

Type PSS Softstarters

ABB Softstarters
Type PSS



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General information

ABB low voltage softstarters now cover the whole range from 3A to 1250A. The new PSS line brings a wide array of benefits for smaller motors in a flexible, compact form.

Compact line

PSS03 to PSS25 softstarters are a very compact solution for starting small motors with rated current from 3 to 25A. They are suitable for 230, 400, 500 and 600V and designed for DIN rail mounting.

The built-in bypass contacts allow you to build space-saving, compact designs.

Adjustable parameters include acceleration time and initial voltage for starting and deceleration time for stopping. In addition, these units cover a control voltage range of 24 – 110 VAC/DC and 100V – 277 VAC.

UL File # E161428

Flexible line

PSS18/30 to PSS300/515 softstarters provide a flexible solution for motor starting. Rated motor currents are covered from 18A to 300A when connected in line like a traditional full voltage starter. These units can also be wired inside the motor-delta, like a wye-delta starter, covering motors up to 515A. This flexibility makes it easier than ever before to replace wye-delta starters.

The total solid state solution — with no moving contacts in the power circuit — is an attractive solution for applications with many starts per hour. Adjustable parameters include acceleration time, initial voltage and optional current limit for starting and deceleration time for stopping.

Class 10 overload protection is standard for Type PSS enclosed softstarters.

UL File # E161428

PSS Open type

PSS - 18/30 - 500 - F ^③

Maximum motor current
when connected in-line

Maximum motor current
when connected inside delta

Control voltage

F - 100V – 120V, 50/60Hz
L - 220V – 240V, 50/60Hz

Line voltage

500: 208V – 500V
690: 575V – 690V

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PSS Enclosed type

P 18 D F 1 - 48 A A

Soft starter
PSS enclosed

Softstarter amps
18 60 175
30 72 250
37 85 300
44 105
50 142

Connection type
L: Inline
D: Inside delta

Combination type
No digit – non-combination
F – fusible disconnect
B – thermal magnetic circuit breaker
M – magnetic only breaker
N – non-fusible disconnect

Enclosure
1 – NEMA 1
2 – NEMA 12 ^②
3 – NEMA 3R ^②
4 – NEMA 4 ^②
X – NEMA 4x stainless steel ^②

Options ^①

A – Start-stop pushbutton
B – Across the line rated (AC3) contactor with emergency bypass control
C – 2 position selector switch
D – 3 position selector switch
E – Pilot light
F – Start-stop pushbutton and pilot light
H – 2 position selector switch and pilot light
J – 3 position selector switch and pilot light
M – Shunt rated (AC1) bypass contactor
W – Isolation contactor

Fuse clip

A – 30A, 600V, Class J
B – 60A, 600V, Class J
C – 100A, 600V, Class J
D – 200A, 600V, Class J
E – 400A, 600V, Class J
F – 600A, 600V, Class J
G – 800A, 600V, Class L

Circuit breaker amp ratings

D – 15 M – 70 W – 225 E – 700
E – 20 N – 80 X – 250
F – 25 P – 90 Y – 300
G – 30 R – 100 Z – 350
H – 35 S – 125 A – 400
J – 40 T – 150 B – 450
K – 50 U – 175 C – 500
L – 60 V – 200 D – 600

MCP/MAG only rating

A – 3 E – 50 J – 400
B – 5 F – 100 K – 600
C – 10 G – 150 L – 800
D – 25 H – 225

Line voltage

20: 208V 120V control voltage
23: 230V 120V control voltage
38: 380V 220V control voltage
41: 415V 220V control voltage
48: 480V 120V control voltage
60: 600V 120V control voltage

^① For more options, see page 6.8
^② Bypass contactor required.
^③ See page 6.3 for the PSS03, PSS12 & PSS25 softstarters.

Open 3A – 25A



Type PSS03-480B



Type PSS25-480B

PSS Open type ①②

| Operating voltage 50Hz – 60Hz | Maximum HP rating three phase | Maximum current amperes | Catalog number | List price |
|----------------------------------|----------------------------------|----------------------------|-------------------|---------------|
| 220 – 240V | 0.5 | 3 | PSS03-220B | \$ 270 |
| | 3 | 12 | PSS12-220B | 345 |
| | 7.5 | 25 | PSS25-220B | 405 |
| 380 – 415V | 1 | 3 | PSS03-400B | 270 |
| | 5 | 12 | PSS12-400B | 345 |
| | 10 | 25 | PSS25-400B | 405 |
| 440 – 480V | 1.5 | 3 | PSS03-480B | 270 |
| | 7.5 | 12 | PSS12-480B | 345 |
| | 15 | 25 | PSS25-480B | 405 |
| 550 – 600V | 10 | 12 | PSS12-600B | 375 |
| | 20 | 25 | PSS25-600B | 445 |

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① Overload protection not included; external overload relay must be in power circuit. Use ABB TA series overload.
② See page 6.12 for single phase wiring schematic.



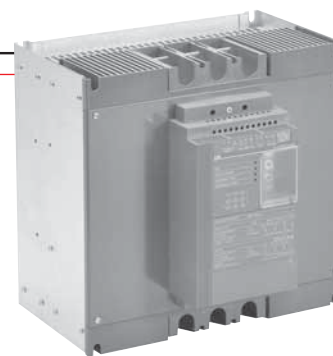
PSS18/30



PSS50/85



PSS85/147



PSS300/515

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Connected inline ①②③

| Maximum motor current | | Maximum horsepower | | | | | Weight (lbs.) | Catalog number | List price |
|-----------------------|-----|--------------------|------|------|------|------|------------------------------------|----------------|------------|
| UL | IEC | 208V | 240V | 380V | 480V | 600V | | | |
| 18 | 18 | 5 | 5 | 10 | 10 | — | PSS18/30-500F PSS18/30-690F | \$ 620 744 | |
| 28 | 30 | 7.5 | 10 | 15 | 20 | — | PSS30/52-500F PSS30/52-690F | 680 820 | |
| 34 | 37 | 10 | 10 | 20 | 25 | — | PSS37/64-500F PSS37/64-690F | 750 900 | |
| 40 | 44 | 10 | 10 | 25 | 30 | — | PSS44/76-500F PSS44/76-690F | 900 1080 | |
| 47 | 50 | 15 | 15 | 25 | 30 | — | PSS50/85-500F PSS50/85-690F | 1120 1345 | |
| 56 | 60 | 15 | 20 | 30 | 40 | — | PSS60/105-500F PSS60/105-690F | 1325 1590 | |
| 67 | 72 | 20 | 20 | 40 | 50 | — | PSS72/124-500F PSS72/124-690F | 1460 1750 | |
| 85 | 85 | 25 | 30 | 50 | 60 | — | PSS85/147-500F PSS85/147-690F | 1650 1980 | |
| 105 | 105 | 30 | 40 | 60 | 75 | — | PSS105/181-500F PSS105/181-690F | 1700 2040 | |
| 125 | 142 | 40 | 40 | 75 | 100 | — | PSS142/245-500F PSS142/245-690F | 2250 2700 | |
| 156 | 175 | 50 | 60 | 100 | 125 | — | PSS175/300-500F PSS175/300-690F | 2900 3395 | |
| 225 | 250 | 75 | 75 | 150 | 150 | — | PSS250/430-500F PSS250/430-690F | 3400 3965 | |
| 248 | 300 | 75 | 100 | 150 | 200 | — | PSS300/515-500F PSS300/515-690F | 3950 4530 | |

Connected inside delta ①②③

| | | | | | | | | |
|-----|-----|-----|-----|-----|-----|---|------------------------------------|---------------|
| 30 | 30 | 7.5 | 10 | 15 | 20 | — | PSS18/30-500F PSS18/30-690F | \$ 620 744 |
| 48 | 52 | 15 | 15 | 30 | 30 | — | PSS30/52-500F PSS30/52-690F | 680 820 |
| 58 | 64 | 20 | 20 | 30 | 40 | — | PSS37/64-500F PSS37/64-690F | 750 900 |
| 69 | 76 | 20 | 25 | 40 | 50 | — | PSS44/76-500F PSS44/76-690F | 900 1080 |
| 81 | 85 | 25 | 30 | 50 | 60 | — | PSS50/85-500F PSS50/85-690F | 1120 1345 |
| 96 | 105 | 30 | 30 | 60 | 75 | — | PSS60/105-500F PSS60/105-690F | 1325 1590 |
| 116 | 124 | 40 | 40 | 60 | 75 | — | PSS72/124-500F PSS72/124-690F | 1460 1750 |
| 147 | 147 | 50 | 50 | 75 | 100 | — | PSS85/147-500F PSS85/147-690F | 1650 1980 |
| 181 | 181 | 60 | 60 | 100 | 150 | — | PSS105/181-500F PSS105/181-690F | 1700 2040 |
| 215 | 245 | 75 | 75 | 150 | 150 | — | PSS142/245-500F PSS142/245-690F | 2250 2700 |
| 270 | 300 | 75 | 100 | 150 | 200 | — | PSS175/300-500F PSS175/300-690F | 2900 3395 |
| 389 | 430 | 125 | 150 | 250 | 300 | — | PSS250/430-500F PSS250/430-690F | 3400 3965 |
| 429 | 515 | 150 | 150 | 300 | 350 | — | PSS300/515-500F PSS300/515-690F | 3950 4530 |

NOTE: Open softstarters are converted from connected inline to connected inside delta by means of a DIP switch. See circuit diagram on pages 6.13 - 6.15 for information.

① Catalog numbers are shown with 120V control. For 240V control, replace "F" with "L" in catalog number.

② Overload protection not included; external overload relay must be in power circuit. Use ABB TA series overload.

③ Current transformer not included. See page 6.8 for current transformers.

