

# Disconnect Switch and Circuit Breaker Mechanism Specifications

Bulletin Number 1494

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## Summary of Changes

This publication contains new and updated information as indicated in the following table.

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## Additional Resources

These documents contain additional information concerning related products from Rockwell Automation®.

Resource	Description
Industrial Automation Wiring and Grounding Guidelines, publication <a href="#">1770-4.1</a>	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, <a href="http://www.rockwellautomation.com/global/certification/overview.page">http://www.rockwellautomation.com/global/certification/overview.page</a>	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <http://www.rockwellautomation.com/global/literature-library/overview.page>. To order paper copies of technical documentation, contact your local Allen-Bradley® distributor or Rockwell Automation sales representative.

## Bulletin 1494U Disconnect Switches

Disconnect Switch Electrical Ratings					
Switch Size		30 A	60 A	100 A	
Rated Insulation Voltage (UL) IEC - Ui		(600) 1000V			
Ratings UL/CSA/NEMA	Hp	230V/60 Hz	7.5	15	30
		460V/60 Hz	15	30	60
		575V/60 Hz	20	50	75
		600V DC	15	30	50
Ratings IEC Applications	Maximum kW (AC23)	220V/50 Hz	5.5	11	22
		440V/50 Hz	11	22	45
		550V/50 Hz	15	37	55
Auxiliary Contact Electrical Ratings					
Standard Contact 1 N.O. or 1 N.C.	NEMA/EEMAC	A600, Q600			
	IEC	AC 15, DC 13 to IEC/EN60947-5-1 and UL 508, 17V, 5 mA minimum			
Low Level Contact 1 N.O. or 1 N.C.	NEMA/EEMAC	C300, R150			
	IEC	AC 15, DC 13 to IEC/EN60947-5-1 and UL 508, 5V, 1 mA minimum			
Electrical Interlock Ratings					
Standard Contact 2 N.O.	NEMA/EEMAC	10 A: 250V AC, 0.3 A: 250V 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)		10 000 operations (30...100 A)			
Switching Frequency (operations/hr)		30, 60, and 100 A sizes — 300 maximum			
Environmental					
Ambient Temperature	Open	-20...+60 °C (-4...+140 °F)			
	Enclosed	-20...+40 °C (-4...+104 °F)			
	Storage	-40...+65 °C (-40...+149 °F)			
Altitude (per IEC 947-1)		2000 m			
Relative Humidity (per IEC 947-1)		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, 600V AC/DC: unfused or with Class H fuses 10 000 A, 600V DC: with Class J or Class R fuses 200 000 A, 600V AC: with Class J or Class R fuses			
Construction					
Switch Body Material		Glass-filled thermoplastic			
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 and Lug Connectors	Single port, aluminum lug	30...60 A	(1) #14...2 AWG, copper - aluminum (2) #14...10 AWG, copper (2) #12...10 AWG, aluminum		
	Single port, aluminum lug	100 A	(2) #12...4 AWG, copper-aluminum (1) #14...1/0 AWG, copper (1) #12...1/0 AWG, aluminum		
	Multi-port, aluminum lug	30...100 A	(1) #14...4 AWG, copper (1) #12...4 AWG, aluminum (2) #10 AWG, copper-aluminum		
	Single port, copper lug	30...60 A	(1) #14...4 AWG, copper (2) #14...8 AWG, copper (4) #16 AWG, copper		
	Line Terminal Adapter Single port, copper lug	30...100 A	(1) #14...8 AWG, copper		
	Line Terminal Adapter Single port, copper lug	100 A	(1) #8...1/0 AWG, copper		
Recommended Torque	30 A	Conductor into Lug		Lug to Terminal	
	60 A	45 lb-in		40...60 lb-in	
	100 A	45 lb-in 50 lb-in		40...60 lb-in 40...60 lb-in	
Switches, Mechanisms, and Accessory Kits		Zinc-plated steel, RoHS Compliant finish			

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

Disconnect Switch Electrical Ratings								
Switch Size		30 A	60 A	100 A	200 A	400 A	600 A	
Rated Insulation Voltage (UL) IEC - Ui		(600) 660V						
Ratings UL/CSA/NEMA	Hp	230V/60 Hz 460V/60 Hz 575V/60 Hz	7.5 15 20	15 30 50	30 60 75	60 125 150	125 250 350	200 400 500
	Continuous Current, Ithe	250V DC 600V AC 250V DC	5 30	10 60	20 100	40 200	50 400	50 600
Ratings IEC Applications	Maximum kW (AC23)	220V/50 Hz 440V/50 Hz 550V/50 Hz	5.5 11 15	11 22 37	22 45 55	48 90 110	90 185 257	150 295 375
Auxiliary Contact Electrical Ratings								
Standard Contact 1 N.O. or 1 N.C. <sup>(1)</sup>	NEMA/EEMAC	A600, Q600						
	IEC	AC 15, DC 13 to IEC/EN60947-5-1 and UL 508, 17V, 5 mA minimum						
Low Level Contact 1 N.O. or 1 N.C. <sup>(1)</sup>	NEMA/EEMAC	C300, R150						
	IEC	AC 15, DC 13 to IEC/EN60947-5-1 and UL 508, 5V, 1 mA minimum						
Electrical Interlock Ratings								
Standard Contact	1 N.O. and 1 N.C. 2 N.O. and 2 N.C.	NEMA/EEMAC	20 A: 480V AC, 0.25 A: 250V 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)		10 000 operations (30...100 A) 8000 operations (200 A) 6000 operations (400 A) 5000 operations (600 A)						
Switching Frequency (operations/hr)		30, 60, 100, and 200 A sizes — 300 maximum 400 and 600 A sizes — 240 maximum						
Environmental								
Ambient Temperature	Open	-20...+60 °C (-4...+140 °F)						
	Enclosed	-20...+40 °C (-4...+104 °F)						
	Storage	-40...+65 °C (-40...+149 °F)						
Altitude (per IEC 947-1)		2000 m						
Relative Humidity (per IEC 947-1)		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, 600V AC/250V DC: unfused 10 000 A, 600V AC: with Class H fuses 200 000 A, 600V AC: with Class J or Class R fuses						
Construction								
Switch Body Material		Glass-filled thermoset plastic						
Terminals	30 A 60 A 100 A 200 A 400 A 600 A	#10 - 32 screw and self-lifting pressure plate 1/4 in. - 28 screw-lug, copper 5/16 in. - 24 screw-lug, copper 3/8 in. - 24 screw-lug, copper 3/8 in. - 24 screw-lug, copper 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 <sup>2</sup> )	30 A 60 A 100 A 200 A 400 A 600 A	#14...8 AWG (1.5...10 mm <sup>2</sup> ) #14...4 AWG (2.5...16 mm <sup>2</sup> ) #8...1/0 AWG (10...50 mm <sup>2</sup> ) #6...4/0 AWG (16...95 mm <sup>2</sup> ) 2 of #1/0 AWG...250 MCM (2 per lug) 2 of 185 mm <sup>2</sup> ...250 MCM or (1) #4 AWG...500 MCM 2 of #1/0 AWG...350 MCM (2 per lug) 2 of 185 mm <sup>2</sup> ...350 MCM or (1) #4 AWG...500 MCM						
Recommended Torque	30 A 60 A 100 A 200 A 400 A 600 A	<b>Conductor into Lug</b> 20 lb-in 45 lb-in 150 lb-in 275 lb-in 275 lb-in 275 lb-in			<b>Lug to Terminal</b> 20 lb-in 50 lb-in 90 lb-in 175 lb-in 175 lb-in 275 lb-in			
Switches, Mechanisms, and Accessory Kits		Zinc-plated steel, RoHS Compliant finish						

(1) When using a N.C. contact with a 400 A switch in a PLC sensing circuit, a false indicator may occur. To avoid the false indicator, add a 30 ms time delay into the circuit or add a N.O. contact next to the N.C. contact.

## Bulletin 1494H, 1494HL Disconnect Switches

Disconnect Switch Electrical Ratings						
Switch Size			30 A	60 A	100 A	200 A
Rated Insulation Voltage (UL) IEC - Ui			(600) 660V			
Ratings UL/CSA/NEMA	Hp	230V/60 Hz	10	20	40	60
		460V/60 Hz	20	50	75	125
		575V/60 Hz	30	60	100	150
	250V DC	5	10	20	40	
Continuous Current, I <sub>the</sub>	600V AC 250V DC	30	60	100	200	
Auxiliary Contact Electrical Ratings						
Continuous Current			10 A	15 A		
Pole Configuration			DPDT	DPDT		
Mechanical						
Degree of Protection		Operating handles	Painted Type 1, 3R, 12			
Mechanical Life (Typical)			10 000 operations			
Switching Frequency (operations/hr)			300 maximum			
Environmental						
Ambient Temperature		Operating	-35...+40 °C (-31...+104 °F)			
		Storage	-40...+65 °C (-40...+149 °F)			
Altitude (per IEC 947-5)			2000 m			
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 (30...100 A) 100 000 A: with Class J or Class R fuses (200 A)			
Construction						
Switch Body Material			Phenolic			
Contact Material			Copper, tin-plated			
Terminals	30 A 60 A 100 A 200 A	#10 - 32 screw and self-lifting pressure plate 1/4 in. - 28 screw-lug, copper 5/16 in. - 24 screw-lug, copper 3/8 in. - 24 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 <sup>2</sup> )	30 A 60 A 100 A 200 A	#14...8 AWG #12...2 AWG #10...1/0 AWG #2...250 MCM AWG				
Recommended Torque	30 A 60 A 100 A 200 A	<b>Conductor into Lug</b> 36...40 lb-in 35...45 lb-in 35...50 lb-in 275 lb-in				
Mechanisms			Zinc-plated steel, bronze chromate finish			

