IDEM TONGUE INTERLOCK SAFETY SWITCHES KM

KM

203003A-SS
KM QC M23 12way '2NC 1NO' SS head - std actuator

- Robust die cast housing
- Slim fitting designed for where impact resistance is required
- Available with die cast or stainless steel head
- 8 Actuator entry positions- rotatable head
- IP67 ingress protection rating

Product description

Features

IDEM KM Interlock switches are designed to provide position interlock detection for medium to heavy duty moving guards

They have robust die-cast housings and are designed to fit to the leading edge of sliding, hinged or lift off machine guards. They provide a forced disconnect of the safety contacts at the withdrawal of the actuator and have an anti-tamper mechanism

The rotatable heads have dual actuator entry positions to give up to 8 different entry positions. For extra durability, Flexible Actuators and Stainless Steel head versions are available

Contact blocks are replaceable with optional explosion proof versions. High holding force versions are available for applications where vibration can be a nuisance

Functional specifications

- Positive Break Contacts to EN60947-5-1
- High Functional Safety to ISO13849-1
- 3 pole, 4 pole or Explosion Proof Contact Blocks
- Stainless Steel Head version available
- Connects to most Safety Relays to give up to PLe Cat.4
- Industry Standard Fitting: 40mm wide 118mm long 30mm fixing

Specifications

Actuator	Standard
Annual usage	8 cycles per hour/24 hours per day/365 days
Approvals	ISO 14119, EN60947-5-1, EN60204-1, ISO 13849-1, EN62061, UL 508
Atex approved	No
Central Material	Die cast metal
Conduit entry	M23 12 Pole
Contacts	2NC 1NO
Head material	Stainless steel 316
IP Class	IP67
Maximum approach / withdrawal speed	600
Mechanical reliability B10d	2.5×10^6 operations at 100mA load
Mounting	4 x M5
MTTFd	356 years
Operating temperature	-25..80°C
PFHd	3.44×10^{-8}
PL	e acc. ISO13849-1
Rated insulation voltage	500V ac
SIL	3 acc. EN62061
Thermal current (Ith)	5
Travel for positive opening	8
Withstand voltage	2500V ac

Hinged Guard   Sliding Guard   Lift Off Guard

GBA-1 Gate Bolt
Shown fitted with KM
Tongue Switch.

Standard
A

Flat
F

Plastic Flexible
PF

Heavy Duty Flexible
HF

Heavy Duty Flexible Stainless Steel
HFH

12.50 60 32

FRONT ENTRY

40 30 21

Fixing Holes for M5 Screws

5 9.50

END ENTRY

43.50 34.50 41.50

5

118 9.50 21

2NC 1NO
33 ——— 34
21 ——— 22
11 ——— 12

3NC
31 ——— 32
21 ——— 22
11 ——— 12

3NC 1NO
43 ——— 44
31 ——— 32
21 ——— 22
11 ——— 12

2NC 2NO
43 ——— 44
33 ——— 34
21 ——— 22
11 ——— 12

4NC
41 ——— 42
31 ——— 32
21 ——— 22
11 ——— 12

24V dc

STOP MOMENTARY PUSH BUTTON

START MOMENTARY PUSH BUTTON

FUSE

K1 (AUX)
K2 (AUX)
(A)

GUARD CLOSED

12 22 34 44 (Auxiliary)
11 21 33 43

12 22 34 44 (Auxiliary)
11 21 33 43

SUPERVISION CIRCUIT

SCR-31-i

S10 S11 S21 S22 13 23 A1

S13 S12 14 24 A2

K1 K2

0V

Hinged Guard

Sliding Guard

Lift Off Guard

GBA-1 Gate Bolt Shown fitted with KM Tongue Switch.

Standard
A

Flat
F

Plastic Flexible
PF

Heavy Duty Flexible
HF

Heavy Duty Flexible Stainless Steel
HFH

12.50 60 32 FRONT ENTRY

40 21 30

5 9.50

Fixing Holes
for M5 Screws

43.50 36.50 41.50

5

END ENTRY

118 9.50 21

2NC 1NO

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33 —— 34   31 —— 32
21 —— 22   21 —— 22
11 —— 12   11 —— 12
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3NC

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31 —— 32
21 —— 22
11 —— 12
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3NC 1NO

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43 —— 44   43 —— 44
31 —— 32   21 —— 22
11 —— 12   11 —— 12
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2NC 2NO

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43 —— 44   41 —— 42
21 —— 22   31 —— 32
11 —— 12   11 —— 12
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4NC

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41 —— 42
31 —— 32
11 —— 12
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24V dc

FUSE

STOP
MOMENTARY
PUSH BUTTON

START
MOMENTARY
PUSH BUTTON

(A)

K1
(AUX)

K2
(AUX)

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K1 K2

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