

Forklift Drive Motors

Drive Motor Forklift - Motor Control Centers or likewise called MCC's, are an assembly of one enclosed section or more, which have a common power bus mostly consisting of motor control units. They have been used ever since the 1950's by the automobile industry, as they used many electric motors. These days, they are used in other industrial and commercial applications.

Motor control centers are a modern method in factory assembly for some motor starters. This particular equipment can consist of programmable controllers, metering and variable frequency drives. The MCC's are normally seen in the electrical service entrance for a building. Motor control centers commonly are used for low voltage, 3-phase alternating current motors which vary from 230 volts to 600 volts. Medium voltage motor control centers are designed for large motors that vary from 2300 volts to 15000 volts. These units utilize vacuum contractors for switching with separate compartments so as to accomplish power control and switching.

In factory area and locations which have dusty or corrosive processing, the MCC can be installed in climate controlled separated locations. Typically the MCC will be positioned on the factory floor close to the machines 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 in order to complete testing or maintenance, whereas really large controllers can be bolted in place. Each motor controller has a contractor or a solid state motor controller, overload relays to protect the motor, fuses or circuit breakers to provide short-circuit protection as well as a disconnecting switch in order to isolate the motor circuit. Separate connectors allow 3-phase power in order to enter the controller. The motor is wired to terminals located within the controller. Motor control centers supply wire ways for field control and power cables.

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

Concerning the delivery of motor control centers, there are lots of 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 set for the customer to connect all field wiring.

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