Enclosed ① NEMA 1, 12

Softstarters
Type PSS

Connected inline

| Maximum motor current | | Maximum horsepower | | | | | NEMA 1, 480V | | NEMA 1, 600V | | NEMA 12, 480V ② | | NEMA 12, 600V ② | |
|-----------------------|-----|--------------------|------|------|------|------|----------------|------------|----------------|------------|-----------------|------------|-----------------|------------|
| UL | IEC | 208V | 240V | 380V | 480V | 600V | Catalog number | List price | Catalog number | List price | Catalog number | List price | Catalog number | List price |
| 18 | 18 | 5 | 5 | 10 | 10 | 15 | P18L1-48 | \$ 1095 | — | — | P18L2-48M | \$ 1395 | — | — |
| | | — | — | — | — | — | — | — | P18L1-60 | \$ 1219 | — | — | P18L2-60M | \$ 1519 |
| 25 | — | — | 7.5 | — | 15 | 20 | P22L1-48 | 1155 | — | — | P22L2-48M | 1480 | — | — |
| | | — | — | — | — | — | — | — | P22L1-60 | 1295 | — | — | P22L2-60M | 1620 |
| 28 | 30 | 7.5 | 10 | 15 | 20 | 25 | P30L1-48 | 1155 | — | — | P30L2-48M | 1480 | — | — |
| | | — | — | — | — | — | — | — | P30L1-60 | 1295 | — | — | P30L2-60M | 1620 |
| 34 | 37 | 10 | 10 | 20 | 25 | 30 | P37L1-48 | 1325 | — | — | P37L2-48M | 1725 | — | — |
| | | — | — | — | — | — | — | — | P37L1-60 | 1475 | — | — | P37L2-60M | 1875 |
| 40 | 44 | 10 | 10 | 25 | 30 | 30 | P44L1-48 | 1475 | — | — | P44L2-48M | 1925 | — | — |
| | | — | — | — | — | — | — | — | P44L1-60 | 1755 | — | — | P44L2-60M | 2205 |
| 47 | 50 | 15 | 15 | 25 | 30 | 40 | P50L1-48 | 1595 | — | — | P50L2-48M | 2045 | — | — |
| | | — | — | — | — | — | — | — | P50L1-60 | 1820 | — | — | P50L2-60M | 2270 |
| 56 | 60 | 15 | 20 | 30 | 40 | 50 | P60L1-48 | 1860 | — | — | P60L2-48M | 2360 | — | — |
| | | — | — | — | — | — | — | — | P60L1-60 | 2135 | — | — | P60L2-60M | 2635 |
| 67 | 72 | 20 | 20 | 40 | 50 | 60 | P72L1-48 | 1935 | — | — | P72L2-48M | 2485 | — | — |
| | | — | — | — | — | — | — | — | P72L1-60 | 2225 | — | — | P72L2-60M | 2775 |
| 85 | 85 | 25 | 30 | 50 | 60 | 75 | P85L1-48 | 2475 | — | — | P85L2-48M | 3250 | — | — |
| | | — | — | — | — | — | — | — | P85L1-60 | 2805 | — | — | P85L2-60M | 3580 |
| 105 | 105 | 30 | 40 | 60 | 75 | 100 | P105L1-48 | 2600 | — | — | P105L2-48M | 3375 | — | — |
| | | — | — | — | — | — | — | — | P105L1-60 | 2940 | — | — | P105L2-60M | 3715 |
| 125 | 142 | 40 | 40 | 75 | 100 | 125 | P142L1-48 | 3350 | — | — | P142L2-48M | 4225 | — | — |
| | | — | — | — | — | — | — | — | P142L1-60 | 3800 | — | — | P142L2-60M | 4675 |
| 156 | 175 | 50 | 60 | 100 | 125 | 150 | P175L1-48 | 3780 | — | — | P175L2-48M | 5180 | — | — |
| | | — | — | — | — | — | — | — | P175L1-60 | 4150 | — | — | P175L2-60M | 5550 |
| 225 | 250 | 75 | 75 | 150 | 150 | 200 | P250L1-48 | 4300 | — | — | P250L2-48M | 5700 | — | — |
| | | — | — | — | — | — | — | — | P250L1-60 | 4750 | — | — | P250L2-60M | 6140 |
| 248 | 300 | 75 | 100 | 150 | 200 | 250 | P300L1-48 | 4760 | — | — | P300L2-48M | 6460 | — | — |
| | | — | — | — | — | — | — | — | P300L1-60 | 5215 | — | — | P300L2-60M | 6915 |

Connected inside delta

| | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----------|---------|-----------|---------|------------|---------|------------|---------|
| 30 | 30 | 7.5 | 10 | 15 | 20 | 25 | P18D1-48 | \$ 1095 | — | — | P18D2-48M | \$ 1395 | — | — |
| | | — | — | — | — | — | — | — | P18D1-60 | \$ 1219 | — | — | P18D2-60M | \$ 1519 |
| 37 | — | 10 | — | — | 25 | 30 | P22D1-48 | 1155 | — | — | P22D2-48M | 1480 | — | — |
| | | — | — | — | — | — | — | — | P22D1-60 | 1295 | — | — | P22D2-60M | 1620 |
| 48 | 52 | 15 | 15 | 30 | 30 | 40 | P30D1-48 | 1155 | — | — | P30D2-48M | 1480 | — | — |
| | | — | — | — | — | — | — | — | P30D1-60 | 1295 | — | — | P30D2-60M | 1620 |
| 58 | 64 | 20 | 20 | 30 | 40 | 50 | P37D1-48 | 1325 | — | — | P37D2-48M | 1725 | — | — |
| | | — | — | — | — | — | — | — | P37D1-60 | 1475 | — | — | P37D2-60M | 1875 |
| 69 | 76 | 20 | 25 | 40 | 50 | 60 | P44D1-48 | 1475 | — | — | P44D2-48M | 1925 | — | — |
| | | — | — | — | — | — | — | — | P44D1-60 | 1755 | — | — | P44D2-60M | 2205 |
| 81 | 85 | 25 | 30 | 50 | 60 | 75 | P50D1-48 | 1595 | — | — | P50D2-48M | 2045 | — | — |
| | | — | — | — | — | — | — | — | P50D1-60 | 1820 | — | — | P50D2-60M | 2270 |
| 96 | 105 | 30 | 30 | 60 | 75 | 75 | P60D1-48 | 1860 | — | — | P60D2-48M | 2360 | — | — |
| | | — | — | — | — | — | — | — | P60D1-60 | 2135 | — | — | P60D2-60M | 2635 |
| 116 | 124 | 40 | 40 | 60 | 75 | 100 | P72D1-48 | 1935 | — | — | P72D2-48M | 2485 | — | — |
| | | — | — | — | — | — | — | — | P72D1-60 | 2225 | — | — | P72D2-60M | 2775 |
| 147 | 147 | 50 | 50 | 75 | 100 | 150 | P85D1-48 | 2475 | — | — | P85D2-48M | 3250 | — | — |
| | | — | — | — | — | — | — | — | P85D1-60 | 2805 | — | — | P85D2-60M | 3580 |
| 181 | 181 | 60 | 60 | 100 | 150 | 150 | P105D1-48 | 2600 | — | — | P105D2-48M | 3375 | — | — |
| | | — | — | — | — | — | — | — | P105D1-60 | 2940 | — | — | P105D2-60M | 3715 |
| 215 | 245 | 75 | 75 | 150 | 150 | 200 | P142D1-48 | 3350 | — | — | P142D2-48M | 4225 | — | — |
| | | — | — | — | — | — | — | — | P142D1-60 | 3800 | — | — | P142D2-60M | 4675 |
| 270 | 300 | 75 | 100 | 150 | 200 | 250 | P175D1-48 | 3780 | — | — | P175D2-48M | 5180 | — | — |
| | | — | — | — | — | — | — | — | P175D1-60 | 4150 | — | — | P175D2-60M | 5550 |
| 389 | 430 | 125 | 150 | 250 | 300 | 400 | P250D1-48 | 4300 | — | — | P250D2-48M | 5700 | — | — |
| | | — | — | — | — | — | — | — | P250D1-60 | 4750 | — | — | P250D2-60M | 6140 |
| 429 | 515 | 150 | 150 | 300 | 350 | 400 | P300D1-48 | 4760 | — | — | P300D2-48M | 6460 | — | — |
| | | — | — | — | — | — | — | — | P300D1-60 | 5215 | — | — | P300D2-60M | 6915 |

① All enclosed softstarters include a control power transformer and Class 10 overload.
② Includes shunt rated (AC1) bypass contactor.

Enclosed Options



Connected inline

| Maximum motor current | | Maximum horsepower | | | | | Shunt rated (AC1) bypass or isolation contactor | Across the line rated (AC3) bypass contactor ②③ | Electronic brake std. duty | Electronic brake hvy. duty | Start/Stop pushbuttons | HOA selector switch | Run pilot light | NEMA 12 adder ① | NEMA 3R adder ① | NEMA 4 adder ① | NEMA 4X adder ① |
|-----------------------|-----|--------------------|------|------|------|-------|---|---|----------------------------|----------------------------|------------------------|---------------------|-----------------|-----------------|-----------------|----------------|-----------------|
| UL | IEC | 208V | 240V | 380V | 480V | 600V | List price | List price | List price | List price | List price | List price | List price | List price | List price | List price | List price |
| 18 | 30 | 5 | 5 | 10 | 10 | — 15 | \$ 150 | \$ 775 | \$ 1445 | \$ 1445 | \$ 72 | \$ 72 | \$ 135 | \$ 150 | \$ 150 | \$ 225 | \$ 675 |
| 25 | — | — | 7.5 | — | 15 | — 20 | 175 | 850 | 1445 | 2175 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 28 | 30 | 7.5 | 10 | 15 | 20 | — 25 | 175 | 850 | 1445 | 2175 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 34 | 37 | 10 | 10 | 20 | 25 | — 30 | 250 | 900 | 2175 | 2175 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 40 | 44 | 10 | 10 | 25 | 30 | — 30 | 300 | 950 | 2175 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 47 | 50 | 15 | 15 | 25 | 30 | — 40 | 300 | 950 | 2175 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 56 | 60 | 15 | 20 | 30 | 40 | — 50 | 350 | 1000 | 2175 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 67 | 72 | 20 | 20 | 40 | 50 | — 60 | 400 | 1100 | 2975 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 85 | 85 | 25 | 30 | 50 | 60 | — 75 | 500 | 1150 | 2975 | 5800 | 72 | 72 | 135 | 275 | 275 | 350 | 1150 |
| 105 | 105 | 30 | 40 | 60 | 75 | — 100 | 500 | 1150 | 2975 | 5800 | 72 | 72 | 135 | 275 | 275 | 350 | 1150 |
| 125 | 142 | 40 | 40 | 75 | 100 | — 125 | 600 | 1550 | 5800 | 5800 | 72 | 72 | 135 | 275 | 275 | 350 | 1150 |
| 156 | 175 | 50 | 60 | 100 | 125 | — 150 | 950 | 1850 | 5800 | 6500 | 72 | 72 | 135 | 450 | 450 | 525 | 1575 |
| 225 | 250 | 75 | 75 | 150 | 150 | — 200 | 950 | 2100 | 5800 | 6500 | 72 | 72 | 135 | 450 | 450 | 525 | 1575 |
| 248 | 300 | 75 | 100 | 150 | 200 | — 250 | 1250 | 2700 | 6500 | 7000 | 72 | 72 | 135 | 450 | 450 | 525 | 1575 |

