

NEMA Non-Combination Contactors/Starters and Combination Contactors/Starters

Enclosure Accessories

For use on Bulletins 500, 500F, 500L, 500LP, 502, 502L, 503, 503L, 505, 505V, 506, 506X, 507, 507X, 509, 512, 512H, 512M, 512V, 513, 513H, 513M, 513V, 520, 520V, 522, 523, 530, 532, 533, 540, 542, 543, 570, 572, 573, 1242, 1243, 1272, 1273, 1282, 1283, 1232X, 1232V, 1233X, and 1233V

Description		Enclosure Type	NEMA Size	Cat. No.
	Non-metallic Conduit Connectors	4, 4X (stainless steel and non-metallic)	0...1	1490-N1
	1/2 in. (12.7 mm)			1490-N9
	3/4 in. (19 mm)			1490-N10
	1 in. (24.5 mm)		2	1490-N11
	1-1/4 in. (31.75 mm)			1490-N5
	1-1/2 in. (38.1 mm)		3	1490-N6
	2 in. (50.8 mm)		4	1490-N7
	2-1/2 in. (63.5 mm)		5	1490-N8
	Grounding Adapters	4, 4X (stainless steel and non-metallic)*	0...1	1490-N19
	1/2 in. (12.7 mm), #14...10 AWG			1490-N20
	3/4 in. (19 mm), #14...8 AWG			1490-N21
	1 in. (24.5 mm), #14...8 AWG		2	1490-N22
	1-1/4 in. (31.75 mm), #14...4 AWG			1490-N23
	1-1/2 in. (38.1 mm), #8...1/0 AWG		3	1490-N24
	2 in. (50.8 mm), #8...1/0 AWG		4	1490-N25
	2-1/2 in. (63.5 mm), #6...2/0 AWG		5	1490-N26
	Handle Kits with Universal Link for Switch and Breaker	1, 3R, 3R/4/12*	0...4	1494F-M1
	Painted Metal 5-1/2 in. base		5	1494F-M2
	Painted Metal 7-1/2 in. base	4/4X (stainless steel)	0...4	1494F-S1
	Stainless Steel 5-1/2 in. base		5	1494F-S2
	Stainless Steel 7-1/2 in. base	1, 3R, 3R/4/12, 4/4X (non-metallic)	0...4	1494F-P1
	Nonmetallic Handle 5-1/2 in. base			
	Hole Plugs	All	0...5	800T-N1
	30.5 mm hole plug for pilot devices			598-N1
	19.5 mm hole plug for resets and door safety hardware			

* For combination starters only.

* Bulletin 1490 grounding adapters are available for use with these conduit hubs. These bushings provide a convenient method of connecting a ground wire to the conduit system. See conduit connector (hub) above proper size.

Variable-Depth Flange-Mounted Disconnect Switches

Product Selection — Disconnect Switch Components

Disconnect Switches

Continuous Current Rating [A] 600V AC 250V DC	NEMA, UL, CSA Maximum Rating Hp				AC 1-Phase		DC❄	IEC Utilization Category AC-23 Maximum Rating kW			Switch with Right-Hand Mechanism	Switch with Left-Hand Mechanism
	3-Phase, 60 Hz							3-Phase, 50 Hz				
	200...208V	230V	460V	575V	115	230	250	220...240V	380...440V	500...600V	Cat. No. Switch Only	Cat. No. Switch Only
30	7.5	7.5	15	20	2	3	5	5.5	11	15	1494V-DS30	1494V-DSX30
60	15	15	30	50	3	10	10	11	22	37	1494V-DS60	1494V-DSX60
100	25	30	60	75	—	—	20	22	45	55	1494V-DS100	1494V-DSX100
200	50...60	60	125	150	—	—	40	48	90	110	1494V-DS200	1494V-DSX200
400	75	125	250	350	—	—	50	90	185	257	1494V-DS400	1494V-DSX400
600	150	200	400	500	—	—	50	150	295	375	1494V-DS600	❄ 1494V-DS600

* Ratings based on utilizing two poles in series to break one line of the DC supply voltage and the remaining pole breaking the second DC supply line.

‡ Switch can be converted in the field for left-hand operation.

