

Drive Motors

MCC's or otherwise known as Motor Control Centers are an assembly of one section or more which have a common power bus. These have been used in the auto trade since the 1950's, as they were utilized a lot of electric motors. Today, they are utilized in a variety of industrial and commercial applications.

Inside factory assembly for motor starter; motor control centers are fairly common method. The MCC's include variable frequency drives, programmable controllers and metering. The MCC's are commonly utilized in the electrical service entrance for a building. Motor control centers often are used for low voltage, 3-phase alternating current motors that range from 230 volts to 600 volts. Medium voltage motor control centers are made for big motors which range from 2300 volts to 15000 volts. These units make use of vacuum contractors for switching with separate compartments to be able to accomplish power control and switching.

Inside factory area and locations that have dusty or corrosive processing, the MCC can be installed in climate controlled separated locations. Usually the MCC will be situated on the factory floor near the equipment it is controlling.

For plug-in mounting of individual motor controls, A motor control center has one or more vertical metal cabinet sections with power bus. To complete testing or maintenance, really big controllers could be bolted into place, while smaller controllers can be unplugged from the cabinet. Every motor controller has a contractor or a solid state motor controller, overload relays to protect the motor, circuit breaker or fuses so as to supply short-circuit protection and a disconnecting switch so as to isolate the motor circuit. Separate connectors allow 3-phase power in order to enter the controller. The motor is wired to terminals located inside the controller. Motor control centers provide wire ways for field control and power cables.

Each motor controller in a motor control center can be specified with several options. These choices include: pilot lamps, separate control transformers, extra control terminal blocks, control switches, and various types of bi-metal and solid-state overload protection relays. They likewise comprise different classes of kinds of circuit breakers and power fuses.

Regarding the delivery of motor control centers, there are many alternatives for the customer. These can be delivered as an engineered assembly with a programmable controller along with internal control or with interlocking wiring to a central control terminal panel board. On the other hand, they could be supplied prepared for the customer to connect all field wiring.

MCC's commonly sit on floors which should have a fire-resistance rating. Fire stops could be needed for cables which go through fire-rated floors and walls.