Transfer Panel
Interlock

HD Series

KIRK Transfer Panel interlock is an assembly of eight or more lock cylinders in a single panel. The Transfer Panel is designed to retain one or more key(s), trapped key(s) or secondary key(s), while the remaining keys, initiating key(s) or primary key(s), are removed. This allows for the exchange of eight or more interlocks within an interlock sequence.

KIRK Transfer Panels are manufactured with a NEMA 4 or NEMA 4X enclosure ensuring the cylinders and mechanical linkages are protected from harsh industrial or outside elements.

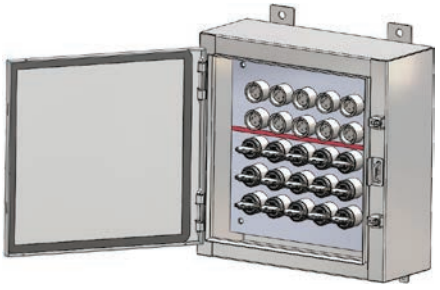
OPERATION

KIRK Transfer Panels are typically used in the transfer process between the isolation of power source(s), such as breakers, T/R switches, or level detectors to multiple access doors. Transfer Panels are typically implemented within the Energy sector in electrostatic precipitator applications and can be implemented within machine guarding applications where the control of access to multiple hazardous areas is critical.

Transfer Panel key operated mechanical transfer interlock panel

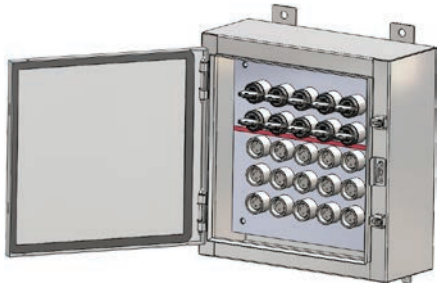
1

A pre-determined number of keys are trapped in the Transfer Panel, awaiting the introduction of the primary keys in the interlock process.



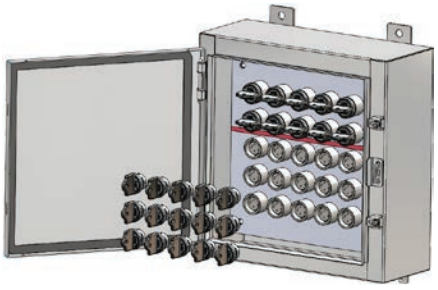
2

Insert the primary keys into the Transfer Panel, turn the keys, releasing the secondary keys that had been trapped.



3

The primary keys are now trapped, and the secondary keys can move to the next sequential step in the process.



For HD multiple cylinder interlocks, all missing keys must be inserted and turned before any trapped keys can be released.

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USAGE

A KIRK Transfer Panel is a group of primary and secondary keys involved in a transfer process. All primary keys must be inserted in the Transfer Panel and turned before any secondary key can be released.

KIRK recommends that any transfer process requiring less than 8 keys implement a KIRK Type T transfer interlock.

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

INSTALLATION

The KIRK Transfer Panel is flange mounted securing the transfer panel to the surface. The installed location of the Transfer Panel should be relative to the sequence of the interlock system and the defined sequence of operations. Proper installation of key interlocks is a critical element of a key interlock system. After installation of the 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.

SD series (brass) interlocks are supplied with a key in each cylinder. These keys are needed during installation of the interlocks. SD series (brass) bolt interlocks with multiple cylinders require the insertion of all keys before the lock bolt can be extended or withdrawn. Do not try to force a multiple cylinder interlock that does not have the correct keys fully inserted in every cylinder!

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.

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.

SD SERIES: Apply a small amount of graphite to the key and insert the key into the lock cylinder. Work the key in an out and turn the key several times in order to distribute the graphite inside 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.

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TECHNICAL DATA

Transfer Panel	SD Series	HD Series
Interlock Housing	Brass	Stainless Steel
Cylinder Housing	Brass	Stainless Steel
Plug/Inner Turn Shaft	Brass	Stainless Steel
Key Material	Nickel-Silver	Stainless Steel
Key Style	7-Pin Tumbler	Dowel Pin
Type of Mounting	Flange mounting to secure to surface	
Panel Enclosure	NEMA 4	NEMA 4X
Temperature Ratings	-65F to +250F	-65F to +700F
Weight	Weight will vary based on number of cylinders and size of box	

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APPLICATION

The Type T interlocks are used as part of safety systems suitable for the transfer of keys between sequential interlocks within a safety interlock system. Transfer Panels are typically implemented within the Energy sector in electrostatic precipitator applications and can be implemented within machine guarding applications where the control of access to multiple hazardous areas is critical.