Connecting Rods

Dimensions are in inches (millimeters). Approximate dimensions are not intended for manufacturing purposes.

Disconnect Switch Size [A]	Enclosure Depth*		Cat. No.
	Minimum	Maximum	
30, 60, 100, 200	6-3/4 (172)	9-1/8 (232)	1494V-RA3
	6-3/4 (172)	21-5/8 (549)	1494V-RA4
400, 600	9-1/2 (241)	10 (254)	▶ 1494V-RB3
	9-1/2 (241)	23 (584)	▶ 1494V-RB4

* Enclosure depth is measured from the top of the flange to the disconnect switch mounting surface (mm).

▶ Kit includes two connecting rods.

Operating Handles

Handle Type	Description	Mounting	Disconnect Switch Size [A]	Cat. No.
Type 1, 3R, 4, 4X, 12	Nonmetallic	Right or Left Flange	30, 60, 100, 200	1494F-P1
Type 1, 3R, 4, 12	Painted Metal	Right or Left Flange	30, 60, 100, 200	1494F-M1
			400, 600	1494F-M2
Type 4, 4X	Stainless Steel	Right or Left Flange	30, 60, 100, 200	1494F-S1
			400, 600	1494F-S2

Trailer Fuse Block Kits

For Class H, J, or R fuses, select the proper fuse clip kit from the table below.

Disconnect Switch Size [A]	Cat. No.
30	1494V-FS30
60	1494V-FS60
100	1494V-FS100
200	❖ 1494V-FS200
400	1494V-FS400
600 — 600 A Class J fuse	1494V-FS600
600 — 400 A Class H, J, and R fuse	1494V-FSV400
600 — 600 A Class H fuse	† 1491-N621
600 — 600 A Class R fuse	† 1491-R621

❖ When installing 400 A Class J fuses, use adapter kit that bolts to the switch (Cat. No. **1401-N171**). Fuse clips are not required.

† Separately mounted fuse blocks (3 required).

Fuse Clip Kits

Includes six clips and mounting hardware.

Fuse Class	Fuse Clip Rating [A]		For Use With	Cat. No.
	250V	600V		
H	30	—	1494C, 1494F, 1494G, 1494M, 1494V Disconnect Switches	1401-N41
	60	30		1401-N42
	—	60		1401-N43
	100	100		1401-N44
	200	200		1401-N45
	400	400		1401-N46
	600	600		§
J	30	30		1401-N42
	60	60		1401-N43
	100	100		1401-N44
	200	200		1401-N45
	400	400		1401-N46
R	600	600		▲
	30	—		1401-N50
	60	30		1401-N51
	—	60		1401-N52
	100	100		1401-N53
	200	200		1401-N54
	400	400		1401-N55
	600	600		§

▲ Fuse clips not required: fuse bolts directly to terminal.

§ Included with Bulletin 1491 separately mounted fuse blocks.

Cable-Operated Disconnect Switches

Product Selection — Disconnect Switch Components

Disconnect Switches

Cont. Current Rating* [A] 600V AC 250V DC	NEMA, UL, CSA Maximum Rating Hp				AC 1-Phase		DC❖	IEC Utilization Category AC-23 Maximum Rating kW			Switch for Right-Hand Mechanism	Switch for Left-Hand Mechanism
	3-Phase, 60 Hz							3-Phase, 50 Hz				
	200...208V	230V	460V	575V	115	230		250	220...240V	380...440V	500...600V	Cat. No. Switch Only
30	7.5	7.5	15	20	2	3	5	5.5	11	15	1494F-D30	1494F-DX30
60	15	15	30	50	3	10	10	11	22	37	1494F-D60	1494F-DX60
100	25	30	60	75	—	—	20	22	45	55	1494F-D100	1494F-DX100
200	50...60	60	125	150	—	—	40	48	90	110	1494F-D200	1494F-DX200
400	75	125	250	350	—	—	50	90	185	257	1494F-D400	1494F-DX400
600	150	200	400	500	—	—	50	150	295	375	1494V-DS600	1494V-DS600

* Also rated operational current for utilization categories AC-20 and AC-21 (IEC 408).

