

Product Details and Certifications

Cross Reference RA Part Number: 150-F43NCR B

Product: **150-F43NCR**

Description: SMC-Flex, Solid State Controller, Open, 43 A,
7.5...30Hp @ 460V AC, Input Volt: 200...600V,
Control Volt: 24V AC/DC



Representative Photo Only (actual product may vary based on configuration sections)

CONTROLLER DATA

Bulletin Number	150-F Solid State Controller
Enclosure Type	Open
Input Line Voltage	200...600V AC, 50/60Hz
Control Voltage	24V AC/DC
Phase	3 PH
Amperage Rating	43 A

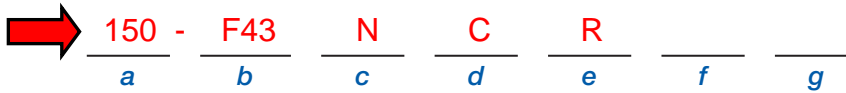
CERTIFICATIONS AND APPROVALS

UL
CSA
EEC
CE

OPTIONS

Control Options	None
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Open and Non-Combination



Bulletin Number	
Code	Description
150	Solid-State Controller
150B	Enclosed Solid-State Controller with Isolation Contactor

Controller Ratings	
Code	Description
F5	5 A, 3 Hp @ 460V AC
F25	25 A, 15 Hp @ 460V AC
F43	43 A, 30 Hp @ 460V AC
F60	60 A, 40 Hp @ 460V AC
F85	85 A, 60 Hp @ 460V AC
F108	108 A, 75 Hp @ 460V AC
F135	135 A, 100 Hp @ 460V AC
F201	201 A, 150 Hp @ 460V AC
F251	251 A, 200 Hp @ 460V AC
F317	317 A, 250 Hp @ 460V AC
F361	361 A, 300 Hp @ 460V AC
F480	480 A, 400 Hp @ 460V AC
F625	625 A, 500 Hp @ 460V AC
F780	780 A, 600 Hp @ 460V AC
F970	970 A, 800 Hp @ 460V AC
F1250	1250 A, 1000 Hp @ 460V AC

Enclosure Type	
Code	Description
F	NEMA Type 4/12 (IP65) (Non-Combination Only)
J	NEMA Type 12 (IP54)
N	Open

Input Line Voltage	
Open Type	
Code	Description
B	200...460V AC, 3-phase, 50 and 60 Hz
C	200...575V AC, 3-phase, 50 and 60 Hz
Z	230...690V AC, 3-phase, 50 and 60 Hz (Open Only, 108 A and above)
Non-Combination Enclosed Only	
H	200...208V AC, 3-phase, 50 and 60 Hz
A	230V AC, 3-phase, 50 and 60 Hz
B	400...460V AC, 3-phase, 50 and 60 Hz
C	500...575V AC, 3-phase, 50 and 60 Hz

Control Voltage	
Code	Description
D	100...240V AC (5...480 A units)
R	24V AC/DC (5...480 A units) (Open Only)
E	110/120V AC (625...1250 A units)
A	230/240V AC (625...1250 A units)

Options (Select Only One)	
Code	Description
Blank	Standard
B	Pump Control
D	Braking Control

Options (Non-Combination only) (see page 19 for a full listing)	
Code	Description
8L	Line-Mounted Protective Module (enclosed only)
8M	Load-Mounted Protective Module (enclosed only)
8B	Line- and Load-Mounted Protective Modules (enclosed only)

Load-side MOVs are not available with Pump and Braking options, or on delta-connected motors. MOVs can be field installed for open type units.

Combination



Bulletin Number	
Code	Description
152H	Solid-State Controller with Fusible Disconnect
152B	Solid-State Controller with Fusible Disconnect and Isolation Contactor
153H	Solid-State Controller with Circuit Breaker
153B	Solid-State Controller with Circuit Breaker and Isolation Contactor

Controller Ratings	
Code	Description
F5	5 A, 3 Hp @ 460V AC
F25	25 A, 15 Hp @ 460V AC
F43	43 A, 30 Hp @ 460V AC
F60	60 A, 40 Hp @ 460V AC
F85	85 A, 60 Hp @ 460V AC
F108	108 A, 75 Hp @ 460V AC
F135	135 A, 100 Hp @ 460V AC
F201	201 A, 150 Hp @ 460V AC
F251	251 A, 200 Hp @ 460V AC
F317	317 A, 250 Hp @ 460V AC
F361	361 A, 300 Hp @ 460V AC
F480	480 A, 400 Hp @ 460V AC
F625	625 A, 500 Hp @ 460V AC
F780	780 A, 600 Hp @ 460V AC

Enclosure Type	
Code	Description
F	NEMA Type 4/12 (IP65)
J	NEMA Type 12 (IP54)

Line Voltage, 120V AC Control Voltage	
Code	Description
HD	200...208V AC, 3-phase, 50 and 60 Hz
AD	230V AC, 3-phase, 50 and 60 Hz
BD	400...460V AC, 3-phase, 50 and 60 Hz
CD	500...575V AC, 3-phase, 50 and 60 Hz

Control Options	
Code	Description
Blank	Standard
B	Pump Control
D	Braking Control

Options (see page 19 for a full listing)	
Code	Description
8L	Line-Mounted Protective Module
8M	Load-Mounted Protective Module
8B	Line- and Load-Mounted Protective Modules

Load-side MOVs are not available with Pump and Braking options, or when used with inside-the-delta connections.

