

Instructions for S801+ Soft Starter, S801+N... and S801+R...

The Soft Starter features an electronic motor overload protection feature. This is intended to protect the motor and power wiring against overheating caused by excessive current for extended periods of time.

Note: Short circuit protection must be applied on the line side of this soft starter.

Trip current is programmed by entering the motor full load current rating using the "FLA Current Adjust" dial. It is programmable from 32% to 100% (.32-1 adjustment range of the unit's rated current).

Thermal memory is incorporated to accurately monitor motor operating temperature. Ambient temperature does not affect soft starter function within its operating limits.

Auto/Manual Reset

The Select auto or manual reset.

When a fault is present, the auto-reset will attempt to reset the fault every 2.5 seconds. If the fault flag(s) is cleared, the soft starter checks again in five seconds to make sure it stays clear. If it stays clear, the system resets the fault(s).

Note: The motor does NOT automatically restart after a fault is reset.

Notice/Avis.

Automatic reset is not intended for two-wire control devices.

Ce dispositif de reenclenchement automatique ne convient pas aux commandes a deux conducteurs.

12-pin terminal connection wiring capacity and torque requirements for the control wiring.

Table 1. Control Wiring

Wire Size	Number of Conductors	Torque Req.
22 - 14 AWG (0.33 - 2.5 mm ²)	2	3.5 Lb-in (0.4 N-m)
12 AWG (4.0 mm ²)	1	

Table 2. Control Circuit Fuseholder Kit

Catalog Number	Fuse Type
C320FBR	Class CC

Table 3. Short Circuit Rating

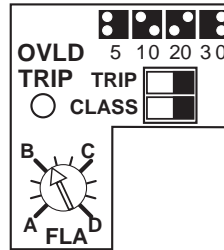
Soft Starter Catalog Number	Three-Phase Short Circuit Rating		
	240V	480V	600V
S801+N...	10 kA	10 kA	10 kA
S801+R...	10 kA	10 kA	10 kA

Note: Suitable for use in a circuit capable of delivering not more than 30,000 rms symmetrical amperes, 600 volts maximum when protected by Class L fuses or inverse time circuit breaker rated 600V, 1500 amperes, maximum.

Table 4. Overload - Adjustment Settings

Catalog Number	Current Range	Value of Adjustment Settings (Amps)			
		A	B	C	D
S801+N37...	11 - 37	11	19	27	37
S801+N66...	20 - 66	20	35	50	66

Catalog Number	Current Range	Value of Adjustment Settings (Amps)			
		A	B	C	D
S801+R10...	32 - 105	32	56	80	105
S801+R13...	42 - 135	42	73	104	135



The overload trip class can be set to Class 5, 10, 20, or 30. The setting determines the time to trip, based on the severity of the overload condition. The trip class setting is made by moving the dip switches into the appropriate position to match the class overload desired.

Find the motor FLA value on the table above. Set the FLA dial to the proper letter.

Table 5. Line and Load Power Wiring

Lug Kit	Number of Conductors	Lug Type	Wire Sizes Cu 75°C Only	Torque Req.	Number of Kits Req'd
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S801+N...

Supplied Standard with Box Lugs	1	Box Lug	2 AWG	50 Lb-in (5.6 N-m)	N/A
			4 - 6 AWG	45 Lb-in (5.0 N-m)	
			8 AWG	40 Lb-in (4.5 N-m)	
			10 - 14 AWG	35 Lb-in (4.0 N-m)	

S801+R...

Supplied Standard with Box Lugs	1	Box Lug	14 - 8 AWG (2.5 - 10 mm ²)	90 - 100 Lb-in (10.1 - 11.3 N-m)	N/A
			6 - 4 AWG (16 - 25 mm ²)		
			3 - 3/0 AWG (27 - 95 mm ²)		

Table 6. MOV Kits Options

Catalog Number	Description
EMS39	600V (max) MOV for S801+... Soft Starters
EMS41	690V (max) MOV for S801+... Soft Starters

Note: LOAD WIRES MUST BE 75° C STRANDED COPPER CONDUCTORS ONLY WHEN USING THE PROTECTIVE MODULE [EMS39]

Table 7. 24V Power Supply Kits

Catalog Number	Steady State Wattage	Inrush Wattage	Input Voltage
PSG240E	240W	360W	85 - 264 VAC
PSG240F	240W	360W	320 - 575 VAC

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