‡ Ratings based on utilizing two poles in series to break one line of the DC supply voltage and the remaining pole breaking the second DC supply line.

‡ Switch can be converted in the field for left-hand operation.

Cable Mechanisms

Disconnect Switch Size [A]	Cable Length [ft]	Right-Hand Cable Mechanisms	Left-Hand Cable Mechanisms
		Cat. No.	Cat. No.
30, 60, 100	3	1494C-CM1	1494C-CMX1
	4	1494C-CM2	1494C-CMX2
	5	1494C-CM3	1494C-CMX3
	10	1494C-CM4	1494C-CMX4
200	4	1494C-CM5	1494C-CMX5
	5	1494C-CM6	1494C-CMX6
	6	1494C-CM7	1494C-CMX7
	10	1494C-CM8	1494C-CMX8
400	4	1494C-CM9	1494C-CMX9
	5	1494C-CM10	1494C-CMX10
	6	1494C-CM11	1494C-CMX11
	10	1494C-CM12	1494C-CMX12
600	4	1494C-CM13	1494C-CMX13
	5	1494C-CM14	1494C-CMX14
	6	1494C-CM15	1494C-CMX15
	10	1494C-CM16	1494C-CMX16

Operating Handles

Handle Type	Description	Mounting	Disconnect Switch Size [A]	Cat. No.
Type 1, 3R, 4, 4X, 12	Nonmetallic	Right or Left Flange	30, 60, 100, 200	1494F-P1
Type 1, 3R, 4, 12	Painted Metal	Right or Left Flange	30, 60, 100, 200 400, 600	1494F-M1 1494F-M2
Type 4, 4X	Stainless Steel	Right or Left Flange	30, 60, 100, 200 400, 600	1494F-S1 1494F-S2

Trailer Fuse Block Kits

For Class H, J, or R fuses, select the proper fuse clip kit from the table below.

Disconnect Switch Size [A]	Cat. No.
30	1494V-FS30
60	1494V-FS60
100	1494V-FS100
200	‡ 1494V-FS200
400	1494V-FS400
600 — 600 A Class J fuse	1494V-FS600
600 — 400 A Class H, J, and R fuse	1494V-FSV400
600 — 600 A Class H fuse	‡ 1491-N621
600 — 600 A Class R fuse	‡ 1491-R621

‡ When installing 400 A Class J fuses, use adapter kit that bolts to the switch (**Cat. No. 1401-N171**). Fuse clips are not required.

‡ Separately mounted fuse blocks (3 required).

Fuse Clip Kits

Includes six clips and mounting hardware.

Fuse Class	Fuse Clip Rating [A]		For Use With	Cat. No.
	250V	600V		
H	30	—	1494C, 1494F, 1494G, 1494M, 1494V Disconnect Switches	1401-N41
	60	30		1401-N42
	—	60		1401-N43
	100	100		1401-N44
	200	200		1401-N45
	400	400		1401-N46
J	600	600	1494C, 1494F, 1494G, 1494M, 1494V Disconnect Switches	‡
	30	30		1401-N42
	60	60		1401-N43
	100	100		1401-N44
	200	200		1401-N45
	400	400		1401-N46
R	600	600	1494C, 1494F, 1494G, 1494M, 1494V Disconnect Switches	‡
	30	—		1401-N50
	60	30		1401-N51
	—	60		1401-N52
	100	100		1401-N53
	200	200		1401-N54
	400	400	1494C, 1494F, 1494G, 1494M, 1494V Disconnect Switches	1401-N55
	600	600		‡

‡ Fuse clips not required: fuse bolts directly to terminal.

‡ Included with Bulletin 1491 separately mounted fuse blocks.

Variable-Depth Flange-Mounted Circuit Breakers

Product Selection — Circuit Breaker Components

Components

Circuit Breaker Operating Mechanism

The mechanism listed must be combined with a connecting rod, operating handle, and a circuit breaker (supplied by customer) to obtain a functional device.

