Allen-Bradley

Fused and Non-Fused Disconnect Switches

Bulletin 194R

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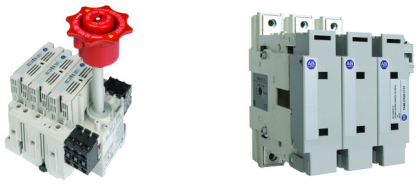
Summary of Changes

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

Topic	Pages
Updated product descriptions	13
Updated quantity that is required and package quantity for terminal shields	16
Updated enclosure dimensions	48-49

Overview

	 Bulletin 194R-C, J, H, B, D, F, L, N, NU	Bulletin 194R-NE
Product Type	Fused and non-fused rotary disconnect switches	Non-fused IEC rotary disconnect switches
Current Range	20…1200 A	125…1250 A
Main Applications	• UL 98 ratings “suitable as service entrance disconnecting means” • UL 508, CSA ratings “suitable as at-motor disconnect” • UL and IEC applications	• Disconnecting means • IEC applications
Functionality	• 3- or 4-pole fusible or non-fusible disconnect for standard OFF-ON or emergency stop in a main panel disconnect application • 4th pole available as modular accessory • Test mode switch position	• 3- or 4-pole non-fusible disconnect for standard OFF-ON or emergency stop in a main panel disconnect application • 4th pole available as modular accessory
Mounting Styles	20…63 A: DIN Rail/Panel mounting; 100…1250 A: Panel mounting	Panel mounting
Handles	• Available in rotary styles, UL Type 1/3R/4/4X/12, IP66, standard, or test mode versions • Handle colors in black and red/yellow and padlockable versions • 30 A/60 A legend markers (optional) — uses Cat. No. 1492-MS6X12 markers	• Available in rotary styles, UL Type 1/3R/4/4X/12, IP66, or standard versions • Handle colors in black and red/yellow and padlockable versions
Open Switch or Enclosed	• Open switch • Enclosed: UL/CSA rated enclosure for 20…63 A devices	• Open switch
UL/CSA Electrical Ratings:		
Rated Voltage U_e	690V AC	690V AC
Rated Current I_e	20…1200 A	125…1250 A
Rated Power P_e [FLA]	Varies w/ 1- or 3-phase switch, voltage	Varies w/ 1- or 3-phase switch, voltage
Short-Circuit Ratings	200 kA	200 kA
Mechanical Life [ops]	Up to 10 000	Up to 10 000
IEC Rated Current I_e		
Ambient Operational Temperature	-20…+60 °C (-4…+140 °F)	-20…+60 °C (-4…+140 °F)
Ambient Enclosed Temperature	-20…+60 °C (-4…+140 °F)	-20…+60 °C (-4…+140 °F)
Ambient Storage Temperature	-40…+65 °C (-40…+149 °F)	-40…+65 °C (-40…+149 °F)
Protection class per IEC 529	• Disconnects with terminal shroud or terminal screen: IP20 • 194R-J100-1753, front mounting: IP20 • Fuse carriers: IP30	• Front-mounted disconnects with terminal shroud or terminal screen: IP20
Optional Accessories	• IP66 handles • Multi-length shafts • Auxiliary contacts • Terminal covers • NFPA 79 internal handle with shaft	• IP66 handles • Multi-length shafts • Auxiliary contacts • Terminal covers

Standards Compliance and Certifications—Bulletin 194R-C, J, H, B, D, F, L, N, NU

Standards Compliance
UL 98
UL 508
CSA C22.2, No. 14
IEC/EN 60947-3 Low Voltage Switchgear and Controlgear part 3
BS EN60947-3
VDE 0660
NEMA KS-1

Certifications
CE Marked
CSA Certified (File No. LR1234)
UL Listed (File No. E 14841, Guide NLRV; File No. E 47426, Guide WHTY)

Standards Compliance and Certifications—Bulletin 194R-NE

Standards Compliance		Certifications
IEC/EN 60947-3 Low Voltage Switchgear and Controlgear part 3		CE Marked

Product Overview

The Bulletin 194R line of fused and non-fused rotary disconnect switches provides the flexibility to meet worldwide applications. The disconnect switches are UL Listed and CSA Certified and are designed to meet IEC 60947-3, VDE, DIN, BS, and applicable NEMA requirements.

Features

- 20 A...1250 A Sizes
- Fused switch versions:
  - BS88 -DIN
  - CSA HRCII-C - CSA HRCI-MISC - HRC-L
  - UL Class J- UL Class CC - UL Class L
  - NFC
- IP66 (Type 3R, 3, 12, 4, 4X) operating handle ingress ratings
- Handle with or without test mode
- Padlockable handle for up to three padlocks
- 6 auxiliary contacts can be added
- Suitable as service entrance disconnecting means (UL 98)
- Suitable as at-motor disconnecting means (UL 508)

Catalog Number Explanation

Fourth pole (20...63 A), additional auxiliary contacts, and handle options available in accessory section.

Cat. No. 194R-J30-1753

Cat. No. 194R-NE160-1753

194R	–	J	30	–	1753	S
		a	b		c	d

a	
Fuse Type	
Code	**Description**
C	UL Class CC, CSA Type HRCI-MISC
J	UL Class J, CSA Type HRCI-J
H	CSA Type HRCII-C
B	BS88(3)
D	DIN(3)
F	NFC(3)
L	UL Class L, CSA Type HRC-L
N	Non-fused (20…63 A)(1)
NE	Non-fused, IEC (100…1250 A)(1)(2)
NU	Non-fused, UL (100…1200 A)(1)

b	
Load Size(3)	
Code	**Description**
20	20 A (BS88)
25	25 A (NFC)
30	30 A (CC, J, HRCI-J)
	30 A (non-fused)
	30 A (HRCII-C)
32	32 A (BS88, NFC)
	32 A (DIN)
60	60 A (J, HRCI-J, HRCII-C)
	60 A (non-fused)
63	63 A (BS88, DIN, NFC)
100	100 A (BS88, DIN, NFC, J, HRCI-J)
125	125 A (BS88, DIN, NFC, Non-fused)
160	160 A (BS88, DIN, NFC, Non-fused)
200	200 A (BS88, DIN, NFC, J, HRCI-J, non-fused)
250	250 A (BS88, DIN, NFC, J, HRCI-J, non-fused)
400	400 A (BS88, DIN, NFC, J, HRCI-J, non-fused)
600	600 A (BS88, DIN, NFC, J, HRCI-J, non-fused)
630	630 A (BS88, DIN, NFC, non-fused)
800	800 A (BS88, DIN, NFC, L, HRCI-L, non- fused)
1200	1200 A (Non-fused)
1250	1250 A (BS88, DIN, non-fused)

c	
No. of Poles	
Code	**Description**
1753	3-poleswitch
1754	4-pole switch (non-fused:100…1250 A)

d	
Fuse Indication	
Code	**Description**
blank	No fuse status indication
S	Fuse status indication (20…63 A)

(1) Non-fused disconnect switches must use separately installed fuses for upstream short-circuit protection
(2) Does not carry UL Certification.
(3) Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications

Product Selection

This section provides information that you need to select a disconnect switch.

UL/CSA Fused Disconnect Switches

Cat. No. 194R-J30-1753

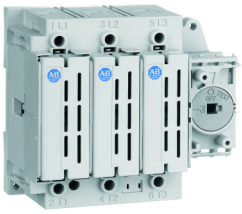
Cat. No. 194R-J100-1753

Note: Your order must include 1) Cat. No. of disconnect switch, 2) shaft, 3) handle, and 4) any accessories.

Rated Current [A]	Maximum Hp Ratings(1)*							Fuse	Dim. Ref.	Cat. No.
	1-Phase (60 Hz)		3-Phase (60 Hz)			DC				
	120V	240V	240V	480V	600V	125V	250V			
UL Class CC and CSA HRCI-MISC Fuses										
30	2	3	7.5	15	20	3	5	30 A CC, HRCI-Misc	A1	194R-C30-1753
UL Class J and CSA HRCI-J Fuses										
30	2	3	7.5	15	20	3	5	30 A Class J, HRCI-J	A1	194R-J30-1753
60	3	10	15	30	50	5	10	60 A Class J, HRCI-J	B1	194R-J60-1753
CSA HRCII-C Fuses										
30	2	3	7.5	15	20	3	5	30 A HRCII-C	B1	194R-H30-1753
60	3	10	15	30	50	5	10	60 A HRCII-C	B1	194R-H60-1753
UL Class J and CSA HRCI-J Fuses										
30	2	3	7.5	15	20	3	5	30 A Class J, HRCI-J	A1	194R-J30-1753
60	3	10	15	30	50	5	10	60 A Class J, HRCI-J	B1	194R-J60-1753
100	7-1/2	15	30	60	75	7.5	20	100 A Class J, HRCI-J	F5	194R-J100-1753(2)
200	—	25	60	125	150	15	40	200 A Class J, HRCI-J	F6	194R-J200-1753
400	—	50	125	250	350	20	50	400 A Class J, HRCI-J	F7	194R-J400-1753
600	—	—	200	500	500	—	—	600 A Class J, HRCI-J	F8	194R-J600-1753
UL Class L and CSA HRCI-L Fuses										
800	—	—	200	500	500	—	—	800 A Class L, HRCI-L	F9	194R-L800-1753

(1) Time delay fuses may be required to utilize the disconnect switch at its maximum horsepower rating.
(2) Integral terminal lug #12…#10 Solid Cu or #12 - #1 Stranded Cu.

UL/CSA Non-fused Disconnect Switches



Cat. No. 194R-N30-1753

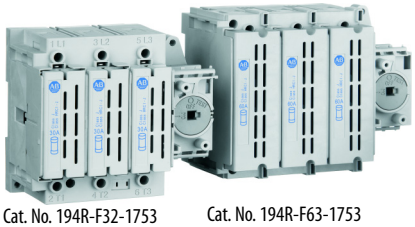
Cat. No. 194R-J100-1753

Note: Your order must include 1) Cat. No. of disconnect switch, 2) shaft, 3) handle, and 4) any accessories.

Fuse Description	Rated Current [A](1)	No. of Poles	Maximum Hp Ratings							Dim. Ref.	Cat. No.
			1-Phase (60 Hz)		3-Phase (60 Hz)			DC			
			120V	240V	240V	480V	600V	125V	250V		
Non-fused disconnect switches must use separately installed fuses for upstream short circuit protection.	30	3	2	3	7.5	15	20	3	5	A2	194R-N30-1753
	60	3	3	10	15	30	40	5	10	B2	194R-N60-1753
	100	3	7-1/2	15	30	75	100	10	15	F1	194R-NU100-1753
		4	7-1/2	15	30	75	100	10	15	F1	194R-NU100-1754
	200	3	—	50	75	150	200	15	15	F1	194R-NU200-1753
		4	—	50	75	150	200	15	15	F1	194R-NU200-1754
	400	3	—	—	125	250	350	20	50	F2	194R-NU400-1753
		4	—	—	125	250	350	20	50	F2	194R-NU400-1754
	600	3	—	—	200	400	350	20	50	F3	194R-NU600-1753
		4	—	—	200	400	350	20	50	F3	194R-NU600-1754
	800	3	—	—	200	500	500	—	—	F4	194R-NU800-1753
		4	—	—	200	500	500	—	—	F4	194R-NU800-1754
	1200	3	—	—	200	500	500	—	—	F4	194R-NU1200-1753
		4	—	—	200	500	500	—	—	F4	194R-NU1200-1754

(1) 30 A UL-rated device has I_{the} of 40 A per IEC. 60 A UL-rated device has I_{the} of 80 A per IEC.

IEC Fused Disconnect Switches



Cat. No. 194R-F32-1753 Cat. No. 194R-F63-1753

Cat. No. 194R-D160-1753

Note: Your order must include 1) Cat. No. of disconnect switch, 2) shaft, 3) handle, and 4) any accessories.

BS88 Fused Disconnect Switches

Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications

Load Rating I_e [A]	Ratings (AC23) With Fuse Links			Fuse	Dim. Ref.	Cat. No.
	3-Phase Max. kW (50 Hz)					
	200/230V	380/400/415V	660/690V			
20	5.5	11	15	BS88 A1	A1	194R-B20-1753
32	9	18.5	30	BS88 A1	A1	194R-B32-1753
63	18.5	30	55	BS88 A3	B1	194R-B63-1753
100	—	57	90	BS88, size A4	F13	194R-B100-1753
160	—	80	110	BS88, size A4	F14	194R-B160-1753
200	—	100	150	BS88, size B1-B2	F15	194R-B200-1753
250	—	132	220	BS88, size B1-B3	F15	194R-B250-1753
400	—	220	220	BS88, size B1- B4	F16	194R-B400-1753
630	—	355	295	BS88, size C1- C2	F17	194R-B630-1753
800	—	450	400	BS88, size C1-C3	F17	194R-B800-1753
1250	—	560	400	BS88, size D1	F18	194R-B1250-1753

DIN Fused Disconnect Switches

Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications

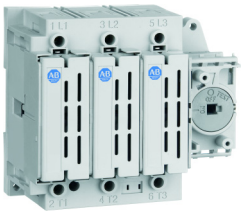
Load Rating I_e [A]	Ratings (AC23) With Fuse Links			Fuse	Dim. Ref.	Cat. No.
	3-Phase Max. kW (50 Hz)					
	200/230V	380/400/415V	660/690V			
32	9	18.5	30	NH 000	B1	194R-D32-1753
63	18.5	30	55	NH 000	B1	194R-D63-1753
125	—	63	90	DIN, size 00	F13	194R-D125-1753
160	—	80	110	DIN, size 00	F13	194R-D160-1753
250	—	132	220	DIN, size T1	F15	194R-D250-1753
400	—	220	220	DIN, size T2	F16	194R-D400-1753
630	—	355	295	DIN, size T3	F17	194R-D630-1753
800	—	450	400	DIN, size T3	F17	194R-D800-1753
1250	—	560	400	DIN, size T4	F18	194R-D1250-1753

NFC Fused Disconnect Switches

Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications.

Load Rating I_e [A]	Ratings (AC23) With Fuse Links			Fuse	Dim. Ref.	Cat. No.
	3-Phase Max. kW (50 Hz)					
	200/230V	380/400/415V	660/690V			
25	7.5	11	22	NFC 14x51 mm	A1	194R-F25-1753
32	9	18.5	30	NFC 14x51 mm	A1	194R-F32-1753
63	18.5	30	55	NFC 22x58 mm	B1	194R-F63-1753

IEC Non-fused Disconnect Switches



Cat. No. 194R-N30-1753

Cat. No. 194R-NE160-1753

Note: Your order must include 1) Cat. No. of disconnect switch, 2) shaft, 3) handle, and 4) any accessories.

Fuse Description	Rated Current [A](1)	No. of Poles	Maximum Hp Ratings				Maximum kW Ratings			Dim. Ref.	Cat. No.
			1-Phase (60 Hz)		DC		3-Phase (60 Hz)				
			120V	240V	125V	250V	240V	480V	600V		
Non-fused disconnect switches must use separately installed fuses for upstream short circuit protection.	30	3	2	3	3	5	7.5	15	20	A2	194R-N30-1753
	60	3	3	10	5	10	15	30	40	B2	194R-N60-1753
	125	3	—	—	—	—	—	63	55	F1	194R-NE125-1753(2)
		4	—	—	—	—	—	63	55	F1	194R-NE125-1754(2)
	160	3	—	—	—	—	—	80	55	F1	194R-NE160-1753(2)
		4	—	—	—	—	—	80	55	F1	194R-NE160-1754(2)
	250	3	—	—	—	—	—	132	90	F2	194R-NE250-1753(2)
		4	—	—	—	—	—	132	90	F2	194R-NE250-1754(2)
	400	3	—	—	—	—	—	220	150	F3	194R-NE400-1753(2)
		4	—	—	—	—	—	220	150	F3	194R-NE400-1754(2)
	630	3	—	—	—	—	—	280	150	F3	194R-NE630-1753(2)
		4	—	—	—	—	—	280	150	F3	194R-NE630-1754(2)
	800	3	—	—	—	—	—	450	185	F4	194R-NE800-1753(2)
		4	—	—	—	—	—	450	185	F4	194R-NE800-1754(2)
	1250	3	—	—	—	—	—	710	415	F5	194R-NE1250-1753(2)
		4	—	—	—	—	—	710	415	F5	194R-NE1250-1754(2)

(1) 30 A UL-rated device has I_{the} of 40 A per IEC. 60 A UL-rated device has I_{the} of 80 A per IEC.

