

Type "PD" Interlock

The type "PD" or door interlock has two parts, a main body with one or more locks and a connecting block.

When the main body is separated from the connecting block, the locking bolt is retained in the withdrawn position. While it is retained, the key cannot turn in the lock, thus the key is always held in the lock whenever the two parts are separated.

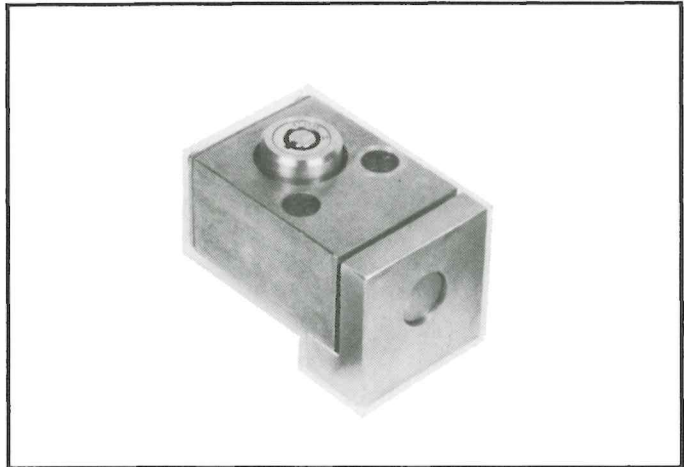


Photo 1: Type "PD" (Door) Interlock

When the door on which the interlock is mounted - is properly closed - the connecting block pins release the restrained operating bolt. The operating key can now be turned to extend the locking bolt into the connecting block. After the bolt is extended, the operating key may be removed.

The lock housing and connecting block of the type "PD" interlock are machined from high strength aluminum bar stock are designed for mounting with two (2) 3/8" diameter fillister head bolts. The locking bolt is machined from 5/8" diameter solid high strength aluminum alloy.

