

# 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 # E16i1428

# Open

Softstarters  
Type PSS



PSS18/30



PSS50/85



PSS85/147



PSS300/515

## 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	—	5	PSS18/30-500F	\$ 620
		—	—	—	—	15		PSS18/30-690F	744
28	30	7.5	10	15	20	—	5	PSS30/52-500F	680
		—	—	—	—	25		PSS30/52-690F	820
34	37	10	10	20	25	—	5	PSS37/64-500F	750
		—	—	—	—	30		PSS37/64-690F	900
40	44	10	10	25	30	—	5	PSS44/76-500F	900
		—	—	—	—	30		PSS44/76-690F	1080
47	50	15	15	25	30	—	8	PSS50/85-500F	1120
		—	—	—	—	40		PSS50/85-690F	1345
56	60	15	20	30	40	—	8.4	PSS60/105-500F	1325
		—	—	—	—	50		PSS60/105-690F	1590
67	72	20	20	40	50	—	8.4	PSS72/124-500F	1460
		—	—	—	—	60		PSS72/124-690F	1750
85	85	25	30	50	60	—	19	PSS85/147-500F	1650
		—	—	—	—	75		PSS85/147-690F	1980
105	105	30	40	60	75	—	23	PSS105/181-500F	1700
		—	—	—	—	100		PSS105/181-690F	2040
125	142	40	40	75	100	—	23	PSS142/245-500F	2250
		—	—	—	—	125		PSS142/245-690F	2700
156	175	50	60	100	125	—	45	PSS175/300-500F	2900
		—	—	—	—	150		PSS175/300-690F	3395
225	250	75	75	150	150	—	48.4	PSS250/430-500F	3400
		—	—	—	—	200		PSS250/430-690F	3965
248	300	75	100	150	200	—	48.4	PSS300/515-500F	3950
		—	—	—	—	250		PSS300/515-690F	4530

## Connected inside delta ①②③



30	30	7.5	10	15	20	—	5	PSS18/30-500F	\$ 620
		—	—	—	—	25		PSS18/30-690F	744
48	52	15	15	30	30	—	5	PSS30/52-500F	680
		—	—	—	—	40		PSS30/52-690F	820
58	64	20	20	30	40	—	5	PSS37/64-500F	750
		—	—	—	—	50		PSS37/64-690F	900
69	76	20	25	40	50	—	5	PSS44/76-500F	900
		—	—	—	—	60		PSS44/76-690F	1080
81	85	25	30	50	60	—	8	PSS50/85-500F	1120
		—	—	—	—	75		PSS50/85-690F	1345
96	105	30	30	60	75	—	8.4	PSS60/105-500F	1325
		—	—	—	—	75		PSS60/105-690F	1590
116	124	40	40	60	75	—	8.4	PSS72/124-500F	1460
		—	—	—	—	100		PSS72/124-690F	1750
147	147	50	50	75	100	—	19	PSS85/147-500F	1650
		—	—	—	—	150		PSS85/147-690F	1980
181	181	60	60	100	150	—	23	PSS105/181-500F	1700
		—	—	—	—	150		PSS105/181-690F	2040
215	245	75	75	150	150	—	23	PSS142/245-500F	2250
		—	—	—	—	200		PSS142/245-690F	2700
270	300	75	100	150	200	—	45	PSS175/300-500F	2900
		—	—	—	—	250		PSS175/300-690F	3395
389	430	125	150	250	300	—	48.4	PSS250/430-500F	3400
		—	—	—	—	400		PSS250/430-690F	3965
429	515	150	150	300	350	—	48.4	PSS300/515-500F	3950
		—	—	—	—	400		PSS300/515-690F	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.