## Guard Locking Switch Metal Type: RAMZLOCK KLTM-P2L

#### **FEATURES:**









#### **FUNCTIONAL SPECIFICATIONS:**

Positive Break Contacts to EN60947-5-1 High Functional Safety to ISO13849-1 Die Cast Metal Housing (painted red) Stainless Steel Head version available Connects to most Safety Relays to give up to PLe Cat.4 Quick Connector version available for ease of installation Machine safety contacts open when power is released LED Status of Solenoid Power

4NC Safety Circuits:

1NC 1NO Auxiliary circuits - Actuator/Door Status

#### KLTM-P2L

4NC Safety Contacts:

2 Guard Closed

2 Switch Locked

1NO Auxiliary Contact (Guard Open)

1NO Auxiliary Contact (Guard Locked)

LED RED Solenoid Power On

### Solenoid Locking Interlock Safety Switch featuring POWER TO LOCK with Guard Holding up to 3000N (300Kg) (F1Max)

KLTM-P2L Series Guard Locking switches have a rugged die cast metal body design with a stainless steel head. They have been developed with a holding force of 3000N to keep large guard doors closed until hazards have been removed.

They are Power to Lock - Spring to Unlock - suitable for applications where immediate unlocking is required at removal or loss of power.

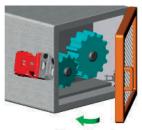
(They are NOT suitable for machines with a running down time).

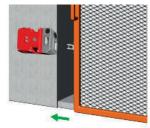
The rugged die cast body provides a durable robust hold closed interlock protection and the stainless steel head provides extra durability. Flexible actuators are available to aid where some alignment is a problem.

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.

The head will rotate to provide up to 4 actuator entry positions.





Hinged Guard

Sliding Guard

#### ACTUATOR OPTIONS (see p100)









MAINTENANCE LOCKOUT ACTUATOR



Fits to switch aperture during maintenance and provides multiple padlock holes. (See p100-101.)

For all IDEM Power to Lock switches the normally closed (NC) circuits are closed when the guard is closed actuator inserted and power is applied to the solenoid.

## Safety Classification and Reliability Data:

Mechanical Reliability B10d

ISO13849-1 EN62061

Standards:

Safety Data – Annual Usage

Solenoid Voltage (by Sales Number) Solenoid Wattage Utilization Category Thermal Current (Ith)

Travel for Positive Opening Actuator Entry Minimum Radius Maximum Approach/Withdrawal Speed Holding Force

> **Body Material** Head Material **Enclosure Protection** Operating Temperature

Conduit Entry

2.5 x 106 operations at 100mA load

EN14119 EN60947-5-1 EN60204-1

ISO13849-1 EN62061 UL508

Up to PLe depending upon system architecture Up to SIL3 depending upon system architecture 8 cycles per hour/24 hours per day/365 days MTTFd 356 years

24Vdc 12W (Inrush 50W) AC15 A300 3A 5A

10mm 175mm Standard 100mm Heavy Duty 600mm/s

F1Max 3000N Fzh 2307N Die Cast (painted red) Stainless Steel 316 IP67

-25C +40C IEC 68-2-6 10-55Hz + 1Hz Excursion 0.35mm 1 octave/min Various (See Sales Number)

Fixing 4 x M5

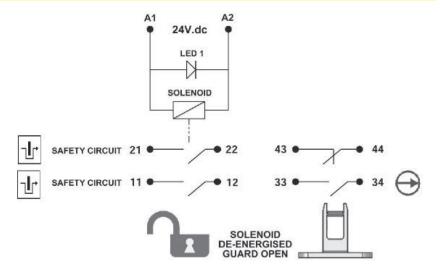
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## SCHEMATIC CIRCUIT:

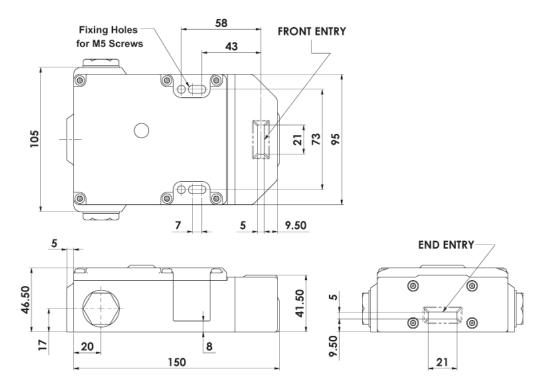








## **DIMENSIONS:**





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



FEMALE QC LEADS	LENGTH	SALES NUMBER
M23 12 Way	5m (15ft)	140143
M23 12 Way	10m (30ft)	140144

SALES NUMBER	SOLENOID VOLTAGE	M20	1/2" NPT	QC M23	
Kobra KLTM-P2L Switch	24V dc	450021	450022	450023	
To order Switch with Actuator					
Kobra Actuator	Standard	Add A	to Sales Part	Number	
Kobra Actuator	Flat	Add F	to Sales Par	t Number	
Kobra Actuator	Heavy Duty Flexible	Add HF	to Sales Par	t Number	
Kobra Actuator	S/Steel Heavy Duty Flexible	HHH bbA	to Sales Par	t Number	