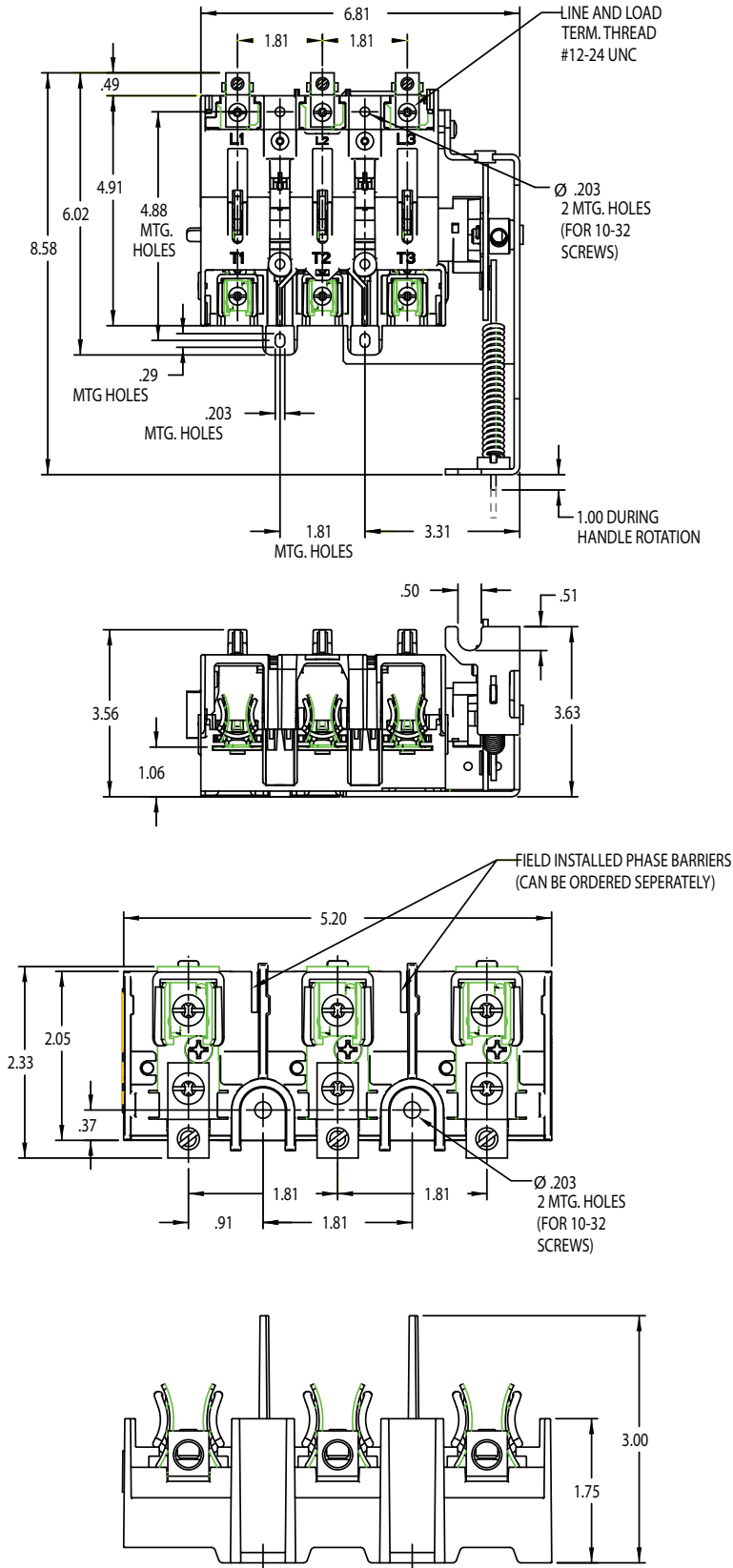
**Bulletin 1494D, 1494V Circuit Breakers**

Electrical Ratings								
Frame Size	125 A	150 A	250 A	400 A	600 A	800 A	1200 A	
<b>Auxiliary Contacts</b>								
Ratings NEMA/EEMAC	B600, P300							
Ratings IEC Applications	ACII U <sub>x</sub>	12...120V 220...240V 380...400V 500...600V				I <sub>e</sub>	6 A 3 A 1.5 A 1.2 A	
Maximum Number of Auxiliary Contacts	2							
<b>Mechanical</b>								
Mechanical Life (Typical)	10 000 operations							
<b>Environmental</b>								
Ambient Temperature <sup>(1)</sup>	Operating	-20...+40 °C (-4...+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)							
<b>Construction</b>								
Mechanisms	Zinc-plated steel							

(1) See circuit breaker specifications for other limitations.

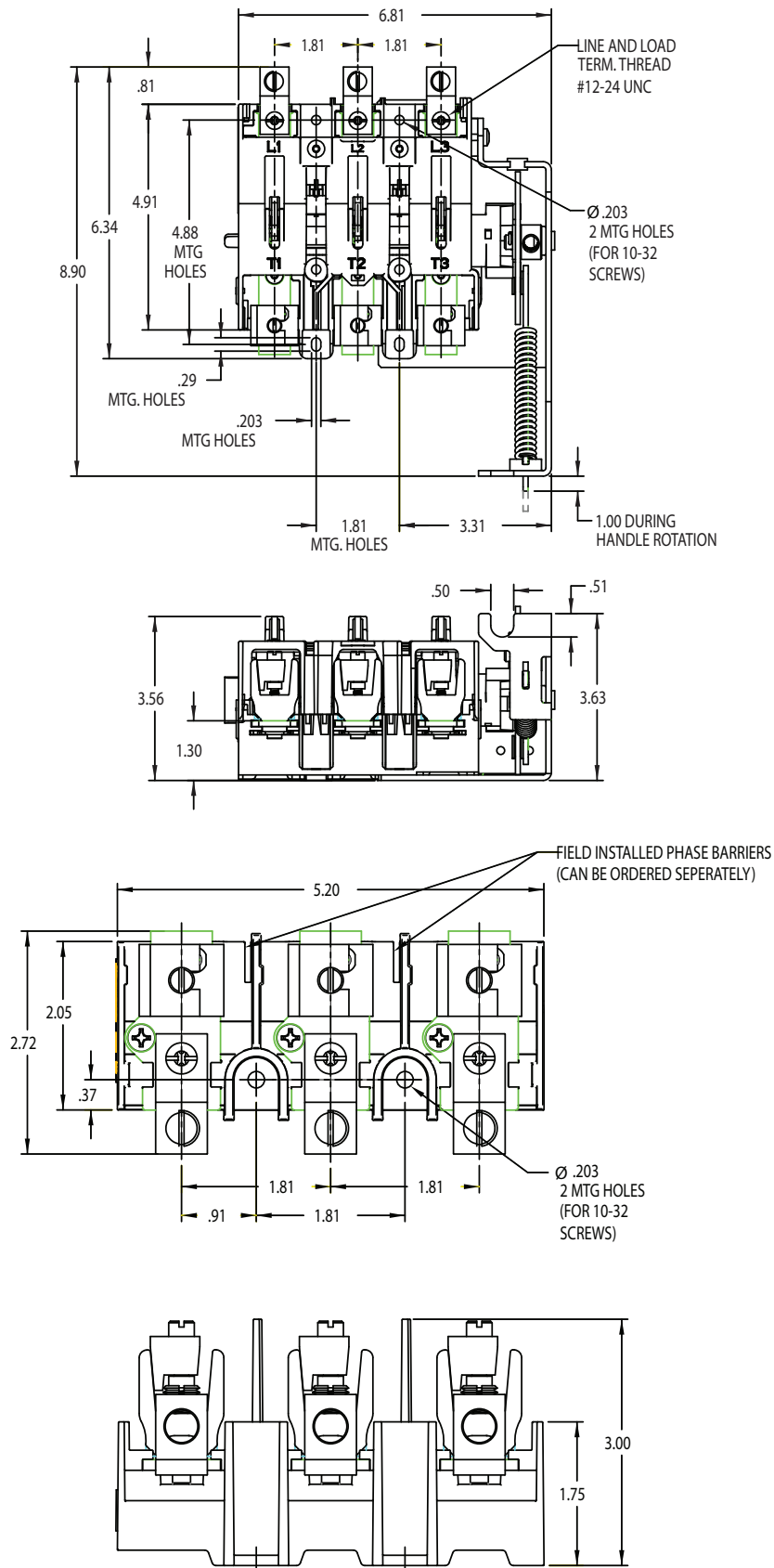
**Bulletin 1494U Disconnect Switch and Fuse Block, 30...60 A**

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



### Bulletin 1494U Disconnect Switch and Fuse Block, 100 A

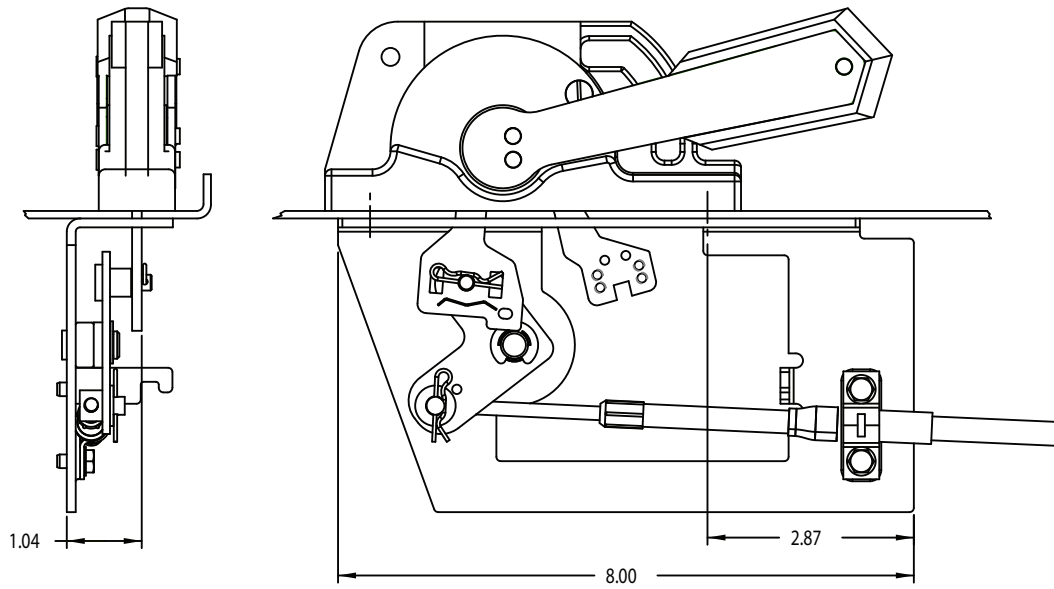
Approximate dimensions are shown in inches. Dimensions are not intended to be used for manufacturing purposes.





