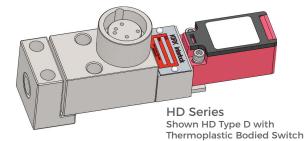


SD Series Shown SD Type F with Thermoplastic Bodied Switch



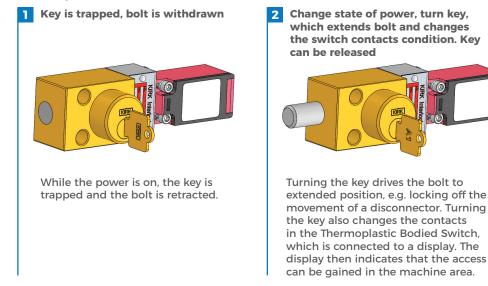
A KIRK interlock equipped with a Thermoplastic Bodied Switch in an interlock system provides remote indication of the lock bolt position or to switch control circuitry. The Thermoplastic Bodied Switch electrical contacts are available in 2 N/O 1 N/C or 4 N/O 2 N/C contacts. This switch body provides the best protection against water ingress.

A Thermoplastic Bodied Switch can be added to a KIRK Type F, Type B, Type T, Type FN, Type D, and Type DM interlock.

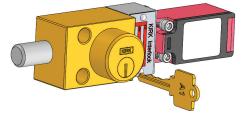
### **OPERATION**

KIRK interlocks equipped with Thermoplastic Bodied Switches are mechanically operated and suitable for the control of electrical switchgear to break circuitry and inhibit movement of cams, toggles, or levers.

### **Thermoplastic Bodied Switch**



Bolt is now a physical barrier to switchgear and key is free to move to the next sequential interlock in the safety process.



### Contact Status for switch when used with KIRK Type F, Type B, Type T, Type FN & Type D

The contacts respond directly to the movement of the locking bolt when the key is turned. The contacts change state when the key is turned and the lock bolt is extended. When ordering the specific type of interlock;

- Option A comes with 2N/O & 1 N/C 5 amp contacts (locking bolt withdrawn).
- Option B comes with 4 N/O & 2 N/C 5 amp contacts (locking bolt withdrawn).

For bolt interlocks equipped with Thermoplastic Bodied Switches, the length of the bolt is available in various lengths to suit each unique application. The travel of the bolt is always <sup>3</sup>/<sub>4</sub>.

#### Continues on next page.



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#### Contact Status for switch when used with KIRK Type DM

The contacts respond directly to the position of the Type DM latch bolt. When the access point is locked, two sets of contacts are closed and one set is open. When access is unlocked the Thermoplastic Bodied Switch provides 2N/O 1N/C contacts that switch state once access is locked. When ordering the KIRK Type DM;

· Option A comes with 2N/O & 1N/C 5 amp contacts (latch bolt disengaged - access unlocked)

### USAGE

KIRK interlocks equipped with Thermoplastic Bodied Switches should be used to allow safe control of switchgear and disconnect switches.

KIRK interlocks with Thermoplastic Bodied Switches are not designed for security applications.

No hazardous substances were used in the manufacturing of the product. The product can be disposed of in standard waste receptacles.

## INSTALLATION

The Thermoplastic Bodied Switch will be mounted to the interlock specified as ordered. Follow installation instructions for the specific interlock to ensure proper installation of the interlock system.

The switch is supplied with a .20 - .35" cable gland installed. A M20 x  $\frac{1}{2}$ " FIP adapter is supplied with each switch for use with  $\frac{1}{2}$ " conduit.

Auxiliary switches cannot be field installed.

All interlocks and interlock systems must be installed by a competent and qualified person who has read and understood these instructions. Please retain this document in your technical files.

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## MAINTENANCE

Periodic visual check should be carried out by a site manager or safety officer.

In case of defects, please contact your KIRK interlock sales department for further actions.



