

ELECTRIFICATION SERVICE

8000-Line motor control center units Installation instructions



8000-Line MCC buckets

01 General photos of an 8000-line size 1 FVNR unit.

02 Unit door latch in

the latched position.

Overview

ABB purchased the GE Industrial Solutions division from GE in 2018. 8000-Line motor control center (MCC) buckets are still available from ABB and are manufactured in the Mebane, NC, factory, which built the 8000-Line MCC from 1980 into the 2000s. These buckets are built in the style of the 8000-Line MCC; however, they are also compatible with 2700, 7700 and Spectra[™] Line MCCs.







8000-Line buckets have a door mounted to the bucket that is hinged on the right side. For older MCCs, section-mounted doors and their hinges must be removed before the 8000-Line bucket can be installed.

Although these units can generally be added in the field, details and degree of complexity may vary. Consult your ABB sales representative in advance of anticipated field work on such assemblies if ABB field service support is required.

Safety and preparation measures

WARNING

Disconnect equipment from all electrical services before performing any installation or maintenance work.

NOTICE

To latch unit doors, rotate the latches 90° clockwise until the arrow points out of the unit and the screw slot is parallel to the edge of the door as indicated in figure 2.



02

Installation considerations

- Units ordered separately from MCC sections are shipped from the factory complete with door. Note that all unit doors hinge on the right side.
- Horizontal shelf assemblies and support brackets should be ordered separately if required. See renewal parts bulletin for shelf assemblies.
- If the available space in the MCC section is larger than required by the new unit, order a filler kit of the appropriate height. See renewal parts bulletin for filler kit heights and part numbers.

Installation

The general procedure for installing a plug-in unit on a horizontal shelf assembly, which is mounted in a section, is as follows:

- Unit ships with its door closed. Verify that the disconnect device (circuit breaker or fusible switch) operating handle is in the off position and the quarter-turn latches are disengaged, then open the unit door.
- Select the proper holes in left- and right-hand vertical steel plates for mounting the horizontal shelf (A) and support bracket (B), figure 3. The vertical distance (C) is equal to the height of the unit to be installed.
- Mount shelf assembly (A) and support bracket
 (B) with ¼-20 self-threading screws at points (D) indicated in figure 3.

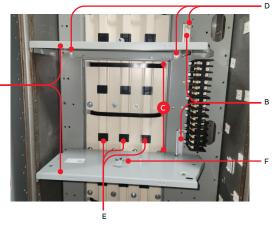
NOTICE

Note figure 3, item E. If vertical bus plugs are installed, they must be removed at the bus stab locations prior to installing a new bucket. Otherwise, the bus stabs will be damaged.

03 Mounting the horizontal shelf assembly

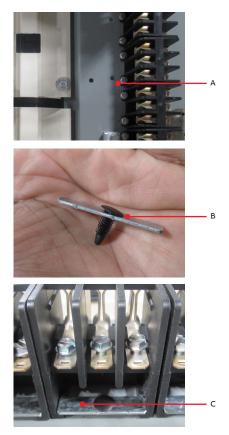
04 Installation of draw-out terminal block in MCC section

05 Front view showing the two upper unit latches and jack screw



 05

- 03
- 4. Most new units have high density terminal blocks fully installed in the bucket. However, if draw-out terminal blocks are furnished, only half of the terminal block is installed in the bucket. Install the fixed half of all draw-out blocks in the intended unit space in the section, on the right side of the vertical bus. See figure 4. Their locations must align with the terminal blocks mounted on the right side of the starter unit. The left side of the fixed terminal block is secured with screw (A). The right side is secured with bracket (B), which is secured as shown (C).



5. Install the unit by placing the base of the unit on the forward portion of the shelf and sliding the unit into the section. The guide should engage with the slot in the base of the unit.

When the jack screw (figure 5, B) engages with the guide (figure 3, F), the stabs are not yet in contact with the vertical bus bars. This unit jack screw must then be turned with a screwdriver to complete the unit stab engagement with the control center bus. Should any binding be noted during this operation, a careful check should be made for interference with draw-out terminal blocks, etc. When the unit is fully racked into the section, the upper unit latches (figure 5, A) should be rotated one-quarter turn to lock the unit in place. Visually check for full engagement of all terminal blocks on unit with adjacent fixed blocks in section.



ABB Inc. 305 Gregson Drive Cary, NC 27511

electrification.us.abb.com/service

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