

# S801+ soft starter frequently asked questions

**Q:** What are the major features of the S801+?

**A:** The S801+ has many user friendly operations and protections parameters that may be configured by the end user for top performance including:

### Operations

- Voltage ramp or current limit start
- Kick start
- Soft stop or pump stop
- Level or edge sense
- Internal bypass contactors
- Voltage and current monitoring capability

### Protections

- Electronic overload
- Jam and stall protection
- Voltage phase loss, phase imbalance, phase reversal
- High and low voltage and current protection
- Pole over temperature protection
- SCR shorted and open detection

**Q:** Does the S801+ have network communication capability?

**A:** The S801+ does not have network communications capability. RVSS command control is accomplished through the control terminal block.

**Q:** How long does it take to program the unit?

**A:** The Control Interface Module (CIM) is a user interface that uses potentiometers for start ramp time, initial torque, kick start time, kick start initial torque, stop ramp time and motor FLA values. Setup can be accomplished in only moments.

**Q:** Can protection parameters be adjusted on the S801+?

**A:** Overload, jam, stall, phase loss and phase reversal parameters may be disabled with DIP switches on the CIM (not recommended). Additionally, overload trip class, manual/auto fault reset and ramp start/current limit start profiles may be selected from DIP switches on the CIM.

**Q:** I will be installing several S801+s in the same application(s). Do I have to program each one separately?

**A:** Not necessarily. The potentiometers on the CIM can be quickly adjusted. The CIM on the S801+ will transfer all the potentiometer values from the CIM to the S801+ during initialization of the unit. If needed, the CIM can then be removed and the S801+ operated as normal.

**Q:** What are the similarities between the S801+ and S801?

**A:** The S801+ is an upgraded version of the S801, primarily the printed circuit board. Both devices have the identical power structure and base assembly. The printed circuit board and firmware used on the S801+ is new. They have the same start and stop methods, options and ratings, and they use the same accessories.

**Q:** What are the major applications that the S801+ may be used in?

**A:** The S801+ is a full featured RVSS that is targeted for many diverse markets including:

- Pumps
- Fans
- Conveyors
- Crushers

**Q:** I notice that there is an S811+ standard and an S811+ premium. Is there an S801+ premium?

**A:** The standard unit includes all the functions required for normal applications with inline mains wiring configurations, and selectable between level and edge sense. The S801+ is only available in the standard configuration.

**Q:** What are the catalog numbers?

**A:** S801+ standard: S801+...N3S—level/edge sense, inline wiring config. only.

**Q:** Who should I contact for technical assistance?

**A:** For open units, contact the Technical Resource Center (800) 809-2772. For Enclosed units contact Fayetteville Enclosed Control Marketing. For MCC's contact Fayetteville MCC Marketing.

**Q:** Is the S801+ available in enclosed control and/or a motor control center?

**A:** Yes. Similar to the S801 that it is replacing, the S801+ may be ordered in either form.

**Q:** Who should I contact for pricing?

**A:** For open units, contact the regional Pricing Manager in Avery Creek.

For Enclosed units contact Fayetteville Enclosed Control Marketing.

For MCC's contact Fayetteville MCC Marketing.

**Q:** Who should I contact for warranty assistance?

**A:** For open units, contact the Milwaukee PIC (Product Integrity Center) (800) 345-0434.

For Enclosed units and MCC's contact Fayetteville PIC (Product Integrity Center).

**Q:** Where can I find technical data on the S801+?

**A:** Technical data is included in the User Manual (MN03900002E) and the catalog supplement for this product.

**Q:** How does the S801+ stack up against the competition?

**A:** A competitive analysis document is available from the Product Manager.



Powering Business Worldwide

**Q:** Can an S801 be upgraded to an S801+?

**A:** Although this is technically possible, no upgrade kits or programs are currently available. Future upgrade kits or programs may be implemented based on technical feasibility and customer demand. Please advise Product Manager of customer interest.

**Q:** I have an S801 in an application. Can I upgrade to (or replace with) the S801+?

**A:** Yes, the mounting dimensions are identical to the S801 (or S811). The unit height is slightly higher, but will normally fit into an existing enclosure or MCC. Additionally, lug design from the T-, U-, and V-Frames have been retained from the S801 and S811 and maybe used with the S811+.

