

# Guard Locking - Rear Manual Escape Release Switches

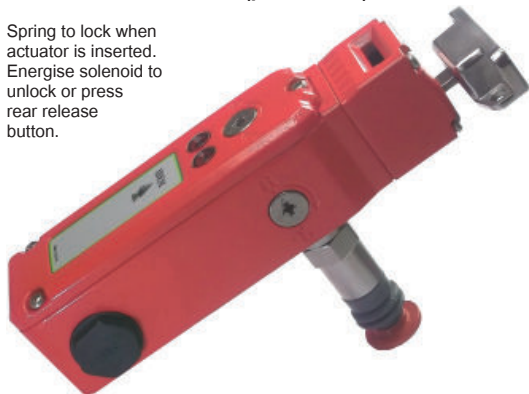
## Types: KLM-RR & HYGIELOCK KL3-SS-RR

### FEATURES & APPLICATION:



#### KLM-RR - IP67 Die-Cast (painted red)

Spring to lock when actuator is inserted. Energise solenoid to unlock or press rear release button.



#### KL3-SS-RR - IP69K

Stainless Steel 316 Housing with mirror polished finish (Ra10)

Spring to lock when actuator is inserted. Energise solenoid to unlock or press rear release button.



IP69K

**Solenoid Locking Door Interlock Safety Switches featuring Guard Holding up to 3000N (300Kg) (F1Max) and Rear Manual Escape Release**

All the features and specifications of the standard KLM and KL3-SS are maintained with the addition of an extra Rear Manual Escape Release button being provided at the rear of the housing.

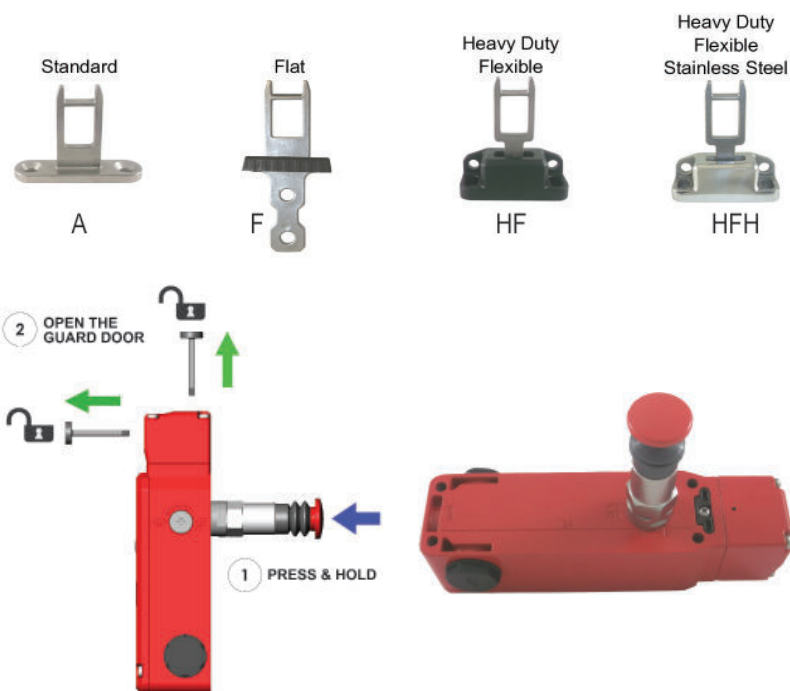
#### APPLICATION:

Where the risk assessment for the application permits, a non-latching manual escape release is provided to enable quick release of the switch lock in case of emergency.

The switch can be mounted such that access to the release button is available from inside the active guard area.

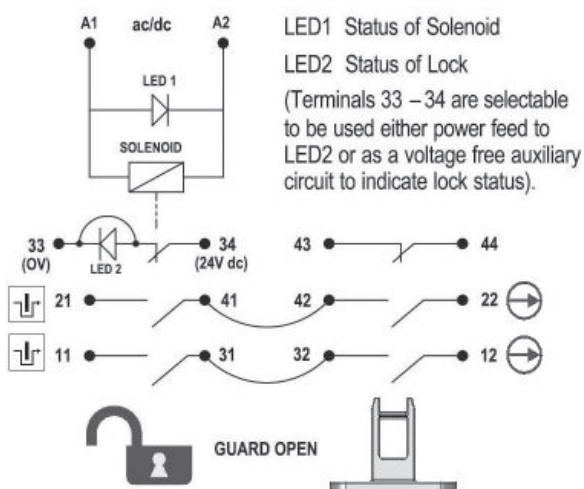
Pressing and holding the red button will release the lock mechanism and open the lock monitoring contacts whilst the guard can be pushed open.