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Connected inside delta

| Maximum motor current | | Maximum horsepower | | | | | Shunt rated (AC1) bypass or isolation contactor | Across the line rated (AC3) bypass contactor | Electronic brake std. duty | Electronic brake hvy. duty | Start/Stop pushbuttons | HOA selector switch | Run pilot light | NEMA 12 adder ① | NEMA 3R adder ① | NEMA 4 adder ① | NEMA 4X adder ① |
|-----------------------|-----|--------------------|------|------|------|-------|---|--|----------------------------|----------------------------|------------------------|---------------------|-----------------|-----------------|-----------------|----------------|-----------------|
| UL | IEC | 208V | 240V | 380V | 480V | 600V | List price | List price | List price | List price | List price | List price | List price | List price | List price | List price | List price |
| 30 | 30 | 7.5 | 10 | 15 | 20 | — 25 | \$ 150 | \$ 775 | \$ 1445 | \$ 1445 | \$ 72 | \$ 72 | \$ 135 | \$ 150 | \$ 150 | \$ 225 | \$ 675 |
| 37 | — | 10 | — | — | 25 | — 30 | 175 | 850 | 1445 | 2175 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 48 | 52 | 15 | 15 | 30 | 30 | — 40 | 175 | 850 | 1445 | 2175 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 58 | 64 | 20 | 20 | 30 | 40 | — 50 | 250 | 900 | 2175 | 2175 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 69 | 76 | 20 | 25 | 40 | 50 | — 60 | 300 | 950 | 2175 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 81 | 85 | 25 | 30 | 50 | 60 | — 75 | 300 | 950 | 2175 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 96 | 105 | 30 | 30 | 60 | 75 | — 75 | 350 | 1000 | 2175 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 116 | 124 | 40 | 40 | 60 | 75 | — 100 | 400 | 1100 | 2975 | 2975 | 72 | 72 | 135 | 150 | 150 | 225 | 675 |
| 147 | 147 | 50 | 50 | 75 | 100 | — 155 | 500 | 1150 | 2975 | 5800 | 72 | 72 | 135 | 275 | 275 | 350 | 1150 |
| 181 | 181 | 60 | 60 | 100 | 150 | — 150 | 500 | 1150 | 2975 | 5800 | 72 | 72 | 135 | 275 | 275 | 350 | 1150 |
| 215 | 245 | 75 | 75 | 150 | 150 | — 200 | 600 | 1550 | 5800 | 5800 | 72 | 72 | 135 | 275 | 275 | 350 | 1150 |
| 270 | 300 | 75 | 100 | 150 | 200 | — 250 | 950 | 1850 | 5800 | 6500 | 72 | 72 | 135 | 450 | 450 | 525 | 1575 |
| 389 | 430 | 125 | 150 | 250 | 300 | — 400 | 950 | 2100 | 5800 | 6500 | 72 | 72 | 135 | 450 | 450 | 525 | 1575 |
| 429 | 515 | 150 | 150 | 300 | 350 | — 400 | 1250 | 2700 | 6500 | 7000 | 72 | 72 | 135 | 450 | 450 | 525 | 1575 |

① Bypass contactor required.
 ② Includes emergency bypass control.
 ③ Subtract AC1 List price when AC1 rating ("M" suffix) is included in the catalog numbers shown on page 6.5.

Accessories

| Item | Suffix code ① | List price adder |
|---|---------------|------------------|
| Softstarters | | |
| Door mounted reset | K | \$ 72 |
| E-Stop | T | 72 |
| Start-stop pushbutton | A | 72 |
| 2 position selector switch | C | 72 |
| 3 position selector switch | D | 72 |
| Pilot light run | E | 135 |
| Start-stop pushbutton & pilot light | F | 207 |
| 2 position selector switch & pilot light | H | 207 |
| 3 position selector switch & pilot light | J | 207 |
| Shunt rated (AC1) bypass contactor | M | see pg 6.7 |
| Across the line rated (AC3) contactor with emergency bypass control ② | B | see pg 6.7 |
| Isolation contactor | W | see pg 6.7 |
| Electronic brake (standard duty) | Y | see pg 6.7 |
| Electronic brake (heavy duty) | Z | see pg 6.7 |
| Service entrance, 3-wire | SE3 | 100 |
| Service entrance, 4-wire | SE4 | 300 |
| Lightning arrester | LA | 320 |
| Space heater, 100W with thermostat | SH | 600 |
| Auxiliary relays | | |
| Type N control relay (4 pole) | CR | 150 |
| Electronic timer | | |
| 1.5 – 30s On Delay | TN30 | 125 |
| 5 –100s On Delay | TN100 | 125 |
| 1.5 – 30s Off Delay | TF30 | 125 |
| 5 –100s Off Delay | TF100 | 125 |
| Phase failure phase reversal | PFPR | 375 |
| Undervoltage relay | UV | 150 |
| Overvoltage relay | OV | 180 |
| Ground fault protection | GFP | 1500 |
| Meters & metering | | |
| Current transformer | CT | 250 |
| Ammeter (including C.T.) | AM | 470 |
| Ammeter & ammeter switch | AMS | 1800 |
| Voltmeter | VM | 1200 |
| Voltmeter & voltmeter switch | VMS | 1800 |
| Elapsed time meter | ETM | 350 |
| Operation counter | OC | 375 |
| Wattmeter | WM | 2450 |

Additional auxiliary contact blocks for bypass or isolation contactors

| Contact configuration | Suffix code | List Price adder |
|-----------------------|-------------|------------------|
| 1 N.O. & 1 N.C. | 11 | \$ 54 |
| 2 N.O. & 2 N.C. | 22 | 98 |
| 3 N.O. & 3 N.C. | 33 | 142 |

Terminal block to increase connection capacity ③

| Wire range | For softstarter | Catalog number | List price |
|--|-----------------|----------------|------------|
| #8 - #1 (1 per phase) | PSS18 – PSS44 | PSLW-44 | \$ 65 |
| #6 - 2/0 (1 per phase) or #4 - 1/0 (2 per phase) | PSS50 – PSS72 | PSLW-72 | 70 |

Terminal lug kits ④

| Wire range | For softstarter ⑤ | Catalog number | List price |
|----------------------------|-------------------|----------------|------------|
| #6 - 250 MCM (1 per phase) | PSS85 – PSS142 | PSLK-185 | \$ 150 |
| #4 - 400 MCM (1 per phase) | PSS175 – PSS300 | PSLK-300 | 195 |
| #4 - 500 MCM (2 per phase) | PSS175 – PSS300 | PSLK-300/2 | 280 |

Terminal covers (Includes line & load covers)

| For softstarter | Catalog ⑥ | List price |
|-----------------|-----------|------------|
| PSS85 – PSS142 | K4LCH | \$ 16 |
| PSS175 – PSS300 | K5LCH | 24 |

Control transformers

| Size | Standard VA | Price adder for extra VA | |
|-------------------------|-------------|--------------------------|--------|
| | | 100VA | 250VA |
| PSS18/30 – PSS 142/245 | 75 | \$ 175 | — |
| PSS175/300 – PSS300/515 | 150 | 225 | \$ 300 |

Current transformers for current limit function ⑦

| Technical data | For softstarter | Catalog number | List price |
|----------------|-----------------|----------------|------------|
| 60/1 – 2 turns | PSS18/30 | PSCT-60 | \$ 70 |
| 40/1 – 1 turn | PSS30/52 | PSCT-40 | |
| 50/1 – 1 turn | PSS37/64 | PSCT-50 | |
| 60/1 – 1 turn | PSS44/76 | PSCT-60 | |
| 75/1 – 1 turn | PSS50/85 | PSCT-75 | 130 |
| 75/1 – 1 turn | PSS60/105 | PSCT-75 | |
| 100/1 – 1 turn | PSS72/124 | PSCT-100 | |
| 125/1 – 1 turn | PSS85/147 | PSCT-125 | |
| 150/1 – 1 turn | PSS105/181 | PSCT-150 | |
| 200/1 – 1 turn | PSS142/245 | PSCT-200 | |
| 250/1 – 1 turn | PSS175/300 | PSCT-250 | |
| 400/1 – 1 turn | PSS250/430 | PSCT-400 | |
| 400/1 – 1 turn | PSS300/515 | PSCT-400 | |

① Add the suffix code after the last digit of the catalog number.

② 1 VA minimum.

③ Stranded conductors.

④ Includes line/load lugs and hardware.

⑤ Softstarters listed are provided with terminating bus tabs as standard.

⑥ Discount schedule SA.

⑦ Control includes panel mounted Norm/E-Bypass switch, START/STOP pushbutton & Class 10 external overload unless otherwise specified.

