

Ultra compact design Microprocessor controlled Mounts on Panel or DIN-rail

PCS Softstarter Intelligent Controller

Three unique softstarting modes

Controls motors to 400HP (@480V)

Built-in overload and SCR bypass

Self diagnostic capabilities

Easy Set-up

Digital rotary switches quickly and easily set exact value. LED indication of all faults.

Line or Delta Compatible

The PCS is capable of running a 3-wire or 6-wire motor via a DIP switch setting.

Built-in Overload Protection

Electronic overload protection with selectable trip class. Overload trip class selection includes OFF, 10, 15 or 20 seconds. Manual or automatic trip reset.

Bypass Contactor

Bypass contactor on each phase. Once the motor is up to speed, the load is removed from the SCRs.

Over Temperature Protection

Internal thermistors monitor the SCR junction temperature. If overheated, microcomputer switches off the PCS and a TEMP fault is indicated via LED.

Phase Reversal Protection

When enabled via a DIP-switch, 3-phase input power will be verified before starting, ensuring the motor rotates in the same direction.

Phase Loss / Open Load

Automatic protection from motor burnout during single phase starting.

Phase Imbalance

The unit monitors for imbalance between phase currents. Tripping occurs when the difference between the minimum phase current and the maximum phase current exceeds 65% for 3 seconds, and a fault will be indicated.

Shorted SCR

Prior to every start and during starting, the unit will check all SCRs for shorts and unit load connections to the motor.

Push to Test Function

The unit with control wiring can be tested for fault conditions or reset.

Fault Diagnostics

Faults indicated by blinking LED

- Overload
- Overtemperature
- Phase Reversal
- Phase Loss/Open Load
- Phase Imbalance
- Shorted SCR
- Test

Auxiliary Contacts

The PCS is equipped with an internal NO auxiliary contact. Additional 1 or 2-pole auxiliary contacts can be snapped on the right side.



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

The PCS Softstarter Controller is one of the newest members of Sprecher + Schuh's broad line of softstarters. This DIN-rail or panel mounted unit provides three different soft starting modes for a variety of industrial applications including compressors, fans, lifts, chillers, conveyors and many applications where three phase motors are present.

The new PCS softstarter also includes a unique "soft stopping" mode for bringing loads to a controlled slow stop. This is useful in applications where spillage or tipping could occur without controlled deceleration.



PCS Series PCS softstarter controller

Compact Design in Five Frame Sizes

| Controller | Dimensions (mm) | | | DIN-rail mount | Panel mount |
|---------------|-----------------|-------|-------|----------------|-------------|
| | A | B | C | | |
| PCS-003...037 | 44.8 | 139.7 | 100 | ✓ | ✓ |
| PCS-043...085 | 72 | 206 | 130 | ✓ | ✓ |
| PCS-108...135 | 196.4 | 443.7 | 205.2 | | ✓ |
| PCS-201...251 | 225 | 560 | 265.3 | | ✓ |
| PCS-317...480 | 290 | 600 | 298 | | ✓ |



