### Industrial Solutions

### **GEH5022 - Installation Instructions**

# 100–225 Ampere Single- and Three-Phase 10–42 Circuit PowerMark Plus™ Load Centers

### Rainproof Type

## Important Safety Instructions — Read All Instructions Before Using

**WARNING:** Do not attempt to install or perform maintenance on equipment while it is energized. Death, severe personal injury, or substantial property damage can result from contact with energized equipment. Always verify that no voltage is present before proceeding with the task, and always follow generally accepted safety procedures.

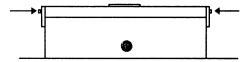
ABB is not liable for the misapplication or mis installation of its products.

#### **Installation Instructions**

To comply with the National Electric Code and Underwriters Laboratories, the load center must be installed in accordance with the information included on the label inside the door.

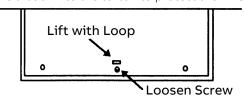
#### 1. Remove the Door.

Back out the door hinges. Remove door and slip it back into the carton to protect the finish. Save the screws for reuse.



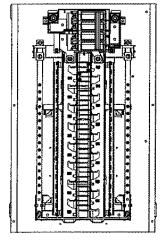
#### 2. Remove the Shield.

- Loosen the fastening screw (the screw will be retained for shield).
- **b.** Insert a screwdriver under loop, then lift the shield up and
- c. Slip shield back into the carton to protect the finish.



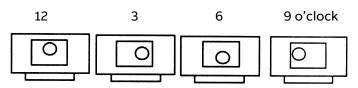
#### 3. Remove interior (Optional).

Back out mounting screws and save for reuse. Slide interior up to clear tabs and remove.



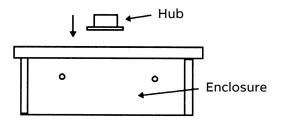
## 4. For Top Feed, Screw the Hub (Not Included) onto the Installed Conduit.

Raintight hubs can be installed in any of the four positions indicated below.



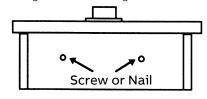
#### 5. Fasten Hub to Box.

Remove factory installed closing cap, re-use the four screws to attach hub. No gasket required. Discard closing cap when hub is used.



#### 6. Mount Box.

Screw or nail through rear mounting holes.



#### 7. Remove KO's for Branch Circuits (and main if Bottom feed).

First kcnock center KO inward. Outer rings should be alternately pried up or driven in one at a time.



## 8. Pull Incoming Service and Branch Circuit Wiring into the

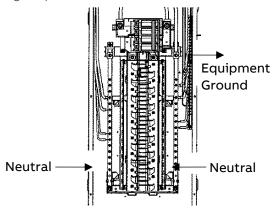
Good practice includes forming drip loops where applicable.

#### 9. Replace the Interior.

Drive mounting screws from step 3.

#### 10. Wire Main, Neutral, and Equipment Ground.

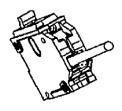
Refer to the rating label inside the equipment for the proper tightening torques.

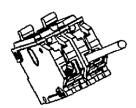


Wire the neutral and equipment grounds only in the direction indicated by the arrows. If required, ground and bond neutral to box using screw or straps provided. Straps must be placed in large neutral holes.

#### 11. Wire Branch Circuits

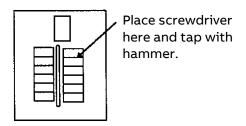
Individually wire each branch circuit into a circuit breaker, then plug the breaker into the interior. Refer to the label on the breaker for the proper tightening torque. Use GE circuit breakers only.





#### 12. Remove Shield Knockouts

Place a screwdriver as shown and tap with a hammer.



**WARNING:** Retighten all electrical connections before energizing.

#### 13. Install the Shield

- **a.** Rotate the cover latch clockwise to position shown.
- $\textbf{b.} \ \ \text{Install the shield and tighten the shield-fastening screw}.$

#### 14. Identify Circuits

For the user's convenience.

#### 15. Install the Door

Drive hinge screws.

**NOTE:** Accessories and replacement parts are listed on the label inside the load center door.

**CAUTION:** Follow the procedure below when connecting aluminum terminations.

#### Installation Instructions – Aluminum Terminations

The following procedure is recommended when connecting aluminum wire.

- 1. Strip the insulation, being careful to not nick the wire.
- 2. Wire-brush the conductor strands.
- **3.** Thoroughly coat the stripped conductor with a suitable antioxidant compound, such as ALNOX or PENETROX A13.
- **4.** Insert the conductor and tighten the connector screw to the indicated torque.

**NOTICE:** These instructions do not cover all details or variations in equipment, nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired, or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to ABB Company. See contact information below.

For troubleshooting or service related questions, <a href="https://electrification.us.abb.com/products/load-centers">https://electrification.us.abb.com/products/load-centers</a>