

INSTALLATION, OPERATION & MAINTENANCE DATA SHEET

VWSQ SERIES 30 AMP INTERLOCKED SWITCH RECEPTACLES VWSQ SERIES INTERLOCKED SWITCHED RECEPTACLES TO BE USED IN ENCLOSURE TYPES 3, 4 & 4X



VWSQ SERIES 30 AMP INTERLOCKED SWITCH RECEPTACLES

CAUTION:

Before installing, make sure you are compliant with area classifications, failure to do so may result in bodily injury, death and property damage. Do not attempt installation until you are familiar with the following procedures. All installation must comply with the applicable Electrical Code.

Make sure that the circuit is de-energized before starting installation or maintenance.

Verify that the installation is grounded. Failure to ground will create electrical shock hazards, which can cause serious injury and or death.

IMPORTANT:

Please read these instructions carefully before installing or maintaining this equipment. Safe electrical practices should be followed at all times and this data should be used as a guide only.

Technical information, advice and recommendations contained in these documents is based upon information that Killark believes to be reliable. All the information and advice contained in these documents is intended for use only by persons having been trained and possessing the requisite skill and know-how and to be used by such persons only at their own discretion and risk. The nature of these instructions is informative only and does not cover all of the details, variations or combinations in which this equipment may be used, its storage, delivery, installation, check out, safe operation and maintenance. Since conditions of use of the product are outside of the care, custody and control of Killark, the purchaser should determine the suitability of the product for his intended use, and assumes all risk and liability whatsoever in connection therewith.













3940 Dr. Martin Luther King Drive St. Louis, MO 63113

This device cannot be used as a replacement for VSQ series or other hazardous location devices. VSQ & VWSQ covers are NOT interchangeable.

1. APPLICATIONS

- VWSQ series dead front interlocked receptacle with switch
- Designed for supplying power to fixed or portable electrical equipment.

2. ELECTRICAL RATING

Maximum voltage – 600 VAC @ 50-400Hz. Continuous Current – 30 Amperes.

Mounting Arrangement:

1. Receptacle assembly must be mounted securely onto column, wall, or other structure that is able to support the device and associated conduit system. Structure is to be prepared for use of four (4) 3/8" steel bolts (furnished by others) using lugs in the enclosure spaced as shown in Fig. 1. Device is equipped with factory installed hinges. Device must be mounted with the hinges on the bottom and the receptacle mounted in downward direction.

Conduit Installation:

- 1. 1 ½" NPT conduit entries are provided on top and bottom of the housing.
- Make sure conduit entries are clean before installing conduit/close-up plugs/reducers etc. Killark "LUBG" thread lubricant is recommended for this application.

Wiring

- Develop and establish the wiring pattern for your system. Locations having different voltages and/or frequencies must not have interchangeable attachment plugs. Always test before energizing.
- Make sure to pull sufficient length of supply conductors to connect the enclosed terminals.
- 3. Strip the conductors to the length shown in table.

WARNING: Use only copper cable or wire for the range indicated in the table. 75°C rated conductors (minimum).			
	Wire Range	Strip Length	Torque
Switch	#10 - #8	0.750 inches	20 lb-in.
Ground	#16 - #6	0.500 inches	20 lb-in.

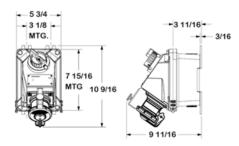


Fig. 1











- Loosen switch terminal screws and wrap stripped conductors securely around the terminal screws. Tighten the terminals to the values per table.
- 5. Connect the ground terminal securely and tighten to the values shown in table.

Inspect & clean the machined flange joint surface of both the cover & box. Surface must be smooth, free of nicks, scratches, dirt, or any foreign particle build-up that would prevent a proper seal. Surfaces must seat fully against each other to provide proper joint. Clean surfaces by wiping with a clean, lint free cloth. Apply a light coating of "LUBG" lubricant to flange surface and close the cover. Install and tighten all cover bolts to 25 ft. lbs. Make sure no cover bolts are omitted. Use only those bolts supplied with the device.

2. OPERATION

CAUTION: The plug assembly cannot be removed until the handle is in the "**OFF**" position. The switch cannot be turned "**ON**" without the plug inserted into the receptacle. **NOTE**: Refer to the label attached on the operator housing of the receptacle assembly.

Plug Insertion: While inserting the plug into the receptacle the release button will snap into place locking the plug into the receptacle.

Switch Control: The switch can be turned "**ON**" when the plug is inserted. The plug is locked in receptacle when the unit is turned "**ON**". The switch handle can be locked in the "**OFF**" position.

Plug Removal: Turn "**OFF**" the switch. Pull out the release button while removing the plug from the receptacle (Refer to the label attached on the operator housing of the receptacle assembly).

3. ELECTRICAL TEST BEFORE ENERRGIZING

Do not connect to power before conducting the following electrical tests:

- Test continuity of wiring to verify correct polarity, phasing and grounding connections.
- Measure insulation resistance to be sure the system does not have any shorts or unwanted grounds.











WARNING

Electrical power supply **MUST BE OFF** before and during installation and maintenance. **DISCONNECT** primary power source and **LOCK OUT.** Installation and maintenance procedure must be performed by a trained and competent electrician.

4. MAINTENANCE

Electrical and mechanical inspection of all components must be performed regularly. It is recommended that inspection be performed a minimum of once a year.

- Inspect all contact wire box terminals for tightness (Retorque). Discoloration die to excessive heat is an indicator of possible problems and should be thoroughly investigated and repaired as necessary.
- Check grounding and bonding for correct installations and secure connections (Retorque).

WARNING

If any parts of the plug, receptacle or switch appear to be missing, broken or show signs of damage:

DISCONTINUE USE IMMEDIATELY!

Do not modify these devices in any way. Replace with proper replacement part(s) supplied by Killark before continuing service. Failure to do so could cause serious or fatal personal injury and/or equipment damage.

- Check gaskets for deterioration and replace if necessary.
- Clean exterior surfaces making sure nameplates remain legible.
- Inspect clamp guide assembly and cable grip tightness to ensure proper cable gripping.
- Torque all screws as described in instructions before reusing device.
- Inspect housing parts and replace those which are broken or excessively worn.
- Check contacts for signs of excessive arcing or burning and replace if necessary.
- Check receptacle thread used for plug locking ring for proper lubrication. Apply Killark "LUBG" type lubricant or equivalent to thread surfaces as required to prevent galling between the receptacle and locking ring threads.

In addition to these required maintenance procedures, we recommend an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B.











Replacement Parts: (Cover Only w/ Devices)

VWSQ3023-COV VWSQ3034-COV

INTERMATEABILITY FOR PLUGS

Device VWSQ3023 VWSQ3034 **Killark Plug** VP3385: VP3023 VP3485: VP3034 **Crouse Hinds Plug** APJ3385: NPJ3383: NPJ3384 APJ3485: NPJ3483: NPJ3484 Appleton Plug ACP3023BC ACP3034BC









