Forklift Drive Motor

Forklift Drive Motor - Motor Control Centers or otherwise called MCC's, are an assembly of one enclosed section or more, which have a common power bus principally containing motor control units. They have been used since the 1950's by the automobile trade, since they utilized a large number of electric motors. Nowadays, they are used in other commercial and industrial applications.

Motor control centers are a modern practice in factory assembly for several motor starters. This machinery could include programmable controllers, metering and variable frequency drives. The MCC's are normally used 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 V to 600V. Medium voltage motor control centers are made for large motors that vary from 2300 volts to 15000 volts. These units utilize vacuum contractors for switching with separate compartments to be able to accomplish power control and switching.

In areas where very corrosive or dusty methods are happening, the motor control center could be installed in a separate air-conditioned room. Normally the MCC would be situated on the factory floor near 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 testing or maintenance, whereas very big controllers can be bolted in place. Every motor controller consists of a contractor or a solid state motor controller, overload relays to be able to protect the motor, circuit breaker or fuses to be able to provide short-circuit protection as well as a disconnecting switch so as to isolate the motor circuit. Separate connectors enable 3-phase power so as to enter the controller. The motor is wired to terminals located inside the controller. Motor control centers supply wire ways for power cables and field control.

Every motor controller within a motor control center can be specified with several options. These options comprise: pilot lamps, separate control transformers, extra control terminal blocks, control switches, as well as many kinds of bi-metal and solid-state overload protection relays. They even have different classes of kinds of circuit breakers and power fuses.

There are lots of alternatives regarding delivery of MCC's to the client. 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. Conversely, they can be provided prepared for the client to connect all field wiring.

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