

 *Allen-Bradley*

Product Profile



MV SMC-Flex™ Smart Motor Controller

Bulletin 1560E / 1562E
200-600 Amp • 2400-6900 Volt

Allen-Bradley



Bulletin 1560E / 1562E

MV SMC-Flex™ Smart Motor Controllers

**Optimized Performance,
Safety, Convenience and Reliability**

**The Rockwell Automation MV SMC-Flex™
Smart Motor Controller offers:**

Standard Control Module

- Soft Start – with Selectable Kickstart
- Soft Stop
- Current Limit Start – with Selectable Kickstart
- Linear Speed Acceleration* – with Selectable Kickstart
- Linear Speed Deceleration*
- Dual Ramp – with Selectable Kickstart
- Full Voltage
- Preset Slow Speed

** requires motor tachometer*

Optional Control Module

- Pump Control (eliminates water hammer)
– separate start and stop profiles

Standard Features of SMC-Flex Controller

- Electronic Motor Overload Protection
- Metering
- Built-in DPI Communications
- Two-line, 16-character Backlit LCD Display
- Keypad Programming
- Three Programmable Auxiliary Contacts

Complete Package

- Quick shipment of several standard configurations
 - Bulletin 1560E retrofit controller
 - Bulletin 1562E combination controller
- Available with optional equipment
 - Power factor correction capacitors
 - Specialty meters, transducers and relays
- Ready for immediate installation
- Complete installation documentation
- Built to Rockwell Automation quality standards and ISO9001:2000
- Fully load tested with a three-phase MV motor



**Bulletin 1562E
Combination Controller**

Bulletin 1560E / 1562E Specifications

Input Voltage

- Three-phase, 2400 to 6900 VAC
+10%, -15%

Frequency

- 50/60 Hz

Power Section

- 6 SCR at 2400 V
- 12 SCR at 3300 V
- 12 SCR at 4160 V
- 18 SCR at 6900 V

Repetitive Peak Inverse Voltage Rating

- 2400 V - 6500 PIV
- 3300 V - 13000 PIV
- 4160 V - 13000 PIV
- 6900 V - 19500 PIV

Enclosure

- NEMA Type 1 General Purpose (IP10)
- NEMA Type 1/G General Purpose with cover gasket (IP21)
- NEMA Type 12 Dust-Tight: Industrial Use (IP52)
- NEMA Type 3R Weatherproof (IP34)

Ambient Temperature

- 0°C to 40°C (32°F to 104°F)

Thermal Capacity

- 600%, 10 seconds
- 450%, 30 seconds

Power Bus (Optional)

- Centerline™ horizontal tin-plated copper bus – optional silver-plated or insulated
- 1200/2000/3000 A
- Front/rear access

SCR Firing

- Economized block-pulse gating
- Self-powered gate drive

dv/dt Protection

- RC snubber network

Motor Protection

- Electronic motor overload protection, Class 10, 15, 20 and 30

Metering

- Access locally using the controller's built-in LCD display, or remotely through the communication port
- Three-phase voltage
- Three-phase current
- Three-phase power (MW, MWh, power factor)
- Elapsed time
- Motor thermal capacity usage
- Motor speed (with optional use of tachometer input)

Communication (optional)

- DeviceNet™
- ControlNet™
- EtherNet/IP
- Profibus DP
- Remote I/O
- RS485-DF1

Programming

- Three-level menu structure (using standard languages)
- Built-in LCD display and keypad
- Multiple languages: English, French, German, Italian, Mandarin, Portuguese, Spanish
- Optional Human Interface Modules (DPI-based)
- Configurable with DriveTools™ programming software

