

FIGURE 1 :
General view of UGRS...QW series
SQUARE MOUNT RECEPTACLES

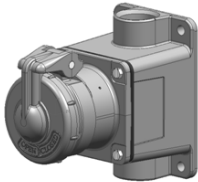
BREECH LID SHOWN



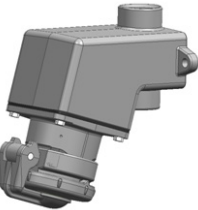
FLIP LID SHOWN



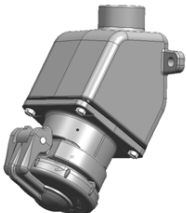
UGRS on C Type back box (*)



UGRS on D Type back box (*)



UGRS on E Type back box (*)



WARNING: Electrical power **MUST BE OFF** during installation, or performing any maintenance. Disconnect primary power source and lock out. This device must be installed by trained, qualified and competent personnel. Installation must comply with local, state and national regulations, as well as safety practices for this type of equipment. **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.

UGRS-2023xB Breach UL/CSA Class I Div 2 BCD; Class II F* G; N4X when Cap Closed; N3 when in use (hinge up).
 UGRS-2023xF Flip UL/CSA Class 1 Div 2 BCD; Class II F* G; N3 when in use (hinge up).
 Certified for intermateability with Appleton® & Crouse-Hinds® plugs.
 Square Mount receptacles certified as “recognized component” for use with N1, 3, 4 enclosures.

Recommended Enclosure Types for use with UGRS Receptacle

Hazardous (Classified) Suitable Enclosure Types Location

Class I, Div. 2 NEMA Type 3, 3R, 3S, 4, 4X or any appropriate enclosed or gasketed enclosure that will prevent the escape of sparks or burning materials; other devices must be non-arcing.

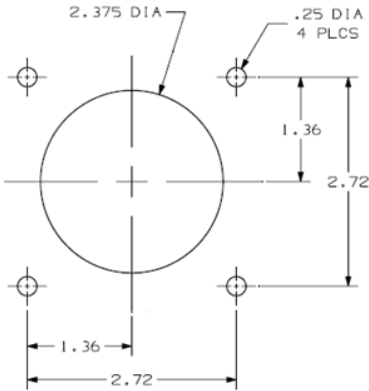
Class II, Div. 1 NEMA Type 9 F (without Electrically Conductive dust); G with gasketed flange, on 30A VersaMate back boxes.

Class II, Div. 2 NEMA Type 3, 3S, 4, 4X or a suitable enclosed or gasketed enclosure that will minimize the entrance of dust and prevent the escape of sparks or burning materials.

(*) Individual back boxes shown are VersaMate® Pin & Sleeve 30A units; available with 1/2", 3/4" & 1" hubs.



**FIGURE 2:
Hole pattern for panel mount**



- For Class I Div. 2, Class II Div. 1 applications, the UGRS is suitable when the unit is bolted to a VersaMate® 30A back box.
- Furnished with sealing gasket and mounting bolts.
- Gasketed construction protects receptacle against moisture and dirt with plug engaged or removed.
- Copper free aluminum housing (4/10 of 1% max. copper content).

1. UL/CSA APPLICATION DATA

The Killark “UGRS” Receptacle can be operated by the Killark “UGP” Plug, the UL/CSA Certified Appleton® “ECP” Series Plug, or the Crouse-Hinds® UL/CSA Certified “ENP” Series Plug; all form a UL/CSA Classified combination. See Table 1 below for possible plug & receptacle combinations.

TABLE 1

| Killark Receptacle Rating | Killark Receptacle CAT.No. | Plug Rating | Killark Plug CAT.No. | Appleton Plug CAT.No. | Crouse-Hinds CAT.No. |
|---------------------------|----------------------------|-----------------|----------------------|-----------------------|----------------------|
| 125V, 20A, 1 hp | UGRS-20231B | 125v, 15A, 1 hp | UGP-15231(QW) | (E or N)CP-1523 | ENP-5151 |
| | UGRS-20231F | 125v, 20A, 1 hp | UGP-20231(QW) | (E or N)CP-2023 | ENP-5201 |
| 250V, 20A, 2 hp | UGRS-20232B | 125v, 15A, 1 hp | UGP-15232(QW) | --- | ENP-6152 |
| | UGRS-20232F | 125v, 20A, 1 hp | UGP-20232(QW) | (E or N)CP-20232 | ENP-6202 |

UGRS BACK BOX MOUNT:

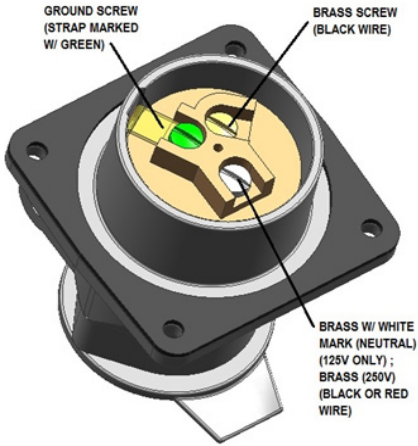
Mount receptacle, with factory applied “VR” Gasket, to previously installed back box using bolts supplied and torque to a minimum of 30 in.-lbs.; to a maximum of 40 in.-lbs. At least one mounting bolt must provide electrical continuity between receptacle housing and back box. There must be a tight seal between the receptacle housing and back box to assure a weatherproof fit. **NOTE:** The included star washers may be used under the bolt heads, as necessary, to assist in achieving ground continuity.

