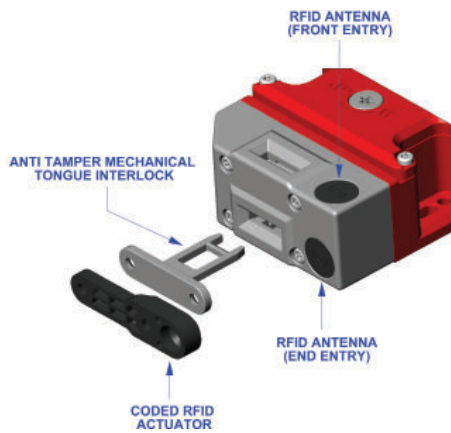


## Guard Locking Switch Metal Type: RAMZLOCK KLTM-RFID

## FEATURES:

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



## 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

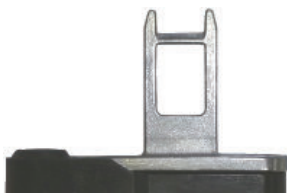
Connects to most Safety Relays to give up to PLe Cat.4

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.



**Solenoid Locking Door Interlock Safety Switch with Integral Unique RFID Coding featuring Guard Holding up to 2000N (200Kg) (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 patented cam system) but also incorporating uniquely coded RFID non contact coded sensor technology in one device.

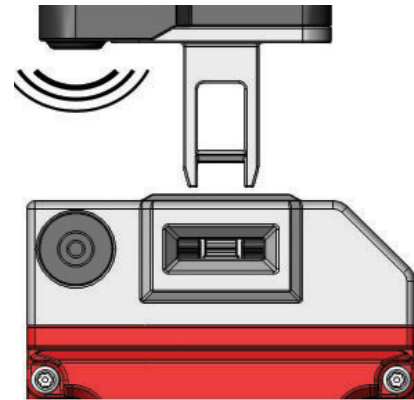
They interlock and hold closed guard doors to protect operators from moving or hazardous machinery. They are suited to where a high anti-tamper technology is required to prevent accidental or deliberate attempts to by-pass the interlock.

**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 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 retrofitting to new or existing guards (or where extra anti-tamper is required).



**Type: KLTM-RFID**

Mechanical and RFID Coding

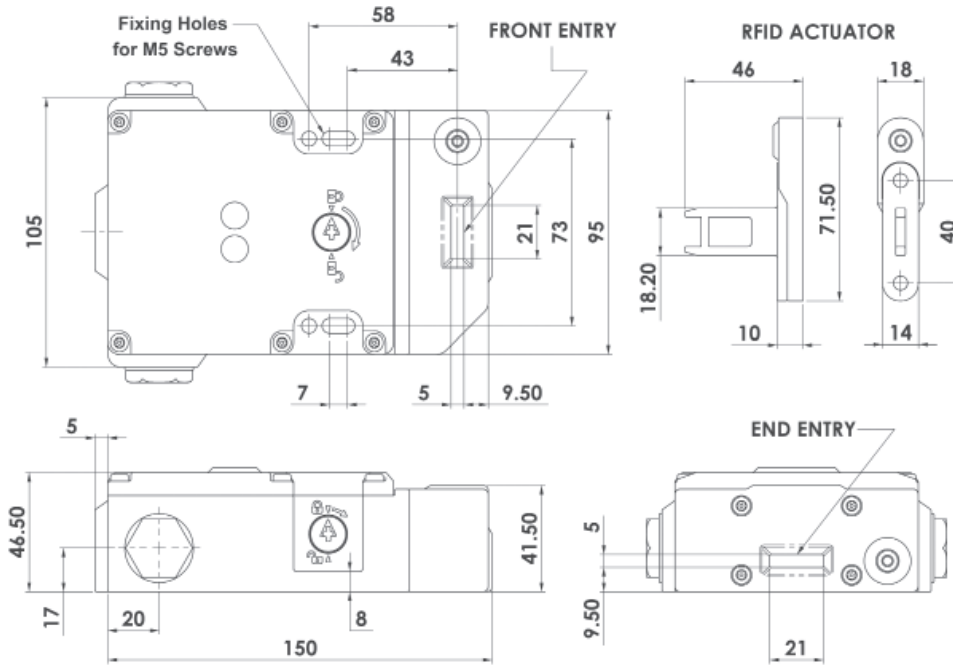
**Standards:** ISO14119 EN60947-5-1 EN60204-1  
ISO13849-1 EN62061 UL508