Technical data

Softstarters
Type PSS

PSS03 – PSS25 and PSS18/30 – PSS300/515

| | | PSS03 – PSS12 | PSS25 | PSS18/30 – PSS300/515 |
|--|--------|---------------------|---------------------|--|
| Rated insulation voltage U_Z | V | 630 | 630 | 690 |
| Rated operational Voltage U_e | V | 220 – 600 | 220 – 600 | 200 – 690 |
| SCR PIV ratings | | | | |
| up to 500V | | 1200 | 1200 | 1600 |
| up to 600V | | 1600 | 1600 | 1800 |
| Starting capacity at max. rated current I_e | | 5 x I_e for 5 sec | 5 x I_e for 5 sec | 500% for 30 sec |
| Number of starts per hour ¹ | | 6 | 6 | 30 ^② |
| Overload class | A | 10 | 10 | 10 |
| Service factor | % | 100 | 100 | 115 110 (PSS300/515) |
| Ambient temperature | | | | |
| During operation | °C | -20 to +50 | -20 to +50 | -20 to +60 ^② |
| During storage | °C | -40 to +70 | -40 to +70 | -40 to +70 |
| Degree of protection | | | | |
| Main circuit | | IP20 | IP20 | IP20 (PSS18/30-500 – PSS44/76-500) IP10 (PSS50/85-500 – PSS72/124/-500) IP10 (PSS18/30-690 – PSS72/124-690) IP00 (PSS85/147 – PSS300/515) |
| Supply and control circuit | | IP20 | IP20 | IP20 |
| Settings | | | | |
| Ramp time during start | s | 0.5 – 6.5 | 0.5 – 10 | 1 – 30 |
| Ramp time during stop | s | 0.5 – 8 | 0.5 – 20 | 0 – 30 |
| Initial voltage during start | % | 0 – 85 | 5 – 50 | 30 – 70 |
| Current limit function | xI_e | No | No | 1.5 – 4 ^③ |
| Switch for | | | | |
| Inside delta connection ON/OFF | | No | No | Yes |
| Signal relay | | | | |
| Bypass signal | | No ^④ | No ^④ | Yes |
| Fault signal | | No | No | Yes |
| Rated operational voltage U_e | V | — | — | 250 |
| Rated thermal current I_{th} | A | — | — | 5 |
| Rated operational current I_e at AC 15 ($U_e=250V$) | A | — | — | 1.5 |
| Signal indication LED | | | | |
| Ready to start/stand by | ON | Green | Green | Green |
| Ramping up/down | | Yellow | Yellow (flashing) | No |
| Completed start ramp | T.O.R. | Yellow | Yellow | Green |
| General fault (internal) | F1 | — | Red | Red |
| External fault (phase loss) | F2 | — | — | Red |

6

Size related data

| Size | Type | A | Max. power loss at max I_e W | Max. SCR fuse rating (optional) | Bussman fuses | Power requirements of supply circuit VA |
|------------|---------|-----------|-----------------------------------|------------------------------------|------------------|--|
| PSS03 | TA25DU | 2.2 – 3.1 | — | 16A | 170M1359 | 2 |
| PSS12 | TA25DU | 10 – 14 | — | 40A | 170M1363 | 2 |
| PSS25 | TA25DU | 18 – 25 | — | 50A | 170M1364 | 5 |
| PSS18/30 | TA25DU | 6 – 18 | ⑤ | 50A | 170M1364 | 9 |
| PSS30/52 | TA25DU | 10 – 30 | ⑤ | 80A | 170M1366 | 9 |
| PSS37/64 | TA42DU | 22 – 37 | ⑤ | 125A | 170M1368 | 9 |
| PSS44/76 | TA75DU | 29 – 44 | ⑤ | 160A | 170M1369 | 9 |
| PSS50/85 | TA75DU | 29 – 50 | ⑤ | 160A | 170M1369 | 10 |
| PSS60/105 | TA75DU | 29 – 60 | ⑤ | 200A | 170M1370 | 10 |
| PSS72/124 | TA75DU | 45 – 72 | ⑤ | 250A | 170M1371 | 10 |
| PSS85/147 | TA110DU | 65 – 85 | ⑤ | 315A | 170M1372 | 36 |
| PSS105/181 | TA110DU | 65 – 105 | ⑤ | 400A | 170M3019 | 36 |
| PSS142/245 | TA200DU | 100 – 142 | ⑤ | 450A | 170M3020 | 36 |
| PSS175/300 | TA200DU | 100 – 175 | ⑤ | 500A | 170M3021 | 65 |
| PSS250/430 | TA450DU | 130 – 250 | ⑤ | 700A | 170M4017 | 65 |
| PSS300/515 | TA450DU | 130 – 300 | ⑤ | 900A | 170M5015 | 65 |

① When more than six starts per hour are required, contact your sales office.

② Above 40°C, up to max 60°C, reduce the rated current with 0.8% per °C.

③ Only if current transformer is connected (accessory).

④ The unit has built-in bypass contacts (AC-53b).

⑤ Total power loss: $P_{Tot} = [3 \times I_e \times 1.0] + 50$ (W), reduced to 50W only when using by-pass.

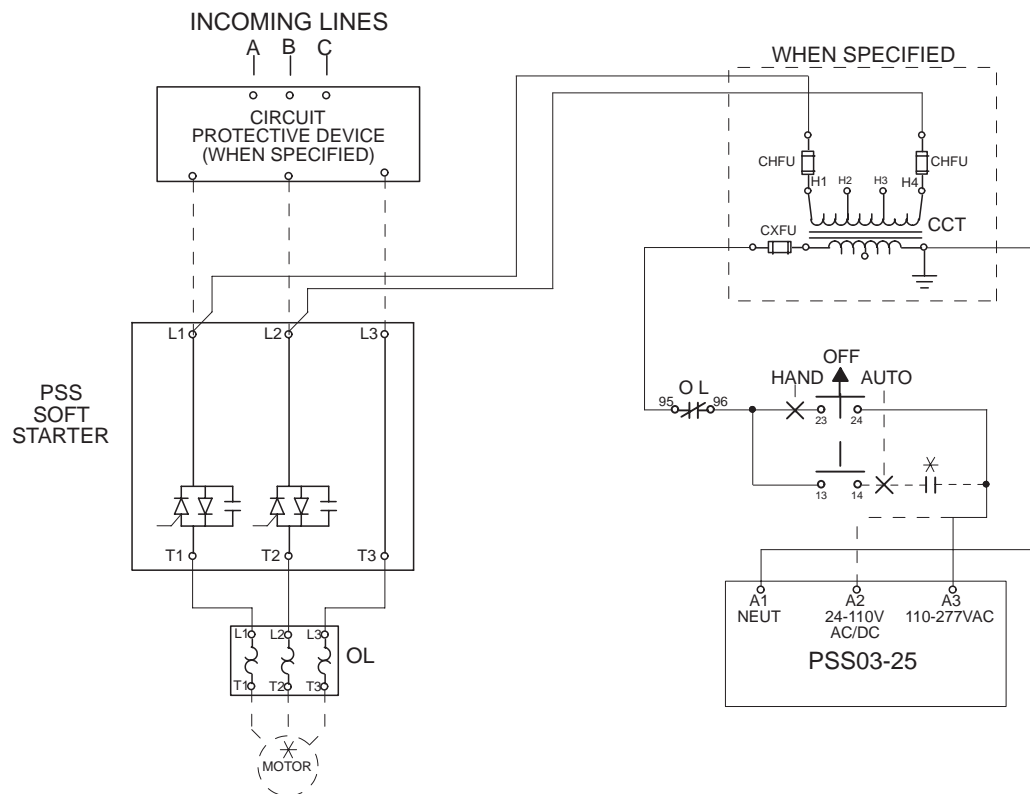
⑥ 50% on and 50% off, 3.5 times rated current and 7 second starting time.

Cross section of connection cables PSS03 – PSS25 and PSS18/30 – PSS300/515

| Type PSS | | PSS03 – PSS12 | PSS25 | PSS18/30-500 – PSS44/76-500 | PSS50/85-500 – PSS72/124-500 & PSS18/30-690 – PSS72/124-690 | PSS85/147-500 – PSS142/245-500 & PSS85/147-690 – PSS142/245-690 | PSS175/300-500 – PSS300/515-500 & PSS175/300-690 – PSS300/515-690 |
|-----------------------------------|---|------------------------------|--------|-----------------------------|---|---|---|
| Main circuit | | | | | | | |
| Connection clamp | | | | | | | |
| | Rigid solid/rigid stranded | 1x AWG 12 | AWG 6 | AWG 4 - 8 | AWG 1 - 8 | — | — |
| | Rigid solid/rigid stranded | 2x AWG 12 | AWG 8 | AWG 4 - 8 | AWG 4 - 8 | — | — |
| | Tightening torque (for guidance only) max. lb./in | 4.3 | 17.5 | 23 | 40 | — | — |
| 6 | Terminal lugs ① | | | | | | |
| | | Rigid solid / rigid stranded | 1x — | — | — | #6 - 250 MCM | #4 - 400 MCM |
| | | Rigid solid / rigid stranded | 2x — | — | — | — | #4 - 500 MCM |
| | Tightening torque (for guidance only) max. lb./in | — | — | — | — | 300 | 375 |
| Connection bar | | | | | | | |
| | Width and thickness | mm — | — | — | — | 17.5 x 5 | 20 x 5 |
| | Hole diameter | mm — | — | — | — | 8.5 | 10.2 |
| | Tightening torque (for guidance only) max. lb./in | — | — | — | — | 79 | 155 |
| Supply and control circuit | | | | | | | |
| Connection clamp | | | | | | | |
| | Rigid solid/rigid stranded | 1x AWG 12 | AWG 12 | AWG 12 | AWG 12 | AWG 12 | AWG 12 |
| | Rigid solid/rigid stranded | 2x AWG 12 | — | — | — | — | — |
| | Tightening torque (for guidance only) max. lb./in | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |

① See accessories on page 6.8.

