

Guard Locking Switches Metal - Type: RAMZLOCK KLTM-RFID & KLTM



Solenoid Locking Door Interlock Switch with Integral Unique RFID Coding featuring Guard Holding up to 2000N.

The KLTM-RFID Series Guard Locking switches are Tongue Type Safety Interlock Switches incorporating traditional Mechanical Anti-Tamper Tongue Technology (cam system) but also incorporating Uniquely Coded RFID Non Contact Coded Sensor Technology in one device.

They interlock and hold closed guard doors closed to protect operators from moving or hazardous machinery. They are suited where a high anti-tamper technology is required to prevent accidental or deliberate attempts to by-pass the interlock.

Both technologies must be satisfied to enable the machine to be started.

They have a rugged metal body design and have been developed with a holding force of 2000N. to keep medium to large Guard Doors closed until hazards have been removed.

IP67 enclosure protection is maintained by a double seal lid gasket design and metal fixings.

They have a low profile and fixing holes are on an industry standard 73mm centre to enable easy retro fitting to new or existing guards (or where extra anti-tamper is required).

The Head will rotate to provide up to 4 actuator entry positions. (KLTM VERSION ONLY)

2 Types available:

Type KLTM-RFID (Incorporating RFID Coding) or KLTM Tongue only (No RFID coding).

4NC Safety Contacts

1NO Auxiliary PNP Signal (Guard open)
1NO Auxiliary PNP Signal (Guard locked)

LED1 RED Solenoid Power on
LED2 GREEN Switch Locked
LED2 YELLOW (Diagnostic fault)

4NC Safety Contacts

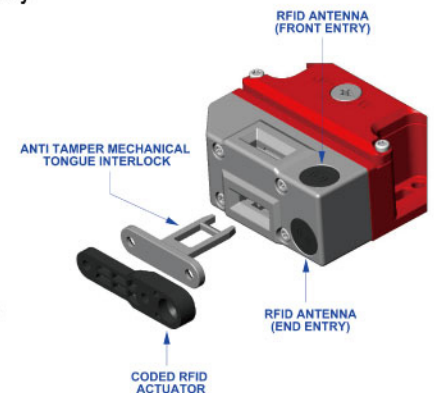
1NO Auxiliary Contact (Guard open)
1NO Auxiliary Contact (Guard locked)
(selectable option for LED2 Guard Locked)

LED1 RED Solenoid Power on
LED2 GREEN Switch Locked (if selected)

Spring to lock when actuator is inserted.
Energise solenoid to unlock.



RAMZLOCK
Type: KLTM-RFID



Functional Specification:

Positive break contacts to IEC 60947-5-1

High Functional Safety to ISO 13849-1

Will fit on 73mm fixing centres

Universal M23 connector versions available for ease of installation

Rugged Die Cast Housings with Stainless Steel Head

Connects to most Safety Relays to give up to PLe Cat.4.

2 Manual override points

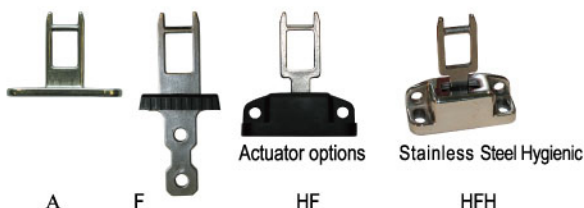
LED Diagnostics for Solenoid, Lock and faults.

Actuator – KLTM-RFID



Actuator options for KLTM (See Page 51)

Standard Flat Heavy Flex. S/Steel Heavy Flex.



For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed actuator inserted.

Standards EN1088 IEC 60947-5-1 EN 60204-1
ISO 13849-1 EN62061 EN 954-1 UL508

Safety Classification and Reliability Data:

Mechanical Reliability B10d 2.5 x 10⁶ operations at 100mA load
EN 954-1 up to Category 4 with Safety Relay
ISO 13849-1 up to PLe depending upon system architecture
EN 62061 up to SIL3 depending upon system architecture

Safety Data - Annual Usage 8 cycles per hour / 24 hours per day / 365 days
PFHd 3.44 x 10⁻⁸

Proof Test Interval (Life) 35 years
MTTFd 356 years

KLTM Solenoid Voltage (by part number) 24V ac/dc or 110V. ac or 230V. ac

KLTM-RFID Supply / Solenoid Voltage 24V.dc

Solenoid Wattage 12W.

Utilization Category AC15 A300 3A.

Thermal Current (Ith) 5A

Rated Insulation / Withstand Voltages 600VAC / 2500 VAC

Travel for Positive Opening 10mm

Maximum Approach / Withdrawal speed 600mm/s.

Body Material Die Cast Metal Painted Red

Head Material Stainless Steel 316

Enclosure Protection IP67

Operating Temperature -25C. 45C.

