## **Drive Motor for Forklifts**

Drive Motor Forklifts - Motor Control Centers or also called MCC's, are an assembly of one enclosed section or more, that have a common power bus mostly containing motor control units. They have been used since the 1950's by the automobile industry, as they used lots of electric motors. Now, they are utilized in a variety of industrial and commercial applications.

In factory assembly for motor starter; motor control centers are rather common technique. The MCC's consist of variable frequency drives, programmable controllers and metering. The MCC's are usually seen in the electrical service entrance for a building. Motor control centers commonly are utilized for low voltage, 3-phase alternating current motors which range from 230 V to 600V. Medium voltage motor control centers are designed for large motors which range from 2300V to 15000 V. These units use vacuum contractors for switching with separate compartments so as to accomplish power switching and control.

In locations where really dusty or corrosive methods are occurring, the motor control center may be established in a separate airconditioned room. Normally the MCC will be positioned on the factory floor close to the equipment 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 may be unplugged from the cabinet so as to complete maintenance or testing, whereas very big controllers can be bolted in place. Each motor controller consists of a contractor or a solid state motor controller, overload relays to protect the motor, circuit breaker or fuses in order to supply short-circuit protection and a disconnecting switch so as to isolate the motor circuit. Separate connectors allow 3-phase power to enter the controller. The motor is wired to terminals situated in the controller. Motor control centers offer wire ways for field control and power cables.

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

Regarding the delivery of motor control centers, there are many options for the consumer. These can be delivered as an engineered assembly with a programmable controller together with internal control or with interlocking wiring to a central control terminal panel board. On the other hand, they could be provided set for the client to connect all field wiring.

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