Square D Application Solutions:

Medium Voltage Motor Controller for HVAC/R Chiller Applications

When combined with our other electrical distribution and control products, the MOTORPACTTM Medium Voltage Motor Controller provides a system-wide global solution for HVAC chiller applications, including:

- Water and cooling tower pumps
- Heating ventilation and air conditioning plants
- Industrial process water systems

Solution

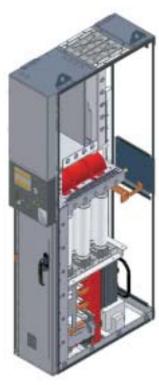
The MOTORPACT MV Motor Controller from Square D is a cost-effective solution featuring added options and serviceability that is unmatched in the industry. Featuring industry-first innovations, this controller provides unmatched performance, increased reliability and decreased maintenance – all the requirements necessary to meet high performance HVAC/R equipment designs.

Customer Benefits

- Isolation switch and low voltage at a consistent accessible height
- Added functionality (compartmentalization, cable grounding switch, Fuselogic, etc.)
- Simplified main bus features fewer connections and no risers for easy maintenance
- Infrared thermal scanning windows for monitoring
- Simple and rugged construction for increased durability

Design Features

- Rugged 11-gauge steel ensures reliability and longer life
- Front access only or optional rear-accessibility
- Power fuses, mounted independent of the contactor, may be removed easily without withdrawing the contactor
- Low voltage compartment mounted on slide-out rails
- Encased isolation switch eliminates need for shutters and features maintenance-free contacts capable of 5000 operations – more than double the industry norm
- Optional soft start ramping reduces mechanical shock during motor starting or stopping and provides smooth, stepless acceleration and controlled deceleration
- Optional cable grounding switch provides a 3-pole, gang-operated means to discharge any capacitance in the cables and features a fault close rating of 5kA
- Meets international standards, including compliance with NEMA, UL, cUL and IEC



MOTORPACT™ MV Motor Controller

Solution Values

- New "single source" offering for medium voltage motor control, distributions and circuit protection solutions
- Complete component packages include soft starters and live reactors for multiple motor types
- Universal mounting and a broad range of design settings adapt for retrofit installations



Load compartment with rails extended

Slide/swing out LV Panel

Medium Voltage Motor Controller for HVAC/R Chiller Applications

Available controller types for chiller retrofit requirements

- Full voltage non-reversing
 - Squirrel cage
 - Two-speed, two winding
 - Two-speed, one winding
 - Latched controller
 - Synchronous
 - Brushless synchronous
- Full voltage reversing
 - Squirrel cage
 - Synchronous
 - Two-speed

■ Reduced voltage

- Solid state soft start
- Autotransformer/squirrel cage
- Autotransformer/synchronous
- Autotransformer/brushless synchronous
- Primary reactor/squirrel cage
- Primary reactor/synchronous
- Primary reactor/brushless synchronous

Questions and Answers

- Q: Will MOTORPACT™ Medium Voltage Motor Controllers connect to existing Square D controllers, in addition to other major equipment?
- A: Yes, a transition section will be required.
- Q: Are controller ratings the same as for the previous model ISO-FLEX™?
- A: The ratings meet or exceed those of ISO-FLEX.
- Q: Does a MOTORPACT controller offer all the same type starter applications as ISOFLEX?
- A: Yes, this controller expands our offering of reduced voltage solid state soft starters.