Vibration IEC 68-2-6, 10-55Hz+1Hz,

Excursion: 0.35mm, 1 octave/min

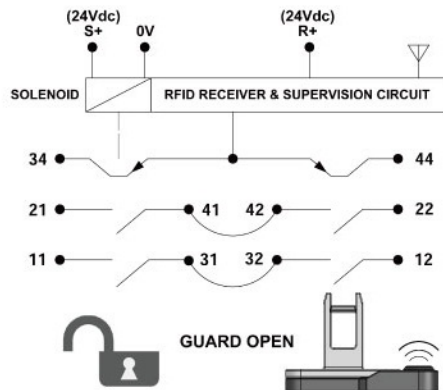
Conduit Entry Various (See Sales Part Numbers)

Fixing 4 x M5

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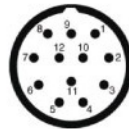
Schematic circuits:

KLTM-RFID Version (incorporating RFID Coding)

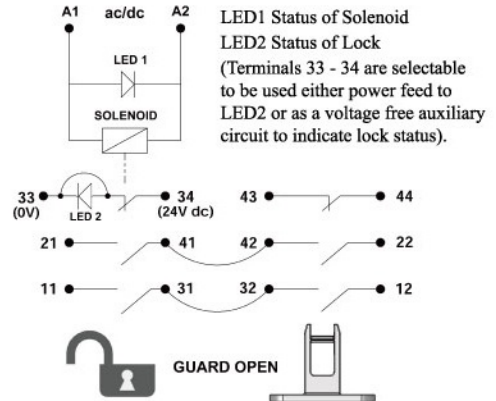


Quick Connect (QC) M23 12 way Male Plug (Pin view from switch)	KLTM-RFID Switch Circuit
1	0V
2	R+ 24V dc
3	S+ 24V dc
4 6	11 / 12
7 8	21 / 22
5	44
9	34
12	Earth

Female QC Leads	Length	Sales Number
M23 12 Way	5m. (15Ft.)	140143
M23 12 Way	10m. (30Ft.)	140144



KLTM Version (Mechanical only)

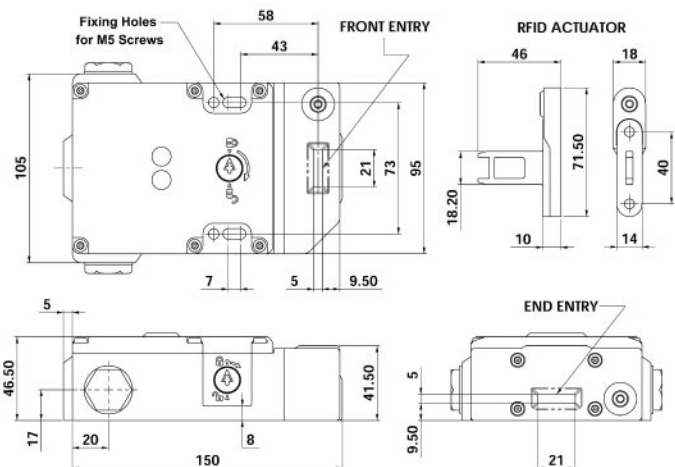


Quick Connect (QC) M23 12 way Male Plug (Pin view from switch)	KLTM Switch Circuit
1 3	A1 A2
4 6	11 / 12
7 8	21 / 22
2 5	43 / 44
9	33
10	34
12	Earth

Type: KLTM-RFID
(Mechanical and RFID Coding)



Type: KLTM
(Mechanical only (without RFID coding))



Sales Numbers			Solenoid Voltage	M20	½"NPT	QC M23
RAMZLOCK	KLTM Switch (Mechanical only)		24V. ac/dc	450001	450002	450003
RAMZLOCK	KLTM Switch (Mechanical only)		110V. ac	450004	450005	450006
RAMZLOCK	KLTM Switch (Mechanical only)		230V. ac	450007	450008	450009
RAMZLOCK	KLTM Actuator Standard		Standard	Add A to Sales Part Number		
RAMZLOCK	KLTM Actuator Flat		Flat	Add F to Sales Part Number		
RAMZLOCK	KLTM Actuator Heavy Duty Flexible		Heavy Duty Flexible	Add HF to Sales Part Number		
RAMZLOCK	KLTM Actuator S/Steel Heavy Duty Flexible		S/Steel Heavy Duty Flexible	Add HFH to Sales Part Number		
			Ordering Example: KLTM M20 24V.ac/dc Solenoid Heavy Duty Flex. Act. Part 450001-HF			
			Supply Voltage / Head position	M20	½"NPT	QC M23
RAMZLOCK KLTM-RFID Switch Supplied complete with uniquely coded actuator		  	24V.dc Actuator entry positions: Front Entry End Entry (Lower)	450201	450202	450203
			24V.dc Actuator entry positions: Rear Entry Front Entry (Upper)	450301	450302	430303