**Safety Classification and Reliability Data:**

Mechanical Reliability B10d	2.5 x 10 <sup>6</sup> 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
PFHd	3.44 x 10 <sup>-8</sup>
Proof Test Interval (Life)	35 years
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 2000N Fzh 1538N
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

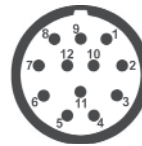
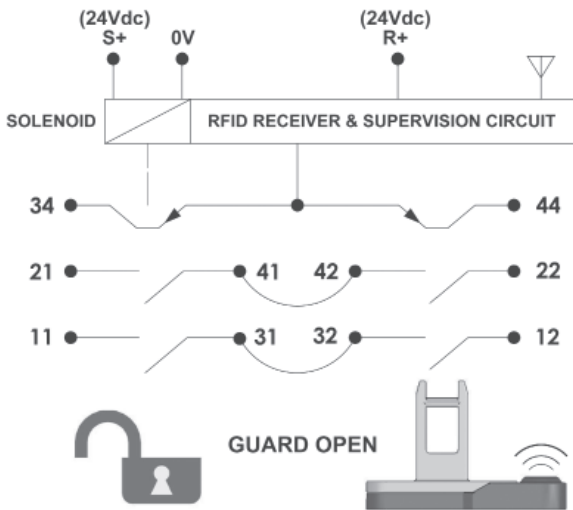
# Guard Locking Switch Metal Type: RAMZLOCK KLTM-RFID

## DIMENSIONS:



## SCHEMATIC CIRCUIT:

KLT-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

# Guard Locking Switch Stainless Steel Type: KLT-SS-RFID

## FEATURES:



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



IP69K



## CONTACTS:

**KLT-SS-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

Mirror Polished (Ra10) Stainless Steel 316

Will fit on 73mm fixing centres

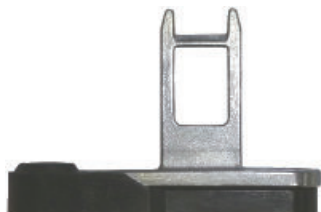
Connects to most Safety Relays to give up to PLe Cat.4

M23 Quick Connector version available for ease of installation

1 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.

**Solenoid Locking Door Interlock Safety Switch with Integral Unique RFID Coding featuring Guard Holding up to 2000N (200Kg) (F1Max)**

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

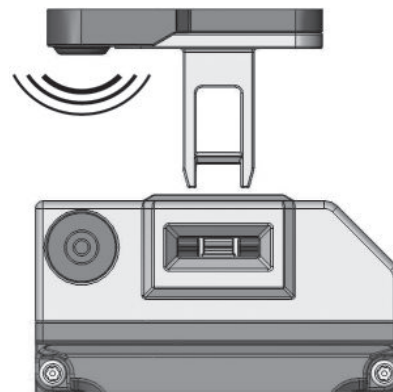
They interlock and hold closed guard doors to protect operators from moving or hazardous machinery. They are suited to where a high anti-tamper technology is required to prevent accidental or deliberate attempts to by-pass the interlock.

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

They have a mirror polished Stainless Steel 316 body design and have been developed with a maximum holding force of 2000N to keep medium to large guard doors closed until hazards have been removed.

IP69K 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: KLT-SS-RFID**  
Mechanical and RFID Coding