### ACTUATOR OPTIONS (see p100)



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

### SCHEMATIC CIRCUIT:



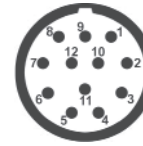
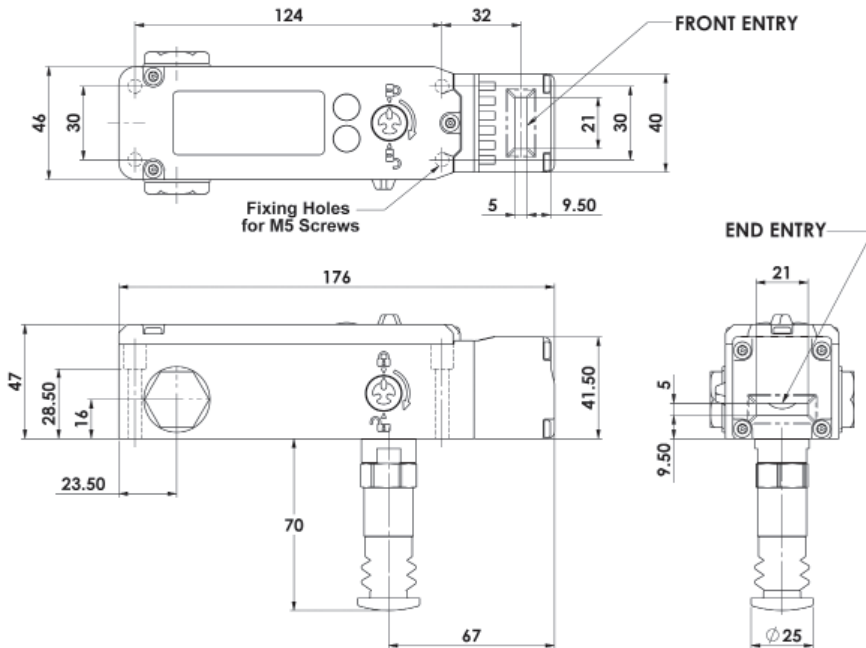
#### Safety Classification and Reliability Data:

|   |  |
|---|--|
| 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    |
|   | MTTFd 356 years                                |
| KLT-SS - Solenoid Voltage (by Sales Number) | 24V ac/dc or 110Vac or 230Vac                  |
| Solenoid Wattage                            | 12W  |
| LED 2 Supply Voltage                        | 24Vac  |
| Utilization Category                        | AC15 A300 3A                                   |
| Thermal Current (Ith)                       | 5A   |
| Rated Insulation/Withstand Voltages         | 600Vac/2500Vac                                 |
| Travel for Positive Opening                 | 10mm   |
| Actuator Entry Minimum Radius               | 175mm Standard 100mm Heavy Duty                |
| Maximum Approach/Withdrawal Speed           | 600mm/s  |
| Holding Force                               | F1Max 3000N Fzh 2307N                          |
| Body Material                               | KLM-RR Die Cast (painted red)                  |
|   | KL3-SS-RR Polished Stainless Steel 316         |
| Head Material                               | Die Cast or Stainless Steel 316                |
|   | KL3-SS-RR Polished Stainless Steel 316         |
| Enclosure Protection                        | KLM-RR IP67                                    |
|   | KL3-SS-RR IP69K                                |
| Operating Temperature                       | -25C +50C                                      |
| Vibration                                   | IEC 68-2-6 10-55Hz + 1Hz                       |
|   | Excursion 0.35mm 1 octave/min                  |
| Conduit Entry                               | Various (See Sales Number)                     |
| Fixing                                      | 4 x M5   |

# Guard Locking - Rear Manual Escape Release Switches

## Types: KLM-RR & HYGIELOCK KL3-SS-RR

### DIMENSIONS:



| Quick Connect (QC)<br>M23 12 Way Male Plug<br>Connector Length 24mm<br>Pin View from Switch | Switch Circuit |
|---|----------------|
| 1 3   | A1 A2          |
| 4 6   | 11/12          |
| 7 8   | 21/22          |
| 2 5   | 43/44          |
| 9   | 33             |
| 10  | 34             |
| Earth   | 12             |

