## DET1038 Installation Instructions for GE Meter Mod III Products



## INSTALL MOUNTING RAILS ON WALL:

Establish the required height of the centerline of the bottom meter socket, per the utility company specifications. Determine the bottom line of the meter modules and main devices. Use a "Z" dimension per the table below. That is the distance from the bottom meter socket line to the bottom of a meter module.
Measure up a distance " $X$ " (see table) inches from the bottom line of the meter modules to mounting holes for the mounting rail. Strike a level line for the fasteners and attach the mounting rails. (See Fig. 1 below).


| TYPE OF METER MODULE | $" X$ " in.(mm) | " $Z$ " in.(mm) |
| :---: | :---: | :---: |
| 125 AMP Meter Stacks | $34-7 / 32(869.16)$ | $12-19 / 32(319.88)$ |
| 200 AMP Meter Stacks | $34-7 / 32(869.16)$ | $18-15 / 32(469.11)$ |
| 225 AMP 1 Meter EUSERC Stack | $17-1 / 16(433.39)$ | $19-27 / 32(504.03)$ |
| 225 AMP 2,3 Meter EUSERC Stack | $35-3 / 16(893.76)$ | $18-1 / 2(469.90) 13$ |
| 225 AMP 1,3.4 Meter Stack | $30-11 / 16(779.46)$ | $(330.20)$ |
| 225 AMP 2 Meter Stack | $30-11 / 16(779.46)$ | $27(685.80)$ |

Fig. 1 Locations of Mounting Feet, Rails, and Modules

Please read these instructions completely before installing or removing device. Improper installation could be hazardous to personnel and/or equipment.

## MOUNTING FEET:

Swivel the mounting feet at the top and bottom of the enclosures as shown Imeter modules have two mounting feet and main devices have four mounting feet). After marking holes on the wall, the mounting feet may be moved away for drilling of the holes. (See Fig. 1 below).

## METER SOCKET COVERS:

Remove all the meter socket covers which are over the horizontal main bus. Ring style covers are attached with two screws inside the socket rim. Ringless style covers are attached with an external movable latch. (See Fig. 2 below).


Fig. 2 Ring Type and Ringless Covers

## METER MODULES:

Hang meter modules on the mounting rails, loosen all of the main bus joint bolts, and slide the meter modules together. Fasten the enclosures together with the (4) \#10-32 screws and keps nuts supplied with each module.
Torque to $26 \mathrm{lb}-\mathrm{in}(2.94 \mathrm{~N}-\mathrm{m})$
Torque each main bus joint bolt to $300 \mathrm{lb}-\mathrm{in}(33.90 \mathrm{~N}-\mathrm{m})$. Secure mounting feet to the wall. (See Fig. 3 on Page 2).

## BUS END CAPS:

Install the bus end caps on the left hand side of the far left meter module in the assembly and the far right meter module in the assembly. End caps are supplied on the main switch, main circuit breaker, or main terminal box (one flush cap and one extended cap). (See Fig. 3 below).


Fig. 3 Meter Module Assembly and End Cap Locations

## PROVISIONS FOR HUBS OR KNOCKOUTS:

- Top Connections - Outdoor Application (125A \& 200A Meter Stacks) Remove the raintight plate and select the knockout entry plate and scribe open knockout positions in the underside of plate. Punch proper holes in raintight plate and reinstall. Install raintight hubs into raintight plate.
- Top Connections - Indoor Application (125A \& 200A Meter Stacks)
Remove and discard the raintight plate. Use the knockouts in top of module as required.
- Top Connections - Indoor or Outdoor Applications (225A Meter Stacks)
Remove raintight plate and punch proper holes for installing raintight hubs. Reinstall raintight plate and install raintight hubs into the raintight plate.
- Top Connections - Indoor or Outdoor Applications (MTB, MFS, MCB, MHCB, or BPS)
Knockouts are not provided in top endwall. Punch proper holes as required. Install raintight hubs on outdoor devices.


## PROVISIONS FOR HUBS OR KNOCKOUTS (CONT’D):

- Backwall Connection (125A \& 200A Meter Stacks) A removable backwall plate is provided in meter modules. Remove plate and selected knockouts, pull wires through knockout openings, and slide over wires to refasten plate.
- Backwall Connection (225A Meter Stacks)

A removable backwall plate is provided in meter modules. Remove plate and punch proper holes for the selected knockouts, pull wires through knockout openings, and slide over wires to refasten plate.

