# Bulletin 150, 152 & 153 Enclosed Smart Motor Controllers



Featuring the SMC<sup>™</sup>-3, SMC<sup>™</sup> Flex & SMC<sup>™</sup>-50

The capabilities and flexibility of the Enclosed SMC-3, SMC Flex and SMC-50 make them ideal for almost any application. They minimize mechanical wear resulting from full-voltage starting, enabling longer system life and also lower line disturbances, reducing downtime and increasing efficiency.

Factory-built, Enclosed SMCs are customized solutions tailored to your specific application, but pre-engineered for standardization and quick delivery.



### **Advantages**

- Reduced mechanical system stress, wear and maintenance
- · Lower voltage/current spikes and line disturbances
- · Decreased water hammer in pumping applications
- · Simplified compliance to local utility code
- · Lower peak electrical use and demand charges

#### **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 (i.e., multi protocol, AOPs)
- Localized I/O and control
- Wire reductions

# Offering

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

Enclosed SMCs offer a balance of performance, versatility and price.

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



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

- Available 3...480 A
- Combination pump panels available in Type 3R enclosure in 7 controller ratings (460V, 25...480 A)

Bulletins 150-C, 152H-C, 153H-C

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

### **Enclosed SMC Flex**

Modular design with advanced performance and communications flexibility

- Available 5...780 A (up to 1250 A through Modified Standards)
- Optional full-numeric, door-mounted HIM

Bulletins 150-F, 150B-F, 152H-F, 152B-F, 153H-F, 153B-F



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

# **Enclosed SMC-50**

Scalable solution, satisfying a wide variety of control needs

- Available 90...520 A
- Normal and heavy-duty ratings
- Optional start- or run-duty external 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 150-S, 150B-S, 152H-S, 152B-S, 153H-S, 153B-S



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

### **SMC Feature Comparison**

	SMC-3	SMC Flex	SMC-50
True 3-phase control	Yes	Yes	Yes
Bypass	Integral	Integral	External
Protection and diagnostics	Basic	Advanced	Industry leading
Start/stop modes	5	9	17
Enclosure Type	1/12/4 or 3R	1/12/4 or 12	1/12/4 or 12
Factory-installed communication modules (optional)	None	RS-485, DeviceNet,™ Ethernet/IP, ControlNet™ ProfiBUS	RS-485, DeviceNet, Ethernet/IP, ControlNet, ProfiBUS
Voltage range	200575V AC	200575V AC	200575V AC
Control voltage	100240V AC	100240V AC	100240V AC
Option offering and customization	Moderate	Extensive	Extensive
Customization through Modified Standards	Yes	Yes	Yes

Common factory-installed options include transformers (standard and extra capacity), pilot devices, HIM, protective modules, communication modules and auxiliaries. Others available.



Scan this code to visit the SMC online catalog for product configuration and options or for general SMC information go to http:// ab.rockwellautomation.com/Motor-Control/ Soft-Starters



Scan this code to visit the SMC family brochure for feature and application information or for general SMC information go to http:// ab.rockwellautomation.com/Motor-Control/ Soft-Starters

# **Modified Standards**

Our Modified Standards program is available to build Enclosed SMCs that are customized with features or components that are not standard options or are third-party devices. Special product needs typically supported include:

- Type 4X or custom enclosures
- · Voltage meters, ammeters and hour meters
- Shunt trips
- Control relays
- Vacuum contactors

Modified Standards designs utilize the layouts and wiring practices of a standard product offering, providing a consistent panel appearance across multiple orders.



Keep your complex projects moving quickly with the Modified Standards quick quoting process. Contact your local Allen-Bradley distributor or Rockwell Automation sales office to place an order.

### **ProposalWorks**

Enclosed SMCs may be configured with the easy-to-use ProposalWorks interface.

Find the exact catalog number you need, access current pricing, view related documents and photos, and include them in a Word document.



### **Ratings and Environmental Specifications**

#### **Enclosed Product**

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)

#### **Open Style**

Standards compliance: UL 508 CSA C22.2 No. 14 FN/IFC 60947-1 EN/IEC 60947-4-2

Certifications: cULus Listed (Open Type) (File No. E96956, Guides NMFT, NMFT7) CSA Certified (File No. LR 1234) CE Marked CCC Certified

Rockwell Automation offers a breadth of quality Allen-Bradley® components to fit your specific needs. In order to assist you with your component selection, we offer a variety of configuration and selection tools.



**Local Distributor** Call 1.800.223.3354 to contact your local Distributor today.

http://www.rockwellautomation.com/products/



http://www.rockwellautomation.com/distributor/



manufacturing cycle.

**On-Line Product Directory** 

Product Selection Toolbox Our powerful range of product selection and system configuration tools assist you in choosing and applying our products. http://www.rockwellautomation.com/en/e-tools/

Our extensive product portfolio is designed to improve your processes through every stage of your

#### Catalogs

Within our catalogs you'll find an extensive selection of essential Allen-Bradley component products. http://www.ab.com/catalogs/

Allen-Bradley, LISTEN. THINK. SOLVE., Rockwell Software, SMC-3, SMC-50 and SMC Flex are trademarks of Rockwell Automation, Inc. Trademarks not belonging to Rockwell Automation are property of their respective companies.

#### www.rockwellautomation.com

#### Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444 Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640 Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846