Circuit diagrams PSS03 – PSS25



NOTES

1. ALL CONTROL WIRING TO BE 18GA.
COLOR OF CONTROL WIRE SHALL BE PER VOLTAGE OF CONTACTOR COILS:
RED - ALL AC VOLTAGES
WHITE MAY BE USED ON THE GROUNDED SIDE OF THE AC CIRCUIT IF SPECIFIED.
BLUE - ALL DC VOLTAGES
2. ALL DEVICES ARE SHOWN DE-ENERGIZED.
3. DO NOT USE SELECTOR SWITCHES WITH AUTO-RESET OVERLOAD RELAYS.

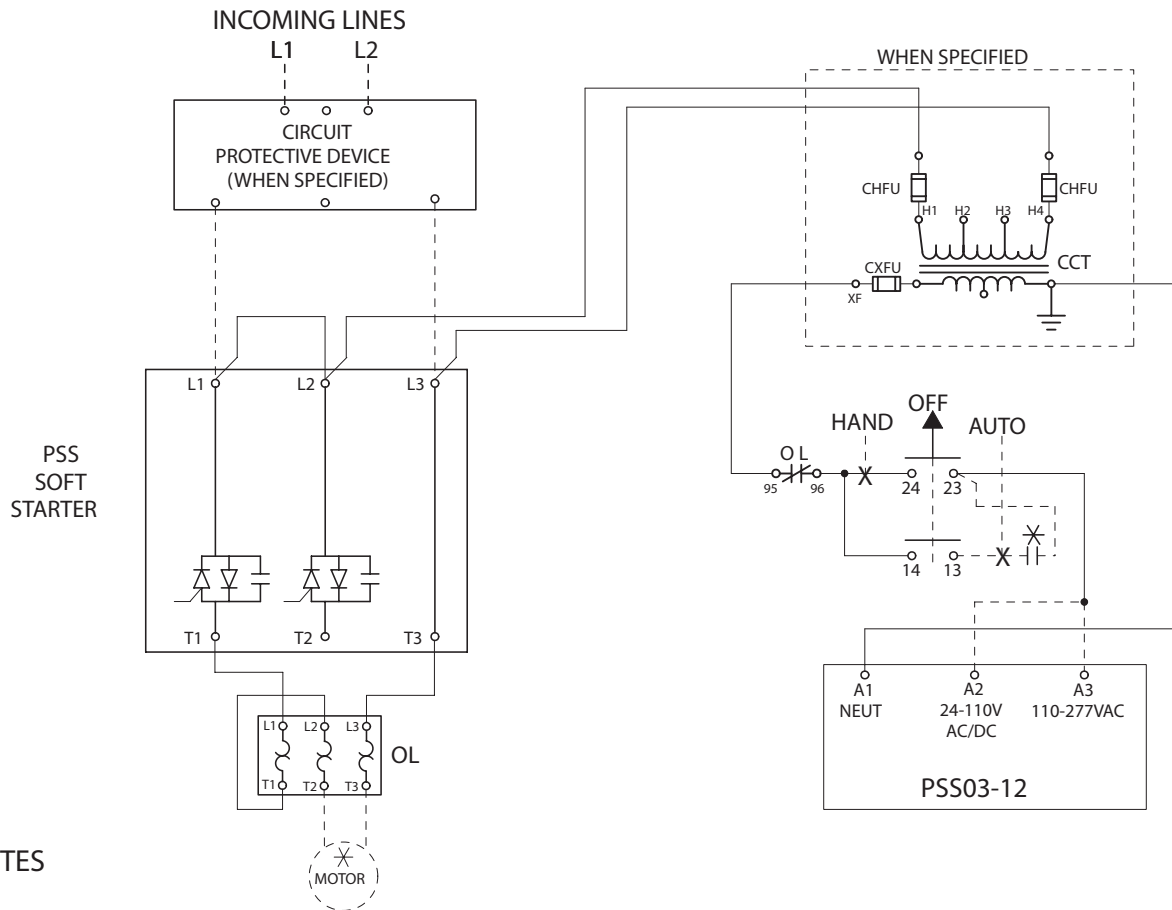
| LEGEND | |
|-----------------|----------------------------------|
| CCT | CONTROL CIRCUIT TRANSFORMER |
| CHFU | CCT PRIMARY FUSE |
| CXFU | CCT SECONDARY FUSE |
| B | BYPASS CONTACTOR |
| OL | OVERLOAD RELAY |
| ° ₁₃ | CONN POINT ON DEVICE WITH NUMBER |
| ⊗ | REMOTE DEVICE |
| ∅ | CONN POINT AT TERMINAL BLOCK |

Circuit diagrams

Single-Phase ①②

PSS03 – PSS12

6



NOTES

1. ALL CONTROL WIRING TO BE 18GA.
COLOR OF CONTROL WIRE SHALL BE PER VOLTAGE OF CONTACTOR COILS:
RED - ALL AC VOLTAGES
WHITE MAY BE USED ON THE GROUNDED SIDE OF THE AC CIRCUIT IF SPECIFIED.
BLUE - ALL DC VOLTAGES
2. ALL DEVICES ARE SHOWN DE-ENERGIZED.
3. DO NOT USE SELECTOR SWITCHES WITH AUTO-RESET OVERLOAD RELAYS.

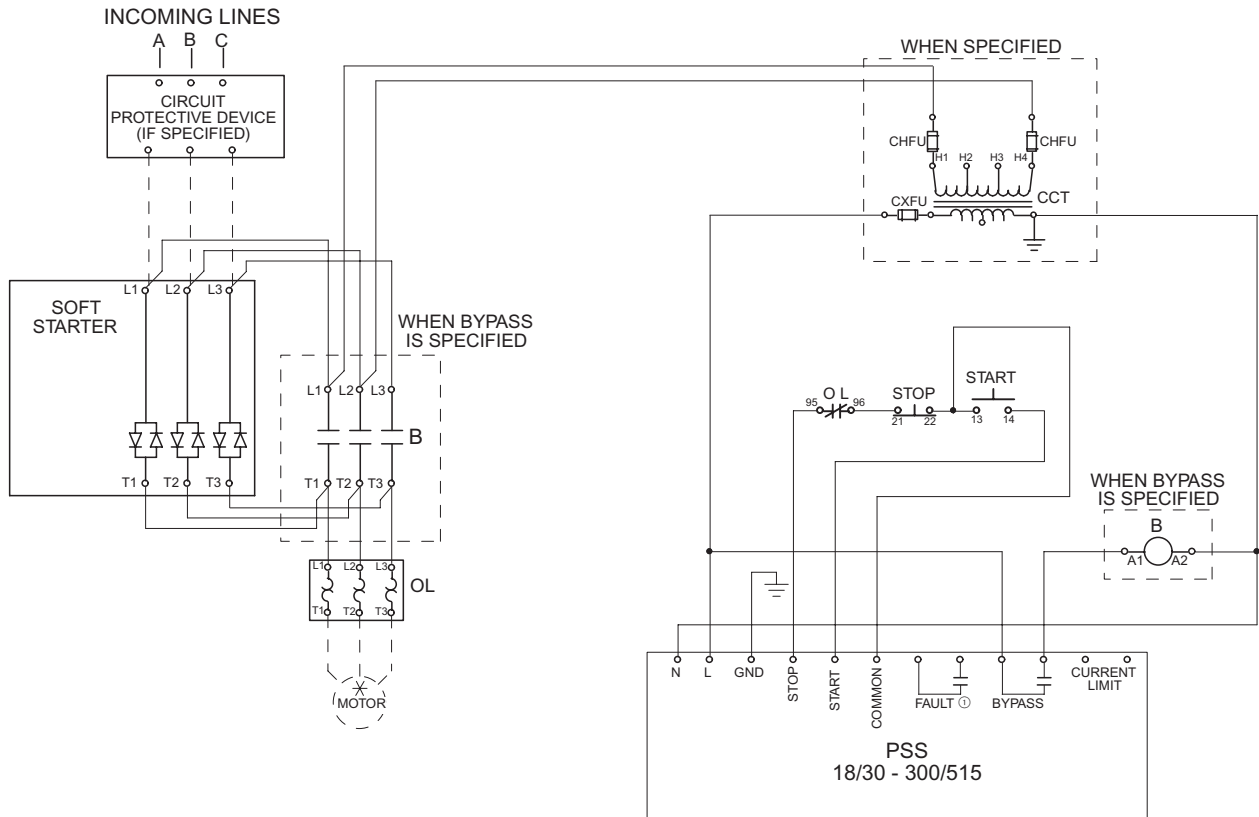
LEGEND

| | |
|-----------------|----------------------------------|
| CCT | CONTROL CIRCUIT TRANSFORMER |
| CHF1 | CCT PRIMARY FUSE |
| CXFU | CCT SECONDARY FUSE |
| OL | OVERLOAD RELAY |
| ○ ₁₃ | CONN POINT ON DEVICE WITH NUMBER |
| ✕ | REMOTE DEVICE |
| ∅ | CONN POINT AT TERMINAL BLOCK |

① Softstarter voltage rating must be the same as the network voltage.
② PSS25 cannot be used for single phase applications.