(2) Does not carry UL Certification.

Complete UL/CSA Disconnect Switch Kits

Includes disconnect switch, operating handle with defeater mechanism and operating shaft, NFPA handle, auxiliary contacts, and padlock attachment.

Catalog Number Explanation

Fourth pole (20...63 A), additional auxiliary contacts, and handle options available in accessory section.

Switch body

Operating handle

NFPA handle and shaft

194R	–	J	30	–	1753	S	–	TY	N1
		a	b		c	d		e	f

a	
Fuse Type	
Code	**Description**
C	UL Class CC, CSA Type HRCI-MISC
J	UL Class J, CSA Type HRCI-J
H	CSA Type HRCII-C
B	BS88(2)
D	DIN(2)
F	NFC(2)
N	Non-fused (20…63 A)(1)

b		
Load Size(2)		
Code	**Description**	**Dimensional Ref.(3)**
20	20 A (BS88)	A1
25	25 A (NFC)	A1
30	30 A (CC, J, HRCI-J)	A1
	30 A (Non-Fused)(1)	A2
	30 A (HRCII-C)	B1
32	32 A (BS88, NFC)	A1
	32 A (DIN)	B1
60	60 A (J, HRCI-J, HRCII-C)	B1
	60 A (Non-Fused)(1)	B2
63	63 A (BS88, DIN, NFC)	B1

c	
No. of Poles	
Code	**Description**
1753	3-poleswitch

(1) Non-fused disconnect switches must use separately installed fuses for upstream short-circuit protection
(2) Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications
(3) See page 33 for dimensional reference data.

d	
Fuse Indication	
Code	**Description**
blank	No fuse status indication
S(1)	Fuse status indication

e	
External Handle	
Code	**Description**
PY	Std/pistol red/yellow handle, 4/4X, IP66 (Cat. No. 194R-PY)
PB	Std/pistol black handle, 4/4X, IP66 (Cat. No. 194R-PB)
TY	Test mode red/yellow handle, 4/4X, IP66 (Cat. No. 194R-PYT)
TB	Test mode black handle, 4/4X, IP66 (Cat. No. 194R-PBT)

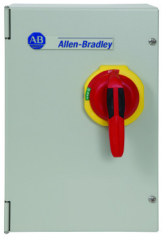
f	
Shaft and NFPA 79 Handle	
Code	**Description**
S1	Cat. No. 194R-S1 shaft (12 in.)
S2	Cat. No. 194R-S2 shaft (21 in.)
N1	NFPA79 handle with 12 in. shaft and guard tube
N2	NFPA79 handle with 21 in. shaft and guard tube

(1) Class C and J fuses only

UL Enclosed Disconnect Switches (Fused and Non-Fused)

Catalog Number Explanation

194R-K
Non-Metallic Enclosure UL Type 3/4/4X, IP66



194R-F
Painted Steel Enclosure UL Type 3/4/12, IP66

194R-C
Stainless Steel Enclosure UL Type 4/4X, IP66

194R	–	C	J	30	–	1753	S	–	TB	–	P
		a	b	c		d	e		f		g

a	
Enclosure Type	
Code	**Description**
K	Thermoplastic, Type 4/4X
F	Painted metal, Type 3/4/12
C	Stainless steel, Type 4/4X

b	
Fuse Type	
Code	**Description**
C	UL Class CC, CSA Type HRCI-MISC
J	UL Class J, CSA Type HRCI-J
H	CSA Type HRCII-C
B	BS88[2]
D	DIN[2]
F	NFC[2]
N	Non-fused (20…63 A)[1]

c		
Load Size[2]		
Code	**Description**	**Dimensional Ref.[3]**
20	20 A (BS88)	A1
25	25 A (NFC)	A1
30	30 A (CC, J, HRCI-J)	A1
	30 A (Non-Fused)[1]	A2
	30 A (HRCII-C)	B1
32	32 A (BS88, NFC)	A1
	32 A (DIN)	B1
60	60 A (J, HRCI-J, HRCII-C)	B1
	60 A (Non-Fused)[1]	B2
63	63 A (BS88, DIN, NFC)	B1

(1) Non-fused disconnect switches must use separately installed fuses for upstream short-circuit protection
(2) Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications
(3) See page 33 for dimensional reference data.

d	
No. of Poles	
Code	**Description**
1753	3-pole switch

e	
Fuse Indication	
Code	**Description**
blank	No fuse status indication
S[1]	Fuse status indication

f	
External Handle	
Code	**Description**
PY	Std/pistol red/yellow handle, 4/4X, IP66 (Cat. No. 194R-PY)
PB	Std/pistol black handle, 4/4X, IP66 (Cat. No. 194R-PB)
TY	Test mode red/yellow handle, 4/4X, IP66 (Cat. No. 194R-PYT)
TB	Test mode black handle, 4/4X, IP66 (Cat. No. 194R-PBT)

g	
Other Accessories	
Code	**Description**
blank	No accessory
P	Padlock attachment

(1) Class C and J fuses only

Accessories

4th Poles for UL Applications

Rated Current [A]	Maximum Hp Ratings[2]							Fuse	Dim. Ref.	Cat. No.[3]
	1-Phase (60 Hz)		3-Phase (60 Hz)			DC				
	120V	240V	240V	480V	600V	125V	250V			
Non-Fused										
30[3]	2	3	7.5	15	20	3	5	—	A2	194R-30-NN
60[1]	3	10	15	30	40	5	10	—	B2	194R-60-NN
UL Class CC and CSA HRCI-MISC Fuses										
30	2	3	7.5	15	20	3	5	30 A CC, HRCI-Misc	A1	194R-30-NC
UL Class J and CSA HRCI-J Fuses										
30	2	3	7.5	15	20	3	5	30 A J, HRCI-J	A1	194R-30-NJ
60	3	10	15	30	50	5	10	60 A J, HRCI-J	B1	194R-60-NJ
CSA HRCII-C Fuses										
30	2	3	7.5	15	20	—	—	30 A HRCII-C	B1	194R-30-NH
60	3	10	15	30	50	—	—	60 A HRCII-C	B1	194R-60-NH

(1) 60 A UL, 80 A IEC
(2) Time delay fuses may be required to utilize the disconnect switch at its maximum horsepower rating.
(3) 30 A UL, 40 A IEC

4th Poles for BS88 Fuses

Load Rating I_e [A]	Ratings (AC23) With Fuse Links			Fuse	Dim. Ref.	Cat. No.[1]
	3-Phase Max. kW (50 Hz)					
	200/230V	380/400/415V	660/690V			
20	5.5	11	15	BS88 A1	A1	194R-20-NB
32	9	18.5	30	BS88 A1	A1	194R-32-NB
63	18.5	30	55	BS88 A3	B1	194R-63-NB

(1) For fuse status indication, add S to catalog number, example: 194R-30-NB becomes 194R-30-NBS.

4th Poles for DIN Fuses

Load Rating I_e [A]	Ratings (AC23) With Fuse Links			Fuse	Dim. Ref.	Cat. No.[1]
	3-Phase Max. kW (50 Hz)					
	200/230V	380/400/415V	660/690V			
32	9	18.5	30	NH 000	B1	194R-32-ND
63	18.5	30	55	NH 000	B1	194R-63-ND

(1) For fuse status indication, add S to catalog number, example: 194R-30-ND becomes 194R-30-NDS.

4th Poles for NFC Fuses

Load Rating I_e [A]	Ratings (AC23) With Fuse Links			Fuse	Dim. Ref.	Cat. No.[1]
	3-Phase Max. kW (50 Hz)					
	200/230V	380/400/415V	660/690V			
25	7.5	11	22	NFC 14 x 51 mm	A1	194R-25-NF
32	9	18.5	30	NFC 14 x 51 mm	A1	194R-32-NF
63	18.5	30	55	NFC 22 x 58 mm	B1	194R-63-NF

(1) For fuse status indication, add S to catalog number, example: 194R-30-NN becomes 194R-30-NNS.

Replacement Fuse Hardware

Description	For Use With	Pkg. Qty.	Cat. No.
M4 x 0.7 Fuse screws	194R BS88 Fuse Types	2	194R-BS88-M4
M5 x 0.6 Fuse screws	194R BS88 Fuse Types	2	194R-BS88-M5

Replacement Conductor Mounting Hardware

Description	For Use With	Cat. No.
(8) HM8 16 mm bolts (8) HM8 nuts (8) M8 washers	3- and 4-pole 125…160 A IEC non-fused switches	194R-HF-160-4(1)
(8) HM10 20 mm bolts (8) HM10 nuts (8) M10 washers	3- and 4-pole 250 A IEC non-fused switches	194R-HF-250-4(1)
(8) HM10 25 mm bolts (8) HM10 nuts (8) M10 washers	3- and 4-pole 400 A IEC non-fused switches	194R-HF-400-4(1)
(8) HM12 30 mm bolts (8) HM12 nuts (8) M12 washers	3- and 4-pole 630 A IEC non-fused switches	194R-HF-630-4(1)
(8) HM10 25 mm bolts (8) HM10 nuts (16) M10 washers	3- and 4-pole 100 and 200 A UL non-fused switches	194R-HF-200-4U
(8) HM12 30 mm bolts (8) HM12 nuts (16) M12 washers	3- and 4-pole 400 A UL non-fused switches	194R-HF-400-4U
(8) HM8 16 mm bolts (8) M8 washers	3-pole 100…160 A BS88 fused switches 3-pole 125…160 A DIN fused switches	194R-HF-160-3BD(2)
(8) HM10 16 mm bolts (8) M10 washers	3-pole 200…250 A BS88 fused switches 3-pole 250 A DIN fused switches 3-pole 200 A UL fused switches	194R-HF-250-3BDU(2)
(8) HM8 16 mm bolts (8) M8 washers (6) HM10 35 mm bolts (6) M10 nuts (12) M10 washers	3-pole 400 A BS88 fused switches 3-pole 400 A UL fused switches	194R-HF-400-3BU(2)
(6) HM12 35 mm bolts (6) M12 nuts (12) M12 washers (12) M10 25 mm bolts (12) M12 washers	3-pole 630…800 A BS88 fused switches	194R-HF-800-3B(2)
(6) HM10 nuts	3-pole 400 A DIN fused switches	194R-HF-400-3D(2)
(6) HM12 nuts	3-pole 630…1250 A DIN fused switches	194R-HF-800-3D(2)
(12) HM12 30 mm bolts (12) HM12 35 mm bolts (12) M12 nuts (36) M12 washers	3-pole 1250 A BS88 fused switches	194R-HF-1250-3B(2)
(8) HM12 30 mm bolts (8) HM12 nuts	3-pole 600…800 A UL fused switches	194R-HF-800-3U

(1) Does not carry UL Certification.
(2) Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications

Replacement Fuse Carriers

	Description	Pkg. Qty.	Cat. No.(1)
194R-J30-FC	30 A CC Fuse Carrier	1	194R-C30-FC
	30 A J Fuse Carrier	1	194R-J30-FC
	60 A J Fuse Carrier	1	194R-J60-FC
	20 A BS88 Fuse Carrier	1	194R-B20-FC
	32 A BS88 Fuse Carrier	1	194R-B32-FC
	63 A BS88 Fuse Carrier	1	194R-B63-FC
	30 A CSA HRCII-C Fuse Carrier	1	194R-H30-FC
	60 A CSA HRCII-C Fuse Carrier	1	194R-H60-FC
	32 A DIN Fuse Carrier	1	194R-D32-FC
	63 A DIN Fuse Carrier	1	194R-D63-FC
	25 A NFC Fuse Carrier	1	194R-F25-FC
	32 A NFC Fuse Carrier	1	194R-F32-FC
	63 A NFC Fuse Carrier	1	194R-F63-FC
194R-J30-FCS	30 A Non-Fuse Carrier	1	194R-N30-FC
	60 A Non-Fuse Carrier	1	194R-N60-FC

(1) For fuse status indication, add S to catalog number, example: 194R-J30-FC becomes 194R-J30-FCS.

Cable Operators and Operating Handles

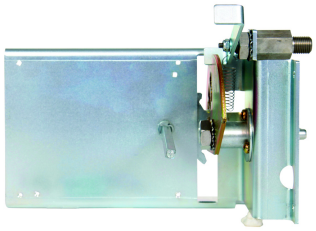
	Description	For Use With	Cable Length	Cat. No.(2)
	Cable operators(1)	20…63 A switches	3 ft.	194R-FC03
			4 ft.	194R-FC04
			6 ft.	194R-FC06
			10 ft.	194R-FC10
		194R-J100-1753 and 194R-J200-1753 fused disconnect switches	3 ft.	194R-LFC03
			5 ft.	194R-LFC05
			10 ft.	194R-LFC10

(1) 1494U-H… operating handle also required.
(2) For additional information, see page 53

	Handle Ingress Protection Rating	Description	Mounting	Disconnect Switch Size [A]	Cat. No.(1)
	Type 1, 3R, 4, 4X, 12	Nonmetallic handle, 5-1/2 in. base	Right or left flange	30, 60, 100, 200	1494U-HP1
	Type 1, 3R, 4, 12	Painted metal handle, 5-1/2 in. base			1494U-HM1
	Type 4, 4X	Stainless steel handle, 5-1/2 in. base			1494U-HS1

(1) For additional information, see page 53

Side-mounted Disconnect Switch Kit (for 20…63 A switches)

	Description	For Use With	Cat. No.(1)
	Side-mounted kit (disconnect mechanism and bracket)	All Bul. 194R 30/60 A disconnect switches and Bul. 194R-P handles	194R-SDK2

(1) For additional information, see page 56

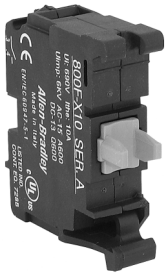
Disconnect Switch Padlock Accessory (for 20…63 A switches)

	Description	Disconnect Switch Dim Ref.	Pkg. Qty	Cat. No.
	For padlock with 3…6 mm diameter	A1, A2, B1, B2	1	194R-PLA1

Replacement Mounting Hardware (for 20…63 A switches)

	Description	Disconnect Switch Dim Ref.	Pkg. Qty	Cat. No.
	(1) M4 x 0.7 set screw, (1) shaft clip and (2) M4 x 0.7 mounting screws	A1, A2	2	194R-30-HDWR
	(1) M4 x 0.7 set screw, (1) shaft clip, and (4) M4 x 0.7 mounting screws	B1, B2	4	194R-60-HDWR

Auxiliary Contact Blocks

	Description	Contact Material	For Use With	Pkg. Qty	Cat. No.
	Contact Block Note: Sold only in multiples of 10. Order (quantity of) 10 to receive one package of 10 pieces. Latch not included.	N.O.	194R 30/60 A switches (all) 194R 100…1250 A switches (fused only). Also used for test mode function for 20…63 A switches.	10	800F-X10
		N.C.			800F-X01
		N.O.E.M.			800F-X10E
		N.C.L.B.			800F-X01L
		N.O. with stab terminals			800F-X10T
		N.C. with stab terminals			800F-X01T
		N.O. spring-clamp			800F-Q10
		N.C. spring-clamp			800F-Q01
	Auxiliary contact (Form C)		194R 100…1250 A switches (non-fused only)	1	194R-1STNONC(1)
				2	194R- 2NDNONC(1)

(1) Does not carry UL Certification.