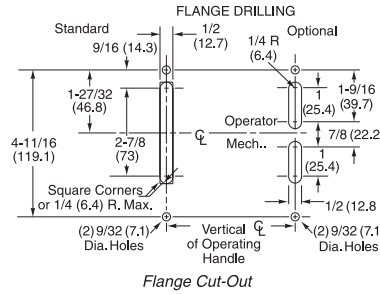
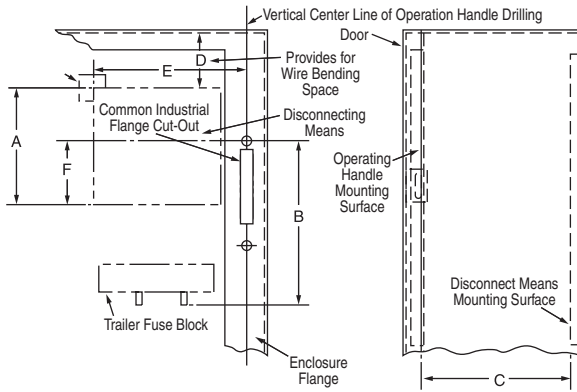
**Bulletin 1494U Handle with Support Bracket**

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

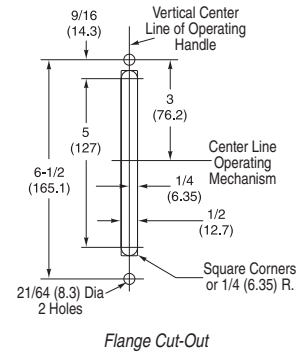


**Bulletin 1494V**

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



**Bulletin 1494V — 30...200 A**



**Bulletin 1494V — 400...600 A**

*Disconnect Switches (Approximate dimensions are for reference only.)*

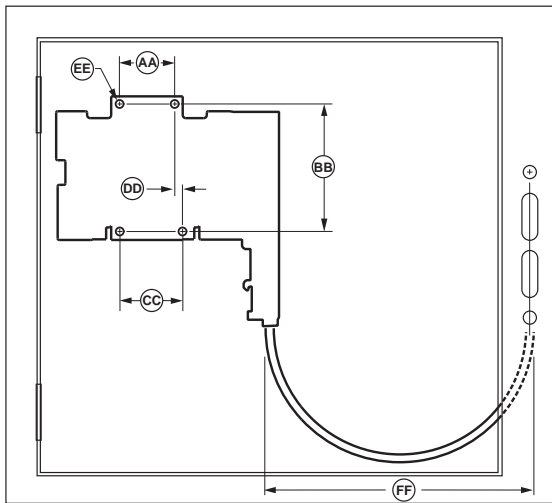
NEMA Size [A]	A	B <sup>(1)</sup>		C		D	E	F	Switch Mounting Hole Diameter
		Maximum	Minimum	Minimum	Maximum				
30	6-19/64 (160)	7-31/32 (202)	6-3/4 (171)	21-5/8 (549)	2-3/4 (69.9)	7-9/16 (192)	3-7/8 (98.5)	7/32 in.	
60	6-19/64 (160)	8-15/32 (215)	6-3/4 (171)	21-5/8 (549)	2-9/16 (65.1)	7-9/16 (192)	3-7/8 (98.5)	7/32 in.	
100	6-19/64 (160)	9-1/8 (231.8)	6-3/4 (171)	21-5/8 (549)	3-37/64 (90.9)	7-9/16 (192)	3-7/8 (98.5)	7/32 in.	
200	8-5/64 (205.2)	15-9/64 (384.5)	9-1/2 (241.3)	21-5/8 (549)	6-35/64 (166.3)	8-25/32 (223)	4-21/32 (118)	19/64 in.	
400	11 (279.4)	18-7/32 (462.7)	10-1/2 (266.7)	21-5/8 (549)	8 (203.2)	10 (254)	5-1/2 (139.7)	11/32 in.	
600	15-23/32 (399.2)	17-19/32 (446.8) <sup>(2)</sup>	10-1/2 (266.7)	21-5/8 (549)	12 (304.8)	11-27/32 (300.8)	8-51/64 (223.3)	11/32 in.	

(1) This approximate dimension varies by fuse class and size.

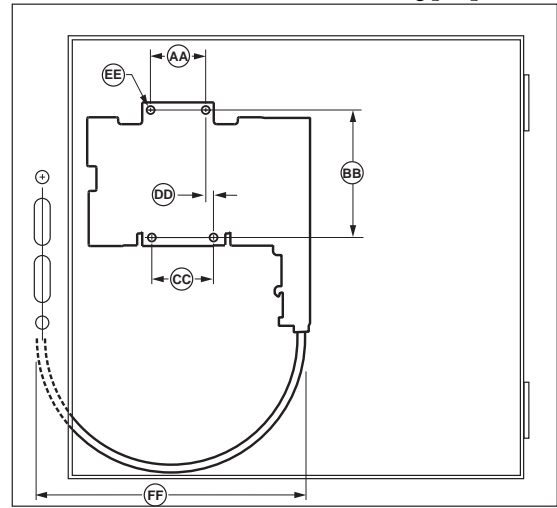
(2) Approximate dimension with Class J fuses.

**Bulletin 1494C**

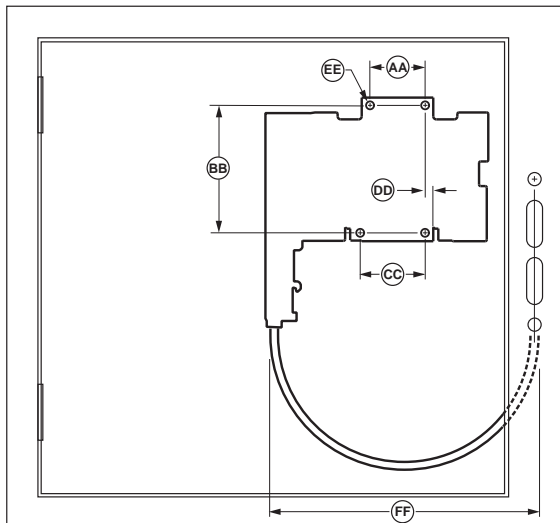
Approximate dimensions are shown in inches. Dimensions are not intended to be used for manufacturing purposes.



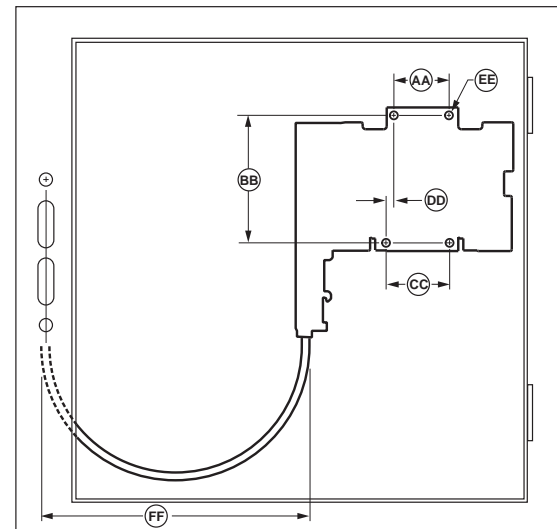
**Enclosure with Right Hand Flange**



**Enclosure with Left Hand Flange**



**Enclosure with Right Hand Flange**



**Enclosure with Left Hand Flange**

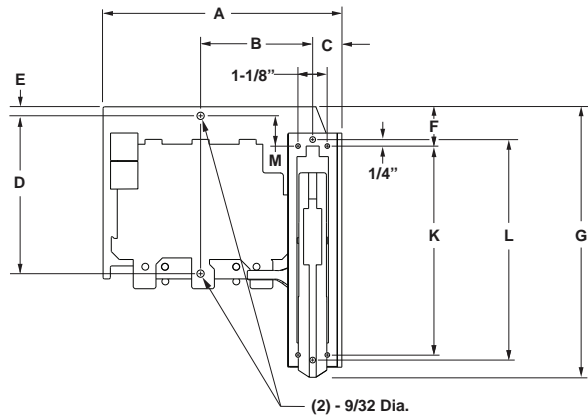
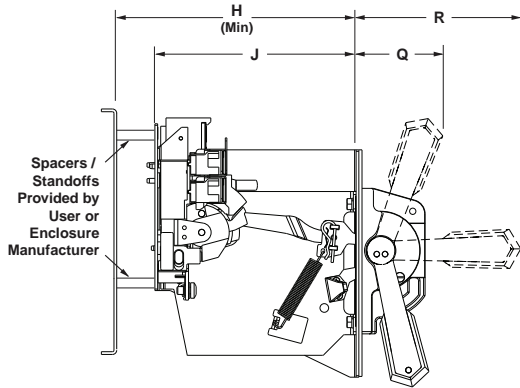
*Disconnect Switches*

