

Kirk Key Interlock Company "The key that ends costly mistakes."

www.kirkkey.com

KIRK[®] is the industry leader and brand name associated with keyed safety interlock systems.

Kirk Key Interlock Company manufactures key interlocks and interlocking systems for the protection of personnel and equipment. Products include mechanical interlocks, electro-mechanical interlocks, solenoid key release units, time delay key release units, and transfer panels. Proper application of our interlocks guarantees a sequential pattern is followed for each step of a prescribed sequence. KIRK key interlock systems are designed and configured to each user's requirements and revolve around a key or keys that an operator must use at each step in the sequence.



The traditional keyed brass interlock. This interlock utilizes a 7-pin nickel-silver key and a pin tumbler lock cylinder. The lock housings are made from brass and the lock bolts are 5/8" diameter 303 stainless steel.

KIRK[®] MD Series (Medium Duty)

Designed for applications requiring a robust key. The simple, heavy-duty, shaft driven design has no openings and few moving parts, allowing the interlock to stand up to dirt and debris that could impede normal operation of a pin tumbler lock cylinder. The lock housings are brass, the keys are 316 stainless steel, and the lock bolts and inner workings of the interlocks are made from 316 stainless steel.



KIRK[®] HD Series (Heavy Duty)

Perfect for applications requiring resistance to corrosion. The key is extremely heavy-duty. Similar to the MD Series except every part is manufactured from electropolished 316 stainless steel. There are no openings and few moving parts, which allow the shaft driven design to resist dirt and debris from entering the lock cylinder and impeding normal operation. Electropolishing passivates the 316 stainless steel, leaving a mirror-bright finish and further protecting the interlock from chemical activity.

All three series of KIRK interlocks can be incorporated into one interlock system, depending upon the application. The MD Series can easily be used with the HD Series. The SD Series can be integrated with the MD Series and HD Series via a key transfer step.

When appropriately applied, KIRK key interlock systems ensure that a pre-determined sequence of operation is followed. KIRK key interlocks can prevent expensive machinery and electrical equipment from being damaged due to operator error. On high-voltage switchgear, the proper use of key interlocks could ultimately save someone's life.

A KIRK system interlocks over any distance without complicated and expensive connecting rods or other mechanisms. The removal of a key will make the interlocked device non-operable mechanically and electrically. That same key can then move to the next interlock in the sequence. Using multi-cylinder interlocks or transfer blocks, the interlock system can be as simple or complex as necessary. A KIRK interlock system can even accommodate equipment that must operate under variable scenarios.

KIRK key interlock systems are versatile and applicable to any standard equipment. Most systems mount directly on devices (circuit breakers, switches, etc.) without elaborate changes or modifications. Any Kirk key interlock system can be easily expanded, rearranged, or combined with another existing KIRK key interlock system.

Let us know your application and the sequence of operation - we will be glad to assist you with the design of a KIRK key interlock system.



The interlock schemes shown above apply to electrical switches and breakers, only because this is the simplest manner in which to show them, and not because they are the only applications.

Typical Switchgear Applications:

- Prevent closing a generator breaker until the main breaker is locked open.
- Prevent operation of breaker disconnects or bypass disconnects under load.
- Permit one power source to supply more than one load through tie breaker(s) only after locking open the appropriate main breaker(s).
- Prevent paralleling of power sources.
- Prevent access to fuses when disconnects and breakers are closed.

Machine Guarding Applications:

- Permit access to a machine guard only after the power has been shut off.
- Deny access to a hazardous area until enough time has elapsed to allow a machine to come to a complete stop.



- Breaker locked open
- Lock bolt extended
- Key released



- Breaker closed
- Lock bolt withdrawn
- Key held



Access Door or Hatch

HD Series type DM interlock mounted on access door.



Two SD Series type F interlocks mounted on a loadbreak switch handle.



Two HD Series type F interlocks mounted on a typical T/R handle.

If it moves, it can be interlocked.

Depending upon your application, choose the series that best meets your specifications. KIRK key interlocks are available in many shapes and sizes offering various mounting options.

Flat mounted interlocks, base mounted interlocks, and narrow interlocks are the most common types of interlocks attached to most devices. Reference KIRK type F, FN, NT and B data sheets on our website or in our catalog.

Key transfer panels and transfer blocks allow an exchange of keys in an operation sequence.

Access door interlocks consist of a main body and a latch block or bolt. Once the door is opened the key is trapped in the interlock. See KIRK type D, DM and DY data sheets on our website or in our catalog.



The KIRK SD Series interlocks are very affordable and comprise our most extensive line of interlocks. Many accessories and options are available for this well-known interlock.

KIRK® MD Series and HD Series Interlocks

*HD Series Type F Interlock Shown.



The KIRK MD Series and HD Series interlocks employ an oversized key that is designed to be extremely tough. The precision drivers located on the inner key disc are not susceptible to wear and slippage like etched style keys. The sealing gasket on the key, when used with the optional cover, prevent debris from entering the cylinder of the interlock.



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What is a Key Interlock?

A key interlock is a safety device applied to two or more moveable parts, preventing (or allowing) a movement or operation of one part only when another part is locked in a predetermined position. Key interlocks operate on the principle that the key can be removed only when the lock bolt is in a predetermined position, thereby releasing one or more keys for the next step in a sequence.

What is a Key Interlock System?

An interlock system is a series of interlocks applied to equipment in such a manner as to prevent or allow operation of the equipment only in a predetermined sequence. The transfer of keys from one interlock to another ensures that the required condition has been achieved and all hazards have been eliminated. Even multiple sequences and variable conditions can be accommodated with a properly designed key interlock system.

Comprehensive Record Keeping

Dating back to 1945, our lock registration system prevents duplication errors. Every KIRK key interlock is assigned a specific lock number, which is marked on the key and lock cylinder for identification. For every application, only locks and keys having the appropriate lock numbers are used. We can easily facilitate replacements, revisions or extensions to any KIRK key interlock system because we carefully record each key and lock number.

For more information on our company and our products, visit us on the Internet at:

www.kirkkey.com

Our website contains useful documentation to assist you in making your next order.



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211 Wetmore Avenue SE, Massillon, Ohio 44646 • Phone: 330.833.8223 • Fax: 330.833.1528 • Toll Free: 1.800.438.2442