Operating Handles (Accepts 3 Padlocks)

	Description	For Use With	Color	Degree of Protection	Cat. No.
	Padlockable handle, standard	• Bul. 194R disconnect switches up to 60 A	Black	Type 3R, 3, 12, 4, 4X	194R-PB
			Red/Yellow	Type 3R, 3, 12, 4, 4X	194R-PY
	Padlockable handle, test mode	• Bul. 194R disconnect switches up to 60 A	Black	Type 3R, 3, 12, 4, 4X	194R-PBT
			Red/Yellow	Type 3R, 3, 12, 4, 4X	194R-PYT
	Operating Handle Standard orientation with defeater	• IEC Non-fused disconnect switches: 125…630 A • IEC Fused disconnect switches: 100…400 A • UL Disconnect switches: 100…400 A	Black	IP66 (Type 1, 3R, 12, 4, 4X)	194R-HM4
			Red/Yellow	IP66 (Type 1, 3R, 12, 4, 4X)	194R-HM4E
		• IEC Non-fused disconnect switches: 800…1250 A • IEC Fused disconnect switches: 630…1250 A • UL Non-fused disconnect switches: 600…1200 A • UL Fused disconnect switches: 600…800 A	Black with light gray cover	IP65 (Type 1, 3R, 12, 4, 4X)	194R-HM4-L
			Red/Yellow	IP65 (Type 1, 3R, 12, 4, 4X)	194R-HM4E-L
	Operating Handle Standard orientation without defeater	• IEC Non-fused disconnect switches: 800…1250 A • IEC Fused disconnect switches: 630…1250 A • UL Non-fused disconnect switches: 600…1200 A • UL Fused disconnect switches: 600…800 A	Black with light gray cover	IP65 (Type 1, 3R, 12, 4, 4X)	194R-HM4-N2-L
			Red/Yellow	IP65 (Type 1, 3R, 12, 4, 4X)	194R-HM4E-N2-L

OSHA Lockout/Tag Out Compliance (LOTO)

OSHA CFR36 Section 1910 mandates that disconnect switches be able to be locked out while in the OFF position during servicing. All Bulletin 194R handles comply with this important safety requirement. See NFPA Article 430 for disconnect requirements of motor applications.

Operating Shafts

	Description	For Use With	Operating Shaft Length	Cat. No.
	Extension shaft, Standard length	140U-P*, 194R-P*, and 194R- P*T handles	12 in. (30.48 cm)	194R-S1
			21 in. (53.34 cm)	194R-S2
	Extension shaft, Standard length	Bul. 194R-HM handles for • IEC Non-fused disconnect switches: 125...630 A • IEC Fused disconnect switches: 100...400 A • UL Disconnect switches: 100...400 A	12.6 in. (320 mm)	194R-R7
	Extension Shaft, Extended length		22.8 in. (580 mm)	194R-R8
	Extension shaft, Standard length	Bul. 194R-HM handles for • IEC Non-fused disconnect switches: 800...1250 A • UL Non-fused disconnect switches: 600...1200A	12.6 in. (320 mm)	194R-R9
	Extension Shaft, Extended length		22.0 in. (560 mm)	194R-R10
	Extension shaft, Standard length	Bul. 194R-HM handles for • IEC Fused disconnect switches: 630...1250 A • UL Fused disconnect switches: 600...800 A	12.6 in. (320 mm)	194R-R11
	Extension Shaft, Extended length		22.0 in. (560 mm)	194R-R12

NFPA 79 Internal Operating Handle with Shaft

	Description	For Use With	Operating Shaft Length	Cat. No.
	NFPA 79 internal operating handle with shaft • Permits operation of the disconnect switch when the panel door is open, in compliance with NFPA 79	140U-P*, 194R-P*, and 194R-P*T handles	12 in. (30.48 cm)	194R-N1
			21 in. (53.34 cm)	194R-N2
		100…400 A UL fused disconnect switches	12.6 in. (320 mm)	194R-HM4-NFPA1
			22 in. (560 mm)	194R-HM4-NFPA3
		600…800 A UL fused disconnect switches	12.6 in. (320 mm)	194R-HM4-NFPA2
			22 in. (560 mm)	194R-HM4-NFPA4

Terminal Shields

	Description	For Use With	No. of Poles	Mounting Position	Disconnect Switch Dim. Ref.	Qty Required per Disconnect Switch	Pkg. Qty	Cat. No.
	30 A IP20 Terminal Shroud (three terminals)	—	—	—	A1, A2	2	2	194R-30-C3
	60 A IP20 Terminal Shroud (three terminals)	—	—	—	B1, B2	2	2	194R-60-C3
	30 A IP20 Terminal Shroud (one terminal)	—	—	—	A1, A2	2	2	194R-30-C1
	60 A IP20 Terminal Shroud (one terminal)	—	—	—	B1, B2	2	2	194R-60-C1
	Terminal Shroud	IEC Non-fused switches, 125…160 A	3	Line or load side	F1	2	3	194R-LNC7
			4			2	4	194R-LNC8
		IEC Non-fused switches, 250 A	3		F2	2	3	194R-LNC9
			4			2	4	194R-LNC10
		IEC Non-fused switches, 400…630 A	3		F3	2	3	194R-LNC11
			4			2	4	194R-LNC12
	IEC Terminal Shield	IEC Non-fused switches, 800 A	3	Line or load side	F4	2	1	194R-LNC13
			4			2	1	194R-LNC14
		IEC Non-fused switches, 1250 A	3		F5	2	1	194R-LNC15
			4			2	1	194R-LNC16

	Description	For Use With	No. of Poles	Mounting Position	Disconnect Switch Dim. Ref.	Qty Required per Disconnect Switch	Pkg. Qty	Cat. No.
	UL Terminal Shield	UL Non-fused switches, 100…200 A	3	Line side	F1	1	1	194R-LNC17
			3	Load side		1	1	194R-LNC18
			4	Line or load side		2	1	194R-LNC19
		UL Non-fused switches, 400 A	3	Line side	F2	1	1	194R-LNC20
			3	Load side		1	1	194R-LNC21
			4	Line or load side		2	1	194R-LNC22
		UL Non-fused switches, 600 A	3	Line or load side	F3	2	1	194R-LNC23
			4			2	1	194R-LNC24
		UL Non-fused switches, 800…1200 A	3	Line or load side	F4	2	1	194R-LNC25
			4			2	1	194R-LNC26
	IEC (BS/DIN) Terminal Shrouds	IEC Fused switches, B100, B160, D125, D160	3	Line or load side	F13, F14	2	3	194R-LNC27
		IEC Fused switches, B200, B250, B400, D250, D400	3		F15, F16	2	3	194R-LNC28
		IEC Fused switches, B630, B800, D630, D800	3		F17	2	3	194R-LNC29
		IEC Fused switches,B1250, D1250	3		F18	2	3	194R-LNC30
		UL Fused switches, 200 A	3		F6	2	3	194R-LNC31
	UL/IEC (BS/DIN) Terminal Shrouds	IEC Fused switches (see Dim.Ref.) UL Fused switches, 400 A	3	Line or load side	F7, F16	2	3	194R-LNC32
	UL Terminal Shroud	UL Fused switches, 600 A, 800 A	3	Line or load side	F8	2	3	194R-LNC29

Lug Kits — order separately

	Description	Wire Size	Dimension Reference	For Use With	Pkg. Qty	Cat. No.
	Multi-Tap Terminal Lugs Load side only	(3) 14…4 AWG (3) 0.75…25 mm2	A1 (194R-C30, -J30), A2 (194R-N30)	—	1	194R-30-MTL3
		(3) 14…4 AWG (3) 0.75…25 mm2	B1 (194R-J60, -H30, - H60), B2 (194R-N60)	—	1	194R-60-MTL3
	Terminal Lug Kit	(1) 300 MCM	—	UL Non-fused switches: 100…200 A UL Fused switches: 200 A	3	194R-TL1
		(1) 300 MCM	—	UL Non-fused switches: 100…200 A	4	194R-TL2
		(1) 600 MCM	—	UL Fused and non- fused switches: 400 A	3	194R-TL3
		(1) 600 MCM	—	UL Non-fused switches: 400 A	4	194R-TL4
		(2) 350 MCM	—	UL Fused and non- fused switches: 400 A	3	194R-TL5
		(2) 350 MCM	—	4-pole UL Non-fused switches: 400 A	4	194R-TL6
		(2) 600 MCM	—	UL Non-fused switches: 600 A UL Fused switches: 600…800 A	3	194R-TL7
		(2) 600 MCM	—	UL Non-fused switches: 600 A	4	194R-TL8
		(2) 600 MCM	—	UL Non-fused switches: 800…1200 A	6	194R-TL9
		(2) 600 MCM	—	UL Non-fused switches: 800…1200 A	8	194R-TL10

Other Accessories

	Description	For Use With	Dimension Reference	Cat. No.
	Cone guide • for shafts longer than 320 mm (12.6 in.)	Cat. No. 194R-HM4-L, -HM4E-L, -HM4-N2-L, and -HME-N2-L handles	—	194R-HSG2
	Shaft Guard • Provides extra protection against contact with shaft	Cat. No. 194R-S1 and -S2 shafts	A1, A2, B1, B2	194R-R1G

Specifications

Fused Disconnect Switches for UL Class Fuses and CSA HRCI-J

Table 1 - Electrical Ratings, 30 A and 60 A Devices

Cat. No.		194R-C30-1753		194R-J30-1753		194R-J60-1753	
CSA Fuse Type/UL Fuse Type		Class CC/HRCI-MISC (1)		Class J/HRCI-J		Class J/HRCI-J	
Maximum Fuse Cartridge Size	[A]	30		30		60	
Maximum Voltage, AC	[V]	600		600		600	
Maximum Voltage, DC	[V]	250		250		250	
Ampere Rating	[A]	30		30		60	
Maximum Short-circuit Prospective Fault Current	[kA]	200		200		200	
Fuse Operating Characteristics		Time Delay	Non-Time Delay	Time Delay	Non-Time Delay	Time Delay	Non-Time Delay
Maximum Hp, 3-Phase AC							
200V, 60 Hz	[Hp]	5	3	7.5	3	15	7.5
240V, 60 Hz	[Hp]	5	3	7.5	3	15	7.5
480V, 60 Hz	[Hp]	10	5	15	5	30	15
600V, 60 Hz	[Hp]	10	7.5	20	7.5	50	15
Maximum Hp, 1-Phase AC							
120V, 60 Hz	[Hp]	0.75	0.5	2	0.5	3	1.5
240V, 60 Hz	[Hp]	2	1.5	3	1.5	10	3
Maximum Hp, DC							
125V DC	[Hp]	2	3	3	2	5	5
250V DC	[Hp]	3	5	5	5	10	10

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, and UL 98.

Table 2 - Electrical Ratings, 100 . . .800 A Devices

Cat. No.		194R-J100	194R-J200	194R-J400	194R-J600	194R-L800
Rated Current	[A]	100	200	400	600	800
Standards Compliance		UL 98, CSA22.2, No. 4				
Ratings per UL/CSA						
Maximum Voltage, AC	[V]	600				
Maximum Voltage, DC	[V]	250				
Maximum Short-circuit Fault Current	[kA]	200	100	100	100	100
Fuse Type						
UL		J	J	J	J	L
CSA		HRCI-J	HRCI-J	HRCI-J	HRCI-J	HRCI-L
Max. Fuse Rating	[A]	100	200	400	600	800
Max. Hp Rating, 3-phase						
240V	[Hp]	30	60	125	200	200
480V	[Hp]	60	125	250	500	500
600V	[Hp]	75	150	350	500	500
Max. Hp Rating, DC						
125V, 2 poles in series	[Hp]	7.5	15	20	—	—
240V, 3 poles in series	[Hp]	20	40	50	—	—

Table 3 - Mechanical Data, 30 A and 60 A Devices

Cat. No.		194R-J30-1753	194R-J60-1753
Degree of Protection (per IEC 60947-3), Switch Only		IP20	IP20
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20
Mechanical Endurance(1)	[Operations]	10 000	10 000
Operating Torque (Maximum)	[N•m]	3.5	3.5
	[Lb•in]	35	35
Terminal Capacity, Power Terminals	[mm^2]	2.5…10	2.5…25
	[AWG]	#14…#8	#14…#4
Terminal Capacity, Auxiliary Contact Terminals	[mm^2]	2.5…4	2.5…4
	[AWG]	#14…#12	#14…#12
Maximum Number of Auxiliary Circuits		6	6
Approximate Weight	[kg]	0.92	1.32
	[lbs]	2.03	2.9
Minimum Enclosure Size	Height [mm (in.)]	248 (9-3/4)	248 (9-3/4)
	Width [mm (in.)]	171 (6-3/4)	197 (7-3/4)
	Depth [mm (in.)]	148 (5-13/16)	148 (5-13/16)
Switch Dimension Reference (See dimension drawings.)		A1	B1

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, and UL 98.

Table 4 - Mechanical Data, 100 …800 A Devices

Cat. No.		194R-J100-1753	194R-J200-1753	194R-J400-1753	194R-J600-1753	194R-L800-1753
Degree of Protection (per IEC 60947-3), Switch Only		IP20(2)	IP20	IP20	IP20	IP20
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20	IP20
Mechanical Endurance(1)	Operations	10 000	8 000	6 000	5 000	5 000
Operating Torque (Maximum)	[N•m]					
	[Lb•in]					
Terminal Capacity, Power Terminals	[mm^2]		300 MCM	600 MCM; 2 x 300 MCM	2 x 600 MCM	2 x 600 MCM
	[AWG]	#12… #10 Solid Cu #12…#1 stranded	#6	#2 or 2 x #6	2 x #2	2 x #2
Terminal Capacity, Auxiliary Contact Terminals	[mm^2]	2.5…4	2.5…4	2.5…4	2.5…4	2.5…4
	[AWG]	#14…#12	#14…#12	#14…#12	#14…#12	#14…#12
Maximum Number of Auxiliary Circuits		4	8	8	8	8
Approximate Weight	[kg]	2.4	3.6	4.85	20	20
	[lbs]	5.3	7.9	10.7	44	44
Minimum Enclosure Size	Height [mm (in.)]	406 (16)	610 (24)	1000 (39.4)	1219 (48)	1219 (48)
	Width [mm (in.)]	610 (24)	508 (20)	800 (31.5)	914.5 (36)	914.5 (36)
	Depth [mm (in.)]	152 (6)	152 (6)	200 (11.8)	305 (12)	305 (12)
Switch Dimension Reference (See dimension drawings.)		F5	F6	F7	F8	F8

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4, IEC 60947-3, and UL 98.
(2) Front-mounted devices only.

Non-Fused Disconnect Switches for CSA and UL Class Applications

Non-fused disconnect switches must be used with separately installed fuses.

