KIRK Type SA1/SA2/SA3 cylinder interlocks engage directly through a mechanical connection with the equipment to isolate power. They are manufactured to rotate clockwise to trap key, however, can be manufactured special to rotate counterclockwise. The SA1/SA2/SA3 are manufactured with no housing and are meant to be installed with provisions or bracketry supplied by the OEM. The SA1/SA2 have a mounting flange for installation. The SA3 mounts to OEM provisions through tapped holes in the bottom of the cylinder.

**OPERATION**

KIRK Type SA1/SA2/SA3 cylinder interlocks are mechanically operated and engages directly with the equipment to isolate power.

**Type SA1/SA2/SA3 isolation interlock**

1. **Key is trapped, linkage is engaged, breaker is closed**

2. **Open the breaker and turn the key to the released position. This will lock the breaker open.**

3. **Key is now released, power is isolated, and key is free to move to the next sequential interlock in the safety process.**
**TYPE SA1/SA2/SA3**

Isolation Interlock

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**USAGE**

KIRK Type SA1/SA2/SA3 should be used on equipment as specified by the OEM in which provisions have been provided. KIRK cylinder interlocks ensure that once the linkage on the equipment has been engaged into the desired position as defined by the end user’s safety process and following the operations of the interlock, the power is now isolated from changing state until the procedure is reversed.

⚠️ KIRK cylinder interlocks are not designed to serve as an access interlock into hazardous areas.

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

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**INSTALLATION**

The KIRK Type SA1/SA2/SA3 interlocks are recessed mounted using OEM provisions. After installation of the cylinder interlocks, the complete interlock system should be tested sequentially by person(s) familiar with the entire system, the key sequence, and its intended purpose. Any problems or discrepancies must be corrected prior to energization.

HD series (stainless steel) interlocks are not sold with keys. Keys must be ordered separately and may be required during the installation process.

- For all interlock systems to maintain system integrity, additional keys must be removed from the system and destroyed or retained by a responsible person. There should only be enough keys to operate the interlock system sequentially.
- Kirk Key Interlock Company will not be responsible for extra keys left in the interlock system.
- 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**

Kirk key interlocks should be periodically lubricated with a small amount of dry powder graphite. DO NOT use oil or grease of any type as these will collect dirt and impede the proper operation of the lock cylinder.

HD SERIES: Apply a small amount of graphite behind the inner turn shaft. Insert and turn the key a few times in order to distribute the graphite below the lock cylinder.

KIRK offers a Graphite Lubrication kit (part# GL-1) complete with instructions for use.
TYPE SA1/SA2/SA3
Isolation Interlock

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Type SA1/SA2/SA3</th>
<th>SD Series</th>
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<tbody>
<tr>
<td>Cylinder Interlock</td>
<td>Electropolished 316 SS</td>
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<tr>
<td>Plug/Inner Turn Shaft</td>
<td>Electropolished 316 SS</td>
</tr>
<tr>
<td>Key Material</td>
<td>Electropolished 316 SS</td>
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<tr>
<td>Key Style</td>
<td>Dowel Pin</td>
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<tr>
<td>Type of Mounting</td>
<td>Recess mounted using OEM provisions</td>
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<tr>
<td>Temperature Ratings</td>
<td>-65F to +700F</td>
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<tr>
<td>Weight</td>
<td>.52 pounds</td>
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</tbody>
</table>

* Weight based on product with no key or mounting hardware

APPLICATION

The Type SA1/SA2/SA3 cylinder interlocks are used as part of safety systems suitable for the control of circuit breakers.

The interlock application example, scheme 35A from the KIRK scheme book, is to prevent the closing of breaker A when breaker G is closed.

Initial system status: Breaker A is closed to supply load M. Key A-1 is held in the SA1/SA2/SA3 interlock on breaker A. Generator breaker G is locked open and cannot be closed until breaker A is locked open.

To transfer load M to the generator, open breaker A. Turn key A-1 in the Type SA1/SA2/SA3 mounted on breaker A to lock open and release key A-1. Insert key A-1 into interlock on breaker G and turn key to unlock. Key A-1 is now trapped. Breaker G can now be closed and load M has been transferred from breaker A to generator.
HD Series Type SA1/SA2

NOTES:
1) Type SA1 mounting.
2) Type SA2 mounting.
TYPE SA1/SA2/SA3 Isolation Interlock

HD Series Type SA3

While every effort has been made to ensure the accuracy of the information provided, no liability can be taken for any errors or omission. Kirk Key Interlock Company, LLC reserves the right to alter specifications and introduce improvements without prior notice.
# TYPE SA1/SA2/SA3
Isolation Interlock

## ORDER INFORMATION

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<tbody>
<tr>
<td><strong>4</strong></td>
<td><strong>Style</strong></td>
<td></td>
<td>1 = SA1</td>
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<td>2 = SA2</td>
<td></td>
<td>3 = SA3</td>
<td></td>
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</tbody>
</table>
| **5** | **Key Rotation**  
(rotation of trapped key) |   | 1 = Clockwise |   | 2 = Counter clockwise |   |   |   |   |   |
| **6** | **Degrees of Rotation** |   | 4 = 45 degrees |   | 6 = 65 degrees |   | 9 = 90 degrees |   | 1 = 120 degrees |   |
| **7** | **Shaft Section** |   | 1 = 9.5mm square |   | X = please specify when ordering |   |   |   |   |   |
| **8** | **Shaft Length** |   | S = 22mm (3/8”) |   | X = please specify when ordering |   |   |   |   |   |
| **9** | **Protective Covers**  
see protective covers data sheet |   | – = No |   | F = Flip Open with LOTO provision |   |   |   |   |   |
| **10** | **Stamp Key Interchange** |   | – = No |   | S = Yes |   |   |   |   |   |

Stamp Key interchange only available when protective Flip Open Cover is added.

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**CONTACT INFORMATION**

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