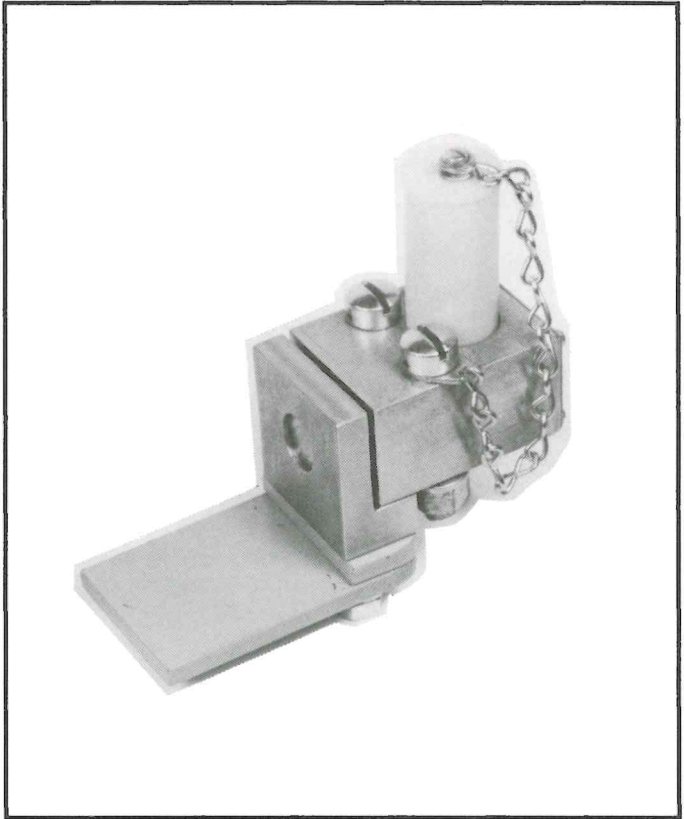


Photo 2: Type "PD" Interlock with Catch Plate Mount & Cover

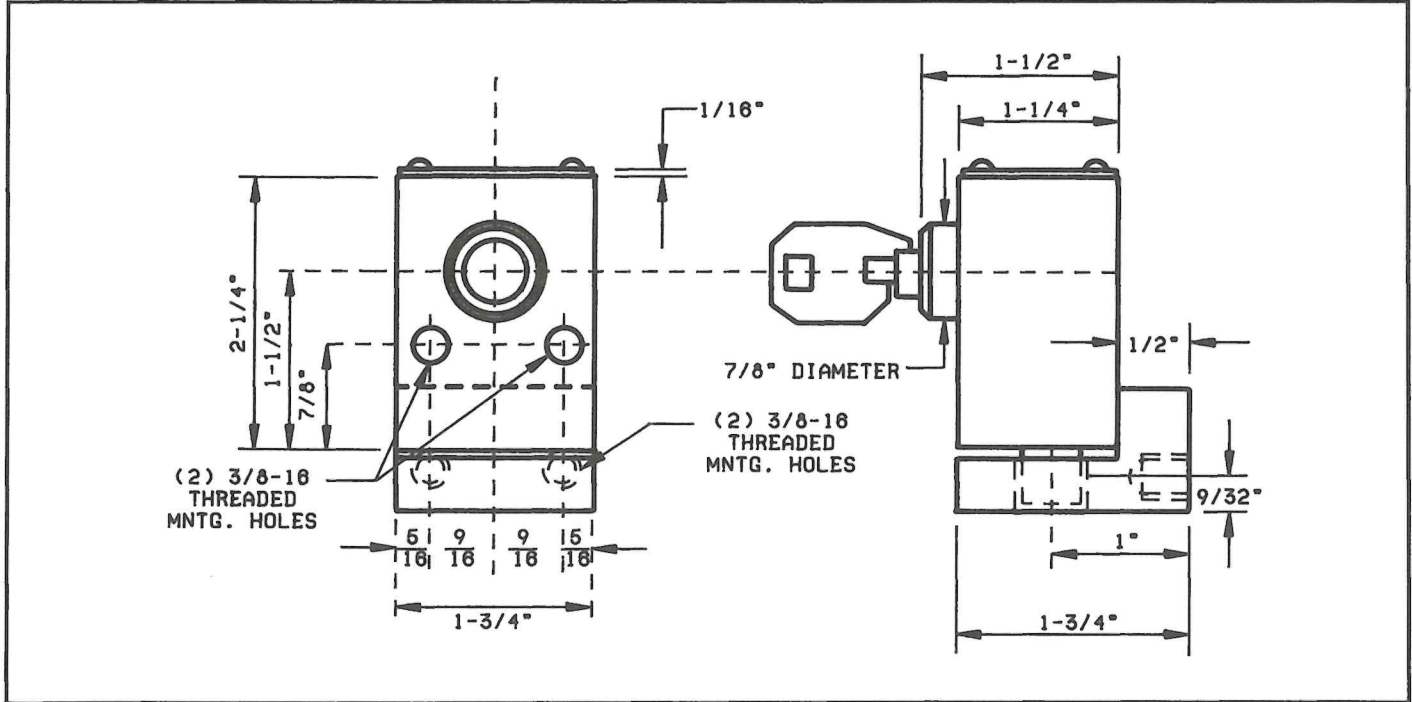


Figure 1: Type "PD" Interlock

Type "PF" Interlock

The type "PF" interlock is designed for surface mounting with two (2) 3/8" fillister head bolts. The mounting bolt heads are predrilled for attaching sealing wires.

Projecting from the end of the interlock housing is the locking bolt. This locking bolt is machined from high strength aluminum (5/8" diameter) and has a total movement of 7/16" standard. Bolt movement of 3/4" can be supplied on special order. The interlock can be supplied with a zero (0) bolt projection or as required. Bolt projection is determined when the locking bolt is withdrawn and must be specified on all orders.

