Drive Motor for Forklift

Forklift Drive Motor - Motor Control Centers or otherwise called MCC's, are an assembly of one or more enclosed sections, which have a common power bus mainly comprising motor control units. They have been utilized ever since the 1950's by the vehicle industry, because they utilized a large number of electric motors. Now, they are used in various commercial and industrial applications.

In factory assembly for motor starter; motor control centers are rather common practice. The MCC's include metering, variable frequency drives and programmable controllers. The MCC's are normally found 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 V to 600V. Medium voltage motor control centers are intended for large motors that vary from 2300 volts to 15000 volts. These units use vacuum contractors for switching with separate compartments to be able to attain power switching and control.

In areas where very dusty or corrosive processes are taking place, the motor control center can be established in a separate air-conditioned room. Usually the MCC would be situated on the factory floor next 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 can be unplugged from the cabinet in order to complete maintenance or testing, while very large controllers can be bolted in place. Every motor controller consists of a solid state motor controller or a contractor, overload relays to protect the motor, circuit breaker or fuses in order to provide 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 situated in the controller. Motor control centers offer wire ways for power cables and field control.

Every motor controller in a motor control center can be specified with different alternatives. These 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 likewise comprise different classes of kinds of circuit breakers and power fuses.

Concerning the delivery of motor control centers, there are various options for the consumer. These can be delivered as an engineered assembly with a programmable controller together with internal control or with interlocking wiring to a central control terminal panel board. Conversely, they could be provided ready for the client to connect all field wiring.

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