Circuit diagrams

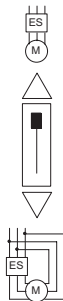
PSS18/30 – PSS300/515, In-line motor configuration



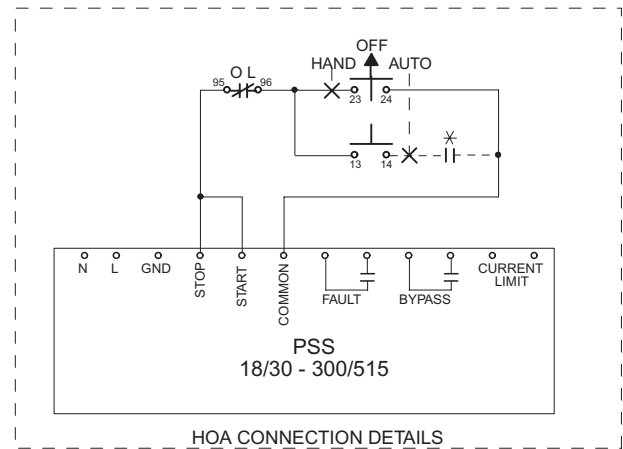
NOTES

1. ALL CONTROL WIRING TO BE 18GA. COLOR OF CONTROL WIRE SHALL BE PER VOLTAGE OF CONTACTOR COILS:
RED - ALL AC VOLTAGES
WHITE MAY BE USED ON THE GROUNDED SIDE OF THE AC CIRCUIT IF SPECIFIED.
BLUE - ALL DC VOLTAGES
2. ALL DEVICES ARE SHOWN DE-ENERGIZED.
3. DO NOT USE SELECTOR SWITCHES WITH AUTO-RESET OVERLOAD RELAYS.

| LEGEND | |
|--------|----------------------------------|
| CCT | CONTROL CIRCUIT TRANSFORMER |
| CHFV | CCT PRIMARY FUSE |
| CXFU | CCT SECONDARY FUSE |
| B | BYPASS CONTACTOR |
| OL | OVERLOAD RELAY |
| 13 | CONN POINT ON DEVICE WITH NUMBER |
| X | REMOTE DEVICE |
| ∅ | CONN POINT AT TERMINAL BLOCK |



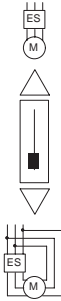
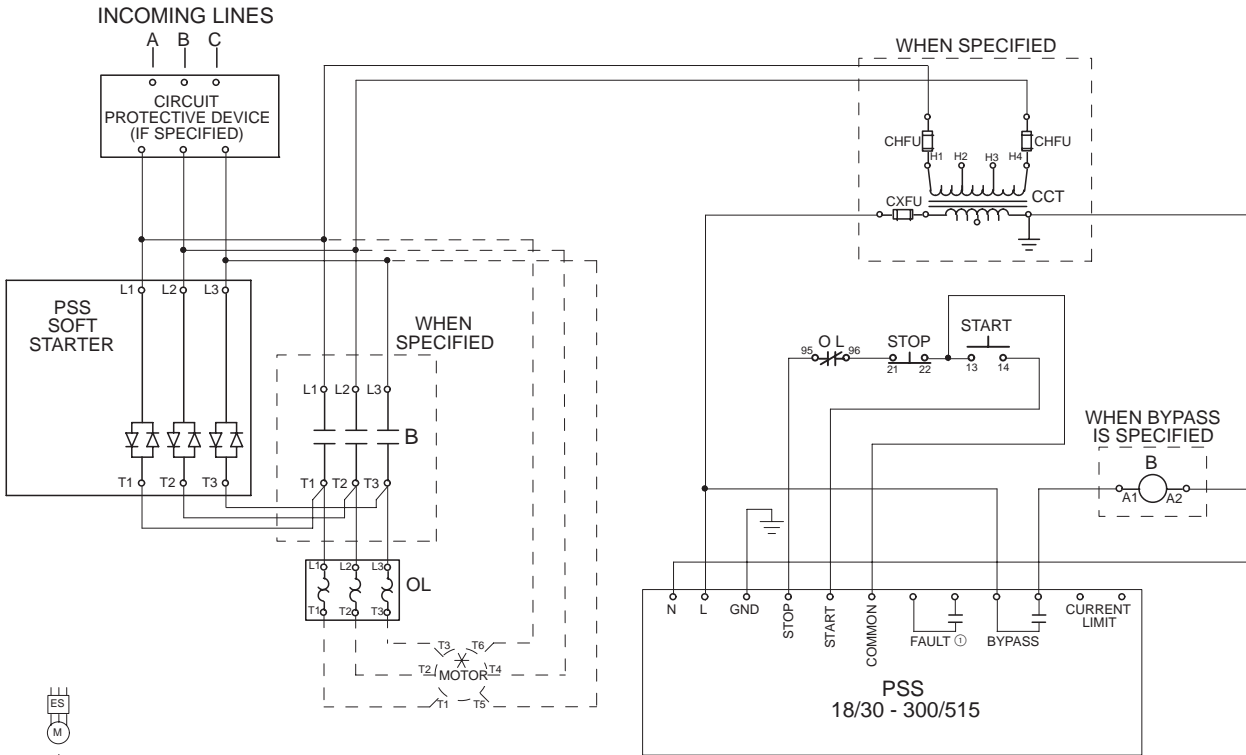
SET DIP SWITCH S1 AS SHOWN



Circuit diagrams

PSS18/30 – PSS300/515, Delta motor configuration

6



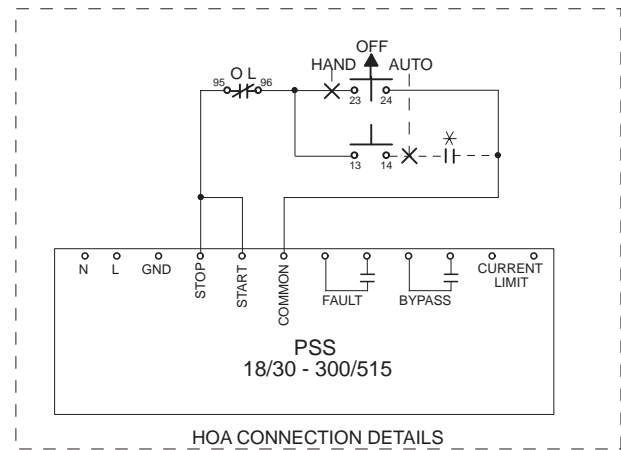
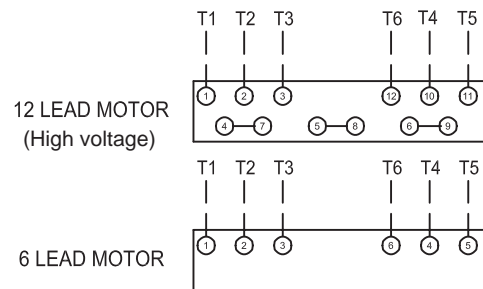
SET DIP SWITCH S1 AS SHOWN

NOTES

- ALL CONTROL WIRING TO BE 18GA. COLOR OF CONTROL WIRE SHALL BE PER VOLTAGE OF CONTACTOR COILS:
RED - ALL AC VOLTAGES
WHITE MAY BE USED ON THE GROUNDED SIDE OF THE AC CIRCUIT IF SPECIFIED.
BLUE - ALL DC VOLTAGES
- ALL DEVICES ARE SHOWN DE-ENERGIZED.
- DO NOT USE SELECTOR SWITCHES WITH AUTO-RESET OVERLOAD RELAYS.

| LEGEND | |
|-----------------|----------------------------------|
| CCT | CONTROL CIRCUIT TRANSFORMER |
| CHFU | CCT PRIMARY FUSE |
| CXFU | CCT SECONDARY FUSE |
| B | BYPASS CONTACTOR |
| OL | OVERLOAD RELAY |
| ° ₁₃ | CONN POINT ON DEVICE WITH NUMBER |
| ✳ | REMOTE DEVICE |
| ∅ | CONN POINT AT TERMINAL BLOCK |

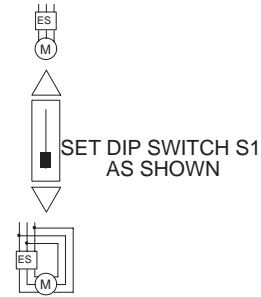
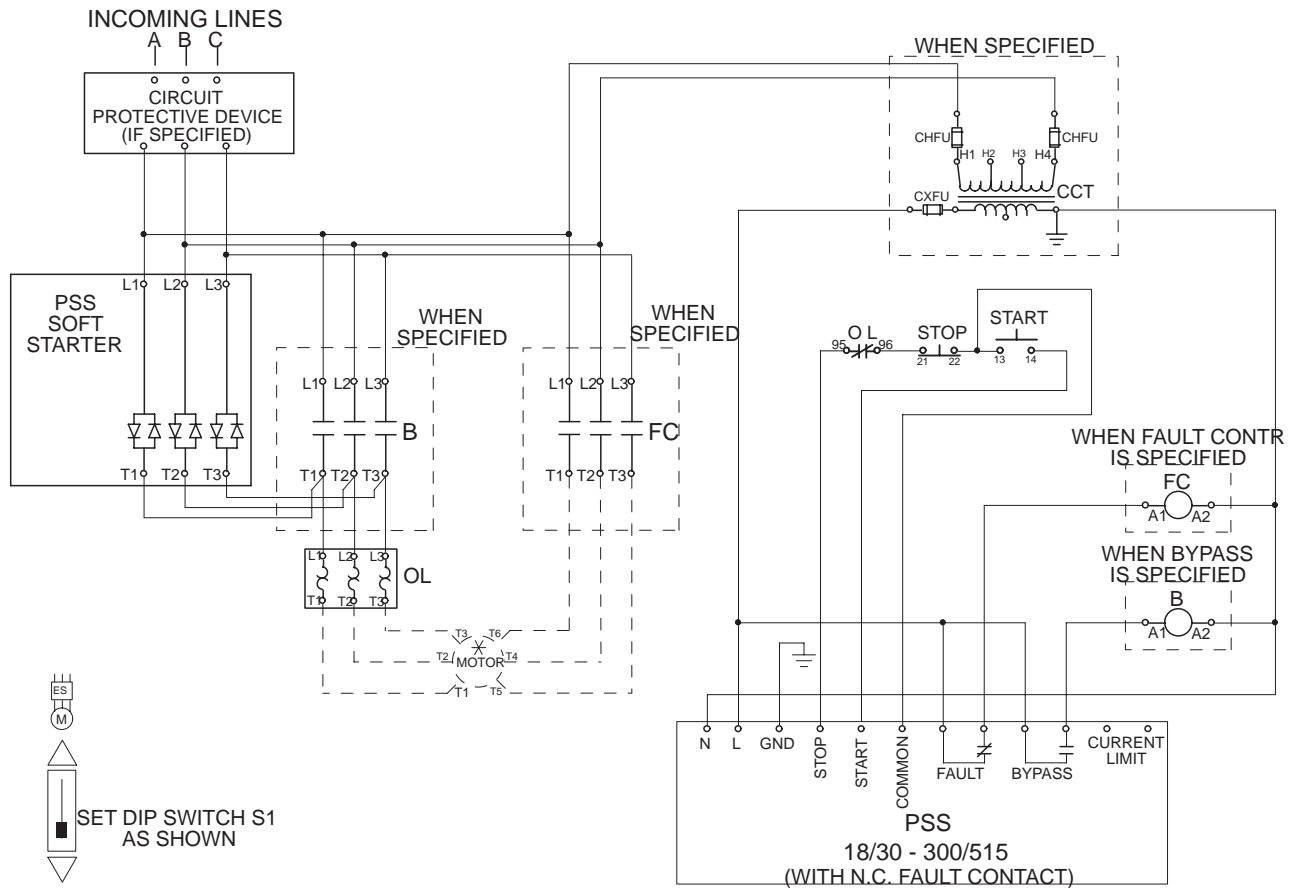
MOTOR MARKINGS ARE AS DEFINED BY NEMA MG1-2.62 FOR 12 LEAD WYE START, DELTA RUN MOTOR CONNECTIONS. ALWAYS CONFIRM CORRECT LEAD MARKINGS WITH NAMEPLATE DIAGRAMS.