Table 5 - Electrical Ratings, 30 A and 60 A Devices

Cat. No.		194R-N30-1753		194R-N60-1753	
Maximum Voltage, AC	[V]	600		600	
Maximum Voltage, DC	[V]	250		250	
Ampere Rating	[A]	30		60	
Maximum Short-circuit Prospective Fault Current	[kA]	200		200	
Maximum Hp, 3-Phase AC					
200V, 60 Hz	[Hp]	7.5	3	15	7.5
240V, 60 Hz	[Hp]	7.5	3	15	7.5
480V, 60 Hz	[Hp]	15	5	30	15
600V, 60 Hz	[Hp]	20	7.5	50	15
Maximum Hp, 1-Phase AC					
120V, 60 Hz	[Hp]	2	0.5	3	1.5
240V, 60 Hz	[Hp]	3	1.5	10	3
Maximum Hp, DC					
125V DC	[Hp]	3	2	5	5
250V DC	[Hp]	5	5	10	10
Power Lost	[W]	2		6	

Table 6 - Electrical Ratings, 100 . . . 1200 A Devices

Cat. No.		194R-NU100	194R-NU200	194R-NU400	194R-NU600	194R-NU800	194R-NU1200
Rated Current	[A]	100	200	400	600	800	1200
Standards Compliance		UL 98, IEC					
Ratings per UL/CSA							
Maximum Voltage, AC	[V]	600					
Maximum Voltage, DC	[V]	250					
Maximum Short-circuit Fault Current	[kA]	200	200	200	200	100	100
Fuse Type		J	J	J	J	L	L
Max. Fuse Rating	[A]	100	200	400	600	800	1200
Max. Hp Rating, 3-phase							
240V	[Hp]	30	75	125	200	200	200
480V	[Hp]	75	150	250	400	500	500
600V	[Hp]	100	200	350	350	500	500
Max. Hp Rating, DC							
125V, 2 poles in series	[Hp]	10	15	20	20	—	—
240V, 3 poles in series	[Hp]	15	15	50	50	—	

Table 7 - Mechanical Data, 30 . . . 200 A Devices

Cat. No.		194R-N30	194R-N60	194R-NU100	194R-NU200
Degree of Protection (per IEC 60947-3), Switch Only		IP20	IP20	—	—
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20
Mechanical Endurance	[Operations]	10 000	10 000	10 000	10 000
Operating Torque (Maximum)	[N•m]	3.5	3.5	10	10
	[Lb•in]	35	35	88.5	88.5
Terminal Capacity, Power Terminals	[mm^2]	2.5…10	2.5…25	300 MCM	300 MCM
	[AWG]	#14...#8	#14...#4	#6	#6
Terminal Capacity, Auxiliary Contact Terminals	[mm^2]	2.5…10	2.5…25	—	—
	[AWG]	#14...#8	#14...#4		
Maximum Number of Auxiliary Circuits		6	6	2	2
Approximate Weight	[kg]	0.81	1.14	1.67/2.1	1.67/2.1
	[lbs]	1.78	2.52	3.7/4.3	3.7/4.3
Minimum Enclosure Size	Height [mm (in.)]	248 (9-3/4)	248 (9-3/4)	610 (24)	610 (24)
	Width [mm (in.)]	171 (6-3/4)	197 (7-3/4)	406 (16)	406 (16)
	Depth [mm (in.)]	111 (4-3/8)	111 (4-3/8)	152 (6)	152 (6)
Switch Dimension Reference (See dimension drawings.)		A2	B2	F1	F1

Table 8 - Mechanical Data, 400 . . . 1200 A Devices

Cat. No.		194R-NU400	194R-NU600	194R-NU800	194R-NU1200
Degree of Protection (per IEC 60947-3), Switch Only		IP20	IP20	—	—
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20
Mechanical Endurance	[Operations]	6 000	6 000	3 500	3 500
Operating Torque (Maximum)	[N•m]	14.5	37	50	50
	[Lb•in]	128.3	327.5	442	442
Terminal Capacity, Power Terminals	[mm^2]	600 MCM	2 x 600 MCM	4 x 600 MCM	4 x 600 MCM
	[AWG]	#2	2 x #2	4 x #2	4 x #2
Maximum Number of Auxiliary Circuits		2	2	2	2
Approximate Weight	[kg]	3/3.8	8.2/10.3	11.6/14.5	11.6/14.5
	[lbs]	6.6/8.4	18.1/22.7	25.6/32	25.6/32
Switch Dimension Reference (See dimension drawings.)		F2	F3	F4	F4

Non-Fused Disconnect Switches for IEC Applications

Non-fused disconnect switches must be used with separately installed fuses.

Table 9 - Electrical Ratings, 30 . . . 160 A Devices

Cat. No.		194R-N30		194R-N60		194R-NE125	194R-NE160
Maximum Voltage, AC	[V]	600		600		600	600
Maximum Voltage, DC	[V]	250		250		250	250
Ampere Rating	[A]	30		60		125	160
Maximum Short-circuit Prospective Fault Current	[kA]	200		200		200	200
Maximum Hp, 3-Phase AC							
200V, 60 Hz	[Hp]	7.5	3	15	7.5	—	—
240V, 60 Hz	[Hp]	7.5	3	15	7.5	—	—
480V, 60 Hz	[Hp]	15	5	30	15	—	—
600V, 60 Hz	[Hp]	20	7.5	50	15	—	—
Maximum Hp, 1-Phase AC							
120V, 60 Hz	[Hp]	2	0.5	3	1.5	—	—
240V, 60 Hz	[Hp]	3	1.5	10	3	—	—
Maximum Hp, DC							
125V DC	[Hp]	3	2	5	5	—	—
250V DC	[Hp]	5	5	10	10	—	—
Power Lost	[W]	2		6		—	—

Table 10 - Electrical Ratings, 250 . . . 1250 A Devices

Cat. No.		194R-NE250	194R-NE400	194R-NE630	194R-NE800	194R-NE1250
Maximum Voltage, AC	[V]	600	600	600	600	600
Maximum Voltage, DC	[V]	250	250	250	250	250
Ampere Rating	[A]	250	400	630	800	1250
Maximum Short-circuit Prospective Fault Current	[kA]	200	200	200	100	100

All Bulletin 194R Disconnect Switch Cat. Nos., 20…63 A Range

Table 11 - Environmental Data

Attribute		Value
Ambient Temperature		
Open	[°C (°F)]	-20…+55 (-4…+131)
Enclosed	[°C (°F)]	-20…+40 (-4…+104)
Storage	[°C (°F)]	-40…+65 (-40…+149)
Altitude (per IEC 60947-1)		2 000
Relative Humidity (per IEC 60947-1)		90% @ +20 °C (+68 °F) 50% @ +40 °C (+104 °F)

Fused Disconnect Switches For CSA HRCII-C Fuses

Table 12 - Electrical Ratings, 30 A and 60 A Devices

Cat. No.		194R-H30	194R-H60
CSA Fuse Type		HRCII-C	HRCII-C
Maximum Fuse Cartridge Size	[A]	30	60
Maximum Voltage, AC	[V]	600	600
Ampere Rating	[A]	30	60
Maximum Short-circuit Prospective Fault Current	[kA]	200	200
Maximum Hp, 3-Phase AC			
200V, 60 Hz	[Hp]	7.5	15
240V, 60 Hz	[Hp]	7.5	15
480V, 60 Hz	[Hp]	15	30
600V, 60 Hz	[Hp]	20	50
Maximum Hp, 1-Phase AC			
120V, 60 Hz	[Hp]	2	3
240V, 60 Hz	[Hp]	3	10

Table 13 - Mechanical Data, 30 A and 60 A Devices

Cat. No.		194R-H30	194R-H60
Degree of Protection (per IEC 60947-3), Switch Only		IP20	IP20
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20
Mechanical Endurance(1)	[Operations]	10 000	10 000
Operating Torque (Maximum)	[N•m]	3.5	3.5
	[Lb•in]	35	35
Terminal Capacity, Power Terminals	[mm^2]	2.5…10	2.5…25
	[AWG]	#14…#8	#14…#4
Maximum Number of Auxiliary Circuits		6	6
Approximate Weight	[kg]	1.18	1.18
	[lbs]	2.60	2.60
Minimum Enclosure Size	Height [mm (in.)]	248 (9-3/4)	248 (9-3/4)
	Width [mm (in.)]	171 (6-3/4)	197 (7-3/4)
	Depth [mm (in.)]	148 (5-13/16)	148 (5-13/16)
Switch Dimension Reference (See dimension drawings.)		B1	B1

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4 and IEC 60947-3.

Fused Disconnect Switches For BS88 Fuses

Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications.

Fuses must be selected by considering the maximum prospective fault current of the system and the maximum cutoff current of the fuse when subjected to that maximum fault current. The maximum fuse cutoff current as specified for each disconnect switch must not be exceeded.

Table 14 - Electrical Ratings, 20 . . . 160 A Devices

Cat. No.		194R-B20		194R-B32	194R-B63		194R-B100	194R-B160
Fuse Type	BS88 Dimension	A1		A2	A2, A3			
Rated Insulation Voltage (U_i)	[V]	1000		1000	1000		750	750
Rated Conditional Short-Circuit Current (r.m.s.) at 415V	[kA]	100		100	100		—	—
Rated Operating Current AC-22A (I_e)		Fuse Links	Shorting Links	Fuse Links	Fuse Links	Shorting Links	—	—
200/230V, 50 Hz	[A]	20	32	32	63	63	—	—
380/400/415V, 50 Hz	[A]	20	32	32	63	63	100	160
500V, 50 Hz	[A]	20	32	32	63	63	—	—
660/690V, 50 Hz	[A]	20	32	32	63	63	100	160
Rated Operating Current AC-23A (I_e)								
200/230V, 50 Hz	[A]	20	32	31	60.5	60	—	—
380/400/415V, 50 Hz	[A]	22	32	35	57	57	100	160
500V, 50 Hz	[A]	20	32	32.5	57	57	—	—
660/690V, 50 Hz	[A]	17	32	32.5	57	57	100	160
Rated Thermal Current (I_{the})	[A]	20	32	32	63	63	100	160
Maximum kW, AC-23A 3-Phase								
200/230V, 50 Hz	[kW]	5.5	9	9	18.5	18.5	—	—
380/400/415V, 50 Hz	[kW]	11	18.5	18.5	30	30	51	63
500V, 50 Hz	[kW]	11	18.5	18.5	30	30	—	—
660/690V, 50 Hz	[kW]	15	30	30	55	55	90	90
Maximum Fuse Rating	[kW]	20	—	32	63	—	100	160
Maximum Motor Circuit Fuse Link		20M32	—	32M63	63M100	—	—	—
Maximum Fuse Cutoff Current	[kA]	7.5	7.5	7.5	10	10	—	—
Rated Short Time Current, 1 second	[kA]	1		1	1		—	—

Table 15 - Electrical Ratings, 200 . . . 1250 A Devices

Cat. No.		194R-B200	194R-B250	194R-B400	194R-B630	194R-B800	194R-B1250
Rated Insulation Voltage (U_i)	[V]	750					
Rated Operating Current AC-22A (I_e)							
380/400/415V, 50 Hz	[A]	200	250	400	630	800	1250
660/690V, 50 Hz	[A]	200	250	315	500	800	800
Rated Operating Current AC-23A (I_e)							
380/400/415V, 50 Hz	[A]	200	250	400	630	800	1000
660/690V, 50 Hz	[A]	200	250	250	315	630	800
Rated Thermal Current (I_{the})	[A]	200	250	400	630	800	1250
Maximum kW, AC-23A 3-Phase							
380/400/415V, 50 Hz	[kW]	80	132	220	355	—	—
660/690V, 50 Hz	[kW]	110	220	220	295	400	400
Maximum Fuse Rating	[A]	200	250	400	630	800	1250

Table 16 - Mechanical Data, 20 …160 A Devices

Mechanical Data						
Cat. No.		194R-B20	194R-B32	194R-B63	194R-B100	194R-B160
Degree of Protection (per IEC 60947-3), Switch Only		IP20	IP20	IP20	—	—
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20	IP20
Mechanical Endurance(1)	[Operations	10 000	10 000	10 000	10 000	10 000
Operating Torque (Maximum)	[N•m]	3.5	3.5	3.5	8.3	8.3
	[Lb•in]	35	35	35	95	95
Terminal Capacity, Power Terminals	[mm^2]	2.5…10	2.5…10	2.5…25	—	—
	[AWG]	#14…#8	#14…#8	#14…#4	—	—
Terminal Capacity, Auxiliary Terminals	[mm^2]	2.5…4	2.5…4	2.5…4	2.5…4	2.5…4
	[AWG]	#14…#12	#14…#12	#14…#12	#14…#12	#14…#12
Maximum Number of Auxiliary Circuits		6	6	6	—	—
Approximate Weight	[kg]	0.83	0.83	1.18	1.88	2.37
	[lbs]	1.84	1.84	2.60	4.75	5.22
Minimum Enclosure Size	Height [mm (in.)]	248 (9-3/4)	248 (9-3/4)	248 (9-3/4)	—	—
	Width [mm (in.)]	171 (6-3/4)	171 (6-3/4)	197 (7-3/4)		
	Depth [mm (in.)]	148 (5-13/16)	148 (5-13/16)	148 (5-13/16)		
Switch Dimension Reference (See dimension drawings.)		A1	A1	B1	F13	F14

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4 and IEC 60947-3.

Table 17 - Mechanical Data, 200 …1250 A Devices

Mechanical Data							
Cat. No.		194R-B200	194R-B250	194R-B400	194R-B630	194R-B800	194R-B1250
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20	IP20	IP20
Mechanical Endurance(1)	[Operations]	10 000	10 000	10 000	8 000	5 000	5 000
Operating Torque (Maximum)	[N•m]	20	20	20	40	40	40
Terminal Capacity, Power Terminals	[mm^2]	240	240	240	240	240	240
Terminal Capacity, Auxiliary Terminals	[mm^2]	2.5…4	2.5…4	2.5…4	2.5…4	2.5…4	2.5…4
	[AWG]	#14…#12	#14…#12	#14…#12	#14…#12	#14…#12	#14…#12
Maximum Number of Auxiliary Circuits		4	8	8	8	8	8
Approximate Weight	[kg]	3.77	3.77	4.85	17.77	19.77	37
	[lbs]	8.37	8.37	10.7	39	43.6	87.57
Switch Dimension Reference (See dimension drawings.)		F15	F15	F16	F17	F17	F18

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4 and IEC 60947-3.

Fused Disconnect Switches For DIN Fuses

Fuse classes BS88, DIN, and NFC are not suitable for use in North American applications.

Fuses must be selected by considering the maximum prospective fault current of the system and the maximum cutoff current of the fuse when subjected to that maximum fault current. The maximum fuse cutoff current as specified for each disconnect switch must not be exceeded.

Table 18 - Electrical Ratings, 32 . . . 160 A Devices

Cat. No.		194R-D32	194R-D63	194R-D125	194R-D160
Fuse Type, DIN Dimension		00	0, 00	—	—
Rated Insulation Voltage (U_i)	[V]	1000	1000	750	750
Rated Conditional Short-Circuit Current (r.m.s.) at 415V	[kA]	100	100	—	—
Rated operating current AC-22A (I_e)		Fuse Links	Fuse Links	—	—
200/230V, 50 Hz	[A]	32	63	—	—
380/400/415V, 50 Hz	[A]	32	63		160
500V, 50 Hz	[A]	32	63		—
660/690V, 50 Hz	[A]	32	63		160
Rated operating current AC-23A (I_e)					
200/230V, 50 Hz	[A]	31	60.5	—	—
380/400/415V, 50 Hz	[A]	35	57		160
500V, 50 Hz	[A]	32.5	57		—
660/690V, 50 Hz	[A]	32.5	57		160
Rated Thermal Current (I_{the})	[A]	40	63	125	160
Maximum kW, AC-23A 3-Phase					
200/230V, 50 Hz	[A]	9	18.5	—	—
380/400/415V, 50 Hz	[A]	18.5	30		63
500V, 50 Hz	[A]	18.5	30		—
660/690V, 50 Hz	[A]	30	55		90
Maximum Fuse Rating	[A]	32	63	125	160
Maximum Fuse Cutoff Current	[kA]	14	20	—	—
Rated Short Time Current, 1 Second	[kA]	1	1	—	—

Table 19 - Electrical Ratings, 250 . . . 1250 A Devices

Cat. No.		194R-D250	194R-D400	194R-D630	194R-D800	194R-D1250
Rated Insulation Voltage (U_i)	[V]	750	750	750	750	750
Rated operating current AC-22A (I_e)						
380/400/415V, 50 Hz	[A]	250	400	630	800	1250
660/690V, 50 Hz	[A]	250	315	500	800	800
Rated operating current AC-23A (I_e)						
380/400/415V, 50 Hz	[A]	250	400	630	800	1000
660/690V, 50 Hz	[A]	250	250	315	630	800
Rated Thermal Current (I_{the})	[A]	250	400	630	800	1250
Maximum kW, AC-23A 3-Phase						
380/400/415V, 50 Hz	[A]	132	220	355	—	—
500V, 50 Hz	[A]	—	—	—	450	560
660/690V, 50 Hz	[A]	220	220	295	400	400
Maximum Fuse Rating	[A]	250	400	630	800	1250

Table 20 - Mechanical Data, 32 . . .160 A Devices

Cat. No.		194R-D32	194R-D63	194R-D125	194R-D160
Degree of Protection (per IEC 60947-3), Switch Only		IP20	IP20	—	—
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20
Mechanical Endurance(1)	[Operations]	10 000	8000	10 000	8 000
Operating Torque (Maximum)	[N•m]	3.5	3.5	8.3	8.3
	[Lb•in]	35	35	95	95
Terminal Capacity, Power Terminals	[mm^2]	2.5…25	2.5…25	2.5…25	2.5…25
	[AWG]	#14…#4	#14…#4	#14…#4	#14…#4
Terminal Capacity, Auxiliary Terminals	[mm^2]	2.5…4	2.5…4	2.5…4	2.5…4
	[AWG]	#14…#12	#14…#12	#14…#12	#14…#12
Maximum Number of Auxiliary Circuits		6	6	6	6
Approximate Weight	[kg]	1.18	1.18	1.88	2.37
	[lbs]	2.60	2.60	4.75	5.22
Minimum Enclosure Size	Height [mm (in.)]	248 (9-3/4)	248 (9-3/4)	—	—
	Width [mm (in.)]	197 (7-3/4)	171 (6-3/4)		
	Depth [mm (in.)]	148 (5-13/16)	148 (5-13/16)		
Switch Dimension Reference (See dimension drawings.)		B1	B1	F13	F13

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4 and IEC 60947-3.