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3-Pole Circuit Breaker*			Operating Mechanism
Brand	Frame Size [A]	Frame Designation	Cat. No.
Allen-Bradley Cutler-Hammer	125 125	140U-H (MCCB), 140M-H (MPCB + MCP) EG, HMCPE	1494V-M41
Allen-Bradley Cutler-Hammer	150 150	140U-I (MCCB) EHD, FD, FDB, FDC, HFD, HMCP, 140M-I (MPCB + MCP)	1494V-M40
Allen-Bradley Cutler-Hammer	250 250	140U-J (MCCB), 140M-J (MPCB + MCP) JG	1494V-M51
Cutler-Hammer	250	JD, JDB, JDC, HJD, HMCP	1494V-M50
Allen-Bradley Cutler-Hammer	400 400	140U-K (MCCB), 140M-K (MPCB + MCP) KD, KDB, KDC, HKD, HMCP	1494V-M60
Allen-Bradley	600	140U-L (MCCB, MPCP, MCP)	

* Circuit breakers to be provided by customer.

Connecting Rods

Approximate dimensions are in inches (millimeters). Approximate dimensions are not intended for manufacturing purposes.

Circuit Breaker Frame Size [A]	Enclosure Depth		Cat. No.
	Minimum	Maximum	
125, 150, 250, 400	6-3/4 (172)	9-1/8 (232)	1494V-RA3
	6-3/4 (172)	21-5/8 (549)	1494V-RA4

Operating Handle

Handle Type	Description	Mounting	Circuit Breaker Frame Size [A]	Operating Handle
				Cat. No.
Type 1, 3R, 4, 4X, 12	Nonmetallic	Right or Left Flange	125, 150, 250, 400	1494F-P1
Type 1, 3R, 4, 12	Painted Metal	Right or Left Flange	125, 150, 250, 400	1494F-M1
Type 4, 4X	Stainless Steel	Right or Left Flange	125, 150, 250, 400	1494F-S1

NEMA Disconnect Switches

Accessories

	Description		For Use With	Cat. No.
	Defeat Bracket Extension Kit For use with operating handles that do not align properly with the door catch or door hardware on enclosures with a rolled lip flange construction.		All 1494F and 1494V Handles (except 1494V-R1 and 1494V-R2)	1494V-H12
			30...200 A Switches Applies only to Operating Handle Cat. Nos. 1494F-P1, M1, and S1.	1494V-H15
	Conduit Hubs (for Type 3R enclosures)* 19.05 mm (3/4 in.) hub	30 A, 60 A, 100 A	1494H Safety Switches	1495-N71
	25.4 mm (1 in.) hub	30 A, 200 A		1495-N72
	31.75 mm (1-1/4 in.) hub	60 A		1495-N73
	38.1 mm (1-1/2 in.) hub	100 A		1495-N74
	50.8 mm (2 in.) hub	—		1495-N75
	63.5 mm (2-1/2 in.) hub	200 A		1495-N76
	Non-Metallic Conduit Connectors		1494G Disconnect Switches	
	1/2 in. (12.7 mm)	30 A		1490-N1
	3/4 in. (19 mm)	30 A		1490-N9
	1 in. (25.4 mm)	30 A		1490-N10
	1-1/4 in. (31.75 mm)	60 A		1490-N11
	1-1/2 in. (38.1 mm)	100 A		1490-N5
	2 in. (50.8 mm)	200 A		1490-N6
	2-1/2 in. (63.5 mm)	200 A		1490-N7
	3 in. (76.2 mm)	400...600 A		1490-N8
	Grounding Adapters			
	#14...10 AWG, 1/2 in. (12.7 mm)	30 A		1490-N19
	#14...8 AWG, 3/4 in. (19 mm)	30 A		1490-N20
	#14...8 AWG, 1 in. (24.5 mm)	30 A		1490-N21
	#14...4 AWG, 1-1/4 in. (31.8 mm)	60 A		1490-N22
	#8...1/0 AWG, 1-1/2 in. (38.1 mm)	100 A		1490-N23
	#8...1/0 AWG, 2 in. (50.8 mm)	200 A		1490-N24
	#6...2/0 AWG, 2-1/2 in. (63.5 mm)	200 A		1490-N25
	#6...4/0 AWG, 3 in. (76.2 mm)	400...600 A		1490-N26

* Packaged in quantities of 10.