- Bottom Connection (125A \& 200A Meter Stacks) Indoor and outdoor applications use knockouts that are provided in bottom of meter modules or main devices. -Bottom Connection (225A Meter Stacks)
A removable bottom plate is provided in meter modules. Remove plate and punch proper holes for the selected knockouts, pull wires through knockout openings, and slide over wires to refasten plate.
(See Fig. 4 below).


Fig. 4 Knockout Plate Locations and Phase Connections
PHASE BALANCING, 3-PHASE IN TO 1-PHASE OUT SYSTEM (125A, 200A \& 225A Meter Stacks):

Phase connectors are factory installed on the A Phase \& B Phase bus. Remove appropriate phase connectors and balance for Phase A-B, B-C or A-C, as needed, across several meter modules in a complete installation (see next page for instructions). Torque all phase connectors to 60 lb -in (6.78 N -m). (See Fig. 4 above).

## Modular Metering <br> Phase Balancing

All three-phase meter stack modules come factory connected to phase A and B, per Figure A. When connected to a 208Y/120 Vac 3-phase, 4-wire system, field phase balancing of two out of every three stacks is required. One of every three stacks should be phased AC, per Figure B, and one of every three stacks should be phased CB, per Figure C.

## Examples:

- 9 Total Positions-use (3) 3-position stacks and phase one per Figure $B$ ( $A-C$ phasing) and on per Figure C (C-B) phasing
- 16 Total Positions-use (2) 5-position and (2) 3-position stacks. Phase balance (1) 5-position per figure $B$ (A-C phasing) and (1) 5-position per Figure C (C-B phasing).
- 19 Total Positions-where 4 position maximum height is allowed by utility, use (1) 4-position and (5) 3-position stacks. Phase balance (2) 3-position stacks per Figure B (A-C phasing) and (2) e-position stacks per Figure C (C-B) phasing.

"Z" Shaped and "Barrel" Shaped Phase Connectors


FACTORY 125A A-B PHASING


FIELD 125A A-C PHASING
Remove "Z" Phase Connector from "B" Phase Horizontal Bus
Replace with "Barrel" Phase Connector supplied with meter stack and attach to "C" Phase Bus as shown
Torque to $60 \mathrm{lb}-$ in $(6.78 \mathrm{~N}-\mathrm{M})$
Retain "Z" Phase Connector for future use.


FIELD 125A C-B PHASING
Remove "Barrel" Phase Connector from "A" Phase Horizontal Bus
Reattached at "C" Phase Horizontal Bus as shown. Torque to 60 lb -in ( $6.78 \mathrm{~N}-\mathrm{M}$ )

200A STACKS
"Barrel" Shaped Phase Connector


Figure A


FACTORY 200A A-C PHASING
Remove "Z" Phase Connector from "B" Phase Horizontal Bus
Reattached at "C" Phase Horizontal Bus as Shown Torque to 60 lb -in ( $6.78 \mathrm{~N}-\mathrm{M}$ )

Figure B


FACTORY 200A C-B PHASING
Remove "Barrel" Phase Connector from "A" Phase Horizontal Bus
Reattached at "C" Phase Horizontal Bus as shown Torque to $60 \mathrm{lb}-$ in ( $6.78 \mathrm{~N}-\mathrm{M}$ )

## INSTRUCTIONS FOR METER SOCKET PHASE CONVERSION

PHASE CONVERSION KIT(S) ARE SUPPLIED FOR THIS METER MODULE TO CONVERT THE METER SOCKET BUSSING FROM A-B TO A-C OR B-C FOR PHASE BALANCE PURPOSES. IF REPLACEMENT PHASE CONVERSION KIT(S) ARE REQUIRED, ORDER 35MMPHBALKIT.