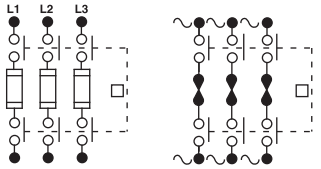
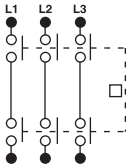
Table 21 - Mechanical Data, 250 . . .1250 A Devices

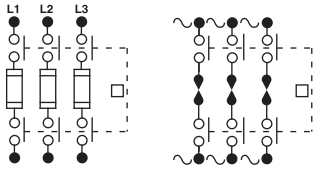
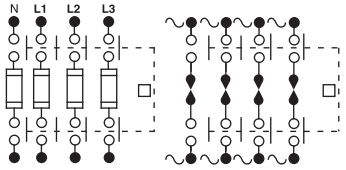
Cat. No.		194R-D250	194R-D400	194R-D630	194R-D800	194R-D1250
Degree of Protection (per IEC 60947-3), Switch with Terminal Shield and Fuse Carriers		IP20	IP20	IP20	IP20	IP20
Mechanical Endurance(1)	[Operations]	10 000	10 000	8 000	5 000	5 000
Operating Torque (Maximum)	[N•m]	20	20	40	40	40
Terminal Capacity, Power Terminals	[mm^2]	240	240	240	240	240
Terminal Capacity, Auxiliary Terminals	[mm^2]	2.5…4	2.5…4	2.5…4	2.5…4	2.5…4
	[AWG]	#14…#12	#14…#12	#14…#12	#14…#12	#14…#12
Maximum Number of Auxiliary Circuits		8	8	8	8	8
Approximate Weight	[kg]	3.77	4.85	17.77	19.77	37
	[lbs]	8.37	10.7	39	43.6	87.57
Switch Dimension Reference (See dimension drawings.)		F15	F16	F17	F17	F18

(1) Based on Rockwell Automation tests in accordance with the requirements as defined in CSA C22.2 No. 4 and IEC 60947-3.

Wiring Schematic

Figure 1 - Wiring Schematic

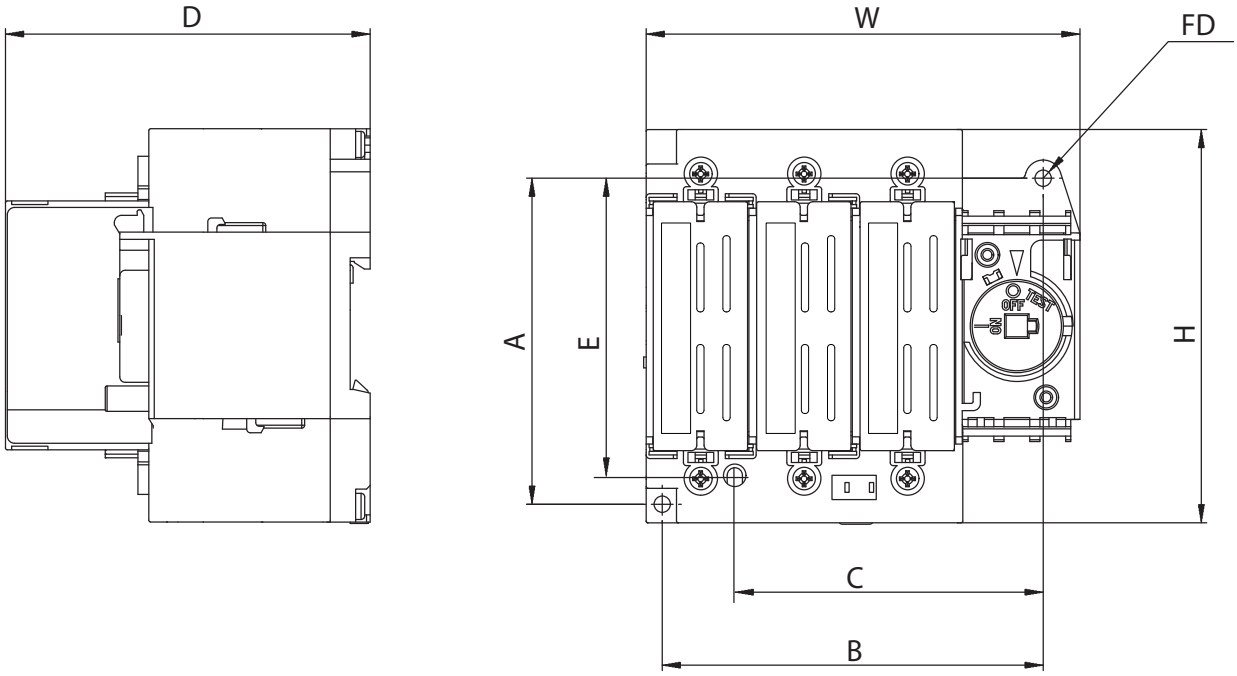
UL LISTED, CSA CERTIFIED	DIMENSION REFERENCE	CIRCUIT
Cat. No.		
194R-C30-1753	A1	
194R-J30-1753	A1	
194R-J60-1753	B1	
194R-H30-1753	B1	
194R-H60-1753	B1	
194R-N30-1753	A2	
194R-N60-1753	B2	

IEC SWITCHES	DIMENSION REFERENCE	CIRCUIT
Cat. No.		
194R-B20-1753	A1	
194R-B32-1753	A1	
194R-B63-1753	B1	
194R-D32-1753	B1	
194R-D63-1753	B1	
194R-F25-1753	A1	
194R-F32-1753	A1	
194R-F63-1753	B1	
194R-*-1754	See Column W4 for the width of the 4-pole switch	

Approximate Dimensions

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

Figure 2 - Disconnect Switch Dimension References A1, A2, B1, and B2 (30 A and 60 A)

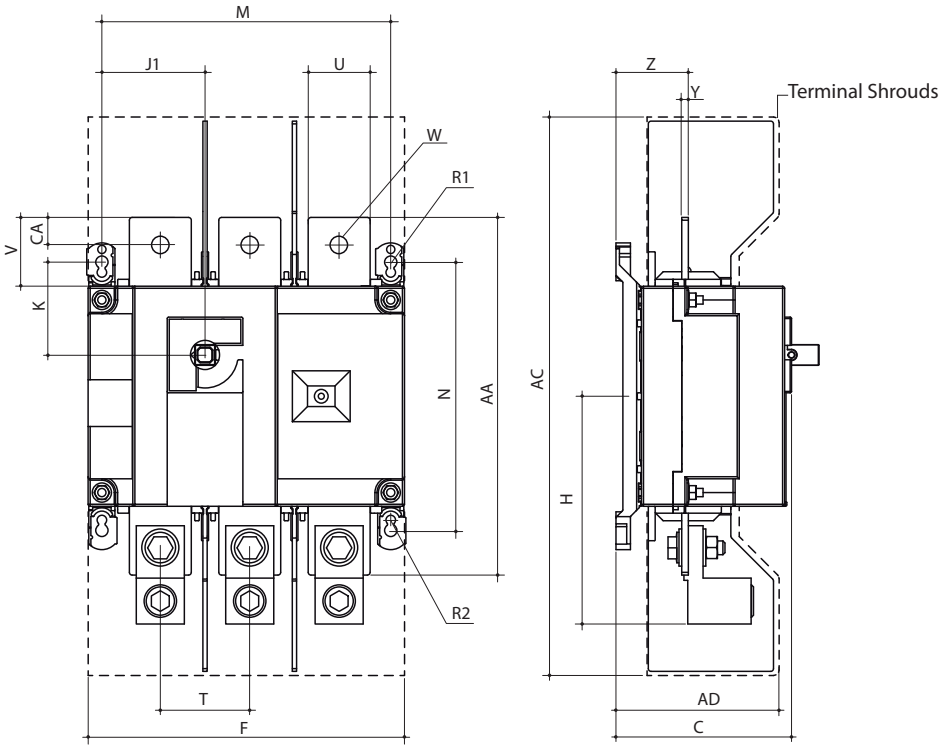


Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]								
	H	W (3-pole)	W (4-pole)	D	A	B	C(1)	E(1)	FD
A1	108 (4-1/4)	120 (4-3/4)	149 (5-7/8)	101 (4)	90 (3-9/16)	105 (4-1/8)	85 (3-11/32)	82 (3-15/64)	2-M4, 2-#8
A2	108 (4-1/4)	120 (4-3/4)	149 (5-7/8)	80 (3-1/8)	90 (3-9/16)	105 (4-1/8)	85 (3-11/32)	82 (3-15/64)	2-M4, 2-#8
B1	113 (4-29/64)	142 (5-19/32)	179 (7-3/64)	114 (4-31/64)	100 (3-15/16)	120 (4-23/32)	—	—	4-M4, 4-#8
B2	113 (4-29/64)	142 (5-19/32)	179 (7-3/64)	93 (3-43/64)	100 (3-15/16)	120 (4-23/32)	—	—	4-M4, 4-#8

(1) Mounting holes for backward compatibility with Bulletin 194R legacy switches.

UL/CSA Disconnect Switches 100…1200 A

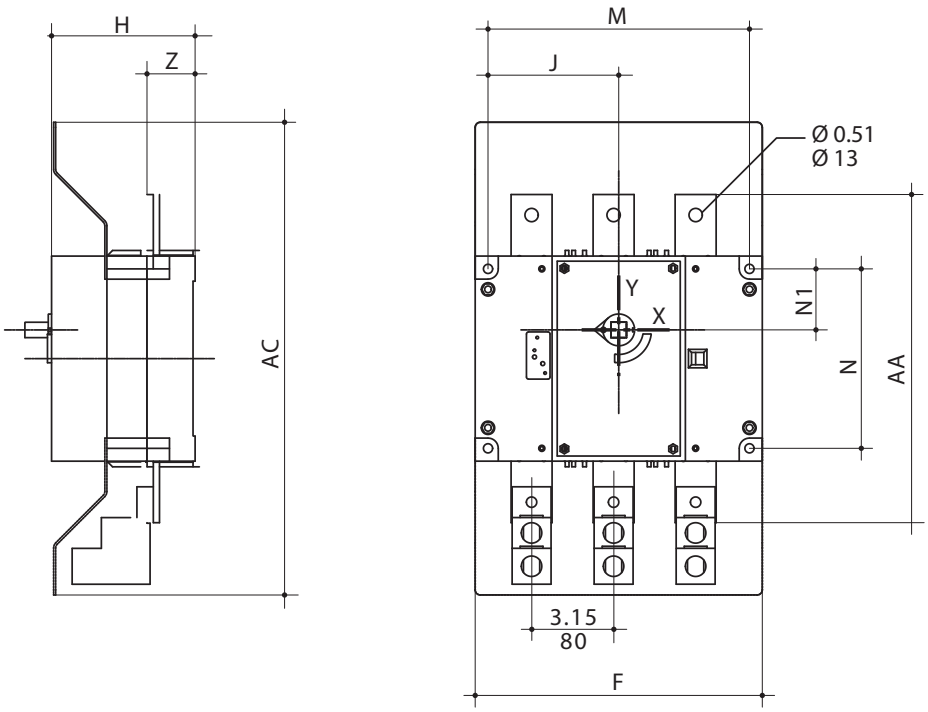
Figure 3 - 100…400 A UL/CSA Non-Fused Disconnect Switches



Cat. No. 194R-N…	Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]										
		Overall	Terminal Shrouds		Switch Body						Switch Mounting	
		C	AC	AD	F (3-pole)	F (4-pole)	H	J1 (3-pole)	J1 (4-pole)	K	M (3-pole)	M (4-pole)
100	F1	94.6 (3.72)	256 (10.1)	77.5 (3.05)	180 (7.09)	230 (9.06)	107 (4.22)	55 (2.17)	105 (4.13)	45.6 (1.8)	160 (6.3)	210 (8.7)
200	F1	94.6 (3.72)	256 (10.1)	77.5 (3.05)	180 (7.09)	230 (9.06)	107 (4.22)	55 (2.17)	105 (4.13)	45.6 (1.8)	160 (6.3)	210 (8.7)
400	F2	128 (4.92)	406 (16)	115 (4.15)	230 (9.05)	290 (11.4)	166 (6.53)	75 (2.95)	135 (5.31)	67.5 (2.65)	210 (8.26)	270 (10.6)

Cat. No. 194R-N…	Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]										
		Switch Mounting			Connection							
		N	R1	R2	T	U	V	W	Y	Z	AA	AC
100	F1	135 (5.31)	9 (0.35)	7 (0.27)	50 (1.97)	25 (0.98)	30 (1.18)	11 (0.43)	3.5 (0.14)	34.4 (0.14)	160 (6.3)	15 (0.6)
200	F1	135 (5.31)	9 (0.35)	7 (0.27)	50 (1.97)	25 (0.98)	30 (1.18)	11 (0.43)	3.5 (0.14)	34.4 (0.14)	160 (6.3)	15 (0.6)
400	F2	195 (7.67)	9 (0.35)	7 (0.27)	65 (2.56)	45 (1.77)	50 (1.97)	13 (0.43)	5 (0.2)	53 (2.08)	260 (10.2)	20 (0.8)