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)	—	7/32 (5.54)	12 (304.8)
60	2-1/4 (57.2)	5-1/4 (133.4)	2-1/4 (57.2)	—	7/32 (5.54)	12 (304.8)
100	2-1/4 (57.2)	5-1/4 (133.4)	2-1/4 (57.2)	—	7/32 (5.54)	12 (304.8)
200	2 (50.8)	8-1/4 (209.6)	4-1/4 (108)	1-1/8 (28.6)	7/32 (5.54)	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)

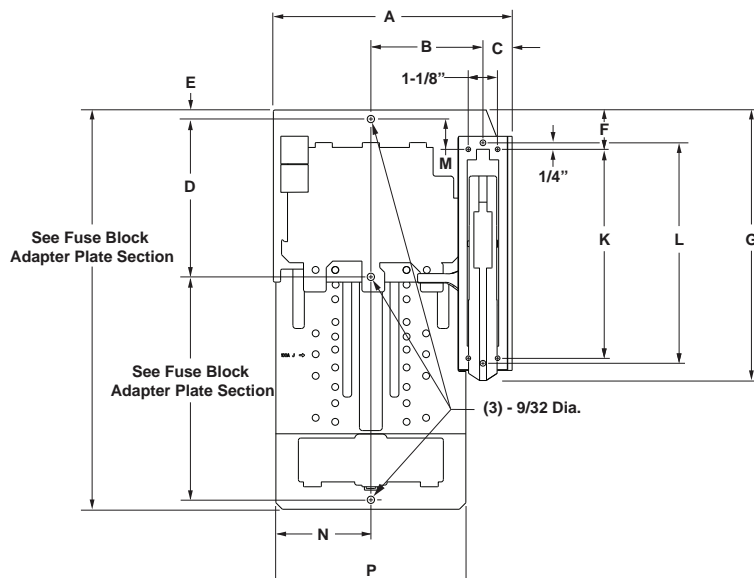
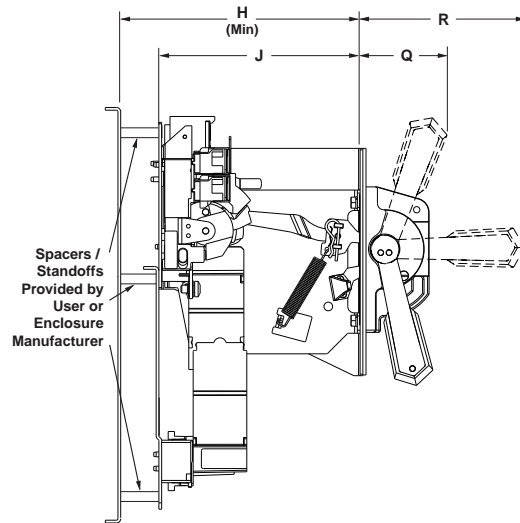
### Bulletin 1494F Disconnect Switches

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

#### Non-Fusible Disconnect Switch



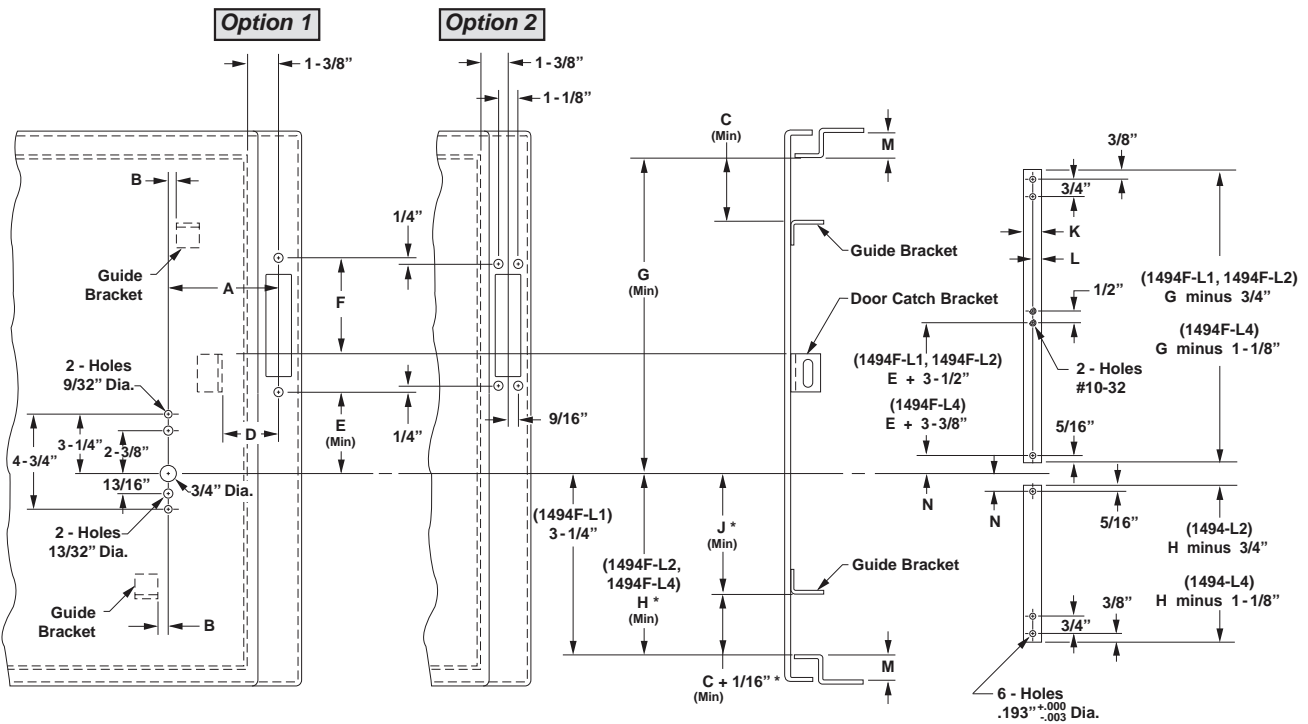
#### Fusible Disconnect Switch



Switch Size [A]	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
30	9-3/16 (233.4)	4-5/16 (109.5)	1-1/8 (28.6)	6 (152.4)	3/8 (9.5)	1-9/16 (39.7)	10-1/2 (266.7)	8-1/2 (215.9)	6-7/8 (174.6)	8 (203.2)	8-1/2 (215.9)	15/16 (23.8)	3-21/32 (92.9)	7-5/16 (185.7)	3 (76.2)	5-7/16 (138.1)
60	9-3/16 (233.4)	4-5/16 (109.5)	1-1/8 (28.6)	6 (152.4)	3/8 (9.5)	1-9/16 (39.7)	10-1/2 (266.7)	8-1/2 (215.9)	6-7/8 (174.6)	8 (203.2)	8-1/2 (215.9)	15/16 (23.8)	3-21/32 (92.9)	7-5/16 (185.7)	3 (76.2)	5-7/16 (138.1)
100	9-3/16 (233.4)	4-5/16 (109.5)	1-1/8 (28.6)	6 (152.4)	3/8 (9.5)	1-9/16 (39.7)	10-1/2 (266.7)	9-3/4 (247.7)	8-1/8 (206.4)	8 (203.2)	8-1/2 (215.9)	15/16 (23.8)	3-21/32 (92.9)	7-5/16 (185.7)	3 (76.2)	5-7/16 (138.1)
200	9-5/8 (244.5)	4-3/4 (120.7)	1-5/32 (29.4)	8-3/16 (208)	7/16 (11.1)	2 (50.8)	10-29/32 (277)	9-3/4 (247.7)	8-1/8 (206.4)	8 (203.2)	8-1/2 (215.9)	1-5/16 (33.3)	3-3/4 (95.3)	7-1/2 (190.5)	3 (76.2)	5-7/16 (138.1)

