

PF Softstarter Motor Control Intelligent Controller



Sprecher + Schuh's PF Softstarter Controller provides intelligence, unmatched performance, flexibility, and diagnostics in a modular compact design for controlling either a standard squirrel-cage induction motor or a star-delta motor. Seven standard, and two optional modes of operation are available within a single controller.

- Built-in SCR Bypass/Run Contactor
- Built-in Electronic Motor Overload Protection
- Built-in CT on each phase
- LCD Display
- Keypad programming
- Four programming Auxiliary Contacts
- Self diagnostic capabilities

The PF Softstarter is available for motors rated 1...1250A (up to 1000Hp@480V AC), 200....600V AC, 50 and 60Hz. In addition to motors, the PF Softstarter can be used to control resistive loads.



Modular and Compact Softstarter

The PF Softstarter reduces both product size and the total cost to the customer. As standard, the PF Softstarter includes electronic overload, integral bypass and motor starting capabilities for both star-delta and standard squirrel-cage induction motors, advanced protection and diagnostics in a compact maintainable modular, cost-effective package.

Large or small HP and options for any application

The basic PF Controller combines large horsepower capacity with the most popular starting modules (up to 1000HP @ 460V, 3-wire). Even in middle and low horsepower applications, PF Softstarters can be configured to provide exactly the right starting and stopping profile.

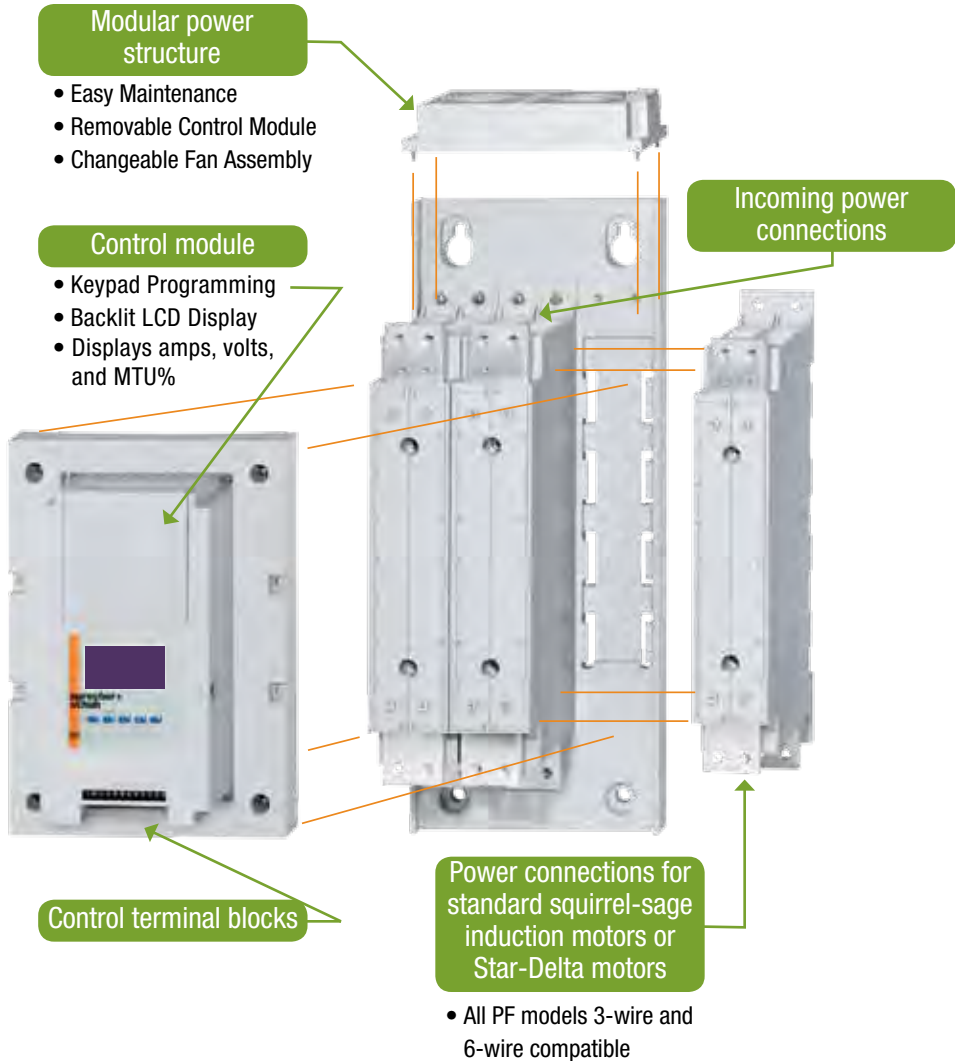
Precise programming set-up with built-in keypad & LCD display

The PF Controller comes equipped with a built-in keypad and LCD display for programming the controller parameter settings for the specific industrial application. The three-line 16-character backlit LCD display provides parameter identification using clear informative text. Parameters are arranged in an organized four-level menu structure for ease of programming and fast access to parameters which allows the PF Softstarters set-up to be performed quickly and easily.

Convenient Features

The PF Controller is designed with easy maintenance in mind. It has a modular Power Structure with a removable Control Module and changeable Fan Assembly for your convenience.

PF Softstarter Features



Product Overview

Modular Design

The PF Softstarter provides intelligence, unmatched performance, flexibility and diagnostics in a modular compact design for controlling either a standard squirrel-cage induction motor or a star-delta motor.

Compact Size

The PF Softstarter integrates a bypass to minimize heat generation during run time. The bypass automatically closes when the motor reaches its nominal speed, resulting in a cooler-running component and reduction in enclosure size.

Voltage Range

Control Range

100...240V AC or 24V AC/DC

Motor Voltage Range

200...600V AC, 50/60 Hz

Horsepower Range

0.5...1000Hp@480V AC

0.5...1400Hp@480V AC (Delta Connected)

Standard Modes of Operation

- Soft Start with selectable kick start
- Current Limit Starting
- Dual ramp start
- Full voltage starting
- Linear speed acceleration
- Preset slow speed
- Soft stop

Option Modes of Operation

- Pump Control
- Brake Control - Includes Smart Motor Brake, Accu-stop and Slow Speed with Braking

Current Range - 16 Models

| Product Rating | Line Current | Delta Current |
|----------------|--------------|---------------|
| 5 | 5 | 9 |
| 25 | 25 | 43 |
| 43 | 43 | 74 |
| 60 | 60 | 104 |
| 85 | 85 | 147 |
| 108 | 108 | 187 |
| 135 | 135 | 234 |
| 201 | 201 | 348 |
| 251 | 251 | 435 |
| 317 | 317 | 549 |
| 361 | 361 | 625 |
| 480 | 480 | 831 |
| 625 | 625 | 850 |
| 780 | 780 | 900 |
| 970 | 970 | 1200 |
| 1250 | 1250 | 1600 |



Starting Modes

| | PFS Standard | PFB Pump Control | PFD Braking Control |
|-----------------------------|--------------|------------------|---------------------|
| Soft Start | X | X | X |
| Soft Stop | X | ~ | ~ |
| Current Limit | X | X | X |
| Full Voltage | X | X | X |
| Kick Start | X | X | X |
| Preset Slow Speed | X | ~ | X |
| Linear Speed Start and Stop | X | ~ | ~ |
| Dual Ramp | X | ~ | ~ |
| Pump Start and Stop | ~ | X | ~ |
| Smart Motor Brake | ~ | ~ | X |
| Accu-Stop | ~ | ~ | X |
| Slow Speed with Braking | ~ | ~ | X |

The PF Softstarter controller meets applicable requirements as a motor overload protective device.