

Cable-Operated Disconnect Switches

Product Overview/Cat. No. Explanation



Bulletin 1494C — Cable-Operated Disconnect Switches

Allen-Bradley Bulletin 1494C cable-operated, flange-mounted disconnect switches that meet industrial requirements for dependable disconnecting means.

- 30...600 A ratings
- Available with 3, 4, 5, 6, and 10 ft cable lengths
- Can accommodate Class H, J, and R fuses
- Precise alignment of the switch with respect to the handle is not required resulting in faster installation
- Complete kits with accessories
- Accessories field installed
- NFPA 79 Compliant — Disconnect switch linked to the handle at all times
- Visible blade construction for safety
- Can be used with enclosure Types 1, 3R, 4, 4X, and 12
- Lockable handle in OFF and ON positions

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Standards Compliance

UL 98
 CSA C22.2, No. 4

Certifications

cULus Listed (File No. E47426, Guide No. WHTY, WHTY7)

Catalog Number Explanation

The information below is for reference purposes. Not all combinations will produce a valid cat. no. Refer to the tables on the following pages for product selection.

1494C – **DR** **233** – **A4** – **B** – **FF**

a *b* *c* *d*

a

Disconnect Switch	
Code	Description
1494C	Cable operated flange mounted

b

Fusing	
30...600 A Switch with Right-Hand Mechanism	
Code	Description
DN	Non-fusible
DH	Class H fuse clips
DJ	Class J fuse clips
DR	Class R fuse clips
30...600 A Switch with Left-Hand Mechanism	
Code	Description
DNX	Non-fusible
DHX	Class H fuse clips
DJX	Class J fuse clips
DRX	Class R fuse clips

c

Switch and Fuse Rating	
Non-Fusible	
Code	Description
30	30 A switch
60	60 A switch
100	100 A switch
200	200 A switch
400	400 A switch
600	600 A switch
Fusible	
233	250V, 30 A switch 30 A clips
633	600V, 30 A switch 30 A clips
666	600V, 60 A switch 60 A clips
611	250V & 600V, 100 A switch 100 A clips
622	250V & 600V, 200 A switch 200 A clips
644	250V & 600V, 400 A switch 400 A clips
606	600V, 600 A switch 600 A clips

d

Accessories (field installed)	
Code	Description
A3	3 ft. cable*
A4	4 ft. cable
A5	5 ft. cable
A6	6 ft. cable*
A10	10 ft. cable
B	Stainless steel handle
B1	Painted metal handle
D	Standard size line & load lugs*
D1	Oversized line & load lugs§
E	Protective fuse cover
F	(1) N.O. auxiliary contact‡
FF	(2) N.O. auxiliary contacts‡
G	(1) N.C. auxiliary contact‡
GG	(2) N.C. auxiliary contacts‡
H	(1) N.O. and N.C. electrical interlock
HH	(2) N.O. and N.C. electrical interlock

* Only available with 30...100 A switches
 * Only available with 200...600 A switches
 ‡ Maximum of (2) auxiliary contacts
 § Only available for 200 & 400 A switches
 * Only available for 60...600 A switches (lugs included on 30 A switches as standard)

