Drive Motors

Motor Control Centers or likewise called MCC's, are an assembly of one enclosed section or more, that have a common power bus principally consisting of motor control units. They have been utilized since the 1950's by the vehicle business, in view of the fact that they utilized a lot of electric motors. Today, they are utilized in other industrial and commercial applications.

In factory assembly for motor starter; motor control centers are rather common practice. The MCC's comprise metering, variable frequency drives and programmable controllers. The MCC's are usually utilized in the electrical service entrance for a building. Motor control centers commonly are used for low voltage, 3-phase alternating current motors that range from 230 V to 600V. Medium voltage motor control centers are intended for big motors that range from 2300V to 15000 V. These units make use of vacuum contractors for switching with separate compartments to be able to achieve power switching and control.

In factory area and locations that have dusty or corrosive processing, the MCC could be installed in climate controlled separated locations. Normally the MCC will be positioned on the factory floor near the machinery it is controlling.

A MCC has one or more vertical metallic cabinet sections with power bus and provisions for plug-in mounting of individual motor controllers. Smaller controllers can be unplugged from the cabinet so as to complete maintenance or testing, while really large controllers could be bolted in place. Every motor controller consists of a solid state motor controller or a contractor, overload relays In order to protect the motor, fuses or circuit breakers to supply short-circuit protection as well as a disconnecting switch to be able to isolate the motor circuit. Separate connectors allow 3-phase power to enter the controller. The motor is wired to terminals situated inside the controller. Motor control centers provide wire ways for power cables and field control.

Inside a motor control center, each and every motor controller could be specified with lots of different choices. Some of the options comprise: pilot lamps, separate control transformers, extra control terminal blocks, control switches, and numerous types of bi-metal and solid-state overload protection relays. They even comprise various classes of kinds of circuit breakers and power fuses.

There are a lot of options concerning delivery of MCC's to the client. They can be delivered as an engineered assembly with interlocking wiring to a central control terminal panel board or programmable controller together with internal control. Conversely, they could be supplied ready for the customer to connect all field wiring.

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