OEM AUTOMATIC

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KLM-Z RFID INTERLOCK SWITCH

454011HFZ
KLM-Z-RR M20 manual release lid and side – Heavy
Duty Actuator

- Locking force F1Max = 3000N
- PL e/Kat. 4
- Option release escape
- Casing made of metal
- 4 x LED indicator

IDEM SAFETY SWITCHES

PRODUCT DESCRIPTION

IDEM's KLM-Z and KLM-Z-RR are heavy-duty, solenoid-controlled RFID safety interlock switches with OSSD outputs, designed for high-integrity machine guarding applications. Housed in a rugged die-cast body with a 316 stainless-steel head, both models feature dual OSSD safety outputs and an auxiliary PNP output, allowing integration into SIL 3 / PL e safety systems. The solenoid mechanism delivers a powerful holding force of up to 3000 N to ensure secure locking of guards during hazardous operations. The RFID-coded actuator provides tamper resistance and ensures only the correctly paired actuator is accepted, minimising the risk of bypassing. Rated IP67, these switches are built to withstand industrial environments, including dust, moisture, and routine cleaning. Multiple head entry positions and compact mounting via M5 screws (at 4 Nm torque) offer flexible installation options, making them ideal for both sliding and hinged guards.

The KLM-Z-RR enhances the standard KLM-Z functionality by adding a rear manual release, enabling emergency or maintenance egress from inside the guarded area without compromising safety. This feature is especially useful in robotic cells, large packaging machines, or applications where operators may need to reset or inspect equipment without full power-down. The OSSD outputs on both models continuously monitor for faults such as actuator misalignment or signal interruption, and support series wiring of multiple devices for streamlined system design. These interlocks are commonly deployed in automation, metalworking, food processing, and cleanroom environments where robust construction, hygiene, and strict safety compliance are required.

TECHNICAL DATA

Actuator entry positions	8
Approvals	ISO 13849-1, ISO 14119, EN62061, EN60947-5-1, UL 508
Conduit entry	M20
Head material	Stainless steel 316
Holding force (F1Max)	3000 N
Housing material	Die cast metal
Integrated LED indication	Yes
IP class	IP67
LED supply voltage	24v

Mounting	4 x M5
Operating temperature	-25°C ... +40°C
PL	e acc. ISO13849-1
Rated insulation voltage	500 V AC
SIL	3 acc. EN62061
Solenoid Voltage	24V dc

24V dc

START
(MOMENTARY)

STOP
(MOMENTARY)

K1
(Aux)

K2
(Aux)

R+ S+ 12 22 34
0V. 11 21
KLM-Z
44

GUARD LOCKED
SIGNAL +24V dc

GUARD OPEN
SIGNAL +24V dc

S13 S11 S21 13 23 95 A1
SCR-31-42-TD-i

SUPERVISION
CIRCUIT

S10 S12 14 24 96 A2

K1 K2

GUARD
CLOSED

0V

(24Vdc)   (24Vdc)
S+   0V   R+

SOLENOID   RFID RECEIVER & SUPERVISION CIRCUIT

34   44

21   22

11   12

GUARD OPEN

124   59.50
44.50

FRONT ENTRY

46 30
21 30 40

Fixing Holes
for M5 Screws
(4 places)

5   12.50

END ENTRY

48 28.50
43
5

23.50 16
190
28.50

9.50 21

18.20   3.40

54 34.80
11
Ø 5.50
6

40
51.50
33

3.50
6

Fixing: 2 X M5

5.80 40
4.50

18.40

10
46

58.40
Ø 5.50

18.40 29.30

40

Fixing: 2 X M5 CSK

24V dc

START
(MOMENTARY)

STOP
(MOMENTARY)

K1
(Aux)

K2
(Aux)

R+ S+ 12 22 34
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