

Drive Motor for Forklifts

Forklift Drive Motor - MCC's or otherwise known as Motor Control Centers are an assembly of one or more sections that include a common power bus. These have been used in the automobile business ever since the 1950's, as they were utilized a lot of electric motors. Nowadays, they are used in different commercial and industrial applications.

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

In areas where very corrosive or dusty processes are occurring, the motor control center can be installed in a separate air-conditioned room. Typically the MCC would be located on the factory floor adjacent to the machines 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 maintenance or testing, while very large controllers can be bolted in place. Each motor controller consists of a contractor or a solid state motor controller, overload relays in order to protect the motor, fuses or circuit breakers in order 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 positioned inside the controller. Motor control centers supply wire ways for field control and power cables.

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

There are numerous options regarding 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. On the other hand, they could be provided ready for the client to connect all field wiring.

MCC's generally sit on floors which should have a fire-resistance rating. Fire stops can be needed for cables which penetrate fire-rated walls and floors.