**Bulletin 1494F Disconnect Switches Vault Hardware Latching (Enclosures that are not pre-drilled)**

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

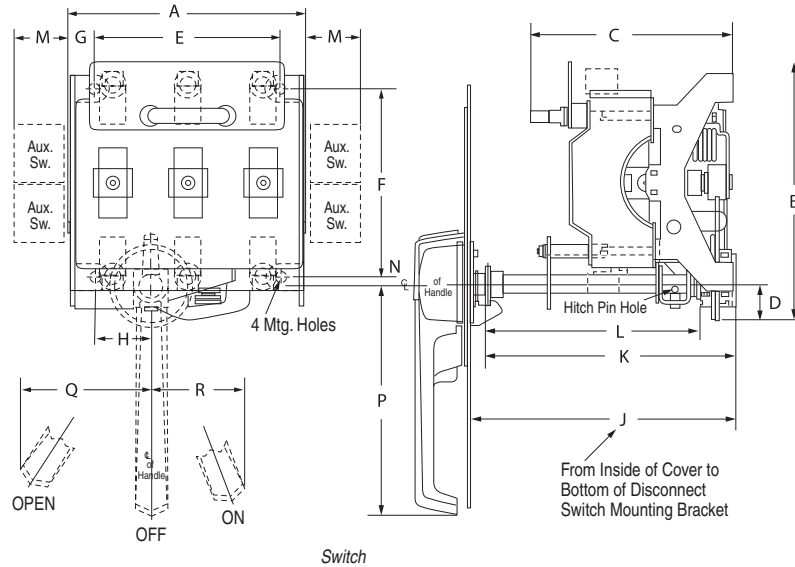


\* Non applicable for 1494F-L1

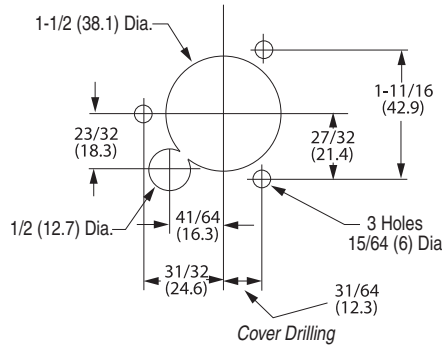
Vault Hardware Kits	Switch Size [A]	A	B	C (Min.)	D	E (Min.)	F	G (Min.)	H (Min.)	J (Min.)	K	L	M	N
Small and Intermediate Enclosures														
1494F-L1 1494F-L2 1494F-L3	30	3-7/8 (98.4)	3/8 (9.5)	3-1/16 (77.8)	2-1/8 (54)	4-1/2 (114.3)	3-13/16 (96.8)	13 (330.2)	8-1/8 (206.4)	5 (127)	1/2 (12.7)	1/4 (6.4)	11/16 (17.5)	1/2 (12.7)
	60							14 (355.6)						
	100							18-7/8 (479.4)						
	200							23-25/32 (604)						
Large Enclosures														
1494F-L4	30	4 (101.6)	1/2 (12.7)	3-3/4 (95.3)	2-1/8 (54)	5 (127)	3-13/16 (96.8)	13-1/8 (333.4)	9-13/16 (249.2)	6 (152.4)	5/8 (15.9)	5/16 (7.9)	1-1/4 (31.8)	3/4 (19.1)
	60							13-5/8 (346.1)						
	100							18-1/2 (469.9)						
	200							23-13/32 (594.5)						

### Bulletin 1494R Disconnect Switches

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



**Bulletin 1494R — 100...200 A**



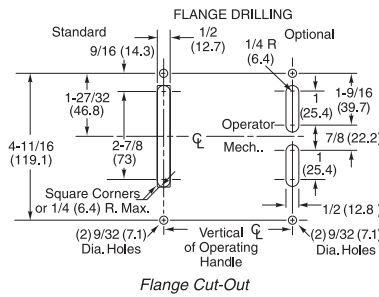
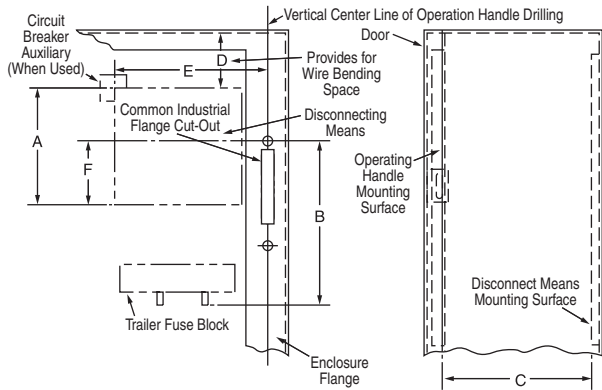
**Bulletin 1494R — 100...200 A**

NEMA Size [A]	A	B	C	D	E	F	G	H	J				K	L	M	N	P	Q	R
									Standard Shaft		Long Shaft								
									Min.	Max.	Min.	Max.							
30	3-31/32 (100.8)	4-13/16 (122.2)	3-9/16 (90.5)	1-1/8 (28.6)	3-1/8 (79.4)	3-1/8 (79.4)	27/64 (10.7)	1 (25.4)	4-3/8 (111.1)	10-7/8 (276.2)	4-3/8 (111.1)	19-3/8 (492.1)	(1)	(3)	1 (25.4)	3/16 (4.8)	5 (127.0)	2-13/16 (71.4)	2-13/16 (71.4)
60	4-21/32 (118.3)	5-1/4 (133.4)	3-9/16 (90.5)	1-1/16 (27.0)	3-13/16 (96.8)	3-1/8 (79.4)	27/64 (10.7)	1 (25.4)	4-1/2 (114.3)	10-7/8 (276.2)	4-1/2 (114.3)	19-3/8 (492.1)	(1)	(3)	1 (25.4)	3/16 (4.8)	5 (127.0)	2-13/16 (71.4)	2-13/16 (71.4)
100	6-7/16 (163.5)	7-3/16 (187.3)	5-7/16 (138.1)	15/16 (23.8)	5 (127.0)	5 (127.0)	23/32 (18.3)	1-1/2 (38.1)	6-1/4 (158.8)	12-7/8 (327.0)	6-1/4 (158.8)	25-7/8 (657.2)	(2)	(4)	1-3/8 (34.9)	1/4 (6.4)	7-11/16 (195.3)	4-3/16 (106.4)	3 (76.2)
200	7-1/4 (184.2)	9-1/2 (241.3)	6-1/2 (165.1)	1-7/16 (36.5)	5-3/4 (146.1)	5-3/4 (146.1)	3/4 (19.1)	1-23/32 (43.7)	7-7/16 (188.9)	12-7/8 (327.0)	7-7/16 (188.9)	25-7/8 (657.2)	(2)	(4)	1-3/8 (34.9)	1/4 (6.4)	7-11/16 (195.3)	4-3/16 (106.4)	3 (76.2)

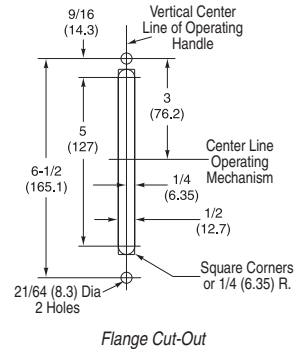
- (1) The adjusted coupling position is determined by measuring the cabinet depth and subtracting 9/16 in.
- (2) The shaft length is determined by measuring the cabinet depth (dimension J) and subtracting 1-3/8 in.
- (3) The adjusted coupling position is determined by measuring the cabinet depth and subtracting 15/16 in.
- (4) The shaft length is determined by measuring the cabinet depth (dimension J) and subtracting 1-7/8 in.

**Bulletin 1494V**

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



**Bulletin 1494V — 125...400 A**



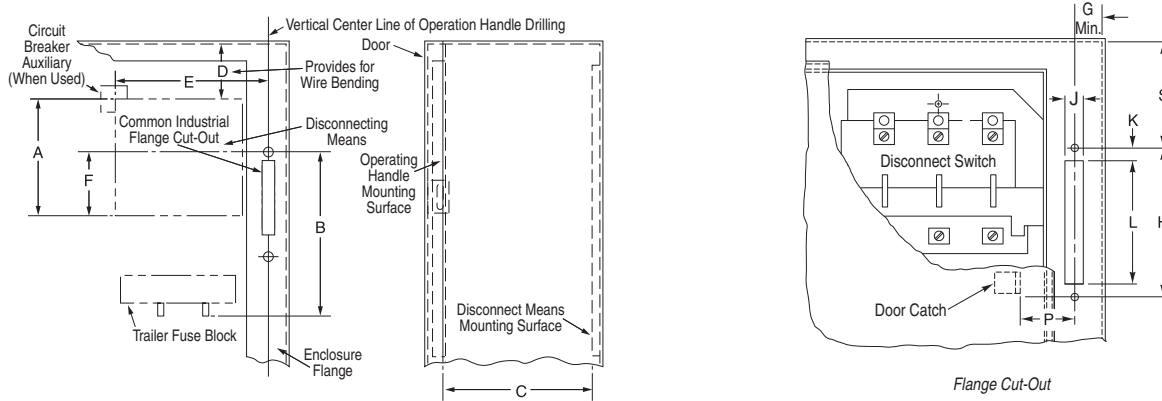
**Bulletin 1494R — 800...1200 A**

*Bulletin 140G Circuit Breakers (Approximate dimensions are for reference only.)*

Frame	A	C		D	E	F
		Minimum	Maximum			
125 A 140G-G, -H 140MG-G, -H	5-7/64 (130.0)	6-3/4 (171.5)	23 (584.2)	2 (50.8)	5-3/4 (147.0)	7-13/64 (182.8)
225 A 140G-I, 140MG-I	5-13/32 (150.0)	7-7/8 (200.0)	22-9/16 (573.1)	6 (152.4)	5-3/4 (147.0)	7-13/64 (182.8)
250 A 140G-J, 140MG-J	6-19/64 (160.0)	7-7/8 (200.0)	22-9/16 (573.1)	6 (152.4)	5-3/4 (147.0)	7-13/64 (182.8)
400 A 140G-K, 140MG-K	8.1 (204.9)	7-7/8 (200.0)	22-9/16 (573.1)	12 (304.8)	7-1/4 (183.0)	8-23/64 (225.1)
800 A 140G-M, 140MG-M	10-3/64 (268.0)	11-3/16 (284.2)	22-9/16 (573.1)	12 (304.8)	10-3/64 (255.2)	9-3/64 (229.6)
1200 A 140G-N, 140MG-N	10-3/64 (268.0)	11-3/16 (284.2)	22-9/16 (573.1)	12 (304.8)	10-3/64 (255.2)	9-3/64 (229.6)

### Bulletin 1494D Circuit Breakers

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



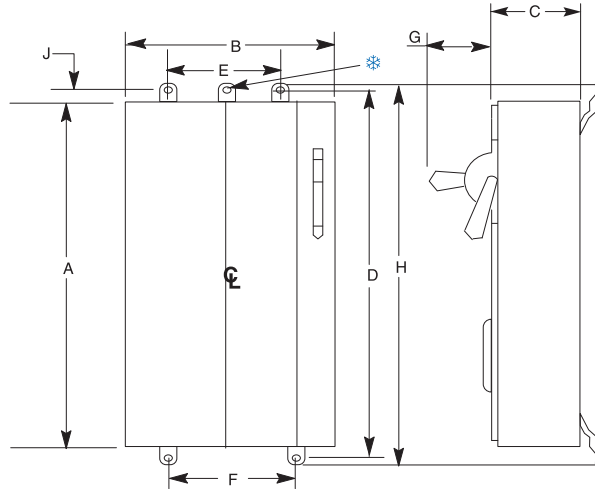
Approximate dimensions are for reference only.

