# RFID Guard Locking Switch Stainless Steel Type: KLT-SS-RFID <br> FEATURES: <br> C $€$ (ㄸ)" $\stackrel{\text { Tiv }}{\text { Tin }}$ 



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 73 mm 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 3000 N ( 300 Kg ) (F 1Max)
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 3000 N 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 73 mm 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 $2.5 \times 10^{6}$ operations at 100 mA 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
KLT-SS-RFID Supply/Solenoid Voltage 24 V dc
Solenoid Wattage
Thermal Current (lIth)
Rated Insulation/Withstand Voltages 600Vac/2500Vac
Travel for Positive Opening 10 mm
Maximum Approach/Withdrawal Speed $600 \mathrm{~mm} / \mathrm{s}$
Holding Force F1 Max 3000N Fzh 2307N
Body Material Polished Stainless Steel 316
Head Material Polished Stainless Steel 316
Enclosure Protection IP69K
Operating Temperature -25C +40 C
IEC 68-2-6 $\quad 10-55 \mathrm{~Hz}+1 \mathrm{~Hz}$
Vibration Excursion 0.35 mm 1 octave/min
Conduit Entry Various (See Sales Number)
Fixing $2 \times \mathrm{M} 5$

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DIMENSIONS:





| Quick Connect (QC) <br> M23 12 Way Male Plug <br> Connector Length 24mm <br> Pin View from Switch | KLT-SS-RFID <br> Switch Circuit |
| :---: | :---: |
| 1 | OV |
| 2 | $\mathrm{R}+24 \mathrm{~V} \mathrm{dc}$ |
| 3 | $\mathrm{~S}+24 \mathrm{~V} \mathrm{dc}$ |
| 4 | 6 |
| 7 | $11 / 12$ |
| 5 | $21 / 22$ |
| 9 | 44 |
| 12 | 34 |
|  | Earth |

## SCHEMATIC CIRCUIT:

KLT-SS-RFID Version (incorporating RFID Coding)


| FEMALE QC LEADS | LENGTH | SALES NUMBER |
| :---: | :---: | :---: |
| M23 | 12 Way | $5 \mathrm{~m}(15 \mathrm{ft})$ |
| M23 | 12 Way | $10 \mathrm{~m}(30 \mathrm{ft})$ |


| STAINLESS STEEL 316 GLAND | SALES NUMBER |  |
| :---: | :---: | :---: |
| M20 | 140120 |  |
| 1/2" NPT | 140121 |  |

IDEM recommend using our Stainless Steel 316 Gland with this switch.

| SALES NUMBER |  | SUPPLY VOLTAGE/HEAD POSITION | M20 | 1/2" NPT | QC M23 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| KLT-SS-RFID Switch Supplied complete with uniquely coded actuator |  | 24 V dc <br> Actuator Entry Positions: <br> Front Entry <br> End Entry (Lower) | 451201 | 451202 | 451203 |
| Manual Release Key (order separately not supplied with switches) <br> Sales Number: 140123 |  | 24 V dc <br> Actuator Entry Positions: <br> Rear Entry <br> Front Entry (Upper) | 451301 | 451302 | 451303 |

