Drive Motor for Forklifts

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

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

In locations where really corrosive or dusty processes are taking place, the motor control center could be established in a separate air-conditioned room. Typically the MCC would be situated on the factory floor next to the machinery 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 to complete testing or maintenance, whereas very big controllers can be bolted in place. Each motor controller has a contractor or a solid state motor controller, overload relays In order to protect the motor, fuses or circuit breakers to supply short-circuit protection as well as a disconnecting switch so as to isolate the motor circuit. Separate connectors enable 3-phase power in order to enter the controller. The motor is wired to terminals situated inside the controller. Motor control centers offer wire ways for power cables and field control.

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

Concerning the delivery of motor control centers, there are several alternatives for the client. 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 can be supplied prepared for the customer to connect all field wiring.

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