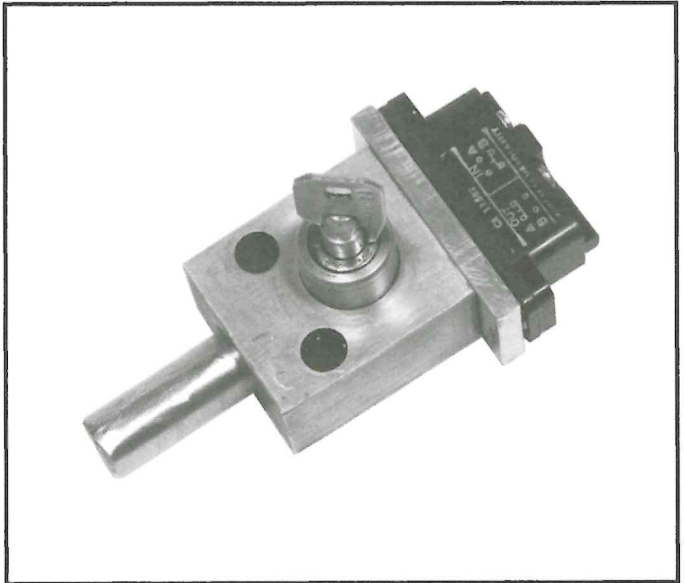


Photo 3: Type "PF" Interlock with Microswitch

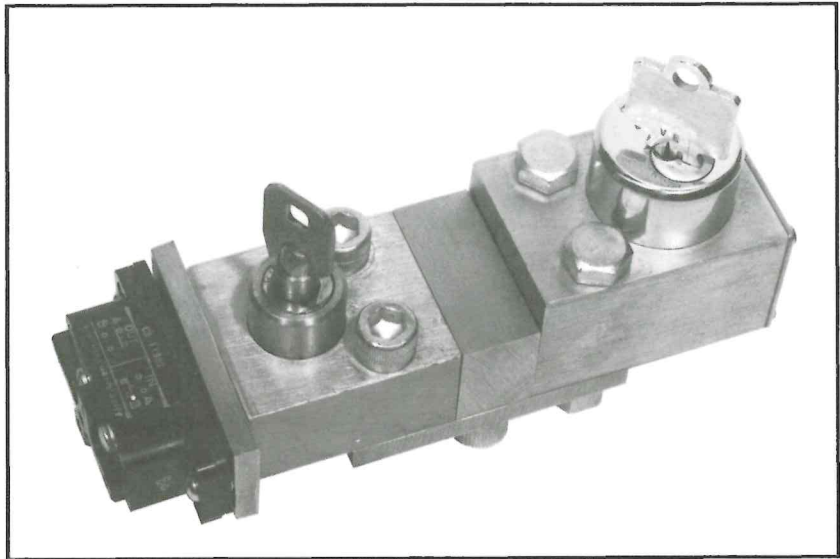


Photo 4: Type "PF" Interlock with Microswitch & Kirk Lock

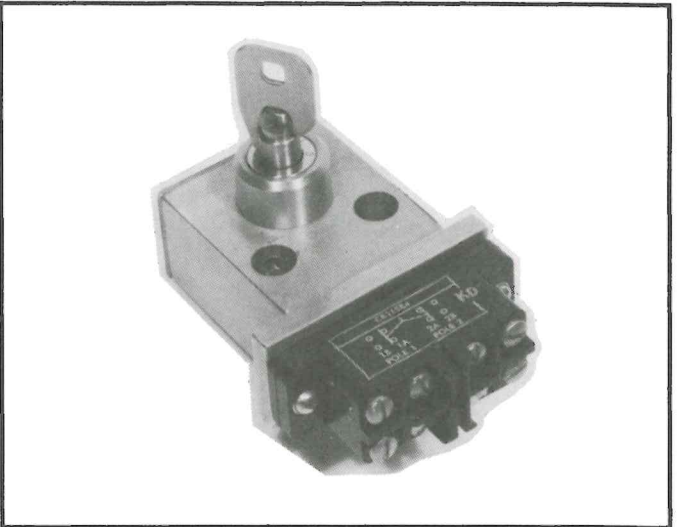


Photo 5: Type "PF" Interlock (Electric Only)