## INSTRUCTIONS FOR METER SOCKET CONVERSION TO A-C PHASE.

1. TURN OFF POWER SUPPLYING THIS EQUIPMENT.
2. REMOVE THE RIGHT ("B" PHASE) BUS LINK BY REMOVING THE 3/8" KEPS NUT AND FLAT WASHER OF THE METER SOCKET AND THE 1/4-20 SCREW AND CONICAL WASHER OF THE VERTICAL BUS. RETAIN ALL PARTS.
3. ASSEMBLE THE JUMPER BAR FROM THE KIT INTO THE RIGHT ("B" PHASE) OF THE METER SOCKET USING THE 3/8" KEPS NUT AND FLAT WASHER RETAINED FROM STEP 2 ABOVE. DO NOT TIGHTEN THE KEPS NUT AT THIS TIME. (ENSURE THAT THE JUMPER BAR IS ORIENTED AS SHOWN.)
4. ASSEMBLE THE "B" PHASE BUS LINK REMOVED IN STEP 2 AS SHOWN USING THE 1/4-20 SCREW AND CONICAL WASHER RETAINED IN STEP 2. DO NOT TIGHTEN THE SCREW AT THIS TIME.(ENSURE THAT END OF BUS LINK WITH OVAL HOLE IS ASSEMBLED TO THE "C" PHASE VERTICAL BUS AND OPPOSITE END IS IN FRONT OF "B" PHASE JUMPER BAR.)
5. INSTALL THE $1 / 4-20 \times 3 / 4^{\prime \prime}$ SCREW AND CONICAL WASHER FROM THE KIT INTO THE TAPPED HOLE IN THE JUMPER BAR. TORQUE THE (2) 1/4-20 SCREWS TO 60 IN-LB ( 6.78 N-M) AND THE 3/8" KEPS NUT TO 200 IN-LB (22.60 N-M).

## INSTRUCTIONS FOR METER SOCKET CONVERSION TO B-C PHASE.

1. TURN OFF POWER SUPPLYING THIS EQUIPMENT.
2. REMOVE THE LEFT ("A" PHASE) BUS LINK BY REMOVING THE 3/8" KEPS NUT AND FLAT WASHER OF THE METER SOCKET AND THE 1/4-20 SCREW AND CONICAL WASHER OF THE VERTICAL BUS. RETAIN ALL PARTS.
3. ASSEMBLE THE JUMPER BAR FROM THE KIT INTO THE LEFT ("A" PHASE) OF THE METER SOCKET USING THE 3/8" KEPS NUT AND FLAT WASHER RETAINED FROM STEP 2 ABOVE. DO NOT TIGHTEN THE KEPS NUT AT THIS TIME. (ENSURE THAT THE JUMPER BAR IS ORIENTED AS SHOWN.)
4. ASSEMBLE THE "A" PHASE BUS LINK REMOVED IN STEP 2 AS SHOWN USING THE 1/4-20 SCREW AND CONICAL WASHER RETAINED IN STEP 2. DO NOT TIGHTEN THE SCREW AT THIS TIME.(ENSURE THAT END OF BUS LINK WITH OVAL HOLE IS ASSEMBLED TO THE "C" PHASE VERTICAL BUS AND OPPOSITE END IS IN FRONT OF "A" PHASE JUMPER BAR.)
5. INSTALL THE $1 / 4-20 \times 3 / 4^{\prime \prime}$ SCREW AND CONICAL WASHER FROM THE KIT INTO THE TAPPED HOLE IN THE JUMPER BAR. TORQUE THE (2) 1/4-20 SCREWS TO 60 IN-LB (6.78 N-M) AND THE 3/8" KEPS NUT TO 200 IN-LB (22.60 N-M).

"AS SHIPPED" - JUMPER BAR ORIENTATION


## INSTALL AND WIRE TENANT CIRCUIT BREAKERS:

Use only the circuit breakers listed on the meter module. Check amperage and interrupting capacity for the application.

## TESTING AND INSPECTION:

- Recheck all main bus joint bolts for tightness. Torque to $300 \mathrm{lb}-\mathrm{in}$. ( $33.90 \mathrm{~N}-\mathrm{m}$ ).
- Recheck all phase connectors for tightness. Torque to $60 \mathrm{lb}-\mathrm{in}$. ( $6.78 \mathrm{~N}-\mathrm{m}$ ) minimum.
- Check all wire and cable terminations for proper installation and tightness of lugs.
- Clean interiors of all units to remove foreign construction material.
- Reinstall all meter socket covers and tenant breaker covers.

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