NEMA Disconnect Switches

Specifications

Bulletin 1494C, 1494F, 1494G, 1494R, 1494V Disconnect Switches

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			Disconnect Switch Electrical Ratings					
Switch Size			30 A	60 A	100 A	200 A	400 A	600 A
Rated insulation voltage U_i (UL) IEC			(600) 660V					
Ratings UL/CSA/NEMA	Hp	230V/60 Hz	7.5	15	30	60	125	200
		460V/60 Hz	15	30	60	125	250	400
	Continuous Current	575V/60 Hz	20	50	75	150	350	500
		250V DC	5	10	20	40	50	50
Ratings IEC Applications	Maximum kW (AC23)	600V AC	30	60	100	200	400	600
		250V DC						
		220V/50 Hz	5.5	11	22	48	90	150
		440V/50 Hz	11	22	45	90	185	295
		550V/50 Hz	15	37	55	110	257	375
			Auxiliary Contact Electrical Ratings					
NEMA/EEMAC			B600, P300					
IEC Ratings			U_i 660V	I_{th} 10 A				
			ACII U_x	12...120V			I_c	6 A
				220...240V				3 A
			380...400V				1.5 A	
			500...600V				1.2 A	
Low level switching			5 mA @ 12V DC					
			Mechanical					
Degree of protection	Operating handles	Non-metallic Type 1, 3R, 4, 4X, 12, Painted Type 1, 3R, 4, 12 Stainless steel Type 4, 4X						
Mechanical life (Typical)	20 000 operations (30...200 A) 10 000 operations (400...600 A)							
Switching frequency (operations/hr)	30, 60, 100, and 200 A sizes — 300 max. 400 and 600 A sizes — 240 max.							
			Environmental					
Temperature	Operating	-35...+40 °C (-31...+104 °F)						
	Storage	-40...+65 °C (-40...+149 °F)						
Altitude (per IEC 947-5)	2000 m per IEC 337-1							
Relative Humidity (per IEC 947-3)	90% at 20 °C (68 °F) and 50% at 40 °C (104 °F)							
			Design Specification/Test Requirements					
Dielectric strength	2200V for 1 minute							
Electrical life	6000 operations at rated current							
Short Circuit Withstand Capability	10 000 A: unfused 10 000 A: with Class H fuses 200 000 A: with Class J or Class R fuses							
			Construction					
Switch body material	Phenolic							
Contact material	Copper, tin-plated							
Terminals	30 A	#10 - 32 screw and self-lifting pressure plate						
	60 A	1/4 in. - 28 screw-lug, copper						
	100 A	5/16 in. - 24 screw-lug, copper						
	200 A	3/8 in. - 24 screw-lug, copper						
	400 A	3/8 in. - 24 screw-lug, copper						
	600 A	1/2 in. - 13 screw-lug, copper						
All wire rated 75 °C (167 °F) or higher must be sized per the local Electric Code for 75 °C (167 °F) wire.								
Conductor Size (mm ²)	30 A	#14...8 AWG (1.5...10 mm ²)						
	60 A	#14...4 AWG (2.5...16 mm ²)						
	100 A	#8...1/0 AWG (10...50 mm ²)						
	200 A	#6...4/0 AWG (16...95 mm ²)						
	400 A	2 of #1/0 AWG...250 MCM (2 per lug) 2 of 185 mm ² ...250 MCM or (1) #4 AWG...500 MCM						
	600 A	2 of #1/0 AWG...350 MCM (2 per lug) 2 of 185 mm ² ...350 MCM or (1) #4 AWG...500 MCM						
Recommended Torque	30 A	Conductor into Lug			Lug to Terminal			
	60 A	20 lb•in			20 lb•in			
	100 A	45 lb•in			50 lb•in			
	200 A	150 lb•in			90 lb•in			
	400 A	275 lb•in			175 lb•in			
	600 A	325 lb•in			175 lb•in			
Switches, Mechanisms, and Accessory Kits			Zinc-plated steel, RoHS Compliant finish					