Cutler-Hammer Frame	A	C		D	E	F
		Minimum	Maximum			
150 A — EHD, FD, FDB, FDC, HFD, HMCP	7-13/16 (198.4)	6-3/8 (161.9)	—	6 (152.4)	5-5/8 (142.9)	6-7/16 (163.5)
250 A — JD, JDB, JDC, HJD, HMCP	11-1/2 (292.1)	8-3/8 (212.7)	—	8 (203.2)	5-13/16 (147.6)	9-7/16 (239.7)
400 A — KD, KDB, KDC, HKD, HMCP	11-1/2 (292.1)	8-3/8 (212.7)	—	12 (304.8)	6-7/8 (174.6)	9-7/16 (239.7)
600 A — LD, HLD, LDC, LA, HLA, LC, HLC	11-3/8 (288.9)	9-1/2 (241.3)	—	8 (203.2)	12 (304.8)	10-17/32 (267.5)
800 A — MA, MDL, HMDL, HMA, MC, ND, HND, NDC	16 (406.4)	9-1/2 (241.3)	—	10 (254)	12-5/16 (312.7)	15-3/32 (183.4)
1200 A — NB TRIPAK	22 (558.8)	9-1/2 (241.3)	—	10 (254)	12-5/16 (312.7)	21-3/32 (535.8)
1200 A — HNC, ND, HND, NDC, NB, HNB, NC, HNC	16 (406.4)	9-1/2 (241.3)	—	12 (304.8)	12-5/16 (312.7)	25-3/32 (183.4)



**Bulletin 1494G, 1494GX, 1494GY Enclosed Disconnect Safety Switches  
Type 3R/4/12 (Enclosure Code "F") Painted Metal Enclosures**

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



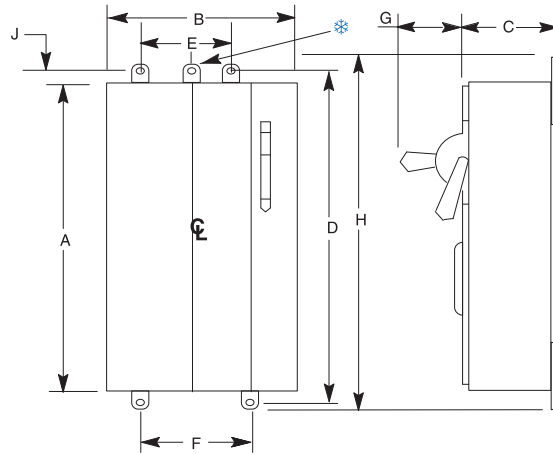
Size [A]	Fuse Style <sup>(1)</sup>	Number of Poles	Bulletin Number	Approximate Dimensions in Inches (Millimeters)								Approx. Shipping Weight [lb (kg)]	
				A Height	B Width	C Depth	D Mounting	E Mounting	F Mounting	G Handle Depth	H		J
30	A	2 or 3	1494G	13-5/16 (338)	10-1/2 (267)	8-1/4 (210)	14-11/16 (373)	(2)	5-1/4 (133)	5-9/16 (141)	15-21/32 (398)	11/32 (9)	20
60				60 (9.07)									
30	B	2 or 3	1494G	20 (509)	10-1/2 (267)	10-3/16 (259)	21-7/16 (545)	(2)	5-1/4 (133)	5-9/16 (141)	22-13/32 (569)	11/32 (9)	30
60				60 (13.6)									
100	A	6	1494G	27-1/2 (698)	10-1/2 (267)	8-1/4 (210)	28-7/8 (733)	(2)	5-1/4 (133)	5-9/16 (141)	29-7/8 (759)	13/16 (21)	60 (27.21)
30	C												
60	D												
100	B												
30	A	2 or 3	1494GY	27-1/2 (698)	10-1/2 (267)	8-1/4 (210)	28-7/8 (733)	(2)	5-1/4 (133)	5-9/16 (141)	29-7/8 (759)	13/16 (21)	60 (27.21)
60	B												
30	A	2 or 3	1494GX	30 (762)	20-1/2 (521)	10-3/16 (259)	31-3/8 (797)	15-1/4 (387)	15-1/4 (387)	5-9/16 (141)	32-3/8 (822)	13/16 (21)	90 (40.82)
60	B												
100	D	6	1494G	30 (762)	20-1/2 (521)	10-3/16 (259)	31-3/8 (797)	15-1/4 (387)	15-1/4 (387)	5-9/16 (141)	32-3/8 (822)	13/16 (21)	90 (40.82)
100	A												
100	B	2 or 3	1494GY	30 (762)	20-1/2 (521)	10-3/16 (259)	31-3/8 (797)	15-1/4 (387)	15-1/4 (387)	5-9/16 (141)	32-3/8 (822)	13/16 (21)	90 (40.82)
100	C												
200	A	2 or 3	1494G	31-1/2 (800)	10-1/2 (267)	10-3/32 (257)	32-7/8 (835)	(2)	5-1/4 (133)	5-9/16 (141)	33-27/32 (860)	11/32 (9)	70 (31.73)
100	A	2 or 3	1494GX	50 (1270)	22 (559)	11-1/2 (292)	51-3/8 (1305)	15-1/4 (387)	15-1/4 (387)	5-9/16 (141)	52-11/32 (1330)	11/32 (9)	200 (90.7)
200	C												
200	D	6	1494G	50 (1270)	22 (559)	11-1/2 (292)	51-3/8 (1305)	15-1/4 (387)	15-1/4 (387)	5-9/16 (141)	52-11/32 (1330)	11/32 (9)	200 (90.7)
200	A												
400	A	2 or 3	1494G	50 (1270)	22 (559)	11-1/2 (292)	51-3/8 (1305)	15-1/4 (387)	15-1/4 (387)	7-5/8 (194)	52-11/32 (1330)	11/32 (9)	200 (90.7)
600	A	2 or 3	1494G	56 (1422)	30-1/2 (775)	13-51/64 (350)	57-5/8 (1464)	20 (508)	25-1/4 (641)	7-5/8 (194)	62-5/8 (1590)	1 (25.4)	300 (136.05)
400	B												
600	B	2 or 3	1494G	56 (1422)	30-1/2 (775)	13-51/64 (350)	57-5/8 (1464)	20 (508)	25-1/4 (641)	7-5/8 (194)	62-5/8 (1590)	1 (25.4)	300 (136.05)
600	A												

(1) A = Non-Fusible, Fusible 250V - Class H/R, Fusible 600V - Class J  
 B = Fusible 600V - Class H/R  
 C = Non-fusible  
 D = Fusible 250V - Class H/R, Fusible 600V - Class J

(2) These enclosures have one top mounting hole on the center line. All other enclosures have two top mounting holes located as shown.

**Bulletin 1494G, 1494GX, 1494GY Enclosed Disconnect Safety Switches  
Type 4/4X (Enclosure Code "C") Stainless Steel Enclosures**

