

## Description

The Atlas 5 is a positive mode, tongue operated guard locking interlock switch that locks a machine guard closed until power is isolated and ensures that it remains isolated while the guard is open. The guard may only be opened when a signal is applied to the internal solenoid which releases the lock mechanism. A heavy-duty switch, the Atlas 5 locking mechanism withstands forces up to 5500 N (1236lbs.) and the die-cast alloy housing is ideal for use in harsh environments. A unique feature of the Atlas 5 is its patented selfaligning head that tolerates actuator or guard misalignment, making it particularly useful for heavy machine guards.

The Atlas 5 is designed for machines that do not stop immediately or where premature interruption of the machine could cause damage to tooling and components or cause an additional hazard. With 2 safety (N.C.) contacts and 2 auxiliary (N.O.) contact, Atlas 5 is ideal for PLC controlled machines.

## Features

- Mechanical lock
- High locking force- -5500 N (1236lbs.)
- Heavy duty die-cast alloy housing ideal for harsh environments
- Patented self-aligning head tolerates actuator misalignment

Specifications

| Standards | EN 954-1, ISO 13849-1, IEC/EN 602041, N FPA 79, EN 1088, ISO 14119, IEC/ EN 60947-5-1, AN SI B11.19, AS4024.1 |
| :---: | :---: |
| C ategory | Cat. 1 Device per EN 954-1 D ual channel interlocks suitable for Cat. 3 or 4 systems |
| Approvals | C E marked for all applicable directives, cULus and CSA |
| Safety C ontacts <br> Atlas 5 <br> Atlas 5 trapped key (left hand) | 2 N.C. direct opening action 1 N.O. direct opening action 2 N.C. direct opening action 1 N.O. direct opening action |
| Utilization C at. <br> AC (Ue) <br> (le) <br> DC | $\begin{aligned} & \text { AC } 15 \\ & 500 \mathrm{~V} 250 \mathrm{~V} 100 \mathrm{~V} \\ & 1 \mathrm{~A} 2 \mathrm{~A} 5 \mathrm{~A} \\ & 250 \mathrm{~V} 0.5 \mathrm{~A}, 24 \mathrm{~V} 2 \mathrm{~A} \end{aligned}$ |
| Maximum Switched Current/ Volt/Load | 500V 500VA |
| Thermal C urrent (Ith) | 10A |
| M in Current | 5V. 5mA DC |
| Safety C ontact Gap | > 2mm contact block |
| Rtd. Insulation Voltage | (Ui) 500 V |
| Rtd. Impulse withstand Volt | (Uimp) 2500V |
| Auxiliary Contacts | 1 N.0. |
| Actuator Travel for Positive 0 pening | 8mm (.31in.) |
| Break Contact Min Force | 12 N (2.7 lbs) |
| Max Actuation Speed | 160 mm per sec ( $6.3 \mathrm{in} . \mathrm{per} \mathrm{sec}$ ) |
| Max Actuation Frequency | 2 Cycle per sec |
| C ase Material | D ie cast alloy |
| Actuator Material | Stainless Steel |
| Protection | IP65 |
| Conduit Entry | $3 \times$ M20 or $3 \times 1 / 2$ in N PT or quick disconnect |
| O perating Temperature | $-10^{\circ} \mathrm{C}$ to $+60^{\circ} \mathrm{C}\left(14^{\circ} \mathrm{F}\right.$ to $\left.+140^{\circ} \mathrm{F}\right)$ |
| Fixing | $4 \times \mathrm{M} 5$ |
| Mechanical Life | 1,000,000 operations |
| Electrical Life | 1,000,000 operations |
| W eight | 1200g (2.65lbs) |
| Colour | Red |
| Max Holding Force | 5500N (1236lbs) |
| Min O perating Radius | 300 mm end entry, 800 mm entry front |
| Power Supply | 24 V AC/DC or 110 V AC or 230V AC (solenoid) |
| Solenoid Power | 13W typical 100\% ED |
| Solenoid Rating | 100\% duty |

Product Selection

| Type |  | Actuator | Contacts |  | Solenoid Voltage | Catalogue Number |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Safety | Aux. | M20 Conduit |  | 1/2in NPT | Quick Disconnect |
| Atlas 5 | Standard |  | Standard | 2 N.C. | 1N.0. | 24 V AC/DC | 440G-L07264 | 440G-L07258 | 440G-L07298 |
|  |  | 110 V AC/DC |  |  |  | 440G-L07263 | 440G-L07257 | 440G-L07299 |
|  |  | 230 V AC/DC |  |  |  | 440G-L07262 | 440G-L07256 | 440G-L07300 |
|  | LH Key Lock | 24 V AC/DC |  |  |  | 440G-L07255 | 440G-L07249 | 440G-L07301 |
|  |  | 110 V AC/DC |  |  |  | 440G-L07254 | 440G-L07248 | 440G-L07302 |
|  |  | 230 V AC/DC |  |  |  | 440G-L07253 | 440G-L07247 | 440G-L07303 |
|  |  | M23 mating cable 2 m (6.5ft). See page 15-13 for details and additional lengths. |  |  |  |  |  | 889M-F12AH-2 |

Accessories


AB Allen-Bradley

Interlock Switches

## Guard Locking Switches

Atlas 5
Approximate Dimensions-mm (inches)
D imensions are not intended to be used for installation purposes.


Typical Wiring Diagrams


| Connector Pinout |  | Terminal | Contact | Contact Action |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | A1 | Solenoid |  |
|  | 3 | A2 | Power | $\square$ Contact O pen $\square$ Contact Closed$\begin{aligned} & \text { Actuator withdrawal distance } \\ & \text { from full insertion }\end{aligned}$ |
|  | 4 | 5 |  |  |
|  | 6 | 6 | N.C. |  |
|  | 7 | 7 | N C |  |
|  | 8 | 8 | N.C. |  |
|  | 9 | 1 | N.O. |  |
|  | 10 | 2 |  |  |
|  | 5 | 3 |  |  |
|  | 2 | 4 | N.O. |  |
|  | 12 | Ground |  |  |

## Application Details



CU 1 Timer Unit
Used with Atlas for machines with constant overruns. Gives a timed delay to the lock/release signal. Failsafe and adjustable to a range of times from 0.1 seconds up to 40 minutes. For more details, see the Safety monitoring relay section in this catalogue.


CU 2 Stop M otion Detector Unit
Used with Atlas for machines with constant or variable over run. Gives a timed delay to the lock/release signal. Fail safe and adjustable to a range of times from 0.1 seconds up to 40 minutes. For more details, see the M onitoring Safety Relay section in this catalogue.


M inotaur MSR6R/T M onitoring Safety Relay Unit
Ensures a maximum level of safety by monitoring all wiring in the safety circuit including switches and contactors.
Any fault and the power to the machine is switched off.
Other M inotaur units are available, see the Safety monitoring relay section in this catalogue.