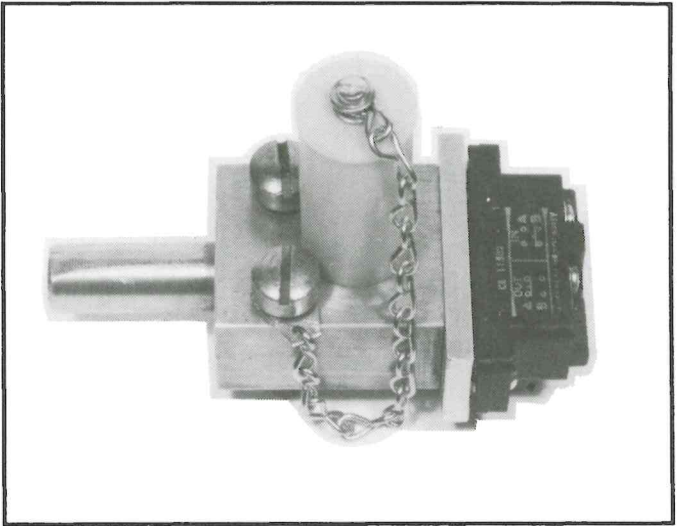


Photo 6: Type "PF" Interlock with Microswitch & Cover

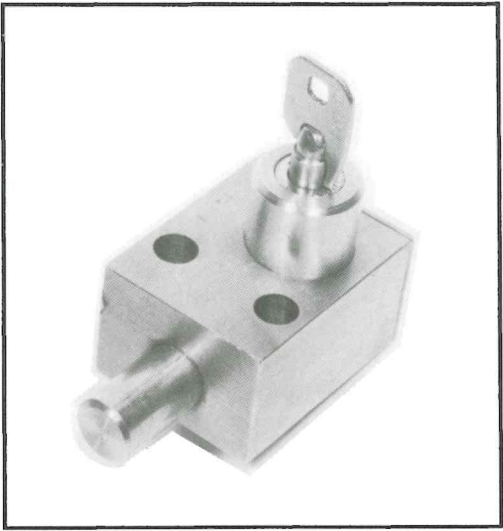


Photo 7: Type "PF" Interlock (Special Offset Cylinder)

FOREWORD

The warranty associated with this equipment is fully described with its implementation on Page ii. It should be emphasized that unless approved by the Powercon Corporation no modification, alteration, additions, change or correction should be undertaken without such express authority provided in writing by representatives authorized to do so.

This Instruction Book is furnished in "As Is" condition. No warranties expressed or implied, including warranties of fitness for a particular purpose, or merchantability, or warranties arising from course of dealing or usage of trade are made regarding the information, recommendations, descriptions, and safety notations contained herein. In no way will Powercon be responsible to the user in contract, in tort (including negligence), strict liability or otherwise for any direct special, indirect, incidental, or consequential damage or loss whatsoever, including but not limited to damage or loss of use of equipment, plant, or power system, cost of capital, loss of profits or revenues, cost of replacement power, additional expenses in the use of existing power facilities, or claims against the user by its customer resulting from the use of information, recommendations, descriptions, and safety notations contained herein.

The information, recommendations, descriptions, and safety notations in this document are based on Powercon's experience and judgement in respect to all of the subject matter contained herein. This information must not be considered to be all inclusive or covering all contingencies.

WARNING QUALIFIED PERSONNEL ONLY

WARNING IMPORTANT

IT IS IMPERATIVE THAT YOU READ AND COMPLETELY UNDERSTAND THE WARNING LOCATED TO THE RIGHT OF THIS BLOCK. FAILURE TO DO SO CAN RESULT IN DAMAGE TO PROPERTY, PERSONAL INJURY OR DEATH.

