

Type of Load

3-phase medium voltage AC induction or synchronous motors

AC Supply Voltage

1000, 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 (1500 Amps)

Up to 20,000 HP @ 15kV (800 Amps)

Contact factory for higher rating requirements

Overload Rating

AC53b 600-30-60m (500% 60sec, 600% 30sec)

Power Circuit

Highest Rated Series SCRs Available

SCR Peak Inverse Voltage

Line Voltage	PIV Rating	Line Voltage	PIV Rating
1000	4500	6500	19500
2300	6500	6900-7200	26000
3300	9000	11000	27000
4160	13000	13-15kV	39500
6000	18000		

BIL Rating

1000V: 30kV

2300V - 7200V: 60kV

11000 - 15000V: 110kV

Corona Free Design

Transient Voltage Protection

Standard on all models

Vacuum Bypass Contactor

In-Line and Bypass Standard on all Models

Ambient Operating Conditions

0 - 50°C (82° F to 122° F) (Optional -20° to 50° C with heaters)

5 - 95% relative humidity

0 - 3300 ft (1000m above sea level without derating)

Operator Interface Panel (HMI)

Programmable keypad/operator with 2 lines x 20 character backlit LCD

Plain Text Display.

Status/Alarm LEDs (indicate: Power, Run, Alarm, Trip, Aux 1 - 8)

Available I/O

Dedicated E-Stop Circuit

Multiple Form C contacts rated 5A @ 250VAC max. 8 Fully - programmable Relays (4 customer definable)

Fail Safe Operation 5 Dedicated Relays (fault, at-speed, etc)

2 Analog Outputs

Acceleration Control

Voltage Ramp, Voltage Ramp with Current Limit, Power (KW) Ramp, Current Ramp, Current Limit, or Custom Ramp, Tach Feedback Closed Loop Speed

Ramp optional

Dual Ramp, Kick Start, Jog

Deceleration Control

Pump-Flex Decel Control Standard on all Models

Motor and Starter Protection

Electronic Overload (49)

Instantaneous Over Current (50)

AC Time Over Current (51)

Under Current (37)

Current Imbalance (46)

Phase Loss (46)

Over Voltage (59)

Under Voltage (27)

Phase Rotation (47)

Starter Over-Temp

Starts per Hour Lockout (66)

Lockout / Start Inhibit (86)

Time between starts (66) Shorted SCR

Bearing RTD Protection (38) optional

Stator RTD Protection (49) optional

Mechanical Condition (39) optional

Instantaneous Over Current (50)

AC Time Over Current (51)

Ground Fault (Option) Incomplete Sequence (48)

Power Factor Trip (55)

Differential (87M) optional

Ground fault (50N/51N, 50G/51G)

Rate of Rise "di/dt" (7)

Statistical Data

Fault log up to 60 events (data includes date & time)

Elapsed run time, last start time, average starting current,

Time-to-trip, remaining inhibit time and starts/hour values

Metering (Voltage & Current)

Percent of FLA, phase currents, kVAR, kVA, kW, power factor, demand, avg. start current, remaining thermal register, thermal capacity to start, measured capacity to start, time since last start, line frequency, phase order, RTD values (optional)

Enclosure

NEMA 12/3R optional (not for direct sun applications), top and bottom entrance plates, 11 gauge steel, ASA #61 gray powder coated paint

Commissioning Software

Free MLink Windows® Based Programming Software

Communications

RS485 with Modbus RTU protocol or RS232 with windows interface

Optional DeviceNet, Profibus, Ethernet Modbus/TCP, Ethernet IP

Optional Web Server Remote Monitoring

Optional EZ-SCADA Communications



3 YEAR WARRANTY
with factory startup