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



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

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

| KLM-RR<br>Die Cast painted red<br>(Stainless Steel Head option available)   | STANDARD MANUAL RELEASE LID AND SIDE |                  |        | MANUAL RELEASE LID ONLY (Not SIDE) |                              |        | NO MANUAL RELEASE FITTED (Blanked) |        |        |          |        |
|---|--------------------------------------|------------------|--------|------------------------------------|------------------------------|--------|------------------------------------|--------|--------|----------|--------|
|   | SALES NUMBER                         | SOLENOID VOLTAGE | M20    | 1/2" NPT                           | QC M23                       | M20    | 1/2" NPT                           | QC M23 | M20    | 1/2" NPT | QC M23 |
| Kobra KLM-RR Switch   | 24V ac/dc                            | 212001           | 212002 | 212003                             | 212401                       | 212402 | 212403                             | 212301 | 212302 | 212303   |        |
| Kobra KLM-RR Switch   | 110V ac                              | 212004           | 212005 | 212006                             | 212404                       | 212405 | 212406                             | 212304 | 212305 | 212306   |        |
| Kobra KLM-RR Switch   | 230V ac                              | 212007           | 212008 | 212009                             | 212407                       | 212408 | 212409                             | 212307 | 212308 | 212309   |        |
| Kobra Actuator  | Standard                             |                  |        |                                    | Add A to Sales Part Number   |        |                                    |        |        |          |        |
| Kobra Actuator  | Flat                                 |                  |        |                                    | Add F to Sales Part Number   |        |                                    |        |        |          |        |
| Kobra Actuator  | Heavy Duty Flexible                  |                  |        |                                    | Add HF to Sales Part Number  |        |                                    |        |        |          |        |
| Kobra Actuator  | S/Steel Heavy Duty Flexible          |                  |        |                                    | Add HFH to Sales Part Number |        |                                    |        |        |          |        |
| Stainless Steel Head Versions   |                                      |                  |        |                                    | Add SS to Sales Part Number  |        |                                    |        |        |          |        |
| <b>Ordering Example: 24V Solenoid M20 Conduit Standard Manual Release Standard Actuator: Sales Number: 212001-A</b> |                                      |                  |        |                                    |                              |        |                                    |        |        |          |        |

| KL3-SS-RR<br>Stainless Steel 316<br>(Mirror Polished Finish to Ra10)   | STANDARD MANUAL RELEASE LID AND SIDE |                  |        | MANUAL RELEASE LID ONLY (Not SIDE) |                              |        | NO MANUAL RELEASE FITTED (Blanked) |        |        |          |        |
|--|--------------------------------------|------------------|--------|------------------------------------|------------------------------|--------|------------------------------------|--------|--------|----------|--------|
|  | SALES NUMBER                         | SOLENOID VOLTAGE | M20    | 1/2" NPT                           | QC M23                       | M20    | 1/2" NPT                           | QC M23 | M20    | 1/2" NPT | QC M23 |
| Kobra KL3-SS-RR Switch   | 24V ac/dc                            | 215001           | 215002 | 215003                             | 215401                       | 215402 | 215403                             | 215301 | 215302 | 215303   |        |
| Kobra KL3-SS-RR Switch   | 110V ac                              | 215004           | 215005 | 215006                             | 215404                       | 215405 | 215406                             | 215304 | 215305 | 215306   |        |
| Kobra KL3-SS-RR Switch   | 230V ac                              | 215007           | 215008 | 215009                             | 215407                       | 215408 | 215409                             | 215307 | 215308 | 215309   |        |
| Kobra Actuator   | Standard                             |                  |        |                                    | Add A to Sales Part Number   |        |                                    |        |        |          |        |
| Kobra Actuator   | Flat                                 |                  |        |                                    | Add F to Sales Part Number   |        |                                    |        |        |          |        |
| Kobra Actuator   | Heavy Duty Flexible                  |                  |        |                                    | Add HF to Sales Part Number  |        |                                    |        |        |          |        |
| Kobra Actuator   | S/Steel Heavy Duty Flexible          |                  |        |                                    | Add HFH to Sales Part Number |        |                                    |        |        |          |        |
| Manual Release Key<br>(order separately - not supplied with switches)  |                                      |                  |        |                                    |                              |        |                                    |        |        |          |        |
| Sales Number: 140123   |                                      |                  |        |                                    |                              |        |                                    |        |        |          |        |
| <b>Ordering Example: 24V Solenoid 1/2" NPT Conduit Manual Release Lid Only Flat Actuator: Sales Number: 215402-F</b> |                                      |                  |        |                                    |                              |        |                                    |        |        |          |        |