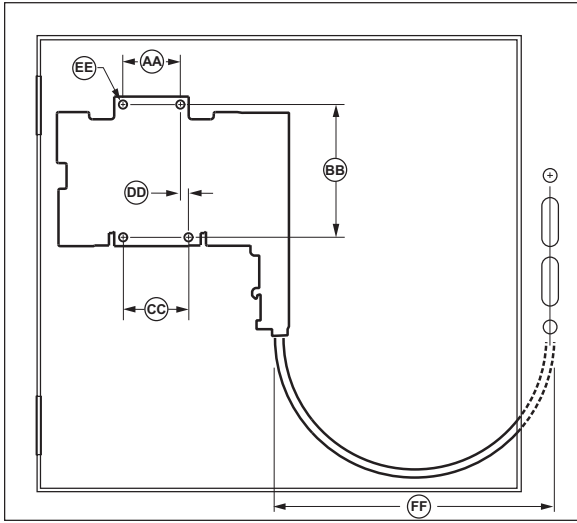
NEMA Disconnect Switches

Approximate Dimensions

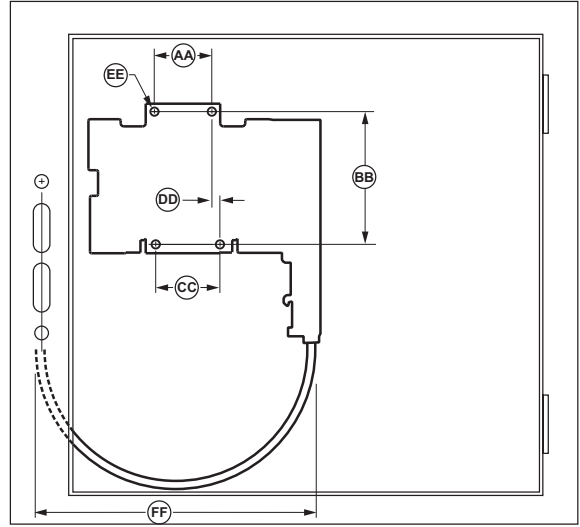
Approximate dimensions are shown in inches (millimeters). Dimensions are not intended to be used for manufacturing purposes.

Bulletin 1494C

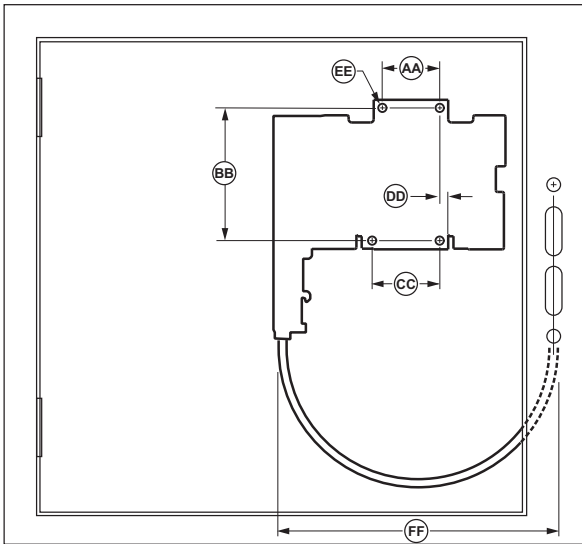
1



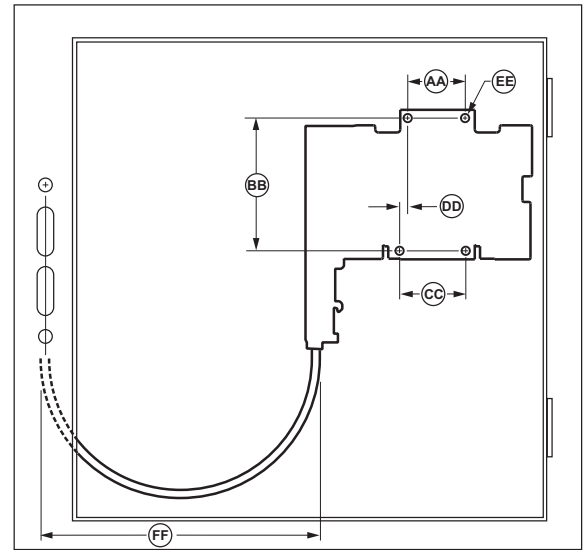
Enclosure with Right Hand Flange



Enclosure with Left Hand Flange



Enclosure with Right Hand Flange



Enclosure with Left Hand Flange

Disconnect Switches

NEMA Size [A]	AA	BB	CC	DD	EE Mounting Plate Hole Diameter	FF Minimum Bevel Diameter
30	2-1/4 (57.2)	5-1/4 (133.4)	2-1/4 (57.2)	—	11/64 (4.37)	12 (304.8)
60	2-1/4 (57.2)	5-1/4 (133.4)	2-1/4 (57.2)	—	11/64 (4.37)	12 (304.8)
100	2-1/4 (57.2)	5-1/4 (133.4)	2-1/4 (57.2)	—	11/64 (4.37)	12 (304.8)
200	2 (50.8)	8-1/4 (209.6)	4-1/4 (108)	1-1/8 (28.6)	7/32 (5.56)	16 (406.4)
400	2 (50.8)	11 (279.4)	4-3/4 (120.7)	1-3/8 (34.9)	9/32 (7.14)	16 (406.4)
600	8-1/4 (209.6)	15 (381)	8-1/4 (209.6)	—	—	16 (406.4)