



ABB MNS-MCC
Low Voltage Motor Control Center
Features and Benefits

MNS-MCC

Maintainable and Higher Level of Safety

The MNS-MCC by ABB offers advanced technology allowing ease of maintenance and a higher level of safety. With features such as the following, ABB is better able to serve its industrial customers.

- The MNS-MCC incorporates the best proven features of a world renowned IEC product along with all UL 845 requirements into a unique comprehensive NEMA/UL product offering.
- With its state of the art withdrawable technology based on a proven global design, the MNS-MCC provides a higher level of safety while minimizing factory downtime.
- The insulating and isolating properties of the Multifunction Wall and a “closed door” unit withdrawal provides a barrier between the operator and all live parts.

The MNS-MCC meets the following standards: UL845, CSA, and IBC-2006. It offers amperage ratings up to 4000A and short circuit ratings up to 100kA at 600V.*

* dependent on configuration



The Modular Low Voltage UL845 - Motor Control Center from ABB



1. Standard Finish

The MNS-MCC standard paint finish is a ANSI 61 light gray.



2. Withdrawable Unit

The MNS-MCC incorporates a unique withdrawable unit technology. All units are provided with pull-apart terminal blocks for control and power connections that are automatically connected when the unit is inserted. And since the door is integral to the unit, there is no need to open the door to remove the unit. Each unit is provided with a rotary handle that provides ease of operation with the following four positions: ON, OFF, TRIP, and MOVE. A quarter-turn latch(s) is used to secure each door in the closed position. The heavy duty unit stabs are shrouded to prevent accidental crossing of phases.



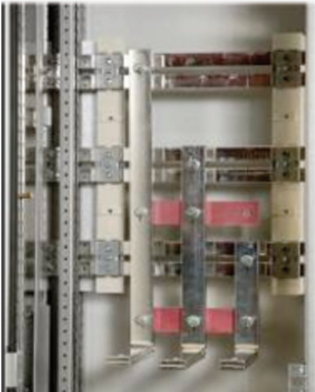
3. Rolling and Locking Withdrawable Mechanism

Each unit is provided with a locking and rolling mechanism that prevents withdrawal or insertion of the unit unless the handle is in the MOVE position. This prevents an inadvertent plug in with the vertical bus and locks the unit in place when the circuit breaker is closed. This interlocking allows the unit to be locked out in an isolated position in which the stabs are disconnected from the vertical bus.



4. Multifunction Wall (MFW)

The Multifunction Wall is an insulating, non-flammable, and non-hygroscopic housing for the vertical bus. The MFW provides IP20 protection, even when a unit is removed. The MFW also provides a solid, isolating barrier between the front accessible areas of the MCC and the horizontal bus compartment at the rear of the MCC.



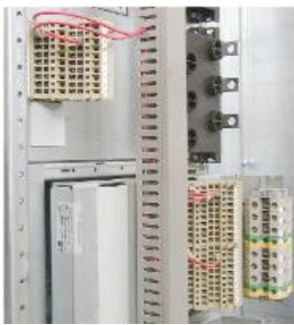
5 Bus

The MNS-MCC provides silver and tin plated copper horizontal bus up to 4000A thus reducing the total number of MCC's required. The silver plated copper vertical bus provided on the MNS-MCC has ratings of 800A and 1600A allowing a greater load to be installed on the bus, which helps reduce the total number of sections.



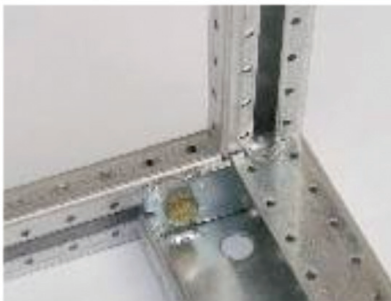
6 Bus Splice Windows

The MNS-MCC is equipped with a window in the vertical wireway which allows visual inspection of the bus splice connections. The splices are accessible from the front of the MCC via the vertical wireway by simply removing a clear, lexan barrier.



7 Motor Lead and Control Wire Connections

The MNS-MCC utilizes disconnecting, pull apart terminal blocks for each withdrawable unit for motor lead connections and control wiring. The motor leads and control conductors are terminated in the wireway, and remain connected independent of the unit position. This provides for more efficient unit maintenance and reconfiguration.



8 C-Channel Frame

The MNS-MCC uses a strong rigid C-channel design composed of Aluzinc material with holes spaced 25 mm apart allowing a strong structural support.

Globally Renowned Products

The ABB MNS-MCC is designed, constructed, and built to enhance the product features from ABB products such as:

- ABB PST and PSTB Softstarter
- ABB A-line Contactors
- ABB ACS350, ACS550, and ACS800 variable frequency drives
- ABB Tmax molded case breakers and Emax power breakers

With globally leading ABB products integrated in the MNS-MCC, ABB motor control center offers enhanced reliability. With the use of the ABB molded case breakers and their true current limiting protection and high interrupting capacities, each unit is well protected making high overall system interrupting short circuit ratings possible.



Contact us

ABB Inc

Low Voltage Products & Systems
3700 W Sam Houston Pkwy S
Houston, TX 77042
Ph: 888.385.1221

Low Voltage Products & Systems
400 Crown Colony Drive
Suite 303
Quincy, MA 02169

www.abb.us/lowvoltage

