

# INSTALLATION, OPERATION & MAINTENANCE DATA SHEET

Form No. K1083

Versa 125 AMP NON-METALLIC PLUG
(VSI125P) & RECEPTACLE (VSI125R)



# Form No. K1072 Versa 125 AMP NON-METALLIC PLUG (VSI125P) & RECEPTACLE (VSI125R)

# **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.

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.













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#### CAUTION: ALWAYS TURN OFF THE SUPPLY CIRCUIT BEFORE BEGINNING INSTALLATION OR MAINTENANCE.

- All installations must comply with applicable local and/or the National Electrical Code. Trained, qualified and competent personnel must install this equipment.
- · For external sealing requirements: In a Class 1, Zone installation, refer to NEC Article 505. In a Class I, Division 2 installation, refer to NEC Article
- · A dust cap is required for the plug when used in Class II, Groups E or F Hazardous Locations.
- · The receptacle can only be switched 'on' after the plug is fully inserted into the receptacle. Do not attempt to actuate switch handle with any tools; it is designed for hand operation only.
- · The receptacle is suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes, 600V AC maximum, when protected by properly sized Class J fuses, 200 Amperes maximum.
- · Any damaged equipment should be replaced promptly to ensure the electrical safety and hazardous area protection of the system.

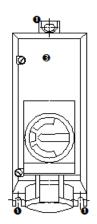
# 1. HAZARDOUS AREA **CLASSIFICATION:**

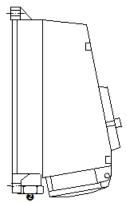


CLASS I, DIVISION 2, GROUPS A, B, C, & D; CLASS I, ZONE 1, AEx de IIC T5; CLASS II, DIVISION 1 & 2, GROUPS E, F, & G; CLASS III DIVISIONS 1 & 2 HAZARDOUS LOCATIONS.

## 2. RECEPTACLE INSTALLATION

- 1. Securely mount the receptacle in a vertical position as illustrated, using three 3/8" (10 mm) screws 1 and suitable washers. Mounting dimensions are marked on the back of the receptacle housing.
- 2. For conduit installation, connect 2" NPT conduit to the hub 2 and avoid misalignment. For cable installation, connect a listed 2" NPT cable fitting to the hub. Conduit/cable fitting should not be tightened more than 100 ft-lbs (136 N.m) of torque.
- 3. Open the cover 3 by unscrewing the two cover screws. Connect 75°C rated copper supply wires. The supply side of the terminal block accepts up to two wires that are between 1/0 through 4/0 AWG per terminal. Allow proper length for bending and cut the conductors to length. Strip the conductor insulation 1" (25 mm) from the end. Insert the conductors into













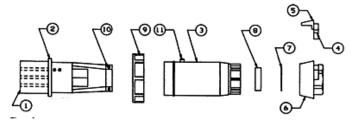


3 Phase Voltage AC	Horsepower
600 V	125
480 V	100
240 V	40
120 V	20

**VSI125 HP Rating** 

- the appropriate terminal that are marked to correspond with the markings on the plug. Torque all terminal screws to 54 in-lbs (6 N·m); including all unused terminals.
- 4. When using the 20 ampere rated early break and late make auxiliary contact for an electrical interlock or other control signal, connect the wires (12 AWG copper wire) to terminals 13 and 14. Torque the terminal screws to 18 in-lbs (2 N-m)
- Remove the plastic function-label (taped inside the cover), mark as required, remove backing strip and apply to the recessed area above switch. Close the cover and tighten the cover screws.

#### FIGURE 1



### 3. PLUG WIRING

- 1. Select a flexible cord with copper conductors of the appropriate insulation, ampacity and 90°C temperature rating. For installations in the U.S., refer to the National Electrical Code, Articles 400-4, 400-5A, 400-5B, 501-11, 502-12 and 503-10.
- **NOTE**: The wire capacity for plug terminals is 6-1/0 AWG. Tighten terminal screws to 54 in-lbs. (6 N-m) torque
- 2. Shear cord cleanly Do not strip away cord jacket or conductor insulation at this time.
- 3. Referring to Figure 1 above, loosen screws ① and pull the plug body ② out of the shell ③. Loosen the screw ④ on the locking clam ⑤, insert the screwdriver in the locking clamp slot, lift the locking clamp out of the pressure ring ⑥ and unscrew the pressure ring.
- 4. Slide the pressure ring 6 and the washer 7 over the cord.
- 5. The grommet (3) is a universal onion ring style, which accommodates several cord diameters by removing (cutting out) the inner undersized diameters. The grommet should fit snugly on the cord. The grommet may require lubrication in order to slide over the cord. Use talcum powder or an equivalent material rated for use on electrical products. Slide the grommet over the cord with the cuts toward the shell.

NOTE: If the grommet slides freely over the cord, there will be insufficient sealing for Class II and Class III Hazardous Locations.













- 6. Slide the shell 3 over the cord.
- Dress the cord by removing the outer jacket and fillers for a length of 4-1/8" (105 mm) and strip the insulation off of the conductors 1-7/16" (36 mm) from the end.
- 8. Open the strain relief clamp screws (10) and flip the clamp to the side. Attach the leads to the appropriate terminals. Terminal markings correspond to receptacle terminal markings.

  CAUTION: The Equipment Ground (green wire) is to be connected to the terminal marked with the Earth / Ground symbol =
- Flip back the strain relief clamp (1), remove clamp plastic inserts, if necessary, to fit the outer diameter of the cord. Make sure that the remaining plastic inserts have their ridges pointing toward the plug before tightening.
- 10. Slide the locking collar (a) into the shell (3) and insert the plug body (2) into the shell. To align the plug body (2) with the shell (3), the keyway on the inside of the shell must mate with the rib in the plug body.
- 11. Tighten the three screws (1).
- 12. Slide the grommet ⓐ and the gland washer forward until they shoulder against the shell ③ and tighten the pressure ring ⑥ until grommet compression is achieved.
- 13. Reinstall locking clamp (5) and tighten the screw (4).
- 14. The optional dust cap (part number VSI125801140) must be used for Class II, Division 1 or 2, Groups E or F locations. Attach the dust cap to post 1.
- WARNING: User must observe the labels on the plug and receptacle with regard to the use of covers and dust caps.

#### 4. MAINTENANCE

The plug and receptacle require no maintenance other than a periodic inspection (minimum annually) for wear, damage, and proper operation.

- The surface of the plug pins should be given a thorough inspection.
- Any worn or damaged equipment should be replaced promptly to ensure the electrical safety and explosion protection of the system.

Please keep this instruction for your records:

MAINTENANCE MANAGER	
Catalog No.	
Installed By	
Location Installed	
Installation Date	









