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)

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



RAMZLOCK
Type: KLTM-RFID



2 Types available:

Type KLTM-RFID (Incorporating RFID Coding)	or	KLTM Tongue only (No RFID coding).
4NC Safety Contacts		4NC Safety Contacts
1NO Auxiliary PNP Signal (Guard open) 1NO Auxiliary PNP Signal (Guard locked)		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 LED2 YELLOW (Diagnostic fault)		LED1 RED Solenoid Power on LED2 GREEN Switch Locked (if selected)

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

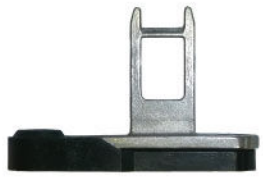
Rugged Die Cast Housings with Stainless Steel Head

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

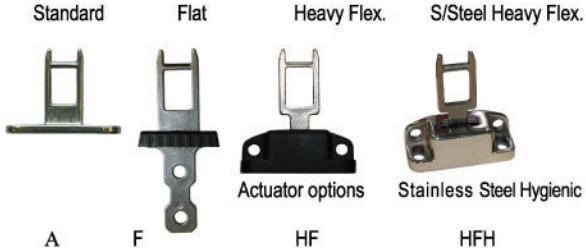
2 Manual override points

LED Diagnostics for Solenoid, Lock and faults.

Actuator – KLTM-RFID



Actuator options for KLTM (See Page 51)



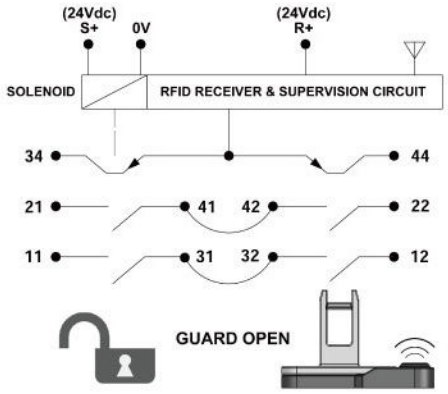
For all IDEM switches the normally closed (NC) circuits are closed when the guard is closed actuator inserted.

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 10^6 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 circuit:s

KLTM-RFID Version (incorporating RFID Coding)



Quick Connect (QC) M23 12 way Male Plug (Pin view from switch)	KLTM-RFD 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

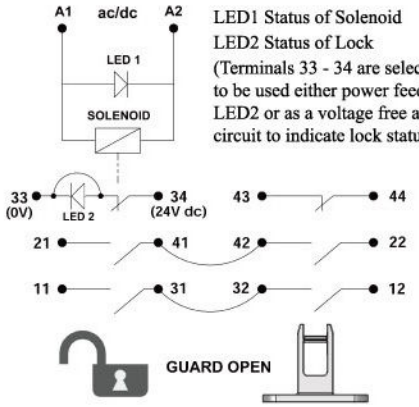
Female QC Leads	Length	Sales Number
M23 12 Way	5m. (15Ft.)	140143
M23 12 Way	10m. (30Ft.)	140144

Type: KLTM-RFID

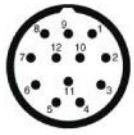
(Mechanical and RFID Coding)



KLTM Version (Mechanical only)



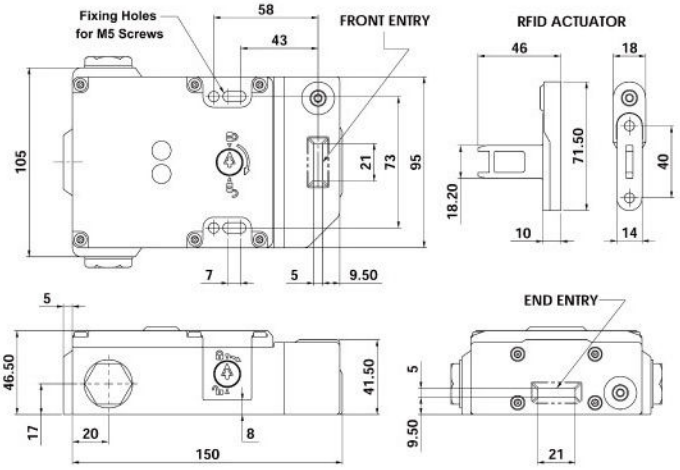
Quick Connect (QC) M23 12 way Male Plug (Pin view from switch)	KLTM Switch Circuit
1 3	A1 A2
4 6	11 / 12
7 8	21 / 22
2 5	43 / 44
9	33
10	34
12	Earth



Type: KLTM

(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