UGRS OPTIONAL PANEL MOUNT:

See (Figure 2) for mounting hole pattern dimensions in a sheet metal enclosure application. The factory supplied hardware (bolts, star washers, flat washers, nuts) are required to complete receptacle mounting and must be installed to maintain the Type 4 enclosure rating. Mount receptacle, with “VR” Gasket applied, to panel using bolts supplied and torque to a minimum of 30 in.-lbs.; to a maximum of 40 in.-lbs. At least one mounting screw must provide electrical continuity between receptacle housing and panel. There must be a tight seal between



**FIGURE 3:
Terminal Connections**



the receptacle housing and panel to assure a weatherproof fit. **NOTE:** The included star washers may be used under the bolt heads, as necessary, to assist in achieving ground continuity.

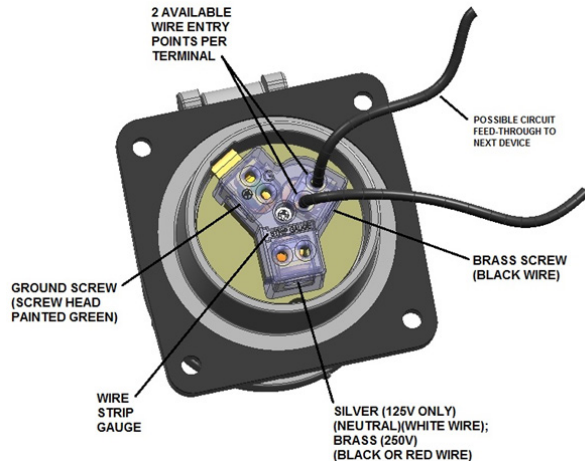
UGRS WIRING (see Figure 3) (for UGRS...QW wiring see sheet 4, Figure 4) :

Loosen the terminal screws on the terminal base. **NOTE:** Use only copper wire with this device (10, 12 or 14 AWG). Refer to National Electrical Code Table 400-5 or Canadian Electrical Code Table 12 when selecting the conductor size. Strip 5/8" of insulator from the end of each wire. Recommended conductor connection is crimp fork or ring terminals; or loop the wires and attach them to the proper terminal screws: Green lead (Ground, if provided) to screw at Ground strap (marked Green); White (Neutral) lead to terminal at White mark (125V. only); Black and/or Red [Line lead(s)] to unmarked terminal(s). Hand tighten terminal screws to 10 in.-lbs. of torque.

UGRS...QW WIRING (see Figure 4):

NOTE: Use only copper wire with this device (10, 12 or 14 AWG). Recommended wire strip length – ½ inch nominal (wire strip gauge also available on the QW terminal cover). Loosen all (3) Terminal Contact Screws and insert wire through the Wiring Entrance holes, into proper terminals: Green lead (Ground) to terminal with ground mark & Green screw head; White (Neutral) lead to terminal with Silver screw head (125V. only); Black and/or Red [Line lead(s)] to terminal(s) with Brass screw head. Hand tighten terminal screws (recommended torque 8 in.-lbs).

**FIGURE 4:
"QW Terminal Connections"**

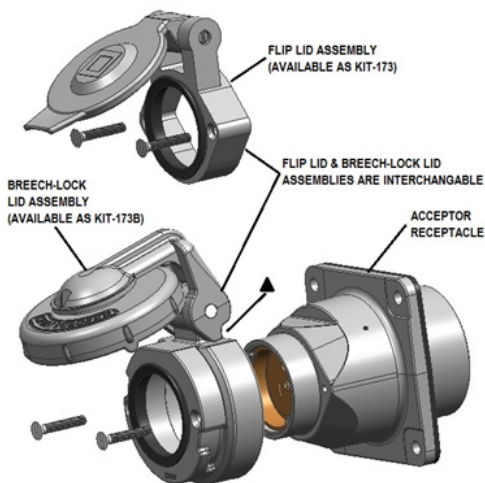


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P/N KIL00921428 FORM NO. K1428 R2/17 ECO-7-004-17

**FIGURE 5:
UGRS Lid Assemblies**

▲ Notch allows use of a screwdriver or similar item to hold lid open "hands free" plug insertion or removal



LID ASSEMBLY or replacement (KIT-173B Breech; KIT-173 Flip)
(see Figure 5):

1. Remove the existing lid assembly by removing the (2) #8-32 screws holding it in place and ensure that the face of the Acceptor receptacle is free of obstructions.
2. Align the flat surface of the lid assembly with the flat step feature of the receptacle body and install the lid assembly to the receptacle, as shown in Figure 5.
3. Utilize the existing or the (2) #8-32 screws provided in the kit to secure the lid.
4. Hand tighten the screws evenly; making sure that the inside diameter of the lid gasket seal remains circular and undistorted.

2. OPERATIONAL DATA

1. Lift receptacle door and insert plug all the way into the receptacle.
2. Turn plug to clockwise limit (45°). This closes internal contacts and completes circuit.
3. Release plug. Plug will move outward to "LOCK" position. Check by trying to turn plug without pushing inward; plug should not turn.
4. To remove plug, push plug inward and turn to counter-clockwise limit (45°). Pull plug straight out.

3. MAINTENANCE DATA

These devices require no maintenance other than a periodic cleaning and a check for proper operation. Also, check conductors and fasteners for damage and/or wear. Inspections should be performed on a regular basis (minimum yearly); determined by the environment and usage.

WARNING: Disconnect and Lock Out

supply circuit before starting maintenance work.

1. To clean receptacle, it is recommended that a soft, non-metallic bristle brush be used.
2. Check tightness of all accessible screws.
3. Inspect the entire assembly for damage, wear & proper function. If necessary, consult Killark factory for availability of replacement parts and discontinue use of the equipment until repairs are made. An Electrical Preventive Maintenance Program, such as the National Fire Protection Association Bulletin NFPA No. 70B, is recommended.

