

## Drive Motor Forklifts

Forklift Drive Motor - MCC's or Motor Control Centers are an assembly of one section or more that have a common power bus. These have been used in the automobile trade since the 1950's, because they were made use of many electric motors. These days, they are utilized in a variety of industrial and commercial applications.

Motor control centers are a modern method in factory assembly for several motor starters. This machine could consist of metering, variable frequency drives and programmable controllers. The MCC's are usually found in the electrical service entrance for a building. Motor control centers often are utilized for low voltage, 3-phase alternating current motors which vary from 230 V to 600V. Medium voltage motor control centers are made for large motors that range from 2300 volts to 15000 volts. These units make use of vacuum contractors for switching with separate compartments in order to attain power control and switching.

In areas where very corrosive or dusty processes are taking place, the motor control center can be established in a separate air-conditioned room. Usually the MCC will be located on the factory floor adjacent 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 could be unplugged from the cabinet so as to complete testing or maintenance, while extremely large controllers can be bolted in place. Every motor controller consists of a solid state motor controller or a contractor, overload relays to be able to protect the motor, circuit breaker or fuses so as to supply short-circuit protection and a disconnecting switch in order to isolate the motor circuit. Separate connectors enable 3-phase power to enter the controller. The motor is wired to terminals positioned in the controller. Motor control centers supply wire ways for power cables and field control.

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

There are numerous options concerning delivery of MCC's to the customer. They could 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 provided prepared for the customer to connect all field wiring.

Motor control centers usually sit on the floor and must have a fire-resistance rating. Fire stops could be required for cables that penetrate fire-rated walls and floors.