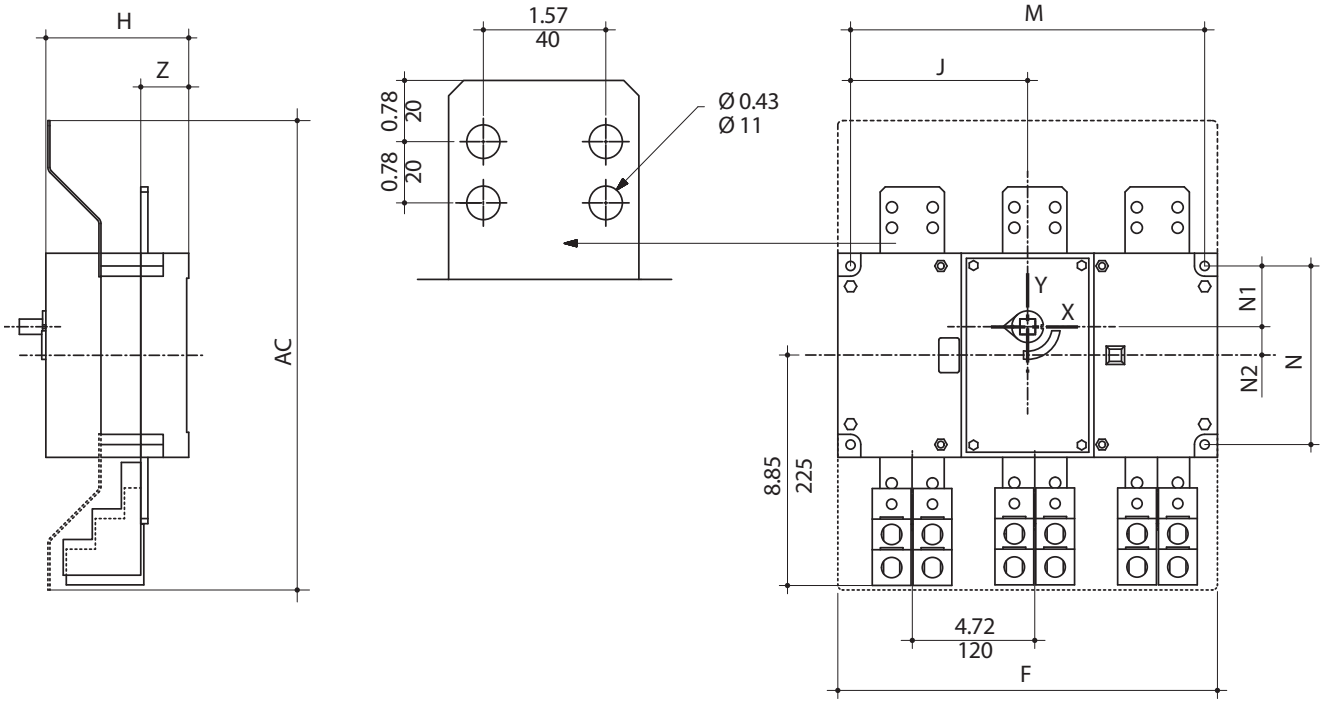
Figure 4 - 600 A UL/CSA Non-Fused Disconnect Switches



Cat. No. 194R-N…	Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]					
		Terminal Shrouds	Switch Body				
		AC	F (3-pole)	F (4-pole)	H	J (3-pole)	J (4-pole)
600	F3	94.6 (3.72)	256 (10.1)	77.5 (3.05)	180 (7.09)	230 (9.06)	107 (4.22)

Cat. No. 194R-N…	Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]					
		Switch Mounting				Connection	
		M (3-pole)	M (4-pole)	N	N1	AA	Z
600	F3	255 (10.03)	335 (13.19)	175(6.88)	59.5 (2.34)	320 (12.6)	47 (1.85)

Figure 5 - 800…1200 A UL/CSA Non-Fused Disconnect Switches



Cat. No. 194R-N…	Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]					
		Terminal Shrouds	Switch Body				
		AC	F (3-pole)	F (4-pole)	H	J1 (3-pole)	J1 (4-pole)
800	F4	460 (18.12)	372 (14.64)	492 (19.37)	140 (5.5)	173.5 (6.83)	233.5 (9.19)
1200	F4	460 (18.12)	372 (14.64)	492 (19.37)	140 (5.5)	173.5 (6.83)	233.5 (9.19)

Cat. No. 194R-N…	Disconnect Switch Dimension Reference	Approximate Dimensions [mm (in.)]					
		Switch Mounting				Connection	
		M (3-pole)	M (4-pole)	N	N1	AA	Z
800	F4	347 (13.66)	467 (18.38)	175 (6.88)	59.5 (2.34)	28 (1.10)	47 (1.85)
1200	F4	347 (13.66)	467 (18.38)	175 (6.88)	59.5 (2.34)	330 (13)	47 (1.85)

Figure 6 - Cat. No. 194R-J100, Frame Size F5 UL/CSA Fused Disconnect Switches

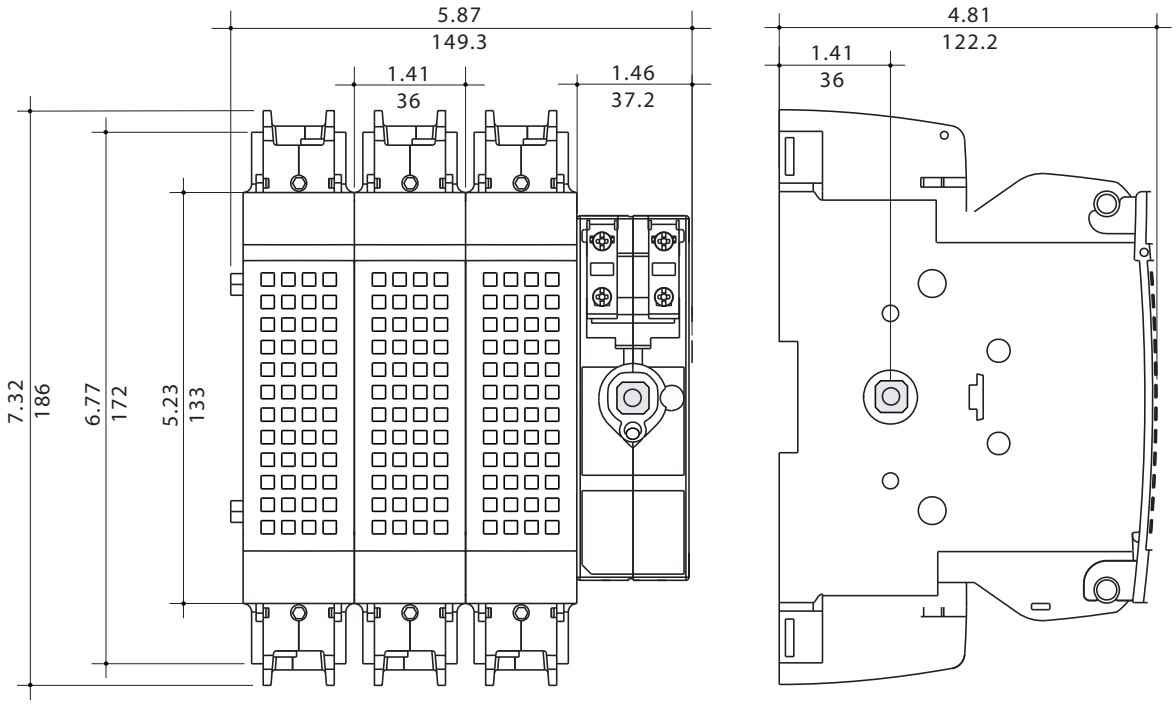


Figure 7 - Cat. No. 194R-J200, Frame Size F6 UL/CSA Fused Disconnect Switches

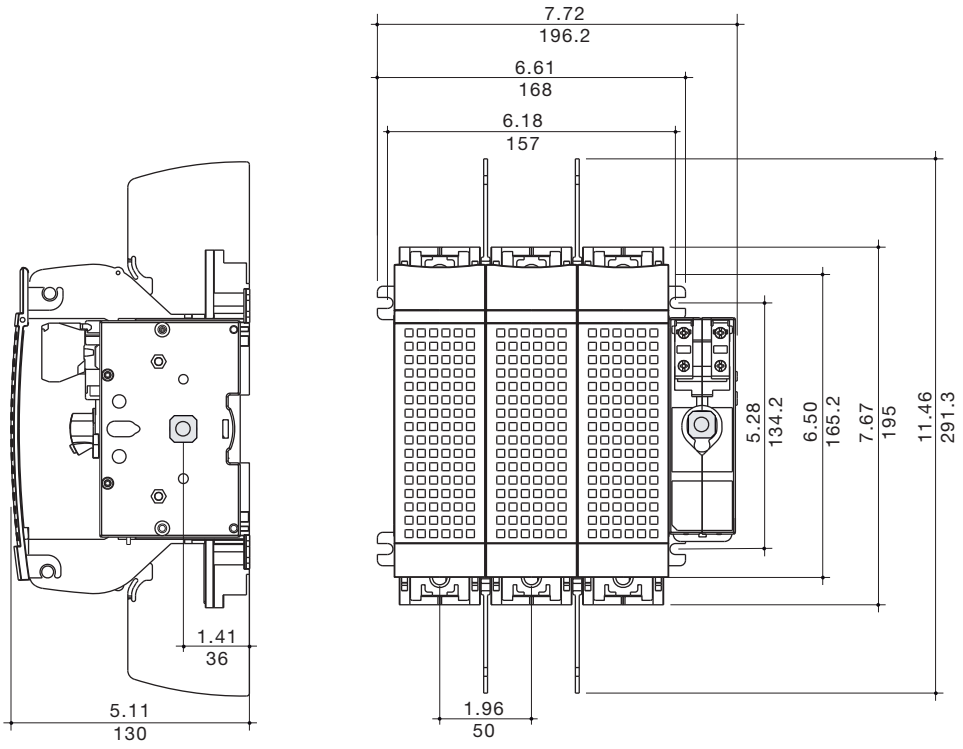


Figure 8 - Cat. No. 194R-J400, Frame Size F7 UL/CSA Fused Disconnect Switches

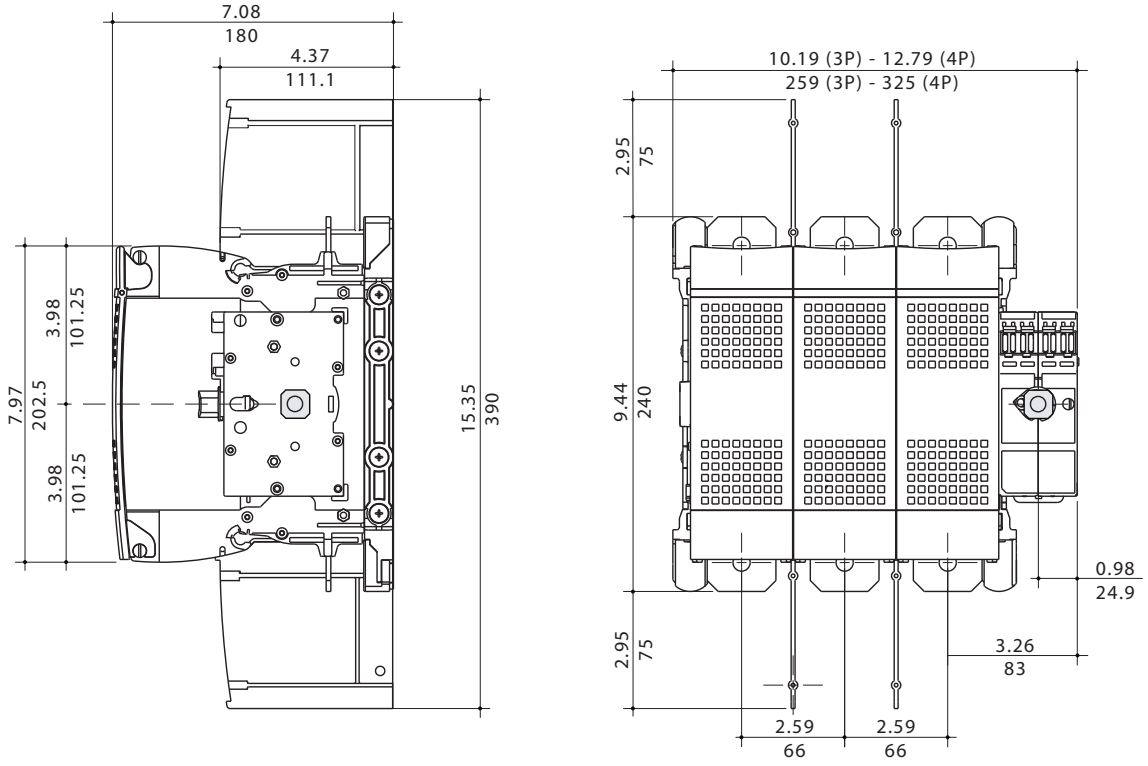
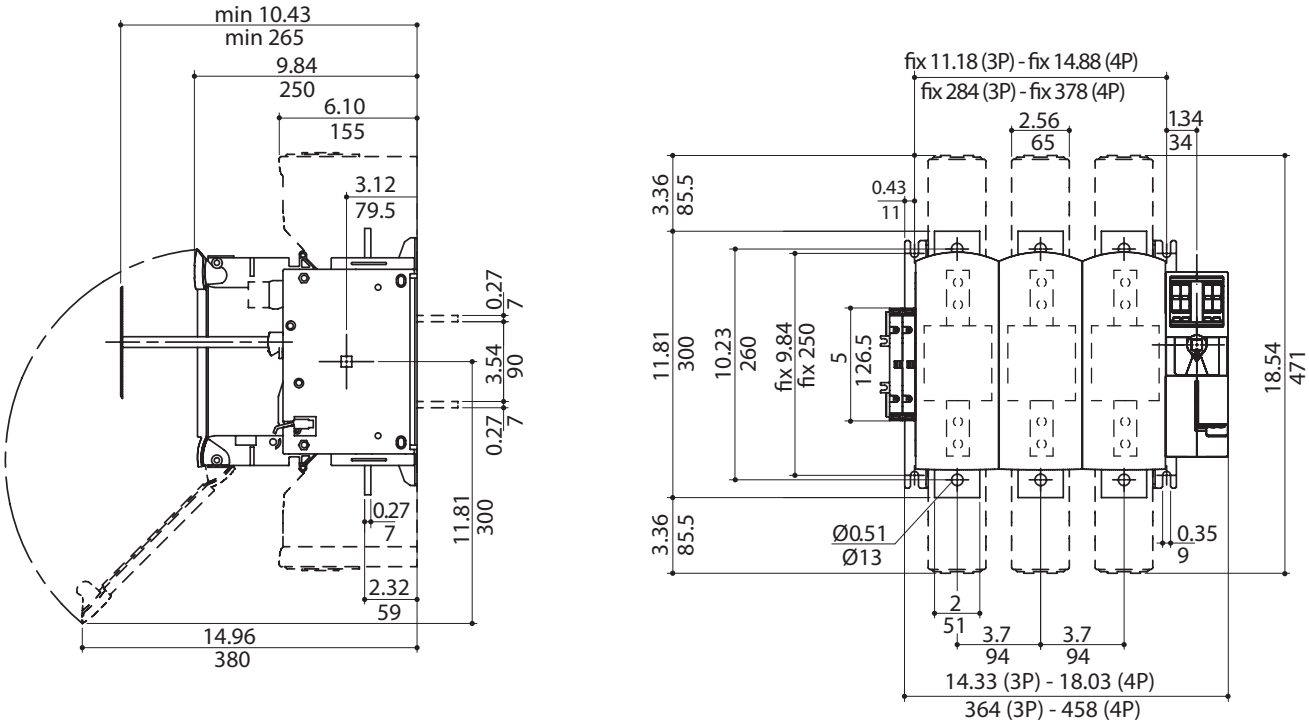
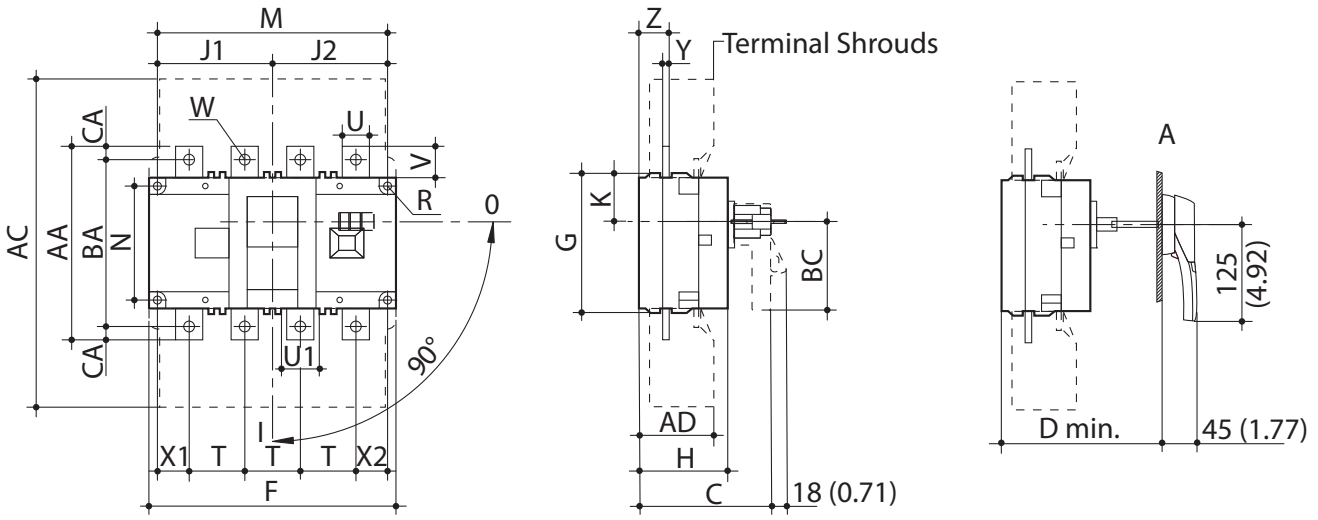