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



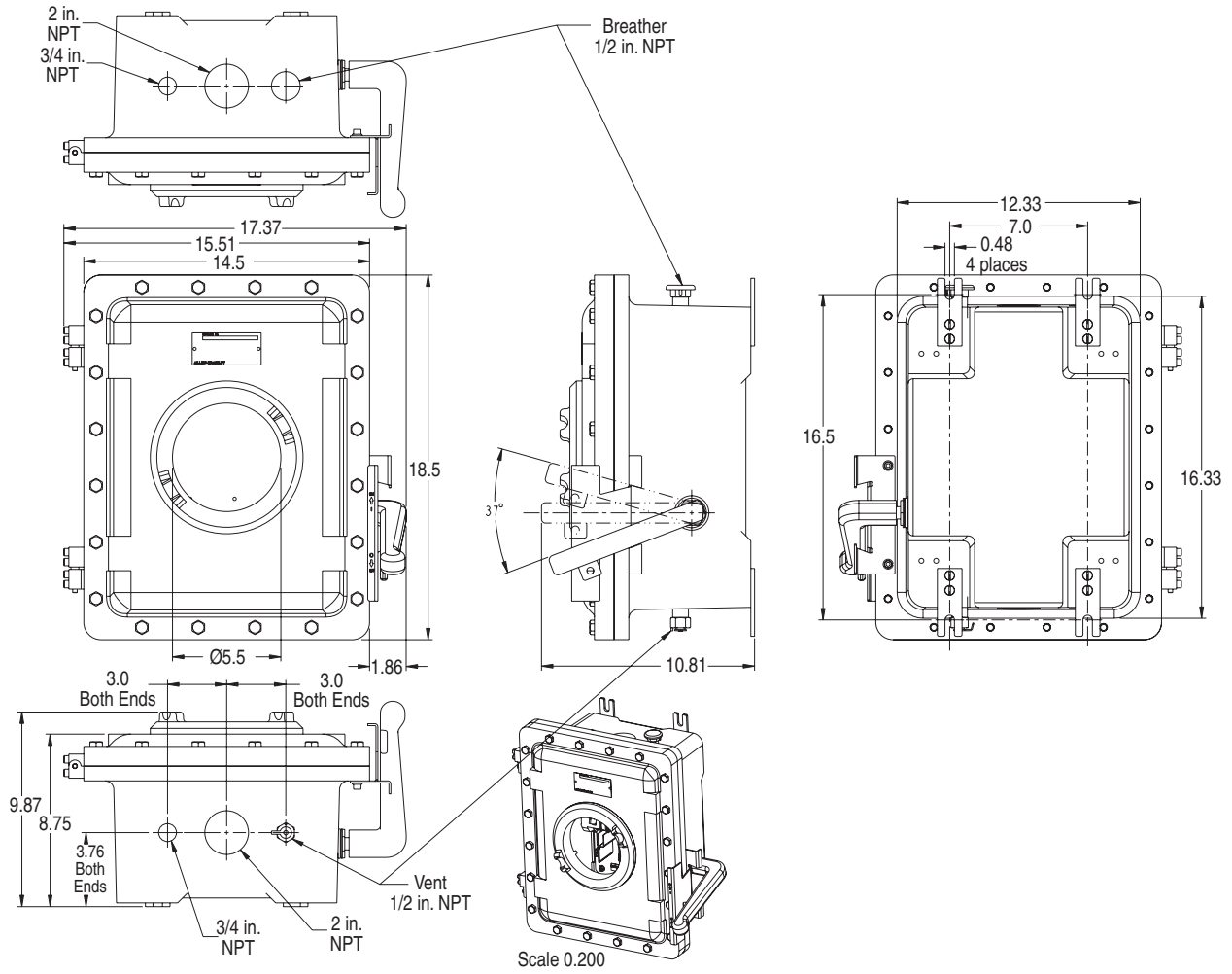
Size [A]	Fuse Style <sup>(1)</sup>	Number of Poles	Bulletin Number	Approximate Dimensions in Inches (Millimeters)								Approx. Shipping Weight [lb (kg)]	
				A Height	B Width	C Depth	D Mounting	E Mounting	F Mounting	G Handle Depth	H		J
30	A	2 or 3	1494G	13-5/16 (338)	10-1/2 (267)	8-1/4 (210)	14-11/16 (373)	(2)	7 (178)	5-9/16 (141)	15-21/32 (398)	13/16 (21)	20 (9.07)
60													
30	B	2 or 3	1494G	27-1/2 (698)	10-1/2 (267)	8-1/4 (210)	28-7/8 (733)	(2)	7 (178)	5-9/16 (141)	29-3/4 (756)	13/16 (21)	60 (27.21)
	C	6											
	D	6											
60	B	2 or 3											
	C	6											
	D	6											
30	A	2 or 3	1494GY	30 (762)	20-1/2 (521)	9-7/8 (254)	31-3/8 (797)	17 (432)	17 (432)	5-9/16 (141)	32-1/4 (819)	13/16 (21)	90 (40.82)
	B												
60	A												
	B												
30	A	2 or 3	1494GX	50 (1270)	22 (559)	11-3/16 (284)	51-3/8 (1305)	18-1/2 (470)	18-1/2 (470)	5-9/16 (141)	52-1/4 (1327)	13/16 (21)	200 (90.7)
	B												
60	A												
	B												
100	A	2 or 3	1494G	56 (1422)	30-1/2 (775)	13-51/64 (350)	57-5/8 (1464)	20 (508)	25-1/4 (641)	7-5/8 (194)	58-5/8 (1489)	1 (25.4)	300 (136.05)
	B												
	600	A											
		B											

(1) A = Non-Fusible, Fusible 250V - Class H/R, Fusible 600V - Class J  
 B = Fusible 600V - Class H/R  
 C = Non-fusible  
 D = Fusible 250V - Class H/R, Fusible 600V - Class J

(2) These enclosures have one top mounting hole on the center line. All other enclosures have two top mounting holes located as shown.

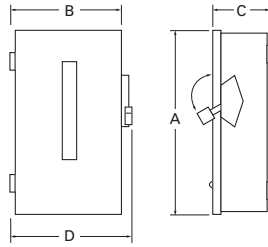
### Bulletin 1494G Safety Switch — Hazardous Locations

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



**Bulletin 1494H Heavy-Duty Safety Switches**  
**Type 1 (Enclosure Code "A") General-Purpose Painted Metal Enclosures**

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



Switch Size [A]	Fuse Style	A Height	B Width	C Depth	D Width (with handle)	Knockout Figure #
30	240V	10-9/32 (261.1)	6-3/8 (162.1)	3-5/16 (84.1)	7-1/8 (181)	1
	600V	12-19/32 (319.8)	8-3/8 (212.9)	4 (101.6)	9-1/2 (241.3)	2
	Non-fusible	10-3/8 (263.7)	8-3/8 (212.9)	4 (101.6)	9-1/4 (235)	3
60	240V	17-19/32 (446.8)	9-3/8 (238.3)	5 (127)	10-3/64 (255.3)	4
	600V	21-11/32 (542)				5
	Non-fusible	17-19/32 (446.8)				4
100	240V	21-11/32 (542)	9-3/8 (238.3)	5 (127)	10-3/64 (255.3)	5
	600V	22-11/32 (567.4)				4
	Non-fusible	17-19/32 (446.8)				4
200	240V	31-5/8 (803.3)	13-7/16 (341.4)	5-1/4 (133.4)	14-7/16 (366)	6
	600V					
	Non-fusible					

**Knockouts — Conduit Size**

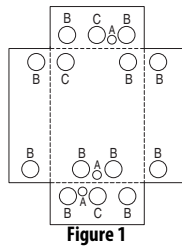


Figure 1

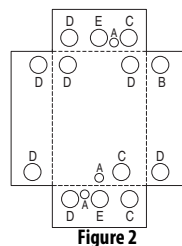


Figure 2

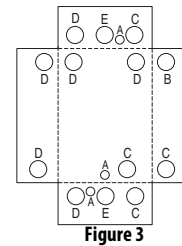


Figure 3

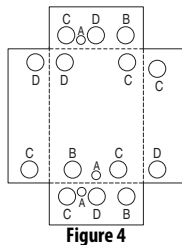


Figure 4

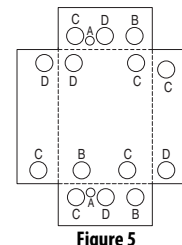


Figure 5

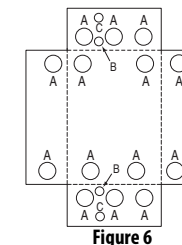
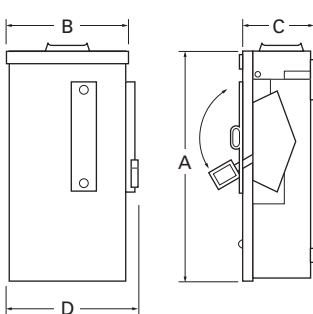


Figure 6

Switch Size [A]	Fuse Style	Knockouts				
		A	B	C	D	E
30	240V	9/32 (7.1)	1/2 x 3/4 (12.7 x 19.1)	3/8 x 1/2 x 3/4 x 1 (9.5 x 12.7 x 19.1 x 25.4)	—	—
	600V			1/2 x 3/4 x 1 (12.7 x 19.1 x 25.4)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)
	Non-fusible			—	—	
60	240V	9/32 (7.1)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)	1 x 1-1/4 x 1-1/2 x 2 (25.4 x 31.8 x 38.1 x 50.8)	—
	600V			—	—	
	Non-fusible			—	—	
100	240V	9/32 (7.1)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)	1 x 1-1/4 x 1-1/2 x 2 (25.4 x 31.8 x 38.1 x 50.8)	—
	600V			—	—	
	Non-fusible			—	—	
200	240V	1 x 1-1/2 x 2 x 2-1/2 (25.4 x 38.1 x 50.8 x 63.5)	9/32 (7.1)	1/2 (12.7)	—	—
	600V			—	—	
	Non-fusible			—	—	

**Bulletin 1494H Heavy-Duty Safety Switches**  
**Type 3R (Enclosure Code "N") Rain-Proof Painted Metal Enclosures**

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



Switch Size [A]	Fuse Style	A Height	B Width	C Depth	D Width (with handle)	Knockout Figure #
30	240V	10-5/8 (269.9)	6-3/8 (162.1)	3-5/16 (84.1)	7-1/8 (181)	7
	600V	13-13/64 (335.3)	8-3/8 (212.9)	4 (101.6)	9-13/32 (239)	8
	Non-fusible					
60	240V	17-7/16 (443)	9-3/8 (238.3)	5 (127)	10-3/64 (255.3)	9
	600V	22-3/16 (563.6)			10-1/2 (267)	
	Non-fusible	17-7/16 (443)			10-3/64 (255.3)	
100	240V	22-3/16 (563.6)	9-3/8 (238.3)	5 (127)	10-1/2 (267)	9
	600V	22-3/16 (563.6)			10-1/2 (267)	
	Non-fusible	17-7/16 (443)			10-3/64 (255.3)	
200	240V	31-7/16 (798.6)	13-3/8 (339.9)	5-15/32 (138.9)	14-1/8 (361.9)	10
	600V					
	Non-fusible					

**Knockouts — Conduit Size**

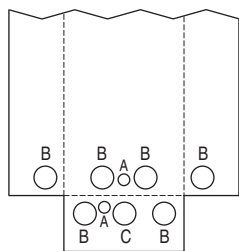


Figure 7

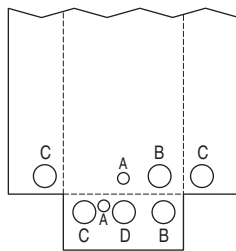


Figure 8

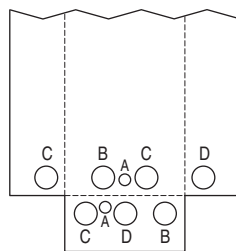


Figure 9

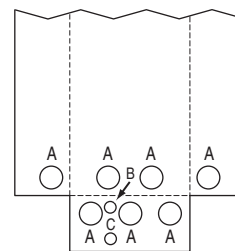
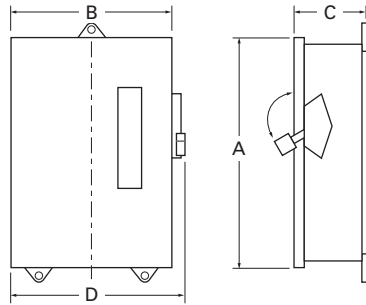