**Q:** It looks like there is a Comms Port channel on the S801. Can it be used for network communications?

**A:** The figure below illustrates the terminal block area and DIP switches.

The S801+ does not support network communications. What appears to be a comms port is actually a factory-use only programming port for the firmware. The S1 DIP switch is used for selecting level or edge sense. The remaining DIP switches are non-functional.

**Q:** Does the S801+ have inside-the-delta control?

**A:** The S801+ is not available for applications requiring inside-the-delta mains wiring configuration. If needed, an S811+ can be used for this purpose.

**Q:** What are the ratings of the S801+?

**A:** The ratings are the same as the S801:

- 11–1000A
- Up to 690V
- 10–1000 hp
- 10–600 kW

**Q:** Will the S801 be discontinued?

**A:** Yes.

**Q:** How do the S801+ and S811+ list prices compare?

**A:** S801+/S811+ prices are within 5% of S801/S811 pricing.

**Q:** Can a CIM from an S801 be used on an S801+?

**A:** Yes.

**Q:** Can the S801+ run without the CIM?

**A:** Yes.

**Q:** Can a CIM be used on an S811+?

**A:** Yes.

**Q:** What renewal parts are available for the S801+?

**A:** Renewal parts include the CIM, CIM cable and locking control terminal block.

**Q:** What are the terminal control block input function options?

**A:**

- Run command
- Jog
- Disable overload on start
- Reset

**Q:** What are the relay options?

**A:**

- Fault/Fault NOT
- In bypass (normally open contact)

**Q:** What is the control voltage?

**A:** The control voltage is 24 Vdc and power supply requirements are the same as the S801, 24 Vdc at 240 watts.

**Q:** Can the control voltage for the S801+ be changed to 120 Vac?

**A:** The S801+ will only recognize 24 Vdc signals at the control terminal block. If the S801+ is to be fitted into a 120 Vac control system, and interposing relay(s) will be needed.

**Q:** Are the faults codes the same as the S801?

**A:** Yes, the fault codes are the same as the S801.

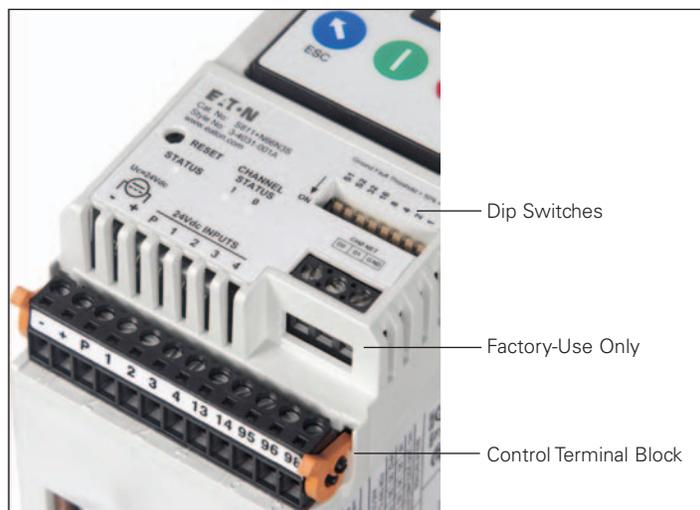
**Q:** What are the fault codes for the S801+?

**A:** A complete list of the fault codes and fault parameter options are available in the S801+ User manual.

**Q:** What literature is available for the S801+?

**A:** Tab 39 Catalog—Volume 6: Pub. Number CA01810007E

S801+ User Manual: Pub. Number MN03900002E



**Eaton Corporation**  
Electrical Sector  
1111 Superior Avenue  
Cleveland, OH 44114 USA  
Eaton.com

© 2012 Eaton Corporation  
All Rights Reserved  
Printed in USA  
Publication No. SA03902031E / Z12524  
July 2012

Eaton is a registered trademark of Eaton Corporation.

All other trademarks are property of their respective owners.

For more information, please contact your local Eaton sales representative or visit [www.eaton.com](http://www.eaton.com)

**EATON**

Powering Business Worldwide