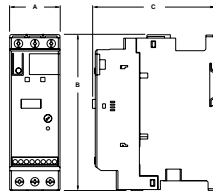
108...480A



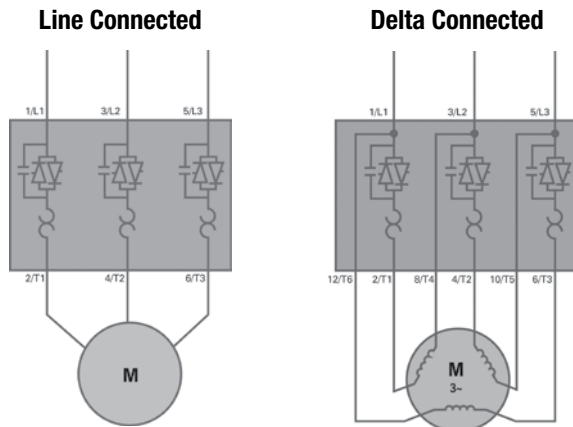
43...85A



3...37A

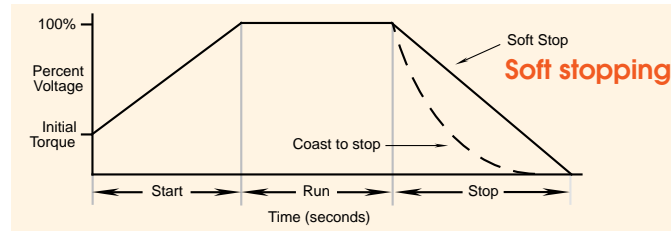
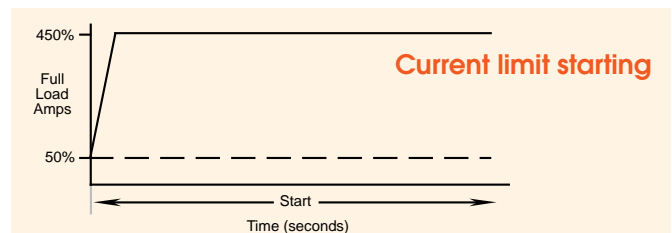
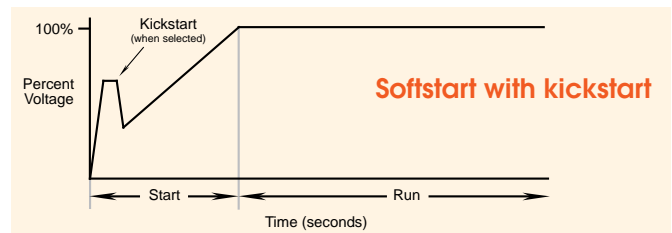
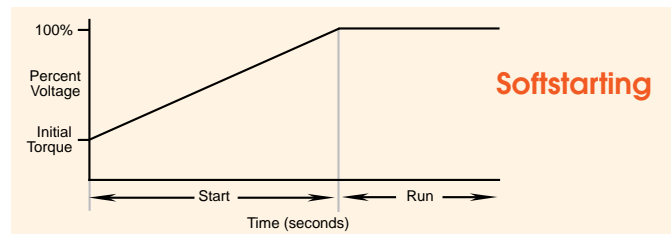


Line & Delta Connection



All PCS Models are Wye-Delta compatible

Four Modes of Operation



PCS Selected Technical Data

| Maximum Horsepower Three Phase Ⓣ | | | | Current Rating | Overload Adjustment Range | With 100...240V AC Control Voltage Ⓛ |
|--|------|------|------|----------------|---------------------------|--------------------------------------|
| 200V | 230V | 460V | 575V | | | |
| Starting Duty (350%) | | | | | | Catalog Number |
| 200...600V AC Max. Applications | | | | | | |
| 0.5 | 0.5 | 1.5 | 2 | 3 | 1...3 | PCS-003-600V |
| 2 | 2 | 5 | 7.5 | 9 | 3...9 | PCS-009-600V |
| 3 | 5 | 10 | 10 | 16 | 5.3...16 | PCS-016-600V |
| 5 | 5 | 10 | 15 | 19 | 6.3...19 | PCS-019-600V |
| 7.5 | 7.5 | 15 | 20 | 25 | 8.3...25 | PCS-025-600V |
| 7.5 | 10 | 20 | 25 | 30 | 10...30 | PCS-030-600V |
| 10 | 10 | 25 | 30 | 37 | 12.3...37 | PCS-037-600V |
| 10 | 15 | 30 | 40 | 43 | 14.3...43 | PCS-043-600V |
| 15 | 20 | 40 | 50 | 60 | 20...60 | PCS-060-600V |
| 25 | 30 | 60 | 75 | 85 | 28.3...85 | PCS-085-600V |
| 30 | 40 | 75 | 100 | 108 | 27...108 | PCS-108-600V |
| 40 | 50 | 100 | 125 | 135 | 34...135 | PCS-135-600V |
| 60 | 75 | 150 | 200 | 201 | 67...201 | PCS-201-600V |
| 75 | 100 | 200 | 250 | 251 | 84...251 | PCS-251-600V |
| 100 | 125 | 250 | 300 | 317 | 106...317 | PCS-317-600V |
| 125 | 150 | 300 | 350 | 361 | 120...361 | PCS-361-600V |
| 150 | 200 | 400 | 500 | 480 | 160...480 | PCS-480-600V |

Ⓛ For units with 24V AC/DC Control Voltage add "-024" to end of Catalog Number.

Ⓣ See Sprecher+Schuh catalog for Wye-Delta HP ratings.

See Sprecher + Schuh's general catalog for complete information and pricing on PCS softstarter controllers.

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