



# MOTORTRONICS™

*Solid State AC Motor Control*

*Low & Medium Voltage*

*Soft Starters for*

*Compressor Applications*

Lower Your Maintenance Cost and  
Reduce Mechanical Stress

*Piston Compressors*

*Screw Compressors*

*Centrifugal Compressors*

*Axial Compressors*

**Standalone Soft Starters or  
Packaged to customer specification**



# Low & Medium Voltage Packaged Solutions & Standalone Soft-Starters



VMX-H

## Built-in Functions

- Operator Interface, Ramp Control Choices (4)
- Dual Ramps, Jog Function, Kick Start Function
- Pump-Flex™ Deceleration Ramp, Restart Delay Timer
- Time Clock Controller
- RS-485 Serial Communications



MVC4

## Low Voltage

### Power Components

- 6 SCRs in inverse parallel pairs for full phase angle soft start control (1600V PIV)
- RC snubber for dv/dt protection of each SCR pair

### Line Voltage Range

- 200 to 600 VAC, 3 phase +10% -15% , 50/60Hz

### Current Ratings

- 18 - 1250A depending on unit selection
- Range of each unit is 50-100% of max current rating

### AC Supply Voltage

- User supplied 120VAC +10% -15% tolerance, 60Hz
- Optional 240VAC 50Hz control available

### Start/Stop Control Choices

- 2-wire Run-Stop using dry contacts
- 3-wire Start/Stop with built-in seal in contact
- N.C. Interlock input (dry contact) for remote devices



VMX2

## Medium Voltage

### Type of Load

- 3-phase medium voltage AC induction or synchronous motors
- AC Supply Voltage

- 2300, 3300, 4160, 6000/7200V, 11-15kV VAC +10% to -15%, 50/60 Hz line voltages

### HP Ratings

- Up to 10,000 HP @ 7.2kV (800 Amps)
- Up to 20,000 HP @ 15kV (800 Amps)
- Contact factory for higher rating requirements

### Overload Rating

- AC53b 600-30-60m

### Power Circuits

- Series strings of SCR power modules (1, 2 or 3 matched pairs of SCRs per phase depending on voltage rating)

### SCR Peak Inverse Voltage

Line Voltage	PIV Rating	Line Voltage	PIV Rating
2300	6500	6500	19500
3300	9000	6900-7200	26000
4160	13000	11000	27000
6000	18000	13-15kV	39500

### BIL Rating

- 2300V - 7200V 60kV, 11000 - 15000V (110kV)

### Transient Voltage Protection

- dv/dt circuits (1 per SCR pair)

### Vacuum Bypass Contactor

- Standard on all models, line start rated

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