The interlock application scheme 41 from the KIRK scheme book is to prevent opening any access doors of an electrostatic precipitator until all power supplies are de-energized and properly grounded.

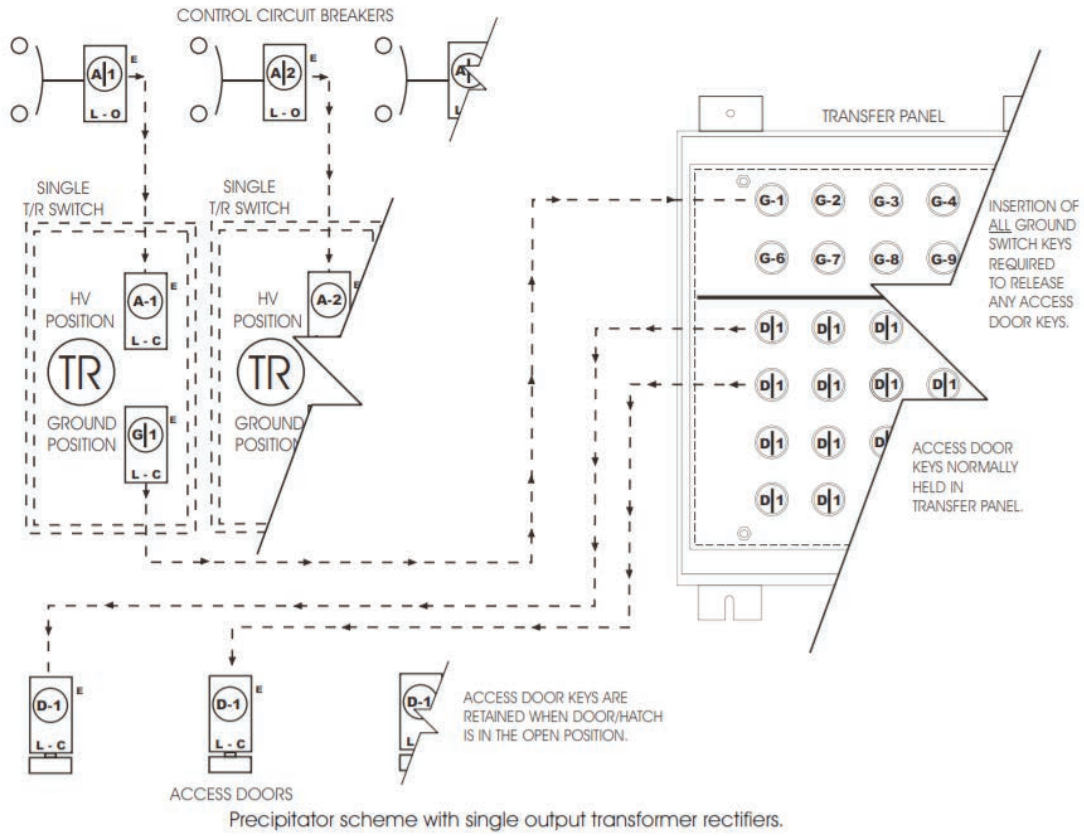
Initial system status: All main breakers in ESP control room are closed to supply all transformer rectifiers. All A keys (A-1, A-2, A-3, etc.) are held in L-O interlocks on the breakers. All transformer rectifiers are locked in the ON position. All G keys (G-1, G-2, etc.) are held in L-C interlocks on the ground position of the transformer rectifiers. All access doors are locked closed and all access door keys are held in the transfer panel (key exchange box).

To begin maintenance on electrostatic precipitator open Breaker A-1. Turn key A-1 in L-O (locked open) isolation interlock to lock breaker in the open position. Key A-1 is now free. Repeat operation of all other breakers, locking them open and freeing all A keys (A-2, A-3, A-4, etc).

Insert all A keys into the L-C (locked closed) isolation interlocks in the HV position of each TR. Turn A keys to unlock. All A keys are now trapped in TR HV position.

Turn all G keys (G-1, G-2, G-3, etc) in TR ground position, locking all TR's to ground and releasing all G keys. Insert all G keys (primary keys) into the Transfer Panel and turn. All G keys are now trapped. Turn and remove all D keys (secondary keys).

All D keys are now free and can be inserted into their respective access interlocks to unlock doors. All D keys will remain in access interlocks until doors are closed and properly latched. Safety process can then be completed in reverse and power restored.

