 E, FKa 2000 EF, FKa 3000 E, FKa 3000 EF)**
Manufacturer	**Fir.Ex. S.r.l.** **Via Bruxelles 34** **I-00198 Roma (RM)**

IS IN COMPLIANCE WITH THE REQUIREMENTS OF THE STANDARDS

IEC 61508 Parts 1–7:2010

AS RESULT OF THE ASSESSMENT ACCORDING TO THE PROVISION SET OUT IN THE ABOVE-MENTIONED STANDARDS

Summary Report no.	**TAI-FS-R-24-0078**
Expiry date	**06.05.2027**
Issue date	**07.05.2024**

TUV AUSTRIA ITALIA
07.05.2024, Monte Roberto (AN)

Ing. Crescenzo Di Fratta

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Annex to certificate no. TAI-FS-C-24-0039

Type	A
HFT	0
Safety functions	1. Aerosol discharge generation, when piloted by current pulse
Mode of operation	Low Demand Mode

Random failure rates				
Configuration	**Safety function**	**λ_{DU} [1/h]**	**λ_{DD} [1/h]**	**λ_S [1/h]**
Fire Kloud series FKA	1	1,65E-10	1,64E-08	0,00E+00

Systematic capability	**3** (Route 1_S applied)			
Architectural constraints	**Route 1_H:**	Applied	**Route 2_H:**	Applied
	The product can be used in: • single channel configuration: up to SIL 3 considering external diagnostic tests (line monitoring) • double channel configuration: up to SIL 4 considering external diagnostic tests (line monitoring)			

Remarks:

- The product does not include internal diagnostics. The integrity of discharge circuit shall be detected with line monitoring by upstream fire and gas central unit, as documented in the Safety Manual
- For further details, including environmental conditions, limitations of use, lifetime, failure rates traceability, mean repair times, common cause factors and systematic capability constraints, make reference to Safety Manual SF 2100

END OF CERTIFICATE

TUV AUSTRIA ITALIA
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