Figure 9 - Cat. No. 194R-J600, -L800, Frame Size F8 UL/CSA Fused Disconnect Switches



IEC Disconnect Switches, 125…1250 A

Figure 10 - 125…630 A IEC Non-Fused Disconnect Switches

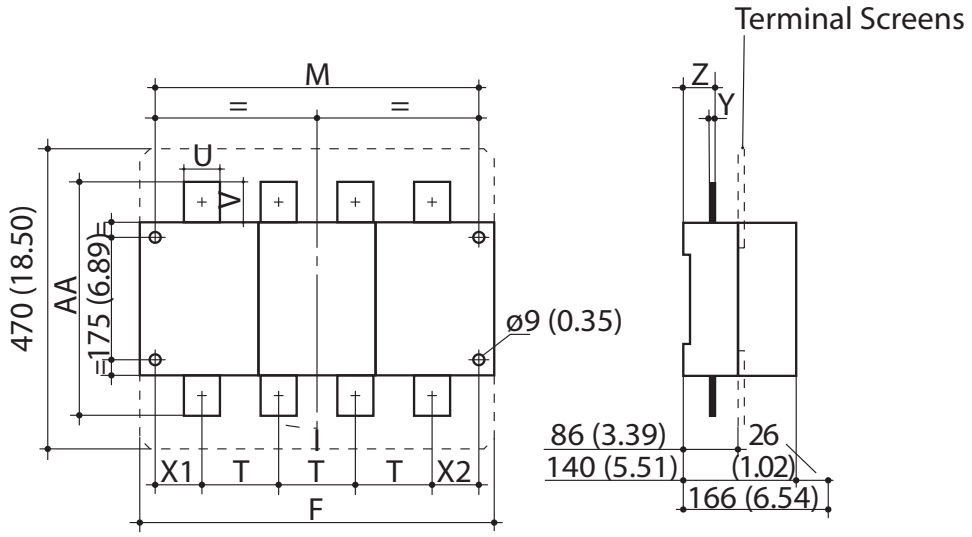


Cat. No. 194R-NE…	Approximate Dimensions [mm (in.)]												
	Overall		Terminal Shrouds		Switch Body								
	C	D (min.)	AC	AD	F (3-pole)	F (4-pole)	G	H	J1 (3-pole)	J1 (4-pole)	J2	K	BC
125	115 (4.53)	125 (4.92)	235 (9.25)	50 (1.97)	140 (5.51)	170 (6.69)	93 (3.66)	65 (2.56)	45 (1.77)	75 (2.95)	75 (2.95)	31.5 (1.24)	80 (3.15)
160	115 (4.53)	125 (4.92)	235 (9.25)	50 (1.97)	140 (5.51)	170 (6.69)	93 (3.66)	65 (2.56)	45 (1.77)	75 (2.95)	75 (2.95)	31.5 (1.24)	80 (3.15)
250	125 (4.92)	135 (5.31)	280 (11.02)	60 (2.36)	180 (7.09)	230 (9.06)	108 (4.25)	75 (2.95)	55 (2.17)	105 (4.13)	105 (4.13)	34 (1.34)	115 (4.53)
400	160 (6.30)	165 (6.50)	401 (15.79)	89 (3.50)	230 (9.05)	290 (11.40)	170 (6.69)	110 (4.33)	75 (2.95)	135 (5.31)	135 (5.31)	55 (2.17)	115 (4.53)
630	160 (6.30)	165 (6.50)	401 (15.79)	89 (3.50)	230 (9.05)	290 (11.40)	170 (6.69)	110 (4.33)	75 (2.95)	135 (5.31)	135 (5.31)	55 (2.17)	115 (4.53)

Cat. No. 194R-NE…	Approximate Dimensions [mm (in.)]			
	Switch Mounting			
	M (3-pole)	M (4-pole)	N	R
125	120 (4.72)	150 (5.90)	65 (2.56)	5.5 (0.21)
160	120 (4.72)	150 (5.90)	65 (2.56)	5.5 (0.21)
250	80 (3.15)	160 (6.30)	210 (8.27)	5.5 (0.21)
400	210 (8.28)	270 (10.60)	140 (5.51)	7 (0.28)
630	210 (8.28)	270 (10.60)	140 (5.51)	7 (0.28)

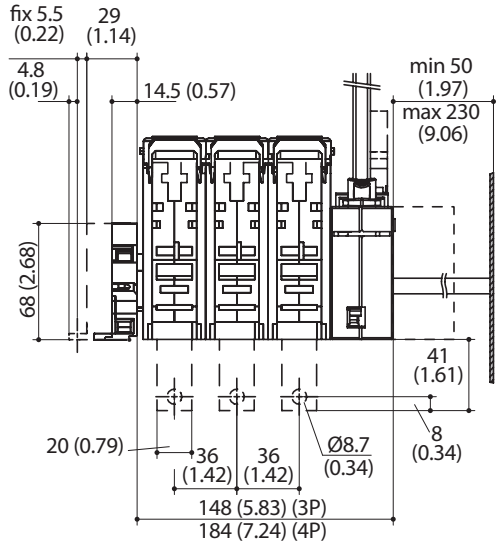
Cat. No. 194R-NE…	Approximate Dimensions [mm (in.)]												
	Connection												
	T	U	U1	V	W	X1 (3-pole)	X1 (4-pole)	X2	Y	Z	AA	BA	CA
125	36 (1.41)	20 (0.79)	20.5 (0.81)	25 (0.98)	9 (0.35)	28 (1.10)	22 (87)	20 (0.79)	3.5 (0.14)	20.5 (0.81)	135 (5.31)	115 (4.53)	10 (0.39)
160	36 (1.41)	20 (0.79)	20.5 (0.81)	25 (0.98)	9 (0.35)	28 (1.10)	22 (87)	20 (0.79)	3.5 (0.14)	20.5 (0.81)	135 (5.31)	115 (4.53)	10 (0.39)
250	50 (1.97)	25 (0.98)	25.5 (1.00)	30 (1.18)	11 (0.43)	33 (1.30)	33 (1.30)	27 (1.06)	3.5 (0.14)	22.5 (0.89)	160 (6.30)	130 (5.12)	15 (0.60)
400	65 (2.56)	32 (1.26)	45.5 (1.79)	37.5 (1.48)	11 (0.43)	42.5 (1.67)	37.5 (1.48)	37.5 (1.48)	5 (0.20)	36 (1.41)	235 (9.25)	205 (8.07)	15 (0.60)
630	65 (2.56)	32 (1.26)	45.5 (1.79)	37.5 (1.48)	11 (0.43)	42.5 (1.67)	37.5 (1.48)	37.5 (1.48)	5 (0.20)	36 (1.41)	235 (9.25)	205 (8.07)	20 (0.79)

Figure 11 - 800…1250 A IEC Non-Fused Disconnect Switches



Cat. No. 194R-NE…	Approximate Dimensions [mm (in.)]											
	Switch Body		Switch Mounting		Connection							
	F (3-pole)	F (4-pole)	M (3-pole)	M (4-pole)	T	U	V	Y	X1	X2	Z	AA
800	280 (11.02)	360 (14.17)	255 (10.04)	335 (13.19)	80 (3.15)	50 (1.97)	60.5 (2.38)	7 (0.27)	47.5 (1.87)	47.5 (1.87)	46.5 (1.83)	321 (12.64)
1250	372 (14.65)	492 (19.37)	347 (13.66)	467 (18.39)	120 (4.72)	90 (3.54)	44 (1.73)	8 (0.31)	53.5 (2.11)	53.5 (2.11)	47.5 (1.87)	288 (11.34)

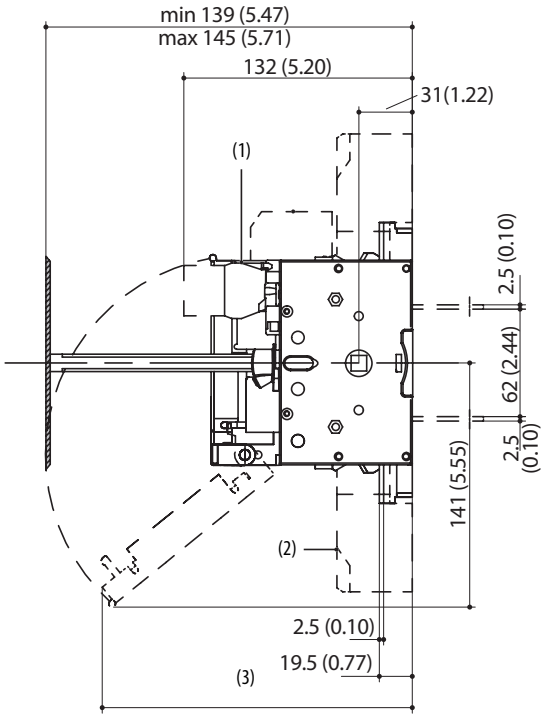
Figure 12 - Cat. No. 194R-B100-1753, 194R-D125-1753, Frame Size F13 IEC Fused Disconnect Switches



(1) 1…4 pre-break auxiliary contacts for signalling

(2) Terminal shrouds

(3) 179 (7.05) for BS88/NFC and DIN 100…125 A
189 (7.44) for NFC and DIN 125…160 A



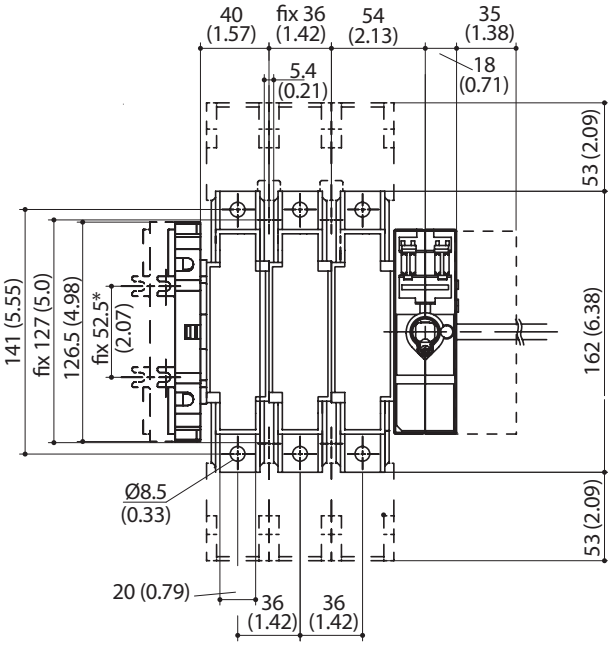


Figure 13 - Cat. No. 194R-B160-1753, 194R-D160-1753, Frame Size F14 IEC Fused Disconnect Switches

(1) 1…4 pre-break auxiliary contacts for signalling

(2) Terminal shrouds

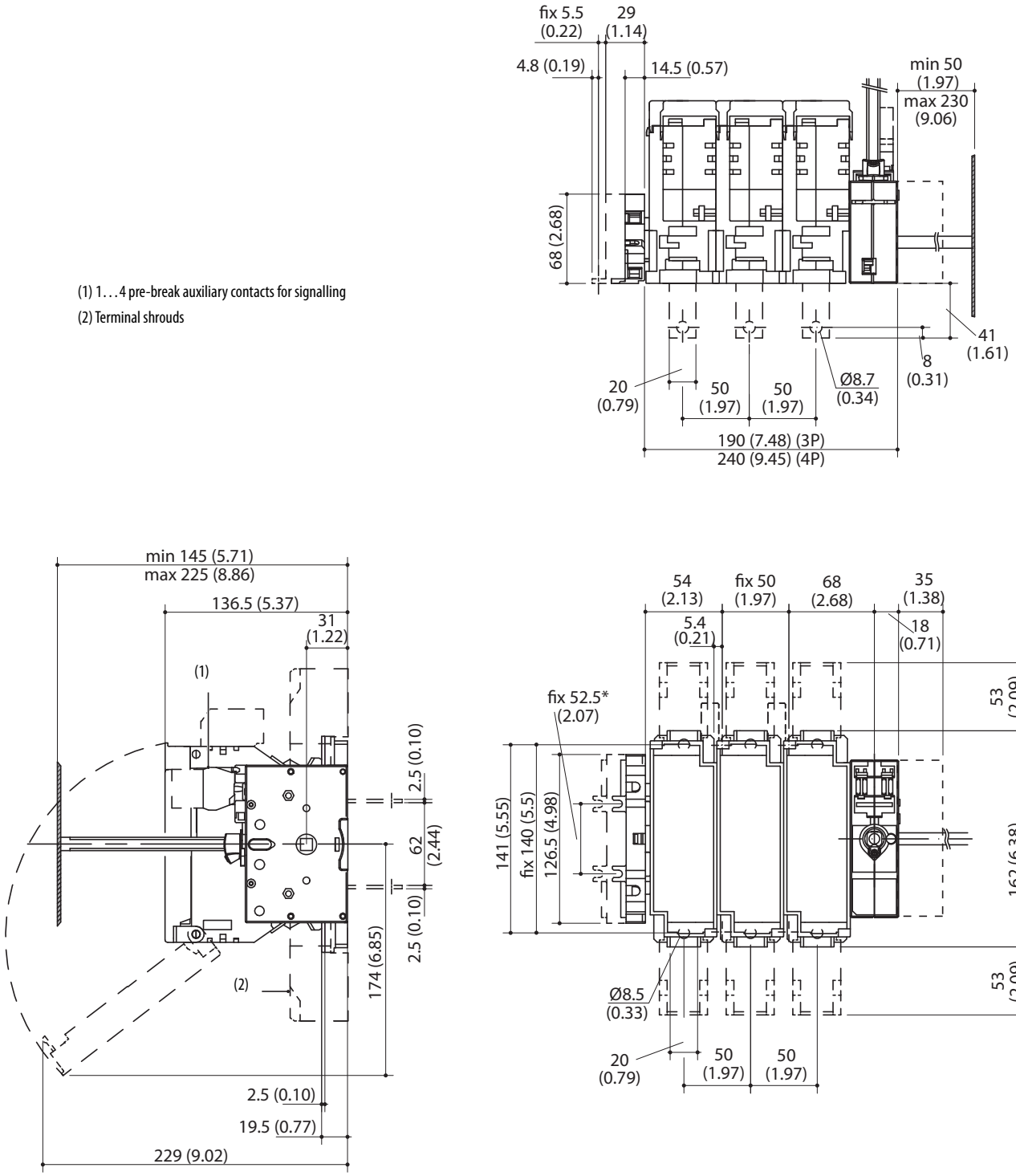


Figure 14 - Cat. No. 194R-B200-1753, 194R-D250-1753, Frame Size F15 IEC Fused Disconnect Switches

