Forklift Drive Motors

Forklift Drive Motor - Motor Control Centers or MCC's, are an assembly of one enclosed section or more, which have a common power bus principally consisting of motor control units. They have been used since the 1950's by the vehicle trade, because they used a large number of electric motors. Now, 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 programmable controllers, metering and variable frequency drives. The MCC's are usually utilized in the electrical service entrance for a building. Motor control centers often are utilized for low voltage, 3-phase alternating current motors that vary from 230 volts to 600 volts. Medium voltage motor control centers are intended for large motors which vary from 2300 volts to 15000 volts. These units make use of vacuum contractors for switching with separate compartments in order to accomplish power switching and control.

Inside factory area and locations which have corrosive or dusty processing, the MCC can be installed in climate controlled separated locations. Typically the MCC would be positioned on the factory floor close 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 maintenance or testing, while really large controllers can be bolted in place. Each and every motor controller has a solid state motor controller or a contractor, overload relays to protect the motor, circuit breaker or fuses to be able to provide short-circuit protection and a disconnecting switch so as 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 provide wire ways for field control and power cables.

Within a motor control center, every motor controller could be specified with lots of various alternatives. Some of the choices consist of: extra control terminal blocks, control switches, pilot lamps, separate control transformers, and numerous kinds of solid-state and bi-metal overload protection relays. They even comprise various classes of kinds of circuit breakers and power fuses.

There are several alternatives 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 along with internal control. On the other hand, they can be supplied set for the customer to connect all field wiring.

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