



SOFTSTARTERS PSR SERIES



DESCRIPTION

Constant-speed AC motors are used to drive HVAC fans and pumps. During start and stop, both mechanical and electrical stresses are high, causing undesirable load peaks each time the motors are started. An ABB Softstarter eliminates many of these problems. The voltage is smoothly applied to, and removed from, the motor. Both the torque and the current consequently behave in the same way. The result is that mechanical and electrical stresses are significantly lower than with conventional starting methods.

The **PSR series** Compact Softstarters range covers motor currents from 3 to 46A. All sizes include a Run signal relay. The 25A and above are also provided with an output signal for TOR (Top Of Ramp, i.e. full voltage). With standard performance the **PSR** Softstarters handle ten starts per hour. When an auxiliary cooling fan is added, the starting capacity is increased to 20 starts per hour.

FEATURES

- Compact size
- Easy to install and adjust
- DIN rail or screw mounting



PSR16-600-70

PSR45-600-70

PSR30-600-70



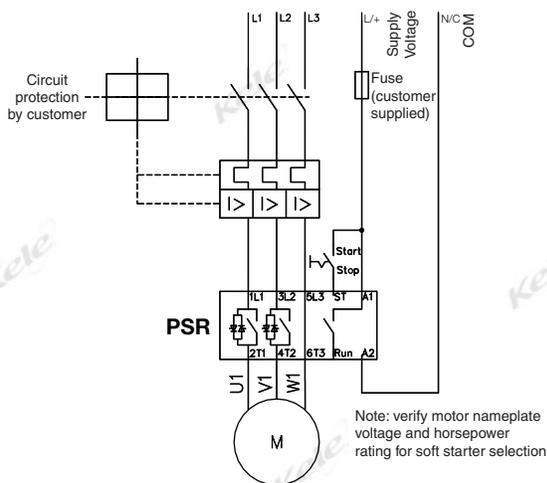
- Run signal relay
- 25A and above includes "Top Of Ramp" output signal
- Motor ratings up to 600 VAC and 40Hp
- Separate Acceleration/ Deceleration times

SPECIFICATIONS

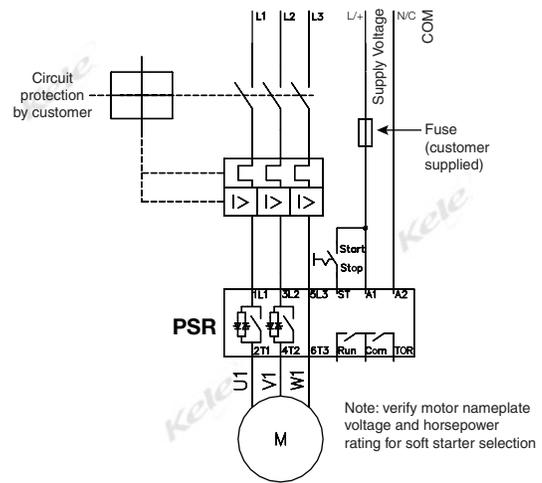
Supply Voltage	100/ 240 V, 24 VDC	Acceleration Time	1-10 seconds
Motor Voltage Rating	208 to 600 VAC	Deceleration Time	0-20 seconds
Current Rating		Altitude Limits	13,123 ft. (4000 m)
PSR3	3.9A Starting capacity 15.6A for 6s	Protection Rating	Main circuit IP20 Control Circuit IP20
PSR6	6.8A Starting capacity 27.2A for 6s	LED Indication	On/ Ready Green On/ Ready Green Run/ Top of Ramp Green Run/ Top of Ramp Green
PSR9	9A Starting capacity 36A for 6s	Operating Temperature	-13° to 140°F (-25° to 60°C)
PSR12	12A Starting capacity 48A for 6s	Storage Temperature	-40° to 158°F (-40° to 70°C)
PSR16	16A Starting capacity 64A for 6s	Number of Starts/ hr	10 standard; 20 with Aux. Fan
PSR25	25A Starting capacity 100A for 6s	Approvals	UL Listed File E161428
PSR30	30A Starting capacity 120A for 6s	Warranty	12 months from installation, maximum 18 months from factory
PSR37	37A Starting capacity 148A for 6s		
PSR45	46A Starting capacity 180A for 6s		
Horsepower	Based on rated Voltage and FLA		

WIRING

Model PSR3 - 16 with MCCB



Model PSR25 - 45 with MCCB





MOTOR CONTROLS

SOFTSTARTERS PSR SERIES

ORDERING INFORMATION

Model	Control Supply Voltage	Full Load Amps	Horsepower				Circuit Breaker Max.	Fuse Size	Dimensions	Weight
			208V	240V	480V	600V				
PSR3-600-70	100/ 240 V	3.4	.5	0.75	2	2	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR6-600-70	100/ 240 V	6.1	1	1.5	3	5	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR9-600-70	100/ 240 V	9	2	2	5	7.5	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR12-600-70	100/ 240 V	11	3	3	7.5	10	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR16-600-70	100/ 240 V	15.2	3	3	10	10	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR25-600-70	100/ 240 V	24.2	7.5	7.5	15	20	50 A	40 A J-Type	6.30" x 1.77" x 5.04" (160mm x 45mm x 128mm)	1.43 lbs. (0.65 kg)
PSR30-600-70	100/ 240 V	28	7.5	7.5	20	25	50 A	40 A J-Type	6.30" x 1.77" x 5.04" (160mm x 45mm x 128mm)	1.43 lbs. (0.65 kg)
PSR37-600-70	100/ 240 V	34	10	10	25	30	50 A	40 A J-Type	7.36" x 1.77" x 6.02" (187mm x 45mm x 153mm)	2.20 lbs. (1.00 kg)
PSR45-600-70	100/ 240 V	46.2	15	15	30	40	50 A	40 A J-Type	7.36" x 1.77" x 6.02" (187mm x 45mm x 153mm)	2.20 lbs. (1.00 kg)
PSR3-600-11	24 VDC	3.4	.5	.5	2	2	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	2.20 lbs. (1.00 kg)
PSR6-600-11	24 VDC	6.1	1	1	3	5	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR9-600-11	24 VDC	9	2	2	5	7.5	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR12-600-11	24 VDC	11	3	3	7.5	10	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR16-600-11	24 VDC	15.2	3	3	10	10	50 A	40 A J-Type	5.51" x 1.77" x 4.47" (140mm x 45mm x 113.5mm)	0.99 lbs. (0.45 kg)
PSR25-600-11	24 VDC	24.2	7.5	7.5	15	20	100 A	60 A J- Type	6.30" x 1.77" x 5.04" (160mm x 45mm x 128mm)	1.43 lbs. (0.65 kg)
PSR30-600-11	24 VDC	28	7.5	10	20	25	100 A	70 A J- Type	6.30" x 1.77" x 5.04" (160mm x 45mm x 128mm)	1.43 lbs. (0.65 kg)
PSR37-600-11	24 VDC	34	10	10	25	30	150 A	100 A J- Type	7.36" x 1.77" x 6.02" (187mm x 45mm x 153mm)	2.20 lbs. (1.00 kg)
PSR45-600-11	24 VDC	46.2	15	15	30	40	150 A	100 A J- Type	7.36" x 1.77" x 6.02" (187mm x 45mm x 153mm)	2.20 lbs. (1.00 kg)

ACCESSORIES

PSR-FAN

Cooling Fan for increased starting capacity (field-installable)