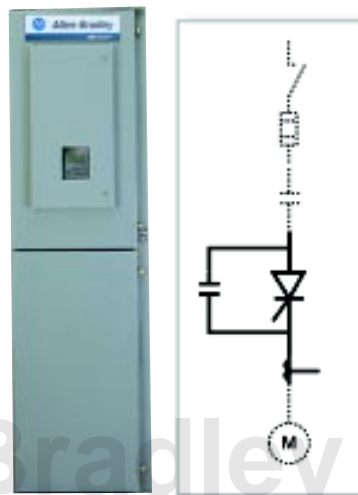
Vacuum Contactor

- Fixed mounted vacuum contactor is standard
- Main contactor for unit isolation (1562E)
- Bypass contactor removes SCR Power Stack from circuit, once at full voltage
 - Eliminates heat generated by SCRs - improves efficiency
 - Protects SCRs from voltage and current transients
- Contactor can be provided with IntelliVAC™ solid-state control

Diagnostics

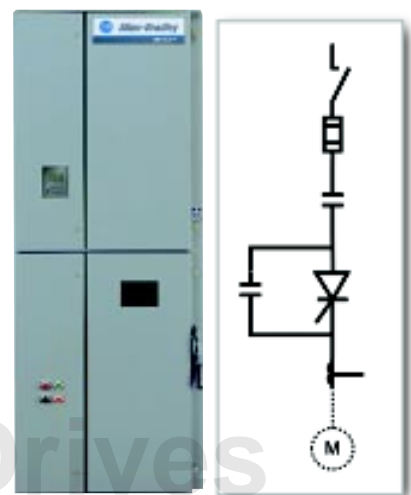
- Line Fault
- Power Loss
- Voltage Unbalance
- Current Unbalance
- Ground Fault
- Communication Fault
- Phase Reversal
- Undervoltage
- Overvoltage
- Jam
- Overtemperature
- Stall
- Open Gate
- Overload
- Underload
- Excessive Starts per Hour

Bulletin 1560E



Retrofit Controller

Bulletin 1562E



Combination Controller

Bulletin 1560E / 1562E Specifications (continued)

Output Ratings (NEMA 1, IP10)

Voltage	Output Ratings – hp (kW)		
	200 A	400 A	600 A
2400 V	800 (600)	1,500 (1100)	2,750 (2050)
3300 V	1,000 (750)	2,250 (1700)	4,000 (3000)
4160 V	1,250 (950)	2,750 (2050)	4,500 (3350)
6900 V	2,500 (1900)	5,000 (3350)	7,500 (5600)

Dimensions and Weights

Bulletin	Voltage	Rating	Width		Depth		Height		Weight	
			in.	mm	in.	mm	in.	mm	lb.	kg
1560E	2400 V	200 A	26	660	36	914	91	2311	800	363
		400 A	26	660	36	914	91	2311	800	363
		600 A	44	1117	36	914	91	2311	1,300	590
	3300 V	200 A	26	660	36	914	91	2311	800	363
		400 A	26	660	36	914	91	2311	800	363
		600 A	44	1117	36	914	91	2311	1,300	590
	4160 V	200 A	26	660	36	914	91	2311	800	363
		400 A	26	660	36	914	91	2311	800	363
		600 A	44	1117	36	914	91	2311	1,300	590
	6900 V	200 A	36	914	36	914	91	2311	1,220	554
		400 A	36	914	36	914	91	2311	1,220	554
		600 A	44	1117	36	914	91	2311	1,300	590
1562E	2400 V	200 A	36	914	36	914	91	2311	1,400	636
		400 A	36	914	36	914	91	2311	1,400	636
		600 A	80	2032	36	914	91	2311	2,325	1056
	3300 V	200 A	36	914	36	914	91	2311	1,400	636
		400 A	36	914	36	914	91	2311	1,400	636
		600 A	80	2032	36	914	91	2311	2,325	1056
	4160 V	200 A	36	914	36	914	91	2311	1,400	636
		400 A	36	914	36	914	91	2311	1,400	636
		600 A	80	2032	36	914	91	2311	2,325	1056
	6900 V	200 A	62	1575	36	914	91	2311	2,325	1056
		400 A	62	1575	36	914	91	2311	2,325	1056
		600 A	100	2540	36	914	91	2311	4,000	1812

Note: Certain options (PFCC, etc.) can change dimensions and weight.
Consult factory on the specific application.

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