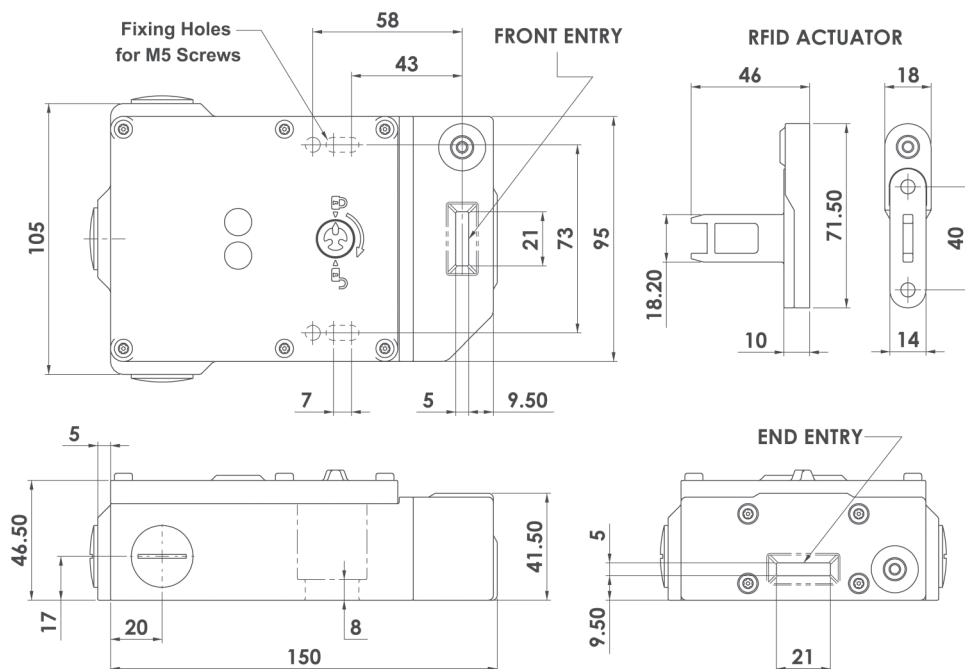
**Standards:** ISO14119 EN60947-5-1 EN60204-1  
ISO13849-1 EN62061 UL508

### Safety Classification and Reliability Data:

Mechanical Reliability B10d	2.5 x 10 <sup>6</sup> 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
PFHd	3.44 x 10 <sup>-8</sup>
Proof Test Interval (Life)	35 years
MTTFd	356 years
KLT-SS-RFID Supply/Solenoid Voltage	24V dc
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 2000N Fzh 1538N
Body Material	Polished Stainless Steel 316
Head Material	Polished Stainless Steel 316
Enclosure Protection	IP69K
Operating Temperature	-25C +40C
Vibration	IEC 68-2-6 10-55Hz + 1Hz
Conduit Entry	Various (See Sales Number)
Fixing	2 x M5

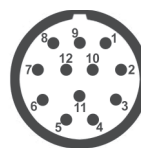
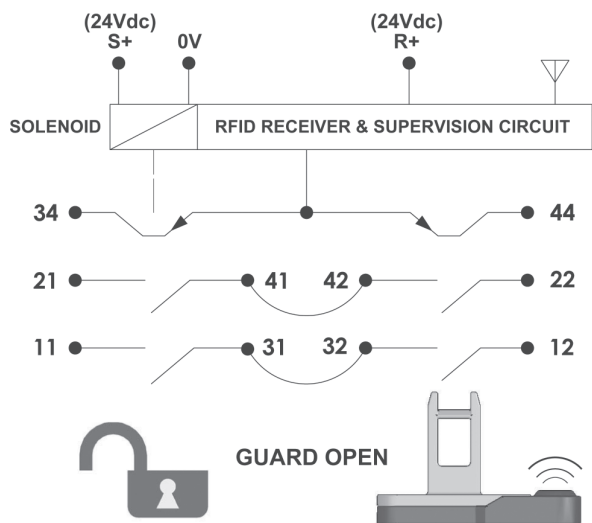
# Guard Locking Switch Stainless Steel Type: KLT-SS-RFID

## DIMENSIONS:



## SCHEMATIC CIRCUIT:

KLT-SS-RFID Version (incorporating RFID Coding)



Quick Connect (QC) M23 12 Way Male Plug Connector Length 24mm Pin View from Switch	KLT-SS-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
KLT-SS-RFID Switch Supplied complete with uniquely coded actuator		24V dc Actuator Entry Positions: Front Entry End Entry (Lower)	451201	451202	451203
Manual Release Key (order separately - not supplied with switches)		24V dc Actuator Entry Positions: Rear Entry Front Entry (Upper)	451301	451302	451303
Sales Number: 140123					