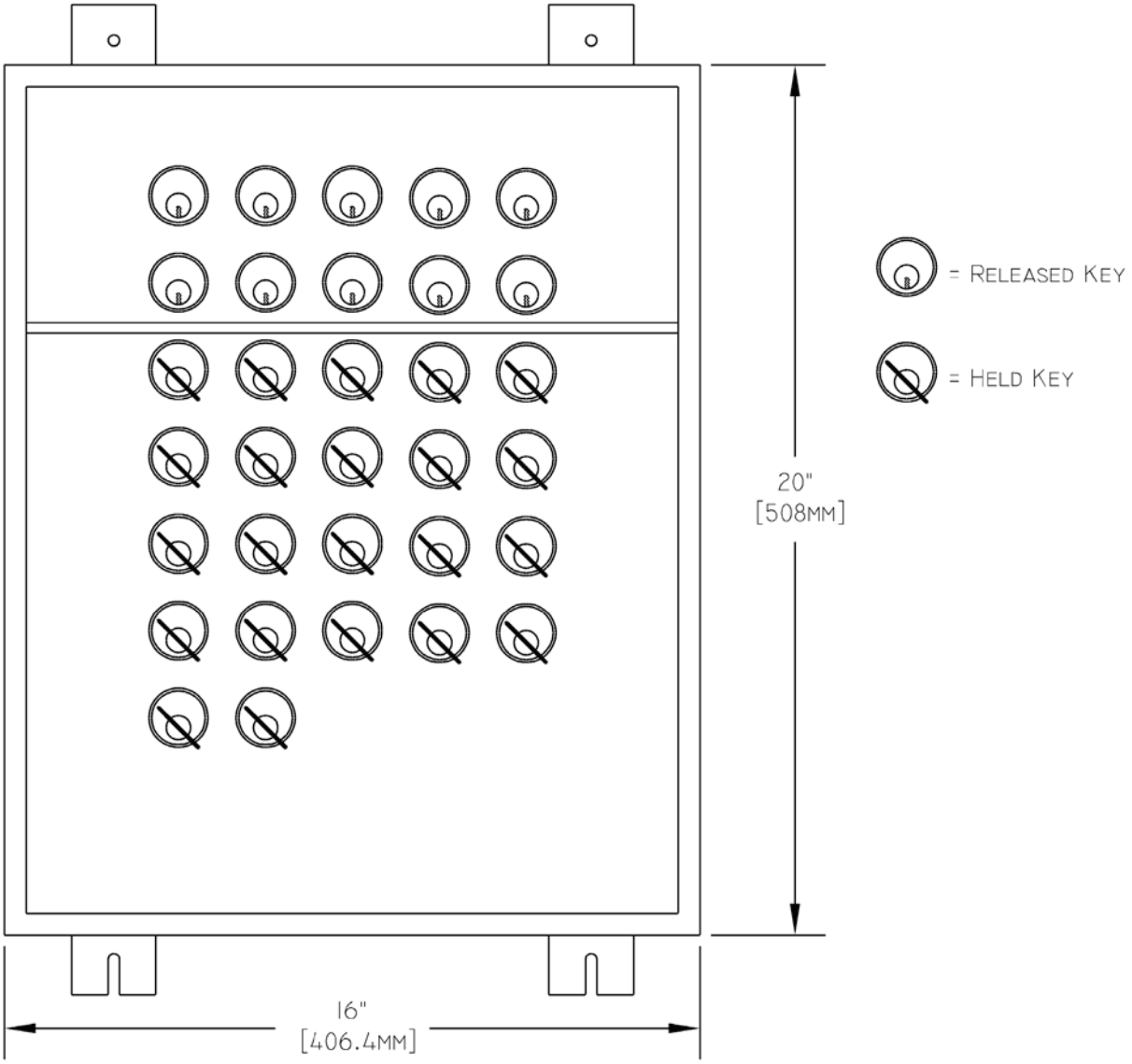


Precipitator scheme with single output transformer rectifiers.

