

PDS

Designed for wye-delta apps Microprocessor controlled Mounts on DIN-rail

PDS Wye-delta Softstarter Controller

**Replaces traditional
wye-delta starters**

**Controls motors to
100HP (@460V)**

**Built-in overload and
SCR bypass**

**Self diagnostic
capabilities**

Specifically designed to operate 3-phase, six lead wye-delta motors with an "inside the delta" configuration; 11 amp sizes available

Selectable ramp times of 2, 5, 10 or 15 seconds (via DIP-switch)

Built-in electronic overload protection; select from OFF, 10, 15 or 20 seconds, manual or automatic trip

Built-in SCR bypass contactors on all three phases minimize heat, allowing compact size and longer SCR life

Built-in thermistors shut down the PDS unit when maximum power pole temperature is reached, protecting internal SCRs

Built-in phase loss and open load sensing prevents motor burnout during single phase conditions



Offers current limit starting from 150% to 350% of FLA; units available up to 147 FLA (100HP @460V / 150HP @ 575V)

Rated operation from 0° to 50°C without derating

A digital rotary switch is quickly set to the correct value; LED indication of all faults is standard

Accessories such as aux contact blocks, MOVs, fans and connector modules add flexibility

Directly connects to KT7 Motor Circuit Controller for BCPD protection or CA7 contactor for isolation

Two control voltage options available for remote control input; 100...240V or 24VAC/DC

Compact design; one-third the size of electromechanical solutions; small frame size (to 64A) measures 45 x 140 x 100mm; large frame (to 147A) measures just 72 x 200 x 130mm

As little as 45mm (1-3/4") wide



The PDS Wye-delta Controller is one of the newest members of Sprecher + Schuh's broad line of softstarters. This DIN-rail mounted unit provides current limit starting for a variety of applications including hydraulic elevators, compressors, chillers, pumps, conveyors, crushers and many applications where six lead, three phase motors are used.

The new PDS softstarter is also at the heart of our Delta-pak™ assembly, specifically designed for the elevator industry (currently pending CSA Elevator Approval). Space saving and long lived, this wye-delta controller assembly is the perfect replacement for traditional electromechanical controllers.



Series PDS wye-delta controller

The PDS Delta-pak™ available soon

The PDS wye-delta softstarter will soon be available in a special assembly we call the PDS Delta-pak. This assembly is specifically designed for direct replacement or retrofit of traditional electromechanical wye-delta controllers in six wire elevator applications. The PDS Delta-pak consists of a PDS softstarter (see chart below), a CA7 fault contactor and terminal connections, all preassembled on DIN-rail or backpan. CSA Elevator Approval is pending. In cases where CSA Approval is not necessary, the unit is easily assembled by the user from stock Sprecher + Schuh components.

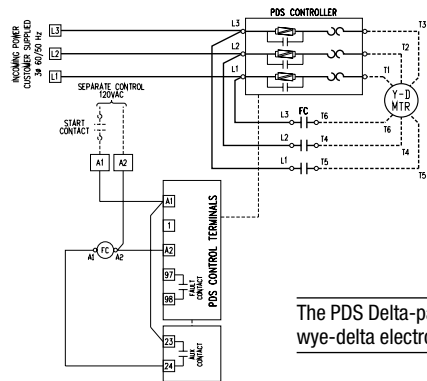
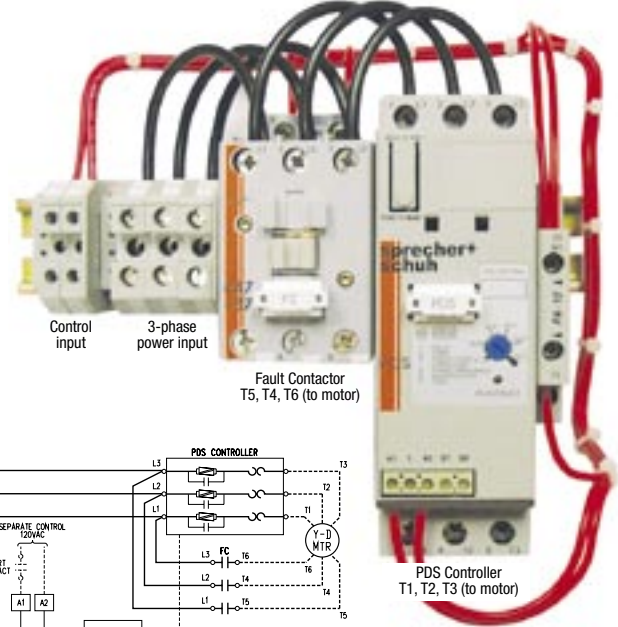
There are many advantages to using the PDS Delta-pak over electromechanical wye-delta controllers. This small, powerful assembly includes numerous features like:

- built-in overload protection
- bypass contactors on each phase
- fault contactor
- over temperature protection
- phase loss / imbalance protection...
- no transition spikes
- less wiring and longer life
- PDS fault contacts available for other uses
- ability to add aux's to fault contactor to indicate motor running

all at a price approaching electromechanical controllers. With no contacts to burn out, the solid state PDS softstarter lasts up to six times longer than electromechanical devices while substantially reducing panel space.

The diagram to the right demonstrates how easy it is to wire the PDS Delta-pak into an existing two wire control scheme. Aside from removing or replacing the electromechanical wye-delta components, no other special considerations or alterations are necessary to the existing circuit.

8" ← →
Backpan mounted units measure 12" x 12"



The PDS Delta-pak™ easily replaces existing wye-delta electromechanical assemblies

PDS Selected Technical Data

Maximum Horsepower Three Phase				Current Rating	Overload Adjustment Range	PDS Softstarter with 100...240V AC control voltage	PDS Softstarter with 24V AC/DC control voltage	PDS Delta-pak Availability
200V	230V	460V	575V			Catalog Number	Catalog Number	
200...600 VAC Max. Applications								
0.5	0.5	1.5	2	3	1...3	PDS-003-600V	PDS-003-600V-024	
2	2	5	7.5	9	3...9	PDS-009-600V	PDS-009-600V-024	
3	5	10	10	16	5.3...16	PDS-016-600V	PDS-016-600V-024	
5	5	10	15	20	6.7...20	PDS-020-600V	PDS-020-600V-024	
7.5	7.5	15	20	25	9.2...27.7	PDS-025-600V	PDS-025-600V-024	✓
10	10	20	30	32	10.6...32	PDS-032-600V	PDS-032-600V-024	
15	15	30	40	51	17...51	PDS-051-600V	PDS-051-600V-024	
20	20	40	60	64	21.3...64	PDS-064-600V	PDS-064-600V-024	✓
20	25	50	60	74	24.7...74	PDS-074-600V	PDS-074-600V-024	✓
30	40	75	100	104	34.7...104	PDS-104-600V	PDS-104-600V-024	✓
40	50	100	150	147	49...147	PDS-147-600V	PDS-147-600V-024	✓

See Sprecher + Schuh's general catalog for complete information and pricing on PDS wye-delta softstarter controllers.

For 3-wire applications, check out Sprecher + Schuh's new PCS softstarter controller.