## **Forklift Drive Motors**

Forklift Drive Motor - MCC's or otherwise known as Motor Control Centersare an assembly of one or more sections which contain a common power bus. These have been utilized in the vehicle trade since the 1950's, since they were utilized lots of electric motors. Nowadays, they are utilized in other commercial and industrial applications.

In factory assembly for motor starter; motor control centers are rather common technique. The MCC's include programmable controllers, metering and variable frequency drives. The MCC's are usually found 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 utilize vacuum contractors for switching with separate compartments in order to accomplish power switching and control.

Inside factory area and locations which have corrosive or dusty processing, the MCC can be installed in climate controlled separated locations. Normally the MCC will be situated on the factory floor close to the machinery it is controlling.

A MCC has one or more vertical metal cabinet sections with power bus and provisions for plug-in mounting of individual motor controllers. Smaller controllers can be unplugged from the cabinet to be able to complete maintenance or testing, while really large controllers could be bolted in place. Each motor controller consists of a solid state motor controller or a contractor, overload relays to be able to protect the motor, fuses or circuit breakers to supply short-circuit protection and 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 located in the controller. Motor control centers provide wire ways for field control and power cables.

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

Regarding the delivery of motor control centers, there are several options for the consumer. 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 ready for the customer to connect all field wiring.

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