The equipment covered by this Instruction Book must be selected for a specific application and it must be installed, operated and maintained by qualified persons who are thoroughly trained and who understand all of the hazards involved. As with any electrical apparatus the thorough knowledge of the engineering safety, inspection, maintenance and repair techniques and familiarity with particular features of the apparatus involved is mandatory. This book does not provide sufficient instructions for inexperienced electricians or unqualified persons to do any work required including the handling, installation, testing, operation, inspection, maintenance, and repair. Refer to OSHA 29CFR Part 1910.399 (defines a qualified person).

WARNING SAFETY GROUNDING TO BE DONE ON DE-ENERGIZED EQUIPMENT ONLY.

WARNING IMPORTANT

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Before energizing the equipment and prior to any testing it is recommended that all circuits be safely grounded. Prior to any grounding whether it be for any testing, inspection, or maintenance procedures, assure that all safety precautions are taken. It is further recommended that an appropriate glow tube instrument that lights up and warns the worker when held in any alternating current field, indicating the presence of voltage, be used prior to grounding.

Personnel doing such work should wear lineman's protective equipment in accordance with such equipment manufacturer's recommendations including but not limited to protective gloves, insulated sleeves, lineman's blankets, insulated helmets, face and eye protection that will assist in preventing injury if for any reason the equipment is grounded to an energized circuit. Every precaution should be taken to prevent such electrical grounding. Suitable grounding clamp leads should be used and safety grounding techniques employed. All such grounds must be removed after testing, inspection, or maintenance prior to energizing the equipment

The above in no way replaces the user's safety techniques or applicable safety codes, rules, or regulations.

Type "PC" Interlock

The type "PC" interlock is a single lock used in an interlock system with any of the other Powercon Interlocks.

It is suitable for mounting on a flat plate and various bolt extensions can be provided upon request, such as shown in Photo 9.



Photo 8: Type "PC" Interlock - Standard



Photo 9: Type "PC" Interlock - Special Bolt

Duplicate Key(s)

WARNING IMPORTANT

IT IS IMPERATIVE THAT YOU READ AND COMPLETELY UNDERSTAND THE WARNING LOCATED FOLLOWING THIS BLOCK. FAILURE TO DO SO CAN RESULT IN DAMAGE TO PROPERTY, PERSONAL INJURY OR DEATH.

A DUPLICATE KEY IS FOR INSTALLATION ONLY. DESTROY ALL DUPLICATE KEYS BEFORE THE INTERLOCKED EQUIPMENT IS ENERGIZED. FAILURE TO DESTROY DUPLICATE KEY(S), CAN DEFEAT THE INTERLOCK SYSTEM AND PROVIDE ACCESS TO EQUIPMENT OR PERMIT OPERATING ERRORS THAT CAN RESULT IN PROPERTY DAMAGE, INJURY, OR DEATH.

Duplicate keys may be ordered but an order for duplicate key(s) requires Powercon to clarify our position regarding Powercon Key Interlock Systems. These systems operate in a predetermined sequence. Duplicate key(s) provide a means to defeat this sequential operation. Accordingly, before we can comply with an order, we must have your acknowledgement of the potential hazards arising from the use of a duplicate key(s) and your agreement to defend, indemnify and hold harmless Powercon Corporation for any claim, demand, suit, loss or damage recovered from Powercon Corporation, by reason of any damage to property including loss of use thereof; or injury, including death sustained by any person arising out of the use of a duplicate key(s) to defeat the system.

Duplicate key(s) orders will not be entered without an authorization form being completed and signed by authorized personnel.

