

SAFETY PRODUCTS

MKEY 1 Series Safety Switch Data Sheet

MKey 1 is a mechanical safety switch used for monitoring doors and hatches.

The switch is mounted on the frame and the actuator key on the moving part of the guard.



Easy to install

Variety of actuators

Many types of actuators available depending on application.

Easy mounting

Rotating head allows for up to 8 actuating positions allowing for many mounting possibilities.



Safety and Protection

Added Safety

Stainless steel actuator designed to match cam and provides an interlock mechanism that is not easily defeatable.



Optimum Interface

Small Design

Small footprint makes it easy to install in restricted space.

Industry Footprint

Standard industry footprint for smaller mechanical switches and 1/2 NPT conduit entry.

Ordering Information

Description	Material Housing	Material Head	Type	Order code
MKEY 1, ½ NPT, Angle Key	Polyester	Polyester	MKEY 1	2TLA050021R1100
MKEY 1, ½ NPT, Flat Key	Polyester	Polyester	MKEY 1	2TLA050021R1200
MKEY 1, ½ NPT, Flex Key	Polyester	Polyester	MKEY 1	2TLA050021R1300

NOTE: Anything in **bold** is typically stocked.

Accessories

Description	Material Housing	Order code
Flex Key	Stainless Steel	2TLA050040R0223
Flat Key	Stainless Steel	2TLA050040R0222
Angled Key	Stainless Steel	2TLA050040R0200

NOTE: Anything in **bold** is typically stocked.

Technical Data	
Manufacturer	
Address	ABB Electrification Sweden AB / JOKAB SAFETY Varlabergsvägen 11 SE-434 39 Kungsbacka Sweden
Electrical characteristics	
Utilization category	AC-15 A300 3A
Thermal current	10A
Rated insulation/withstand voltages	600 VAC /2500 VAC
Overload Protection Fuse (fuse externally)	10A (FF)
Contacts	2NC + 1NO
General	
Actuator Travel/Force for positive opening	6 mm/12N
Actuator entry minimum radius	175 mm Standard Key 100 mm Flexible Key
Protection class	IP67
Ambient temperature	-25...+80°C
Size	See manual
Conduit entries	½ NPT
Material	Polyester
Fixing	Actuator: 2 x M4
Maximum approach / withdrawal speed	600 mm/s
Vibration	IEC 68-2-6, 10-55 Hz+1 Hz, Excursion: 0.35 mm, 1 octave/min
Safety-related characteristic data and Conformity	
Conformity	ISO 14119, ISO13849-1 EN 60204- 1, UL508 EN 60947-1, EN 60947-5-1
EN ISO 13849-1	Up to PL e, Cat. 4 depending on system architecture
EN 62061	Up to SIL3 depending on system architecture
Safety data	2,500,000 operations at 100 mA load
B10d	356 years (8 cycles per hour / 24 hours per day / 365 days per year)
MTTFd	
Certifications	TÜV, cULus
Information with regard to UL 508	Type 1 Enclosures. Use 16 - 12AWG stranded copper insulated conductors rated 90°C minimum. (75C. ampacity). Terminal tightening torque 7lbs ins (0.8Nm). Intended for same polarity use and one polymeric conduit connection. Not suitable for connection to a rigid metal conduit system. Electrical Rating: Pilot Duty A300 240V.ac 3A. 6,000 cycles. Maximum ambient temperature 40°C.

NOTE: A single MKey1 can achieve performance level PL c according to EN ISO 13849 if used correctly with an ABB Jokab Safety safety relay, Pluto safety-PLC or Vital safety module. If two MKey1-switches are used for the same safety function, a performance level up to PL e can be achieved. Refer to EN ISO 13849 for details on how to achieve this if necessary.

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