RFID Guard Locking Switch Metal Type: **RAMZLOCK KLTM-RFID**
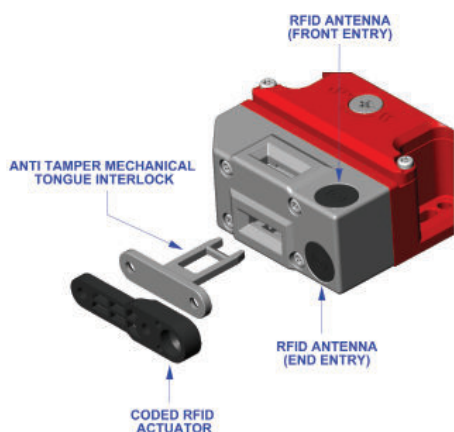
FEATURES:

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

RFID ANTENNA (FRONT ENTRY)

ANTI TAMPER MECHANICAL TONGUE INTERLOCK

RFID ANTENNA (END ENTRY)

CODED RFID ACTUATOR

Solenoid Locking Door Interlock Safety Switch with Integral Unique RFID Coding featuring Guard Holding up to 3000N (300Kg) (F1Max)

IDEM's KLTM-RFID Series Guard Locking switches are tongue type safety interlock switch incorporating traditional mechanical anti-tamper tongue technology (featuring IDEM's patened cam system) but also incorporating uniquely coded RFID non contact coded sensor technology in one device.

They interlock and hold closed guard doors to protect operators from moving or hazardous machinery. They are suited to 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 maximum holding force of 3000N 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 retrofitting to new or existing guards (or where extra anti-tamper is required).

Type: KLTM-RFID
Mechanical and RFID Coding

CONTACTS:

KLTM-RFID (incorporating 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

FUNCTIONAL SPECIFICATIONS:

Positive Break Contacts to EN60947-5-1
High Functional Safety to ISO13849-1
Rugged Die Cast Metal Housing with Stainless Steel 316 Head
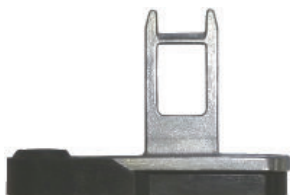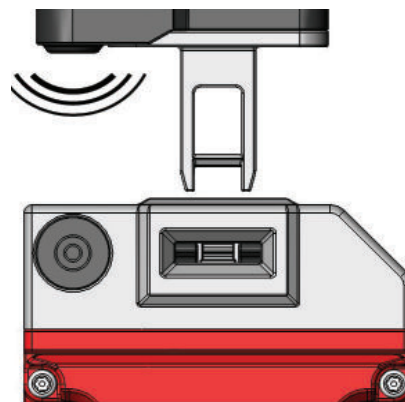Will fit on 73mm fixing centres
Connects to most Safety Relays to give up to PLe Cat.4
M23 Quick Connector version available for ease of installation
2 manual override points
LED diagnostics for Solenoid, Lock and faults

ACTUATOR:

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

Standards:	ISO14119 EN60947-5-1 EN60204-1
	ISO13849-1 EN62061 UL508

Safety Classification and Reliability Data:	
Mechanical Reliability B10d	2.5 x 10⁶ operations at 100mA load
ISO13849-1	Up to PLe depending upon system architecture
EN62061	Up to SIL3 depending upon system architecture
Safety Data – Annual Usage	8 cycles per hour/24 hours per day/365 days
	MTTFd 356 years
KLTM-RFID Supply/Solenoid Voltage	24Vdc
Solenoid Wattage	12W
Thermal Current (Ith)	5A
Rated Insulation/Withstand Voltages	600Vac/2500Vac
Travel for Positive Opening	10mm
Maximum Approach/Withdrawal Speed	600mm/s
Holding Force	F1Max 3000N Fzh 2307N
Body Material	Die Cast Metal (painted red)
Head Material	Stainless Steel 316
Enclosure Protection	IP67
Operating Temperature	-25C +40C
Vibration	IEC 68-2-6 10-55Hz + 1Hz
	Excursion 0.35mm 1 octave/min
Conduit Entry	Various (See Sales Number)
Fixing	2 x M5