# **TECHNICAL DATA**

Enclosure	Thermoplastic, glass fiber reinforced (UL 94-V0)
Hinged Lid	Screwdriver release; opens to 135 degrees
Mechanical Lifecycle	200,000 operations
Cable Entrance	M20 x 1.5 thread
Screw Terminals	Self-lifting clamps numbered in accordance with DIN EN 50013
Rated Insulation Voltage	250V AC
Rated Operational Voltage	240V
<b>Continuous Thermal Current</b>	5 Amp
Forced Disconnect of NC Contacts	To IEC/EN 60947-5-1, Annex K
Ingress Protection	IP65 acc. to EN 60529
Standards	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
Approvals	cCSAus B300 (same polarity)
Utilization Category	AC-15, Ue/le 240V/1.5A
EU Conformity	CE marked
Temperature Ratings	-30 degrees C (ice free) to +80 degrees C
Weight	2N/O 1 N/C = 9.6oz / 272g and 4 N/O 2 N/C = 16oz / 453g

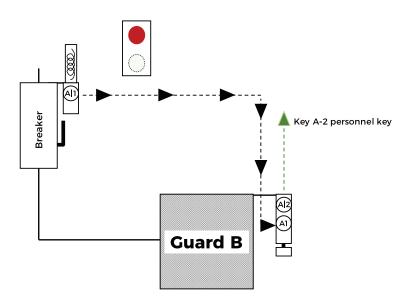
## **APPLICATION**

KIRK interlocks equipped with a thermoplastic bodied switch are used as part of safety systems suitable for the control of electrical switchgear and power isolation ensuring safe access to hazardous areas.

The interlock application is to prevent the opening of guard B with breaker circuit closed.

Initial system status: Power is on, breaker is normally closed. Key A-1 is trapped in interlock equipped with thermoplastic bodied switch on breaker. Thermoplastic bodied switch contacts are open. "Traffic Light" indicator is RED indicating power is still on and opening of Guard B (door) is not granted. Guard B (door) is locked closed by means of a 2-cylinder Type D interlock.

To safely gain access into guard B, power must first be isolated. Open breaker switch. Turn Key A-1 in interlock on breaker. This extends the interlock bolt, providing a physical barrier to the breaker handle and changes the state of contacts in the thermoplastic bodied switch to closed, sending a signal to the "traffic light" and changing the light to green. Key A-1 is now free. Key A-1 can now be inserted into the Type D interlock on guard B and turned to unlock. Guard B can be opened and Key A-2 can be released and held on personnel until service is completed.



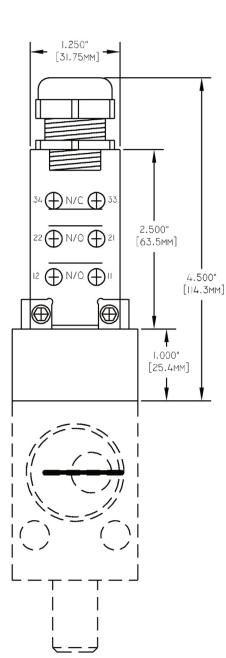
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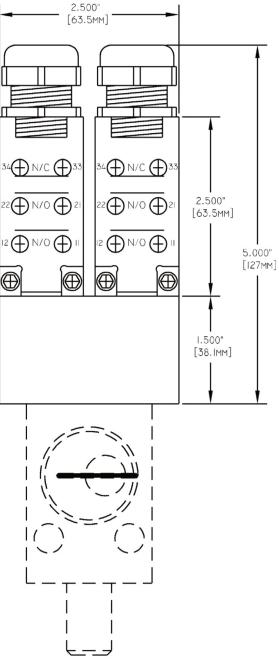


**Dimensions: in inches** 

DRAWING

# For type F, B, T, FN, & D interlocks





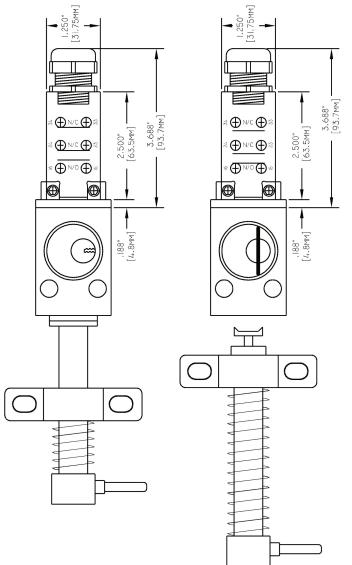
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Dimensions: in inches

## DRAWING

# For type DM interlocks



## **ORDER INFORMATION**

See ordering guide for KIRK Type F, B, T, FN, D & DM

## **CONTACT INFORMATION**

#### The Kirk Key Interlock Company LLC

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