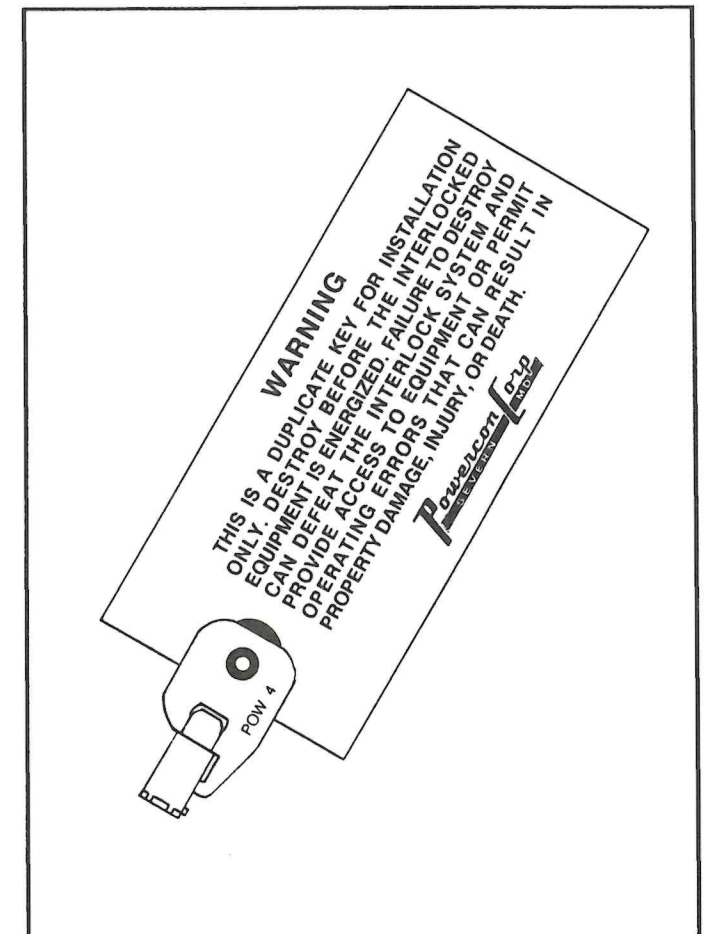


Figure 4 : Duplicate Key

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Do not remove covers, open doors or work on equipment unless power has been turned off and all circuits de-energized and disconnected. Disconnect, de-energize, lock-out and properly ground circuit(s) before working on this equipment. Use proper safety precautions when working on this equipment.

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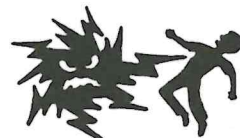
All safety codes, safety standards and/or regulations as they may be applied to this type of equipment must be strictly adhered to. Before any adjustments, servicing, parts replacement or any other act is performed requiring any physical contact with the electrical components or wiring of this equipment, the power supply must be disconnected.

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**ANSI Z244.1-1982 : Personnel Protection Lockout/Tagout of Emergency Sources
Minimum Safety Requirements**

ANSI/NFPA 70E-1988: Electrical Safety Requirements for Employees Workplaces

ANSI/NFPA 70B-1987: Electrical Equipment Maintenance



Before any checking or maintenance of switchgear, after it has been installed - the following must be observed:

Only qualified persons may operate, inspect or maintain power switchgear. In addition to the personnel you may have who are qualified, others may be available from an experienced high voltage contractor or the utility servicing the installation. It is the responsibility of the purchaser, installer or ultimate user to insure that the warning signs are not removed and to make sure that all access doors and operating handles are securely locked when the gear is left unattended by qualified persons, even momentarily.

IT IS IMPERATIVE THAT YOU READ AND COMPLETELY UNDERSTAND THE WARNING LOCATED FOLLOWING THIS BLOCK. FAILURE TO DO SO CAN RESULT IN DAMAGE TO PROPERTY, PERSONAL INJURY OR DEATH.

Throughout this manual you will see warning blocks like the one located to the left. It is imperative that you read & completely understand the wording located below these blocks. Failure to do so can result in damage to property, personal injury or death.



S.O. _____
Date _____

(2) Required Shipping Date	Date Entered
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(3)
Sold
To

SHIPPING SCHEDULE

Terms: 30 Days Net

(4)
Ship
To

[illegible]

Figure 6: Powercon Key Interlock Form