Bulletins 150, 152 and 153
Enclosed Smart Motor Controllers

SMC™-3, SMC™ Flex and SMC™-50 soft starters

Advantages
- Reduced mechanical system stress, wear and maintenance
- Lower voltage/current spikes and line disturbances
- Decreased water hammer in pumping applications
- Snap-together wiring technology for faster, easier installation
- Lower peak electrical use and demand charges
- Floor standing indoor/outdoor rated enclosure has compact footprint requiring less space

Functionality
Enhanced Control Options
- User programmability
- Scalable to critical nature of application
- Local, manual and automatic modes

Inherent Diagnostics
- Current, voltage, power and energy monitoring
- Faults and alarms

Lowest Installed Cost with Network Integration
- Ease of communication linkage (e.g. multi protocol, AOPs)
- Localized I/O and control
- Wire reductions

Overview
The capabilities and flexibility of the enclosed SMC-3, SMC Flex and SMC-50 soft starters make them ideal for almost any application. They minimize mechanical wear that results from full-voltage starting, enabling longer starting. This prolongs system life and lowers line disturbances, reducing downtime and increasing efficiency. Factory-built, enclosed soft starters are customized solutions tailored to your specific application, but pre-engineered for standardization and quick delivery available through regional configuration centers.

Offering
Enclosed SMC-3, SMC Flex and SMC-50 soft starters are available as non-combination, combination fusible disconnect or combination circuit breaker. Solutions can be fully customized with any selection of a wide variety of factory-installed options, and are pre-engineered for quick factory lead times.

With industry-leading customization, available options, and functionality, these soft starters are a clear-cut choice for diverse and specialized applications.
Enclosed Soft Starting Solutions

Enclosed soft starting solutions encompass all the starting, stopping, protection and diagnostics benefits of Allen-Bradley® soft starters, in a customizable, pre-engineered solution. Factory-built enclosed soft starters are shipped ready to install, with quick lead times.

Enclosed SMC-3 soft starter

Compact, cost-effective solution for on-machine or pumping applications

- Available 3…480 A
- Snap-together wiring technology

Bulletins 150C, 152C, 153C

APPLICATIONS: Conveyors • Fans • Pumps • Chillers • Mixers • Lifts

Enclosed SMC Flex soft starter

Modular design with advanced performance and communications flexibility

- Available 5…1250 A
- Snap-together wiring technology
- Optional full-numeric keypad, door-mounted HIM

Bulletins 150F, 152F, 153F

APPLICATIONS: Compressors • Pumps • Fans • Conveyors • Bandsaws • Chillers • Centrifuges

Enclosed SMC-50 soft starter

Scalable solution, satisfying a wide variety of control needs

- Available 90…520 A
- Snap-together wiring technology
- Normal and heavy-duty ratings
- Optional start- or run-duty external bypass or integrated bypass
- Optional door-mounted HIM with easy-selection arrows and soft keys for navigation
- Optional digital and analog I/O expansion modules and protection

Bulletins 150S, 152S, 153S

APPLICATIONS: Pumps • Compressors • Fans • Conveyors • Bandsaws • Mills • Crushers • Grinders • Shredders • Centrifuges

1Snap-together wiring available from 90…520 A
### Soft Starter Feature Comparison

<table>
<thead>
<tr>
<th>Feature</th>
<th>SMC-3 soft starter</th>
<th>SMC Flex soft starter</th>
<th>SMC-50 soft starter</th>
</tr>
</thead>
<tbody>
<tr>
<td>True 3-Phase control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Bypass</td>
<td>Internal</td>
<td>Internal</td>
<td>External or Internal</td>
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<tr>
<td>Protection and Diagnostics</td>
<td>Basic</td>
<td>Advanced</td>
<td>Industry leading</td>
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<tr>
<td>Start/stop modes</td>
<td>5</td>
<td>9</td>
<td>17</td>
</tr>
<tr>
<td>Enclosure type</td>
<td>1/12/4 or 3R</td>
<td>1/12/4 or 3R</td>
<td>1/12/4 or 3R</td>
</tr>
<tr>
<td>Factory-installed communication modules</td>
<td>None</td>
<td>RS-485, DeviceNet™, Ethernet/IP, ControlNet™, ProfiBUS</td>
<td>RS-485, DeviceNet™, Ethernet/IP, ControlNet™, ProfiBUS</td>
</tr>
<tr>
<td>Voltage range</td>
<td>200....575V AC</td>
<td>200....575V AC</td>
<td>200....575V AC</td>
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<tr>
<td>Control voltage</td>
<td>100....240V AC</td>
<td>100....240V AC</td>
<td>100....240V AC</td>
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<tr>
<td>Option offering and customization</td>
<td>Moderate</td>
<td>Extensive</td>
<td>Extensive</td>
</tr>
<tr>
<td>Customization through modified industrial controls</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

### Soft Starter Enclosures

**Standard enclosure sizes are available in three widths**
- 400 mm (15.7 in.)
- 600 mm (23.6 in.)
- 1000 mm (39.4 in.)

**Enclosure accessories are available for each width**
- Mounting rail for door installation
- Enclosure mounting foot, high strength plastic
- Enclosure mounting foot, sheet steel

**Ratings and Environmental Specifications**
- Standards compliance: UL 508A
- Enclosure and ambient operating temperature: -5…40 °C (23…104 °F)
- Altitude: 2000 m (6560 ft)
- Humidity: 5…95% (non condensing)

### Snap-together Wiring Technology

**Wiring Made Easy**
Many of our enclosed soft starters now feature component wiring that is color-coded by function. The wiring sleeve cover corresponds to a colored label on the terminal block, reducing wiring errors and allowing quicker installation times.

**Snap-together wiring available from 90...520 A**
Modified Industrial Controls

The Modified Industrial Controls business at Rockwell Automation can take your panel design needs from conception to completion. We provide a unique engineer-to-engineer relationship that helps to ensure that every aspect of your panel is designed, developed and delivered according to your specifications, schedule and budget.

Customizable panels include:
- Programmable controllers
- Starters
- Distributed I/O
- Servo drives
- Push buttons and pilot lights
- Partner products and other third-party devices

Find out more about Modified Industrial Controls:
www.rockwellautomation.com/go/lit/icp-modified

Regional Configuration Centers

The Rockwell Automation regional configuration centers are located in your area to help you get the right product, right when you need it.

Availability
- Products ship within 5 days

Flexibility
- Factory-installed modifications
- Comply with regional needs and standards

Enclosed soft starters are assembled in the Central and Western regional configuration centers.

www.rockwellautomation.com