Horsepower									
Cat. No.	Hp Rating	Cat. No.	Hp Rating	Cat. No.	Hp Rating	Cat. No.	Hp Rating	Cat. No.	Hp Rating
33	0.5	39	5	46	40	52	150	60	450
34	0.75	40	7.5	47	50	54	200	61	500
35	1	41	10	48	60	56	250	62	600
36	1.5	42	15	49	75	57	300	63	700
37	2	43	20	50	100	58	350	65	800
38	3	44	25	51	125	59	400	67	1000
—	—	45	30	—	—	—	—	—	—

Bulletin 150
SMC™ Flex Smart Motor Controllers
 Product Selection

Open Type and Non-Combination Enclosed (IP65, Type 4/12) Controllers — For use with Line-Connected Motors, Continued

Enclosures other than those listed are available; consult your local Rockwell Automation sales office or Allen-Bradley distributor.

Rated Voltage [V AC]	Motor Current [A]‡	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type — Line-Connected Motors ★	IP65 (Type 4/12) Enclosed Non-Combination Controllers ♦♦
					Cat. No.	Cat. No.
	1...5	2.2	3	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F5NCD 150-F5NCR	150-F5FCD —
	5...25	15	20	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F25NCD 150-F25NCR	150-F25FCD —
	8.6...43	22	40	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F43NCD 150-F43NCR	150-F43FCD —
	12...60	37	50	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F60NCD 150-F60NCR	150-F60FCD —
	17...85	55	75	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F85NCD 150-F85NCR	150-F85FCD —
	27...108	75	100	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F108NCD 150-F108NCR	150-F108FCD —
	34...135	90	125	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F135NCD 150-F135NCR	150-F135FCD —
	67...201	132	200	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F201NCD 150-F201NCR	150-F201FCD —
500/575	84...251	160	250	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F251NCD 150-F251NCR	150-F251FCD —
	106...317	200	300	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F317NCD 150-F317NCR	150-F317FCD —
	120...361	250	350	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F361NCD 150-F361NCR	150-F361FCD —
	160...480	315	500	100...240V AC, 50/60 Hz 24V AC/DCΔ	150-F480NCD 150-F480NCR	150-F480FCD —
	208...625	450	600	110/120V AC, 50/60 Hz 230/240V AC, 50/60 Hz	150-F625NCE 150-F625NCA	150-F625JCE 150-F625JCA
	260...780	560	800	110/120V AC, 50/60 Hz 230/240V AC, 50/60 Hz	150-F780NCE 150-F780NCA	150-F780JCE 150-F780JCA
	323...970	710	1000	110/120V AC, 50/60 Hz 230/240V AC, 50/60 Hz	150-F970NCE 150-F970NCA	— —
	416...1250	900	1300	110/120V AC, 50/60 Hz 230/240V AC, 50/60 Hz	150-F1250NCE 150-F1250NCA	— —

Rated Voltage [V AC]	Motor Current [A]‡	Max. kW, 50 Hz	Max. Hp, 60 Hz	Control Power	Open Type — Line-Connected Motors ★
					Cat. No.
690/Y§	27...108	90	100	100...240V AC, 50/60 Hz	150-F108N2D
	34...135	132	175	100...240V AC, 50/60 Hz	150-F135N2D
	67...201	160	200	100...240V AC, 50/60 Hz	150-F201N2D
	84...251	200	250	100...240V AC, 50/60 Hz	150-F251N2D
	106...317	315	400	100...240V AC, 50/60 Hz	150-F317N2D
	120...361	355	450	100...240V AC, 50/60 Hz	150-F361N2D
	160...480	450	600	100...240V AC, 50/60 Hz	150-F480N2D
	208...625	630	800	110/120V AC, 50/60 Hz	150-F625NZE
				230/240V AC, 50/60 Hz	150-F625NZA
	260...780	800	1000	110/120V AC, 50/60 Hz	150-F780NZE
				230/240V AC, 50/60 Hz	150-F780NZA
	323...970	1000	1300	110/120V AC, 50/60 Hz	150-F970NZE
				230/240V AC, 50/60 Hz	150-F970NZA
	416...1250	1200	1600	110/120V AC, 50/60 Hz	150-F1250NZE
				230/240V AC, 50/60 Hz	150-F1250NZA

★ Controllers rated 108 A and greater are not equipped with line and load terminal lugs. See page 20 for terminal lug kits.

‡ Motor FLA rating should fall within specified current range for unit to operate properly. Special consideration should be given when using a motor with a potentially high starting current (greater than ten times motor FLA) with the SMC Flex in the "Full Voltage" starting mode. Contact Rockwell Automation technical support for further guidance.

♦ These controllers require a separate 100...240V, 50/60 Hz single-phase control source. To add a control circuit transformer to the enclosure, add the appropriate option code to the catalog string.

Δ Separate 120V or 240V single-phase power supply is required for fan operation.

♦ Line and load termination are provided as standard.

§ To be used only in a Y-type system.

▲ Available in IP54 (Type 12) enclosure only.