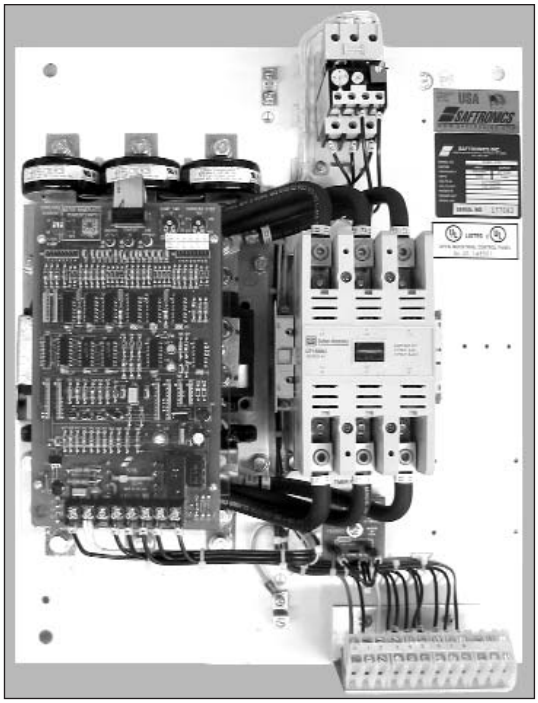
# SY6

## Solid State Reduced Voltage Starter

SAFTRONICS
www.saftronics.com

- AC Solid State Motor Starter
- 7 1/2 - 125 HP
- Universal Source Matching. SY6 automatically adjusts itself to whatever input voltage is applied
- 2 modes of operation
  - Current Ramp - for heavy friction-type loads
  - Constant Current - for light inertia-type loads
- Closed loop control with current feedback
- Compact size
- 6 SCR firing
- Digital rotary switches for motor Full Load Ampere (FLA) selection
- Available in a full range of package configurations (chassis, NEMA 1, NEMA 12, etc.)
- Full range of options available (circuit breaker, reversing, push buttons, etc.)

Saftronics prides itself on developing the perfect motor starters for a world of applications. The SY6 line of simple, reliable, and easy to use starters, balance state-of-the-art design and construction with maximum versatility and value. Packed with features and performance you expect from any Saftronics product, the SY6 is easy to use, yet hard to beat.

# Compact • Reliable • Economical

## Drives For Every Industry

### Features

- Smooth, controlled acceleration extends the life of belts, shafts, gear boxes, power trains and motors while reducing power demand charges.
- Dual Starting Modes (constant current or current ramp) provide optimal starting conditions for heavy friction loads (conveyors, crushers, compressors, mixers, screens) or lighter inertial loads (fans and blowers, pumps and centrifuges, saws, chippers, wood working equipment and machine tools).
- Solid State Switches (SCR's) eliminate the maintenance and downtime associated with coil and contact failure and replacement in "across the line", WYE-Delta and auto transformer methods of AC motor starting.
- Universal Source matching feature allows reliable equipment usage in applications where power fluctuations are common from 200 to 600 VAC and 45 to 65 Hz.
- NEMA 4/12 Enclosed Models include a "bypass" contactor which eliminates heat and makes these units ideal for dusty, hot, or confined space applications.
- Compact size provides retrofit and design flexibility.
- Reduced Voltage Starting results in lower peak starting current which minimizes the voltage drop when starting motor with a generator.

### Protection

- Phase Loss
- MOV Surge suppression across each SCR pair
- Class 10 bimetallic thermal overload
- Soft turn-off to reduce voltage stress on SCR's, motor windings, and bypass contactors

### Control & Diagnostics

- Start-mode select switch (constant current or current ramp
- Motor FLA digital rotary selector switch
- Current step potentiometer also sets start level in ramp mode
- Ramp time potentiometer (1 to 30 seconds)
- LED Diagnostics: Control voltage, Line voltage, Starter ON

The Saftronics SY6 Series of reduced voltage, AC motor starters offers you a superior alternative to outdated technology. Solid State Switches (SCR's) replace mechanical contacts to allow you to regulate the application of current to the motor. This results in a controlled start and eliminates contact wear and arcing. The specific features of the SY6 Series give you a competitive edge by reducing the operating and maintenance costs on a long list of applications which include the following:

| | | |
|---|---|---|
| Aggregate Industry | - | Crushers, Conveyors, Screens, and Washers |
| Forest Industry | - | Chippers, Conveyors, Saws, Band Mills, Planers, and Edgers |
| Recycling Industry | - | Conveyors, Crushers, Chippers, and Compactors |
| HVAC Industry | - | Fans and Blowers |
| Food Industry | - | Mixers, and Conveyors |
| Chemical Industry | - | Pumps |

### Specifications

| ITEM | RATINGS |
|---|---|
| Power Ratings | 2 - 100 HP @ 460 V |
| Input Voltage | 200 - 575 VAC ±10% 50/60 Hz |
| Control Voltage | 120 VAC ±10% |
| SCR Rating | 1600 V PIV (with MOV Protection) |
| Overload Ratings | 600% - 6 Seconds, 500% - 30 Seconds, 115% - Continuous |
| Output Relay | Form C (NO/NC) Run Contact 1.0 Amp 230 VAC |
| LED Indicators | "Control Voltage", "Starter On", "Line Present" |
| Set-Up Devices | Switches and Potentiometers |
| Start Modes | Constant Current or Current Ramp (selectable) |

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24 / 7 Emergency Support
Call 800 533-0031

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