

## Forklift Drive Motor

Forklift Drive Motor - Motor Control Centers or also called MCC's, are an assembly of one or more enclosed sections, that have a common power bus mainly consisting of motor control units. They have been used since the 1950's by the automobile industry, in view of the fact that they used many electric motors. Nowadays, they are utilized in various commercial and industrial applications.

Within factory assembly for motor starter; motor control centers are quite common technique. The MCC's comprise metering, variable frequency drives and programmable controllers. The MCC's are commonly utilized in the electrical service entrance for a building. Motor control centers commonly are used for low voltage, 3-phase alternating current motors which range from 230 volts to 600 volts. Medium voltage motor control centers are designed for large 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.

In factory locations and area which have corrosive or dusty processing, the MCC can be installed in climate controlled separated locations. Usually the MCC will be situated on the factory floor adjacent to 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 may be unplugged from the cabinet to be able to complete testing or maintenance, while very big controllers can be bolted in place. Every motor controller has a contractor or a solid state motor controller, overload relays to protect the motor, fuses or circuit breakers in order to provide 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 situated inside the controller. Motor control centers offer wire ways for power cables and field control.

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

There are numerous alternatives concerning delivery of MCC's to the customer. 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. On the other hand, they can be provided ready for the customer to connect all field wiring.

MCC's usually sit on floors that are required to have a fire-resistance rating. Fire stops may be needed for cables which penetrate fire-rated floors and walls.