Circuit diagrams

PSS18/30 – PSS300/515, Delta motor configuration

Fault contactor



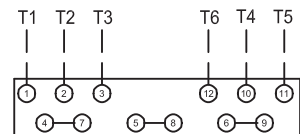
NOTES

1. ALL CONTROL WIRING TO BE 18GA. COLOR OF CONTROL WIRE SHALL BE PER VOLTAGE OF CONTACTOR COILS:
 RED - ALL AC VOLTAGES
 WHITE MAY BE USED ON THE GROUNDED SIDE OF THE AC CIRCUIT IF SPECIFIED.
 BLUE - ALL DC VOLTAGES
2. ALL DEVICES ARE SHOWN DE-ENERGIZED.
3. DO NOT USE SELECTOR SWITCHES WITH AUTO-RESET OVERLOAD RELAYS.

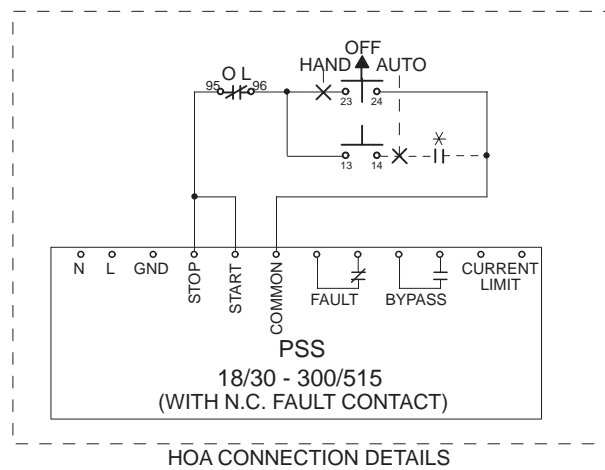
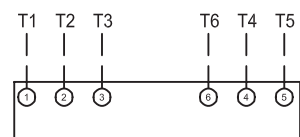
| LEGEND | |
|-----------------|----------------------------------|
| CCT | CONTROL CIRCUIT TRANSFORMER |
| CHFU | CCT PRIMARY FUSE |
| CXFU | CCT SECONDARY FUSE |
| B | BYPASS CONTACTOR |
| OL | OVERLOAD RELAY |
| ° ₁₃ | CONN POINT ON DEVICE WITH NUMBER |
| * | REMOTE DEVICE |
| ∅ | CONN POINT AT TERMINAL BLOCK |

MOTOR MARKINGS ARE AS DEFINED BY NEMA MG1-2.62 FOR 12 LEAD WYE START, DELTA RUN MOTOR CONNECTIONS. ALWAYS CONFIRM CORRECT LEAD MARKINGS WITH NAMEPLATE DIAGRAMS.

12 LEAD MOTOR
(High voltage)



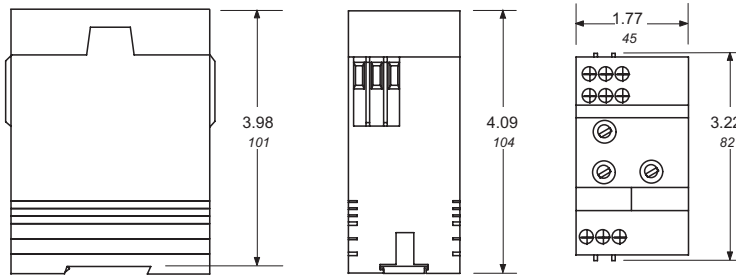
6 LEAD MOTOR



Approximate dimensions Open, PSS03 – PSS18-72

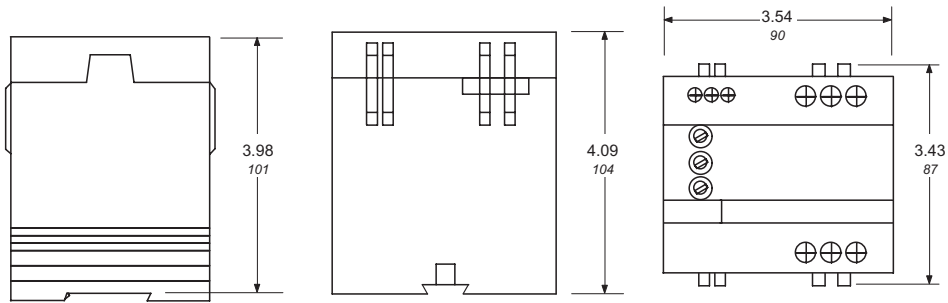
← 00.00 → Inches
00.00 [Millimeters]

PSS03, PSS12



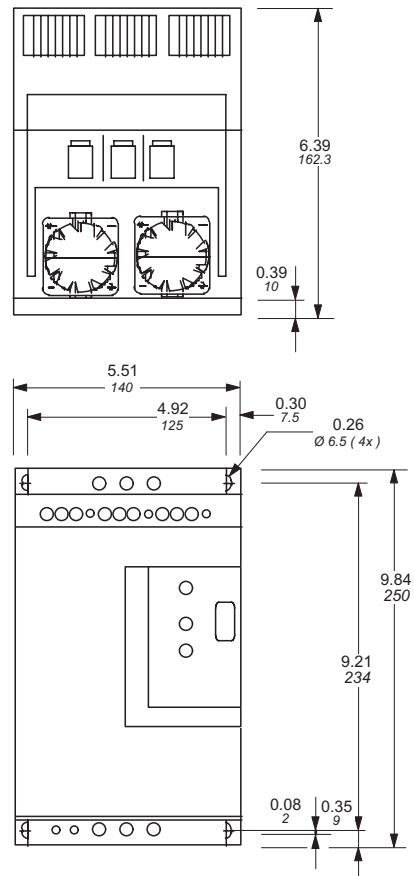
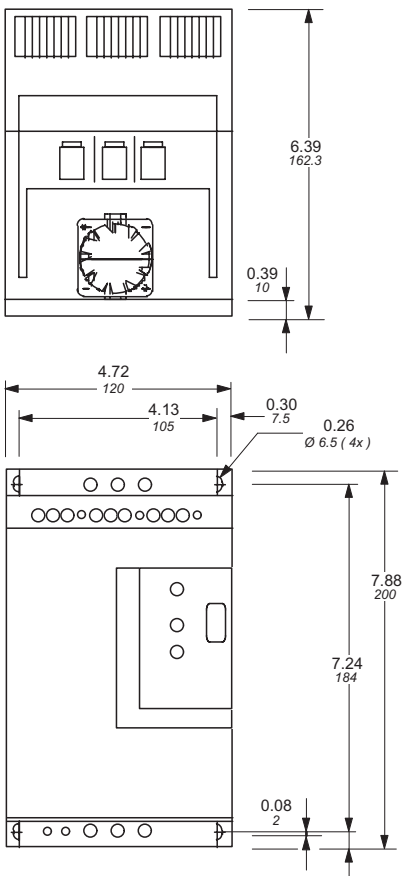
6

PSS25



PSS18 to PSS44 (208V – 480V)

PSS18 to PSS72 (690V) PSS50 to PSS72 (208 – 480V)

