Stainless steel guard-lock safety door switch

The F3S-TGR-KHL1 safety-door switch keeps medium to large guard doors closed until hazards have been removed. It has a stainless steel body and is designed to cope with the rigorous applications of the food processing and chemical industries.

- Safety-door switch with electromagnetic lock and unlock mechanism (mechanical lock/solenoid unlock)
- Model with 6 built-in contacts
- Strong key holding force: 1600 N
- LED for diagnosis
- IP69K suitable for SIP and CIP processes
- Positive break contacts to IEC 60947-5-1

Ordering information

Switches

Type	Housing	Conduit	Contacts	Order code
	Stainless steel 316	M20	2NC/1NO+2NC/1NO Each NC Door contact is connected with another Lock monitor contact internally. NO contacts are not connected in series internally.	F3S-TGR-KHL1

Keys (order separately)

Type	Order code
Standard 	F39-TGR-KAM
Horizontal mounting 	F39-TGR-KF
heavy flexible 	F39-TGR-KHF
hygienic flexible 	F39-TGR-KHFH

Accessories

Item	Remarks	Order code
M20 Gland	Stainless steel 316	F39-TGR-M20

Specifications

Item	F3S-TGR-KHL1
Standards	EN1088, IEC 60947-5-1, EN 60204-1, UL508 EN ISO 13849-1: up to PLe[*1] EN 62061: up to SIL3[*1]
Lock principle	Mechanical lock/solenoid unlock
Indicator LED	Status of solenoid
Holding force	1600 N
Utilization category	AC15 A300 3 A
Thermal current (Ith)	5 A
Rated insulation/Withstand voltages	500 VAC/2,500 VAC
Rated travel for positive opening	10 mm
Actuator entry minimum radius	175 mm standard, 100 mm flexible
Maximum approach/Withdrawal speed	600 mm/s
Body dimensions (W × H × D)	63 × 143 × 41.5 mm
Fixing	2 × M5, 40 mm distance
Conduit entry	M20
Material	Stainless steel 316
Enclosure Protection	IP69K
Temperature Range	–25 to 55°C
Vibration	IEC 68-2-6, 10 to 55 Hz +1 Hz, Excursion: 0.35 mm, 1 octave/min

[*1] Depending upon system architecture