Safety Classification and Reliability Data:
Mechanical Reliability B10d 2.5×10^6 operations at 100mA load

RFID Guard Locking Switch Metal Type: **RAMZLOCK KLTM-RFID**
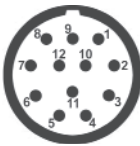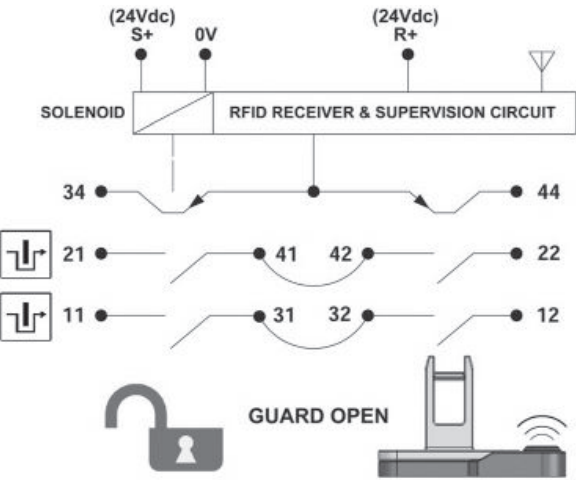
DIMENSIONS:
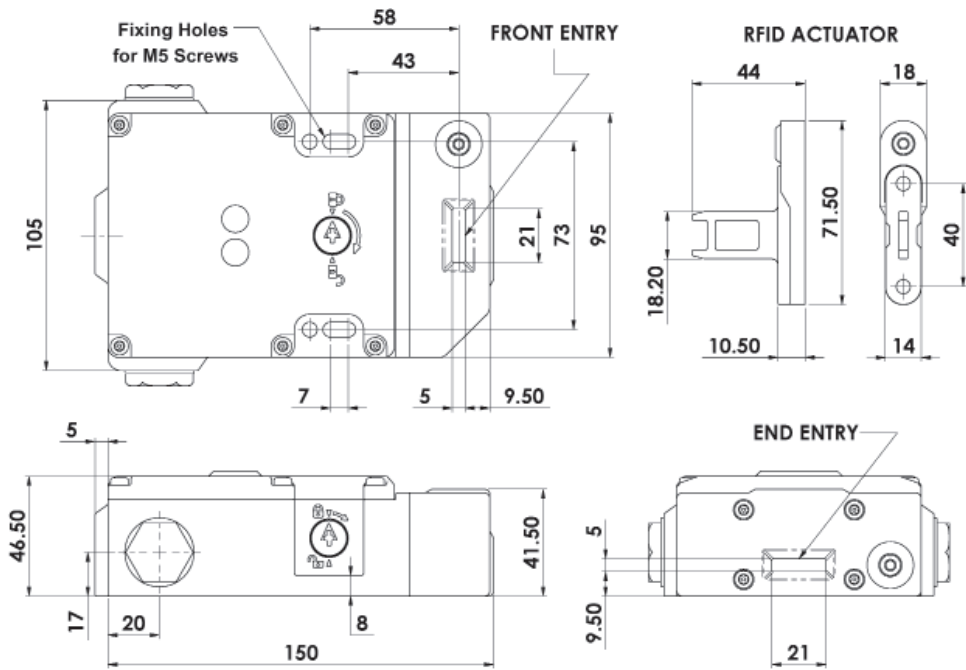
SCHEMATIC CIRCUIT:

KLTM-RFID Version (incorporating RFID Coding)

Quick Connect (QC) M23 12 Way Male Plug Connector Length 24mm 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

SALES NUMBER		SUPPLY VOLTAGE/HEAD POSITION	M20	1/2" 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	450303