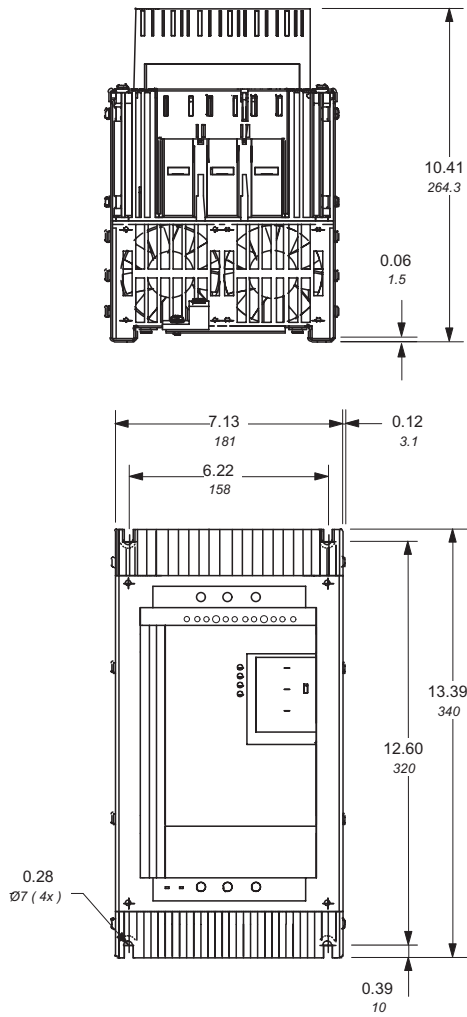


Approximate dimensions Open, PSS85 – PSS300

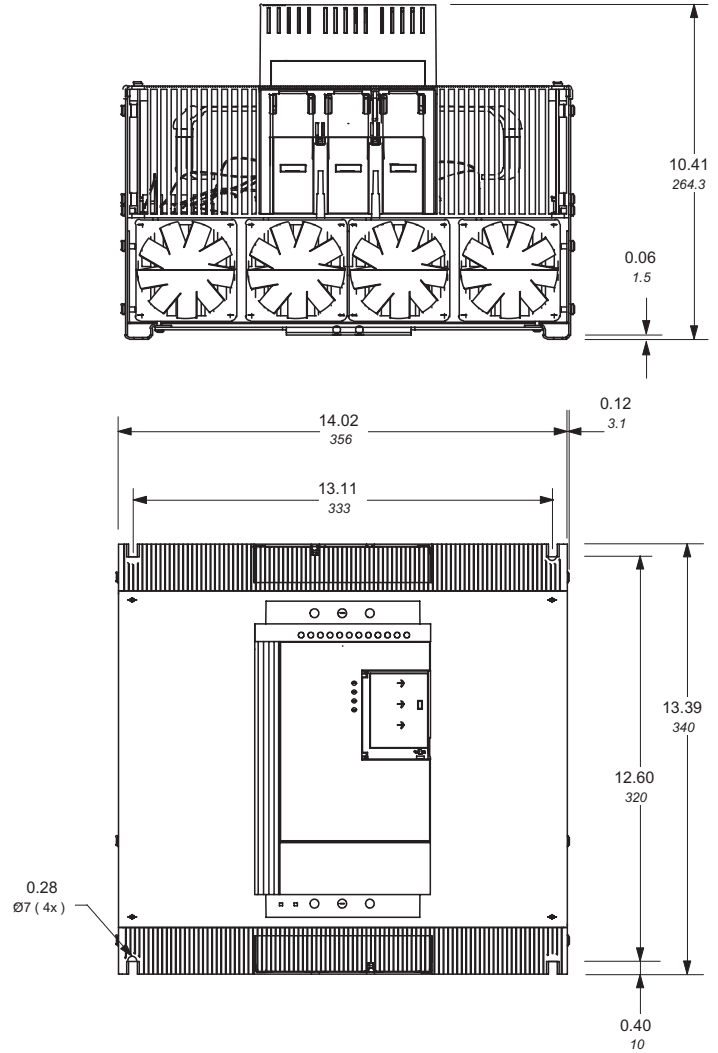
Softstarters
Type PSS

00.00 Inches
00.00 [Millimeters]

PSS85 to PSS142 (208V – 690V)

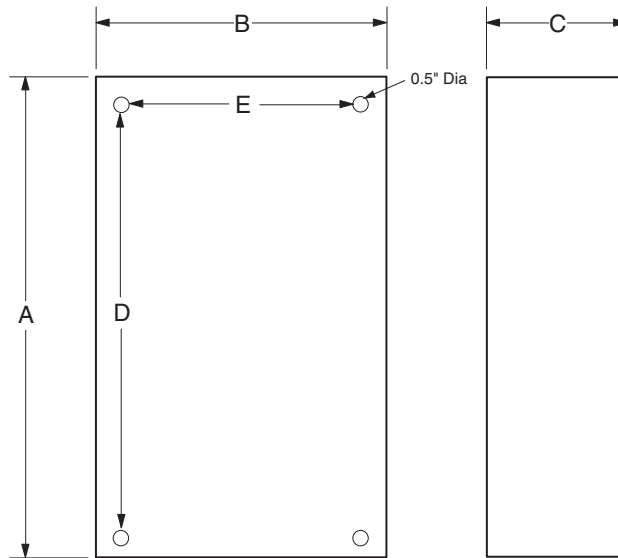


PSS175 to PSS300 (208V – 690V)



6

Approximate dimensions Enclosed



6

208V – 500V

| Softstarter type | Softstarter combination | Dimensions In-line (in.) | | | | | Dimensions Inside delta (in.) | | | | |
|--|-------------------------------------|--------------------------|----|----|-------|-------|-------------------------------|----|----|-------|-------|
| | | A | B | C | D | E | A | B | C | D | E |
| PSS18/30-500 thru PSS44/76-500 | Softstarter only | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with bypass | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with fused disconnect ① | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with circuit breaker ① | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| PSS50/85-500 thru PSS72/124-500 | Softstarter only | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with bypass | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with fused disconnect ① | 20 | 20 | 12 | 18.50 | 18.50 | 24 | 20 | 12 | 22.50 | 18.50 |
| | Softstarter with circuit breaker ① | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| PSS85/147-500 thru PSS142/245-500 | Softstarter only | 24 | 24 | 12 | 22.50 | 22.50 | 24 | 24 | 12 | 22.50 | 22.50 |
| | Softstarter with bypass | 24 | 24 | 12 | 22.50 | 22.50 | 24 | 24 | 12 | 22.50 | 22.50 |
| | Softstarter with fused disconnect ① | 36 | 30 | 12 | 34.50 | 28.50 | 36 | 30 | 12 | 34.50 | 28.50 |
| | Softstarter with circuit breaker ① | 30 | 24 | 12 | 28.50 | 22.50 | 30 | 24 | 12 | 28.50 | 22.50 |
| PSS175/300-500 thru PSS300/515-500 | Softstarter only | 36 | 30 | 12 | 34.50 | 28.50 | 42 | 36 | 12 | 40.50 | 34.50 |
| | Softstarter with bypass | 36 | 30 | 12 | 34.50 | 28.50 | 42 | 36 | 12 | 40.50 | 34.50 |
| | Softstarter with fused disconnect ① | 48 | 36 | 16 | 46.50 | 34.50 | 48 | 36 | 16 | 46.50 | 34.50 |
| | Softstarter with circuit breaker ① | 42 | 36 | 12 | 40.50 | 34.50 | 48 | 36 | 16 | 46.50 | 34.50 |

575V – 690V

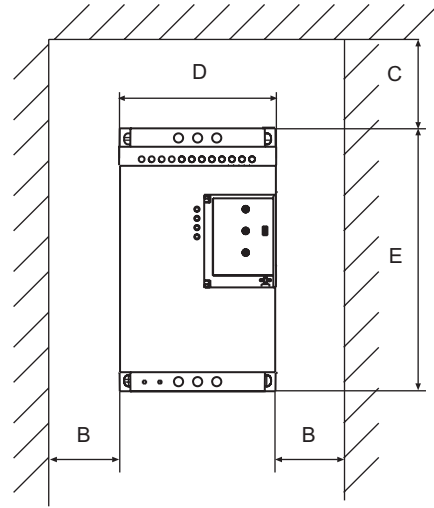
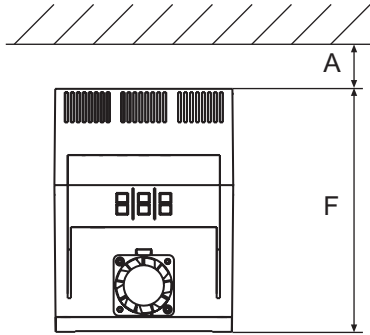
| | | | | | | | | | | | |
|--|-------------------------------------|----|----|----|-------|-------|----|----|----|-------|-------|
| PSS18/30-690 thru PSS72/124-690 | Softstarter only | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with bypass | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with fused disconnect ① | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| | Softstarter with circuit breaker ① | 20 | 20 | 12 | 18.50 | 18.50 | 20 | 20 | 12 | 18.50 | 18.50 |
| PSS85/147-690 thru PSS142/245-690 | Softstarter only | 24 | 24 | 12 | 22.50 | 22.50 | 24 | 24 | 12 | 22.50 | 22.50 |
| | Softstarter with bypass | 24 | 24 | 12 | 22.50 | 22.50 | 24 | 24 | 12 | 22.50 | 22.50 |
| | Softstarter with fused disconnect ① | 36 | 30 | 12 | 34.50 | 28.50 | 36 | 30 | 12 | 34.50 | 28.50 |
| | Softstarter with circuit breaker ① | 30 | 24 | 12 | 28.50 | 22.50 | 30 | 24 | 12 | 28.50 | 22.50 |
| PSS175/300-690 thru PSS300/575-690 | Softstarter only | 36 | 30 | 12 | 34.50 | 28.50 | 42 | 36 | 12 | 40.50 | 34.50 |
| | Softstarter with bypass | 36 | 30 | 12 | 34.50 | 28.50 | 42 | 36 | 12 | 40.50 | 34.50 |
| | Softstarter with fused disconnect ① | 48 | 36 | 16 | 46.50 | 34.50 | 48 | 36 | 16 | 46.50 | 34.50 |
| | Softstarter with circuit breaker ① | 42 | 36 | 12 | 40.50 | 34.50 | 48 | 36 | 16 | 46.50 | 34.50 |

① Dimensions remain the same if bypass contactor is added.

Approximate dimensions Mounting information

Softstarters
Type PSS

Minimum distance to wall / front



Approximate dimensions (in./mm)

| Catalog number | Dimensions | | |
|--|------------|----------|----------|
| | D | E | F |
| PSS18/30-500 – 44/76-500 | 4.7/120 | 7.9/200 | 6.4/163 |
| PSS50/85-500 – 72/124-500 PSS18/30-690 – 72/124-690 | 5.5/140 | 9.8/250 | 6.4/163 |
| PSS85/147-500 – 142/245-500 PSS85/147-690 – 142/245-690 | 7.1/181 | 13.4/340 | 10.4/265 |
| PSS175/300-500 – 300/515-500 PSS175/300-690 – 300/515-690 | 14/356 | 13.4/340 | 10.4/265 |

Minimum distance to wall / front (in./mm)

A = .79/20

B = .39/10

C = 3.9/100 – both top and bottom

6



Notes