DRAWING

Dimensions: in inches

SD Series Transfer Panel

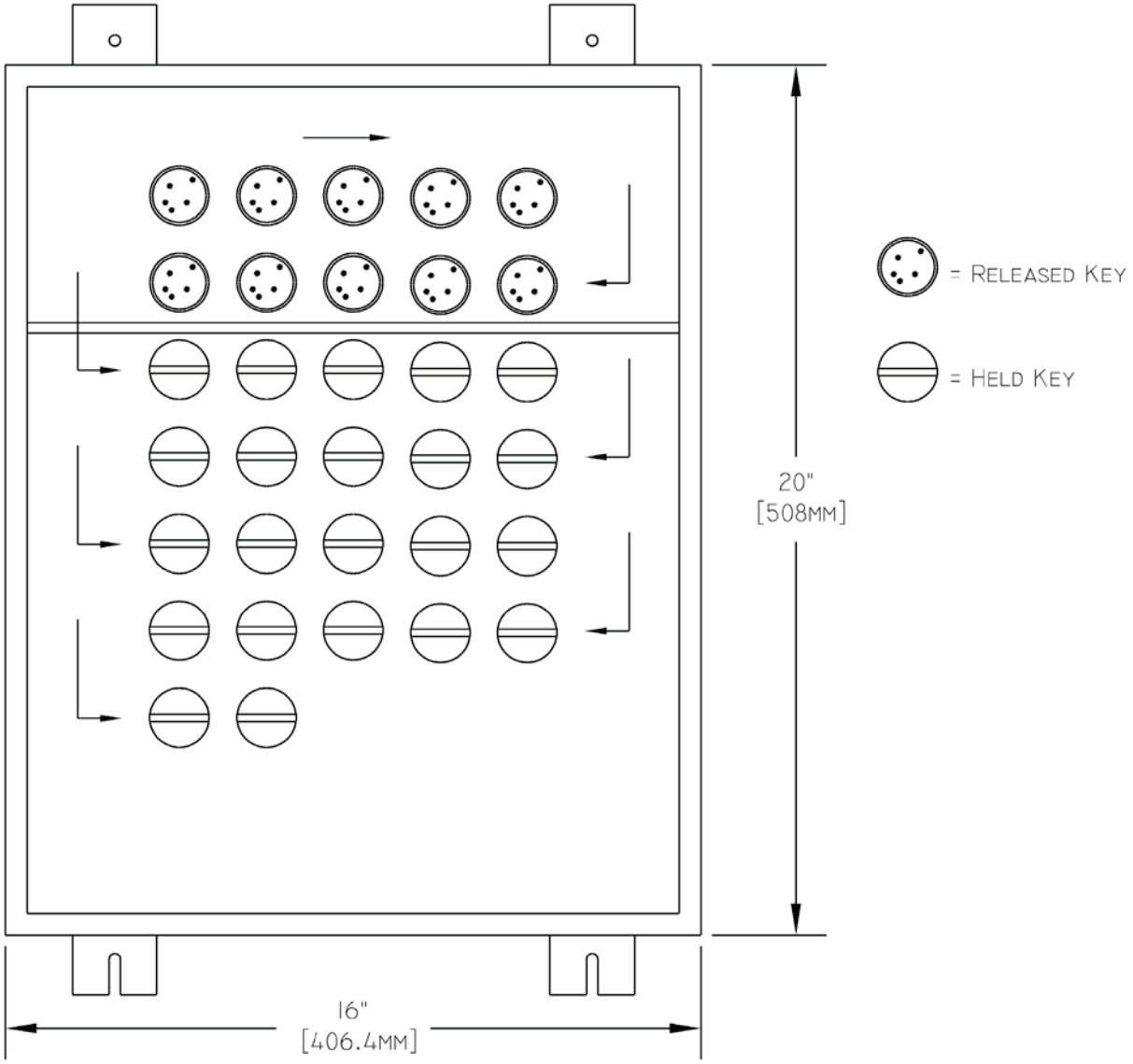


NOTES:
Transfer Panels are available in many sizes. Contact Kirk Key Interlock Company for more information.

DRAWING

Dimensions: in inches

HD Series Transfer Panel



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ORDER INFORMATION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Part number		N	E	M	A					I			O	S

1	**Series**	**K = SD Series (brass)**			**S = HD Series (stainless)**
6, 7	**Enclosure Type**	NEMA 4:	**4**	**—**	
		NEMA 4x:	**4**	**X**	NEMA 4X is a stainless steel enclosure
8, 9	**# of Keys IN**	Use the 2 digit place holder for the # of primary keys coming into the transfer panel. Place the 0 [zero] in place holder 8 for single digits (ex; 07, 08, 09)			
11, 12	**# of Keys OUT**	Use the 2 digit place holder for the # of secondary keys coming out of the transfer panel. Place the 0 [zero] in place holder 11 for single digits (ex; 07, 08, 09)			
14	**Stamp Key Interchange** max. 5 alphanumeric characters	**S** = Yes			HD Series Stamp key interchange on Key only, unless flip cover is selected

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