

# 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 <sup>1</sup>		6	6	30 <sup>⑥</sup>
Overload class	A	10	10	10
Service factor	%	100	100	115
				110 (PSS300/515)
<b>Ambient temperature</b>				
During operation	°C	-20 to +50	-20 to +50	-20 to +60 <sup>②</sup>
During storage	°C	-40 to +70	-40 to +70	-40 to +70
<b>Degree of protection</b>				
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
<b>Settings</b>				
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	x $I_e$	No	No	1.5 – 4 <sup>③</sup>
<b>Switch for</b>				
Inside delta connection ON/OFF		No	No	Yes
<b>Signal relay</b>				
Bypass signal		No <sup>④</sup>	No <sup>④</sup>	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
<b>Signal indication LED</b>				
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

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## 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:  $P_{Ltot} = [3 \times I_e \times 1.0] + 50$  (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.