

Enclosed control



Enclosed S611 solid-state soft starter



The Eaton line of S611 reduced voltage soft starters is multi-functional, easy to install and straightforward to program. Simplified monitoring and diagnostics are possible with this revolutionary soft starter.

Simplifying commissioning

Optimized for heavy-duty applications, the Eaton S611 enclosed soft starter is a powerful combination of performance capability and application flexibility with one of the best user interface experiences. Providing advanced system information to expedite commissioning, S611 soft starters minimize downtime for heavy-duty applications. The S611 soft starter is designed to:

- Minimize shock to mechanical components
- Extend system life
- Increase reliability
- Reduce maintenance requirements

S611 soft starter monitoring capabilities include:

- Overload
- Undervoltage
- Overcurrent
- Phase loss
- Jam and stall protection
- Power monitoring

Fully stocked and readily available, the Eaton S611 enclosed soft starters are available in NEMA® 1, 12, 3R, 4 and 4X, with keypad door mounting and external bypass options. The Eaton S611 enclosed soft starters withstand rigorous duty cycles, helping construction and OEM customers improve reliability.

The S611 soft starters deliver powerful performance with an integrated run bypass and overload protection. A fully-rated bypass is available in an enclosed offering. The S611 reduces device counts, panel size, installation time and assembly costs.

EATON

Powering Business Worldwide

Product description

Designed to control acceleration and deceleration of three-phase motors up to 600V, current ratings 26–414A.

- Ease of commissioning and troubleshooting (intuitive user interface)
- Internal run bypass
- 120 Vac control voltage
- Open architecture for serviceability (PCBs and contactors can be replaced in the field)
- Built-in overload protection
 - Adjustable trip class 5, 10, 20, 30
 - 50–100% FLA adjustment

- Selectable current limit or ramp start
- Adjustable ramp times
 - 0–180 seconds standard
 - Extended ramps available
- Adjustable torque control
- Adjustable kick start control
- Soft stop control
 - 0–60 seconds standard
 - Extended times available
- Built-in low impedance contactor
- Six SCR control in all units
- Selectable phase reversal protection

Enclosed units

- Keypad is posted outside the door
- External bypass is available
- Enclosed options include NEMA Type 1, 12, 3R, 4 and 4X

Features and benefits

Reduced mechanical stress on system

- Reduces wear on belts, gears, chains, clutches, shafts and bearings, realizing 2–6 times the life on standard belts with a soft starter
- Eliminates water-hammer in pumping applications extends component life and helps limit leakage in system

- Minimizes shock to product on conveyor lines and material handling gear
- Catches motors and fans on the fly and controls their acceleration

Electrical system improvements

- Limits the peak inrush current as required by many local codes
- Helps to eliminate sags on the plant electrical grid when starting large loads, thus avoiding brownout conditions

W34 enclosed S611 (stocked)

S611 Horsepower Ratings Based on Standard Duty—300%

| Max. Current | 60 Hz—300% Duty | | | | NEMA Type Enclosure | | | Disconnect | | | Transformer | | Cover Control | |
|--------------|-----------------|------|------|------|---------------------|----|---|------------|---------|---------|-------------|-----|---------------|--|
| | 208V | 240V | 480V | 600V | 12 | 3R | 4 | Non-Combo | Fusible | Breaker | CPT | HOA | START/STOP | |
| 52A | 15 | 15 | 40 | 50 | — | ■ | — | — | — | ■ | ■ | ■ | ■ | |
| 65A | 20 | 20 | 50 | 60 | — | — | — | — | — | — | — | — | — | |
| 77A | 25 | 25 | 60 | 75 | — | ■ | — | — | — | ■ | ■ | ■ | ■ | |
| 99A | 30 | 30 | 75 | 100 | ■ | ■ | — | — | — | ■ | ■ | ■ | ■ | |
| 125A | 40 | 40 | 100 | 125 | — | ■ | — | — | — | ■ | ■ | ■ | ■ | |
| 156A | 50 | 60 | 125 | 150 | — | — | — | — | — | — | — | — | — | |
| 180A | 60 | 60 | 150 | 150 | ■ | ■ | — | — | — | ■ | ■ | ■ | ■ | |
| 242A | 75 | 75 | 200 | 250 | — | ■ | — | — | — | ■ | ■ | ■ | ■ | |
| 302A | 100 | 100 | 250 | 300 | — | — | — | — | — | — | — | — | — | |
| 361A | 125 | 150 | 300 | 350 | — | — | — | — | — | — | — | — | — | |
| 414A | 150 | 150 | 350 | 450 | — | — | — | — | — | — | — | — | — | |

Note: Door-mounted keypad and pump control S611 are provided as standard.

Vista registered enclosed S611 (two weeks lead-time)

S611 Horsepower Ratings Based on Standard Duty—300%

| Max. Current | 60 Hz / 300% Duty | | | | NEMA Type Enclosure | | | | Disconnect | | | Transformer | | Cover Control | | Lead-Time |
|--------------|-------------------|------|------|------|---------------------|----|----|---|------------|---------|---------|-------------|-----|---------------|---|-----------|
| | 208V | 240V | 480V | 600V | 1 | 12 | 3R | 4 | Non-Combo | Fusible | Breaker | CPT | HOA | START/STOP | | |
| 52A | 15 | 15 | 40 | 50 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | 2 weeks |
| 65A | 20 | 20 | 50 | 60 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 77A | 25 | 25 | 60 | 75 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 99A | 30 | 30 | 75 | 100 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 125A | 40 | 40 | 100 | 125 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 156A | 50 | 60 | 125 | 150 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 180A | 60 | 60 | 150 | 150 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 242A | 75 | 75 | 200 | 250 | ■ | ■ | ■ | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 302A | 100 | 100 | 250 | 300 | — | — | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 361A | 125 | 150 | 300 | 350 | — | — | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 414A | 150 | 150 | 350 | 450 | — | — | — | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |

Note: Door-mounted keypad and pump control S611 are provided as standard.

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Printed in USA
Publication No. PA123001EN / Z13784
June 2013

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