Figure 10

Switch Size [A]	Fuse Style	Knockouts			
		A	B	C	D
30	240V	9/32 (7.1)	1/2 x 3/4 (12.7 x 19.1)	3/8 x 1/2 x 3/4 x 1 (9.5 x 12.7 x 19.1 x 25.4)	—
	600V		1/2 x 3/4 x 1 (12.7 x 19.1 x 25.4)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)
	Non-fusible				
60	240V	9/32 (7.1)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)	1 x 1-1/4 x 1-1/2 x 2 (25.4 x 31.8 x 38.1 x 50.8)
	600V				
	Non-fusible				
100	240V	9/32 (7.1)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)	1 x 1-1/4 x 1-1/2 x 2 (25.4 x 31.8 x 38.1 x 50.8)
	600V				
	Non-fusible				
200	240V	1 x 1-1/2 x 2 x 2-1/2 (25.4 x 38.1 x 50.8 x 63.5)	9/32 (7.1)	1/2 (12.7)	—
	600V				
	Non-fusible				

**Bulletin 1494H Heavy-Duty Safety Switches**  
**Type 12 (Enclosure Code "F") Dust-Tight Painted Metal Enclosures**

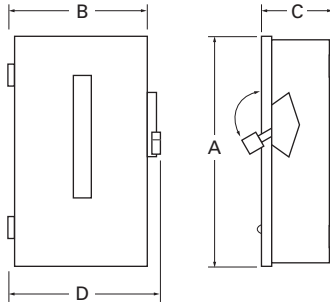
Approximate dimensions are shown in inches. Dimensions are not intended to be used for manufacturing purposes.



Switch Size [A]	Fuse Style	A Height	B Width	C Depth	D Width (with handle)
30	240V	11-3/8 (288.9)	7-3/8 (187.3)	5-1/16 (128.6)	8-1/8 (206.4)
	600V	13-3/8 (339.7)	9-3/8 (238.3)	5-1/16 (128.6)	10-1/4 (260.4)
	Non-fusible				
60	240V	19-3/8 (492.1)	9-3/8 (238.3)	5-1/16 (128.6)	10-1/4 (260.4)
	600V				
	Non-fusible				
100	240V	25-3/8 (644.5)	13-1/2 (342.9)	5-1/16 (128.6)	14-1/4 (362)
	600V				
	Non-fusible				
200	240V	35-1/8 (892.2)	13-1/2 (342.9)	5-1/16 (128.6)	15-1/4 (387.4)
	600V		14-1/2 (368.3)		
	Non-fusible		14-1/2 (368.3)		

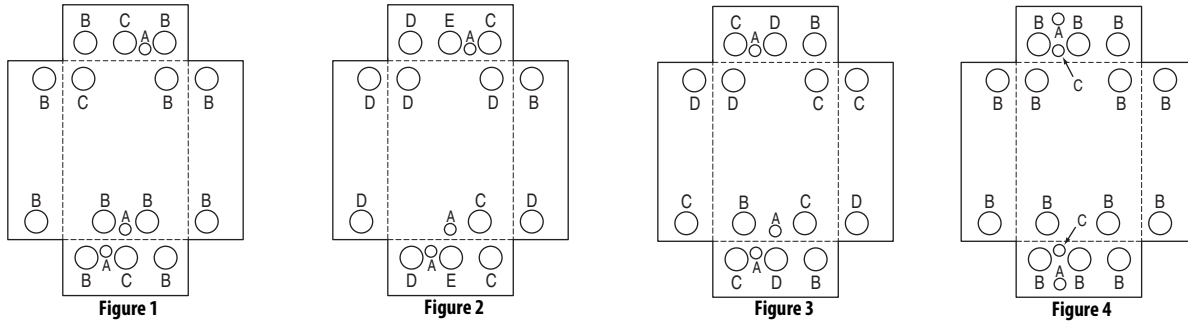
**Bulletin 1494HL General Duty Safety Switches**  
**Type 1 (Enclosure Code "A") General-Purpose Painted Metal Enclosures**

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



Switch Size [A]	Fuse Style	A Height	B Width	C Depth	D Width (with handle)	Knockout Figure #
30	240V	10-9/32 (261.1)	6-1/2 (165.1)	3-5/16 (84.1)	6-29/32 (175.3)	1
60		13-27/32 (351.5)	8-1/2 (215.9)	4 (101.6)	8-7/8 (225.6)	2
100		21-11/32 (542)	9-1/2 (241.3)	5 (127)	9-7/8 (251)	3
200		29-1/8 (739.6)	13-7/16 (341.4)	5-5/16 (134.9)	13-15/16 (354.1)	4

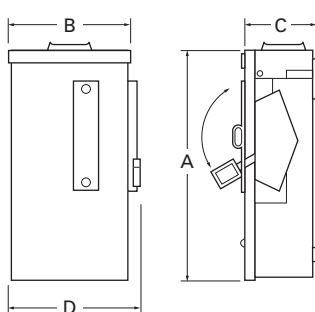
**Knockouts — Conduit Size**



Switch Size [A]	Knockouts				
	A	B	C	D	E
30	9/32 (7.1)	1/2 x 3/4 (12.7 x 19.1)	3/8 x 1/2 x 3/4 x 1 (9.5 x 12.7 x 19.1 x 25.4)	—	—
60	9/32 (7.1)	1/2 x 3/4 (12.7 x 19.1)	1/2 x 3/4 x 1 (12.7 x 19.1 x 25.4)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)
100	9/32 (7.1)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)	1 x 1-1/4 x 1-1/2 x 2 (25.4 x 31.8 x 38.1 x 50.8)	—
200	1/2 (12.7)	1 x 1-1/2 x 2 x 2-1/2 (25.4 x 38.1 x 50.8 x 63.5)	9/32 (7.1)	—	—

**Bulletin 1494HL General Duty Safety Switches  
Type 3R (Enclosure Code "N") Rain-Proof Painted Metal Enclosures**

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



Switch Size [A]	Fuse Style	A Height	B Width	C Depth	D Width (with handle)	Knockout Figure #
30	240V	10-1/32 (254.8)	6-3/8 (162.1)	3-5/16 (84.1)	7-1/8 (180.8)	5
60		13-15/16 (353.8)	8-3/8 (212.9)	3-7/8 (225.6)	9-3/32 (230.9)	6
100		21-7/16 (544.3)	9-3/8 (238.3)	5 (127)	9-61/64 (252.7)	7
200		28-15/16 (735.1)	13-3/8 (339.9)	5-5/16 (134.9)	14-1/16 (357.1)	8

**Knockouts — Conduit Size**

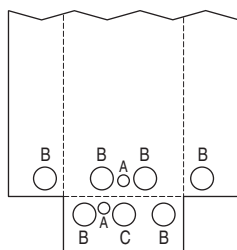


Figure 5

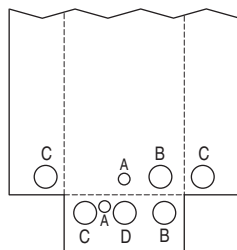


Figure 6

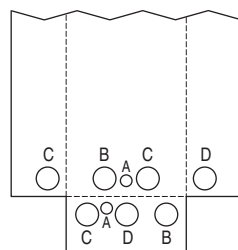


Figure 7

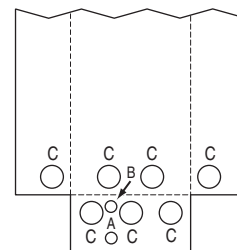


Figure 8

Switch Size [A]	Knockouts			
	A	B	C	D
30	9/32 (7.1)	1/2 x 3/4 (12.7 x 19.1)	3/8 x 1/2 x 3/4 x 1 (9.5 x 12.7 x 19.1 x 25.4)	—
60	9/32 (7.1)	1/2 x 3/4 x 1 (12.7 x 19.1 x 25.4)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)
100	9/32 (7.1)	1/2 x 3/4 x 1 x 1-1/4 (12.7 x 19.1 x 25.4 x 31.8)	3/4 x 1 x 1-1/4 x 1-1/2 (19.1 x 25.4 x 31.8 x 38.1)	1 x 1-1/4 x 1-1/2 x 2 (25.4 x 31.8 x 38.1 x 50.8)
200	1/2 (12.7)	1 x 1-1/2 x 2 x 2-1/2 (25.4 x 38.1 x 50.8 x 63.5)	1 x 1-1/2 x 2 x 2-1/2 (25.4 x 38.1 x 50.8 x 63.5)	—



**Notes:**

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<b>Local Technical Support Phone Numbers</b>	Locate the phone number for your country.	<a href="http://www.rockwellautomation.com/global/support/get-support-now.page">www.rockwellautomation.com/global/support/get-support-now.page</a>
<b>Direct Dial Codes</b>	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	<a href="http://www.rockwellautomation.com/global/support/direct-dial.page">www.rockwellautomation.com/global/support/direct-dial.page</a>
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<b>Product Compatibility and Download Center (PCDC)</b>	Get help determining how products interact, check features and capabilities, and find associated firmware.	<a href="http://www.rockwellautomation.com/global/support/pcdc.page">www.rockwellautomation.com/global/support/pcdc.page</a>

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