(1) 1…8 pre-break auxiliary contacts for signalling

(2) Terminal shrouds

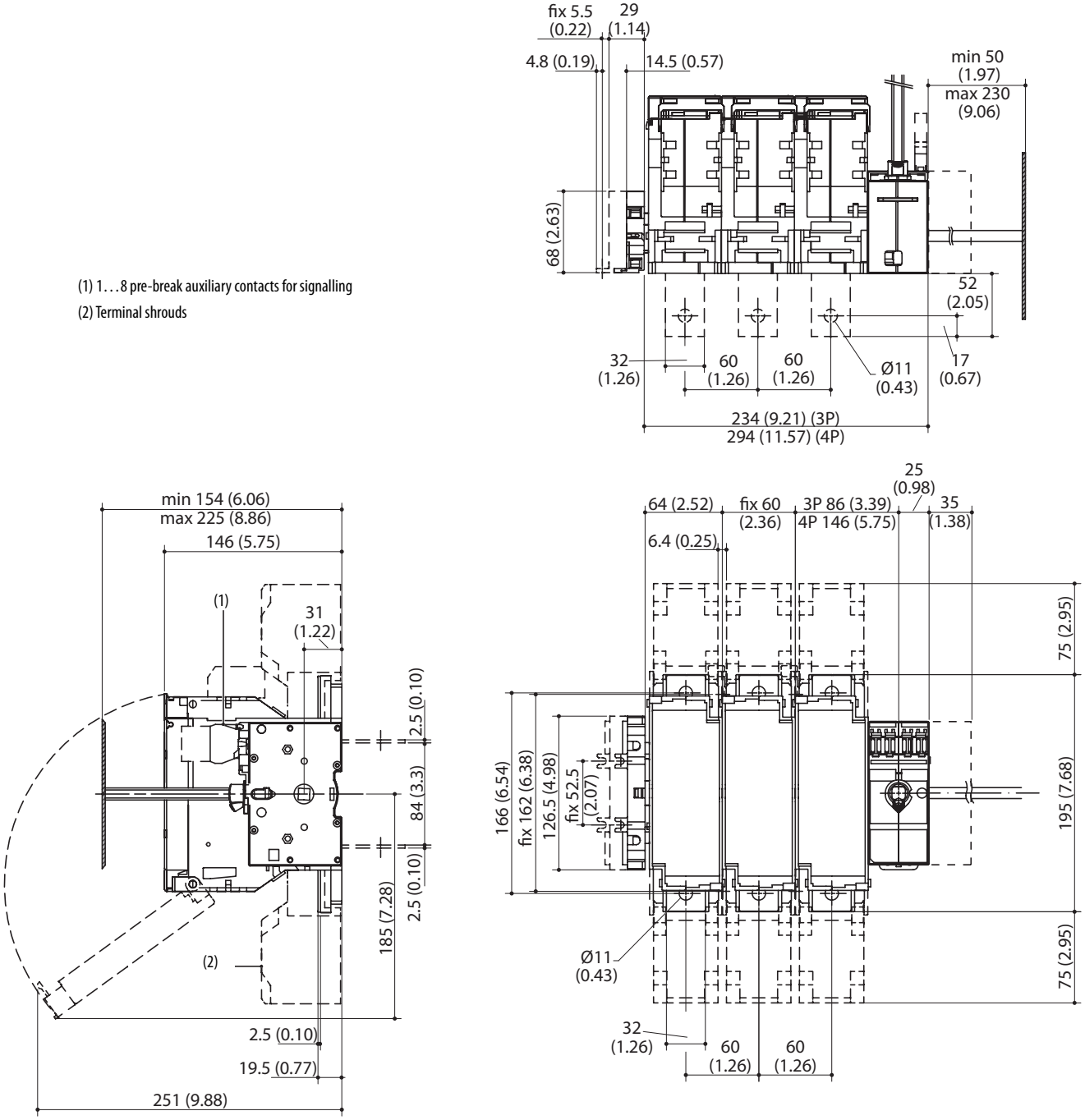


Figure 15 - Cat. No. 194R-B400-1753, 194R-D400-1753, Frame Size F16 IEC Fused Disconnect Switches

(1) 1…8 pre-break auxiliary contacts for signalling

(2) Terminal shrouds

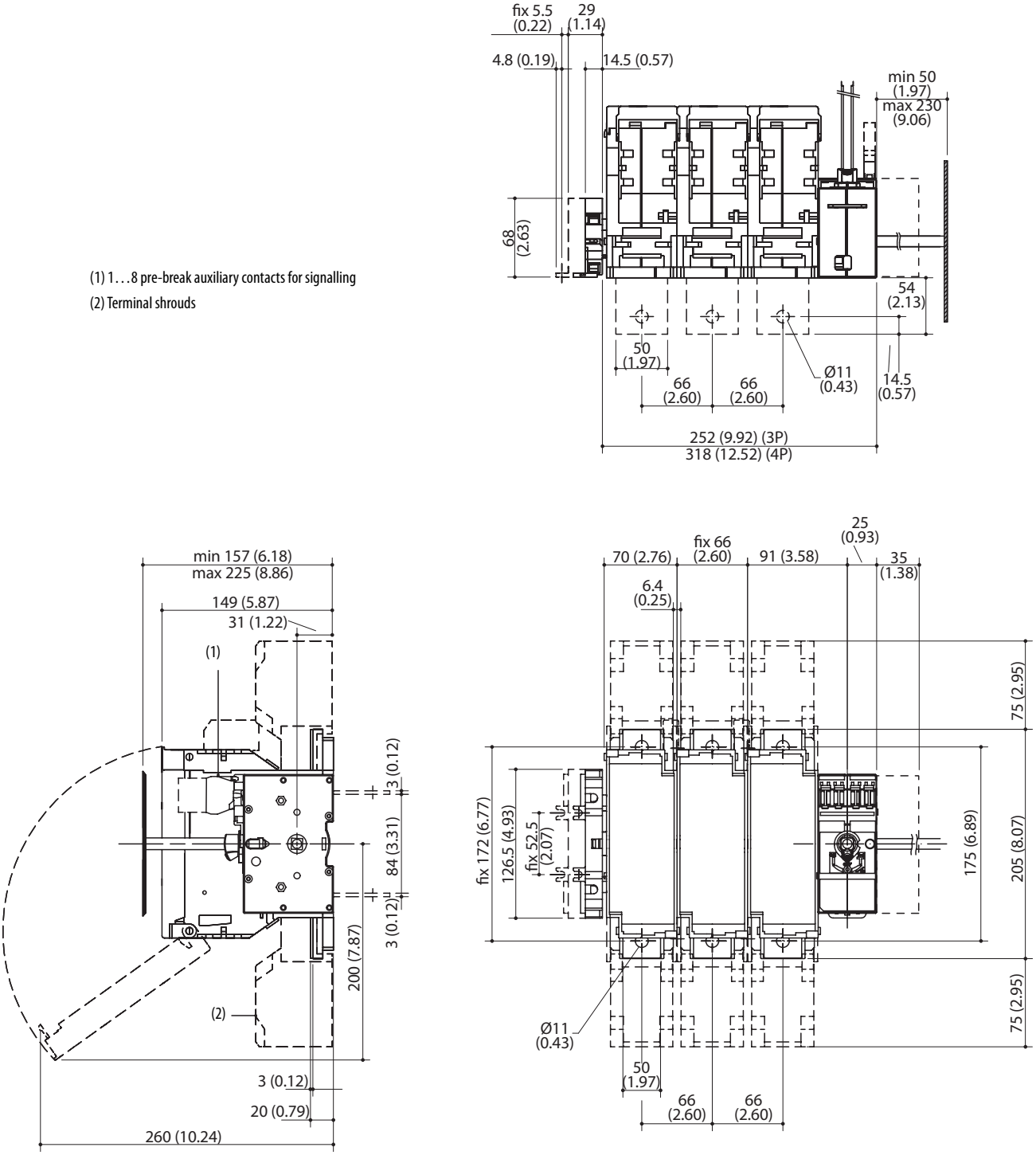


Figure 16 - Cat. No. 194R-B630-1753, 194R-D630-1753, 194R-B800-1753, 194R-D800-1753, Frame Size F17 IEC Fused Disconnect Switches

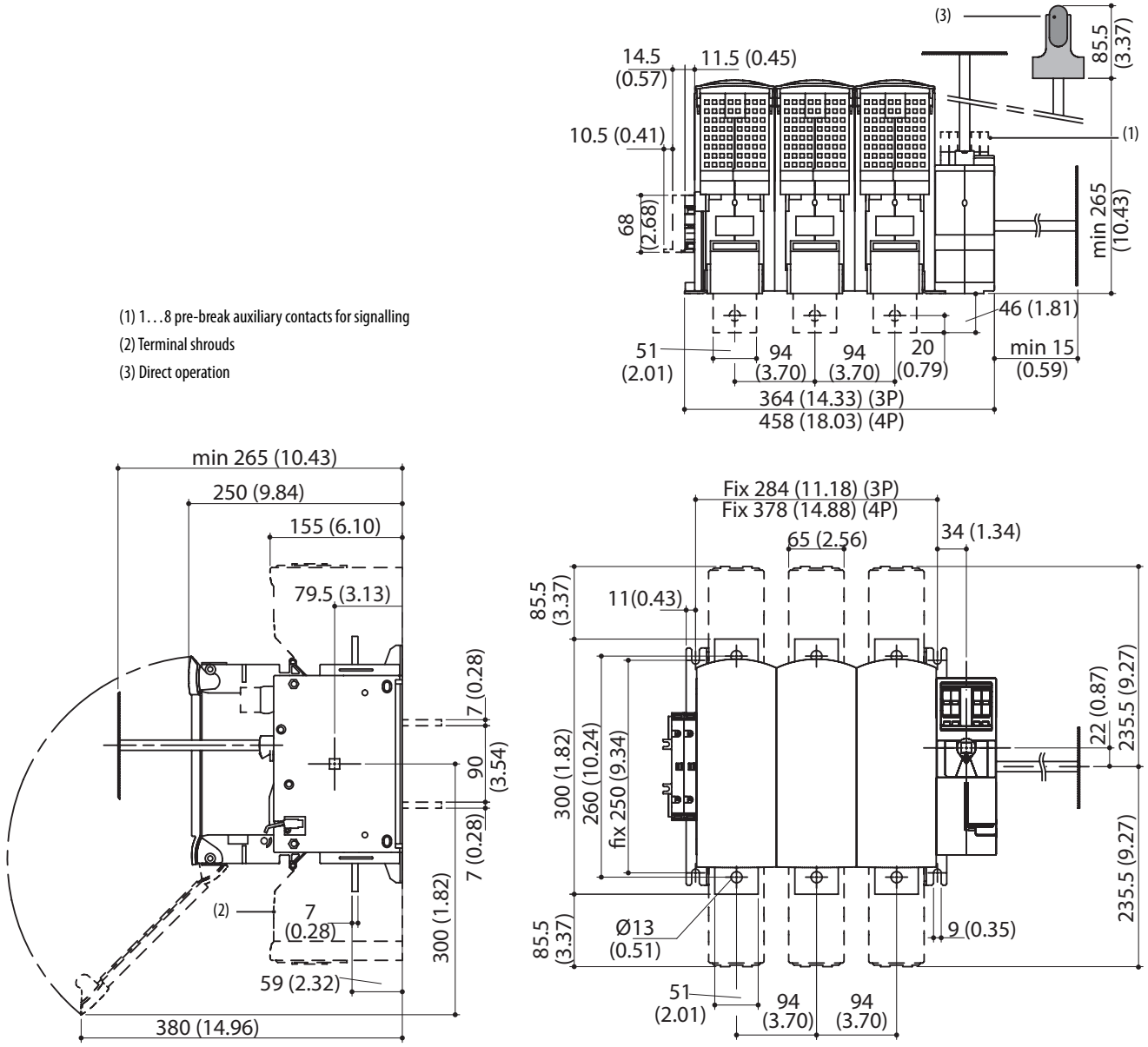
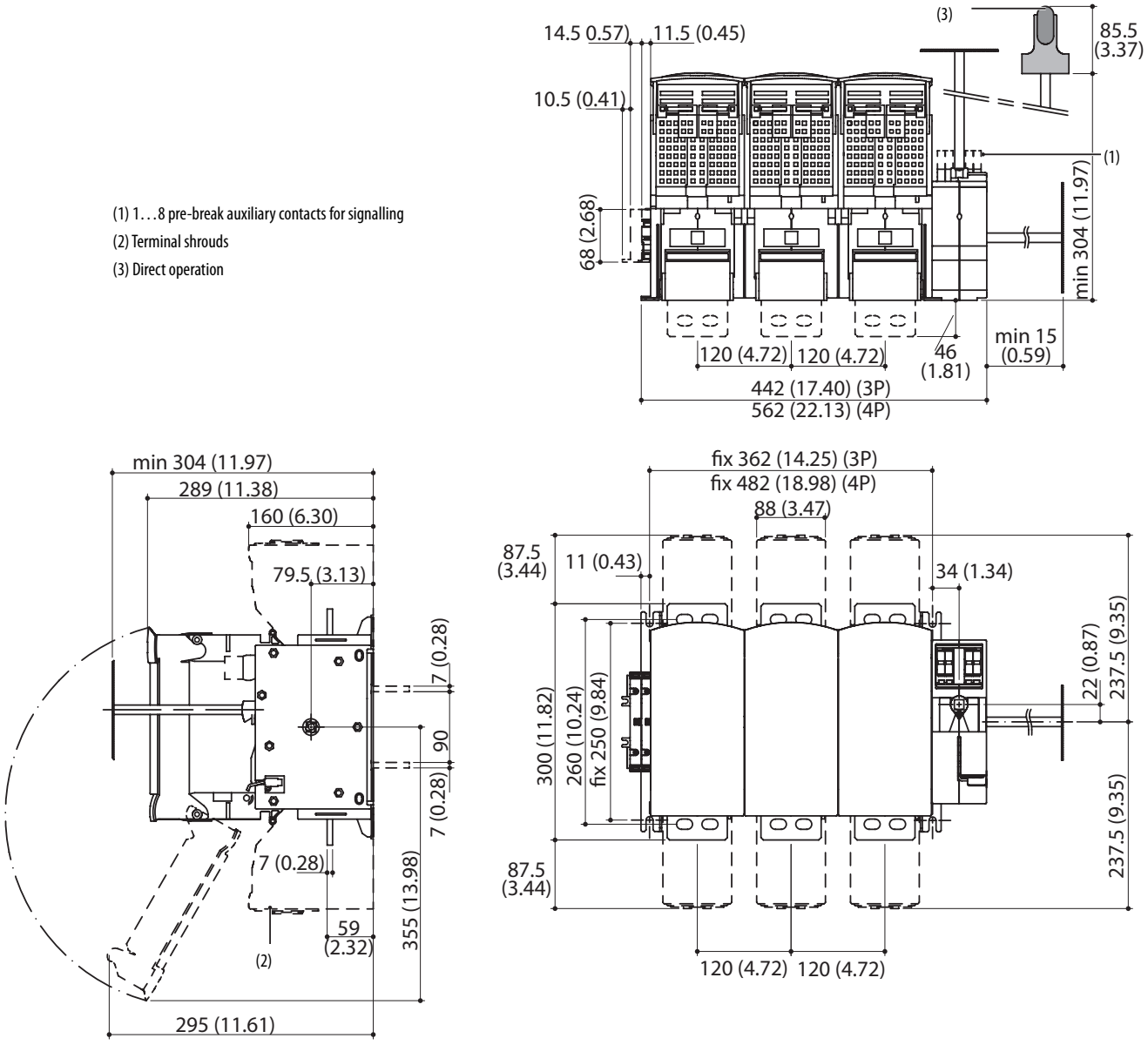


Figure 17 - Cat. No. 194R-B1250-1753, 194R-D1250-1753, Frame Size F18 IEC Fused Disconnect Switches

(1) 1…8 pre-break auxiliary contacts for signalling
(2) Terminal shrouds
(3) Direct operation



Operating Handles

Figure 18 - Cat. Nos. 194R-P…/140U-P…

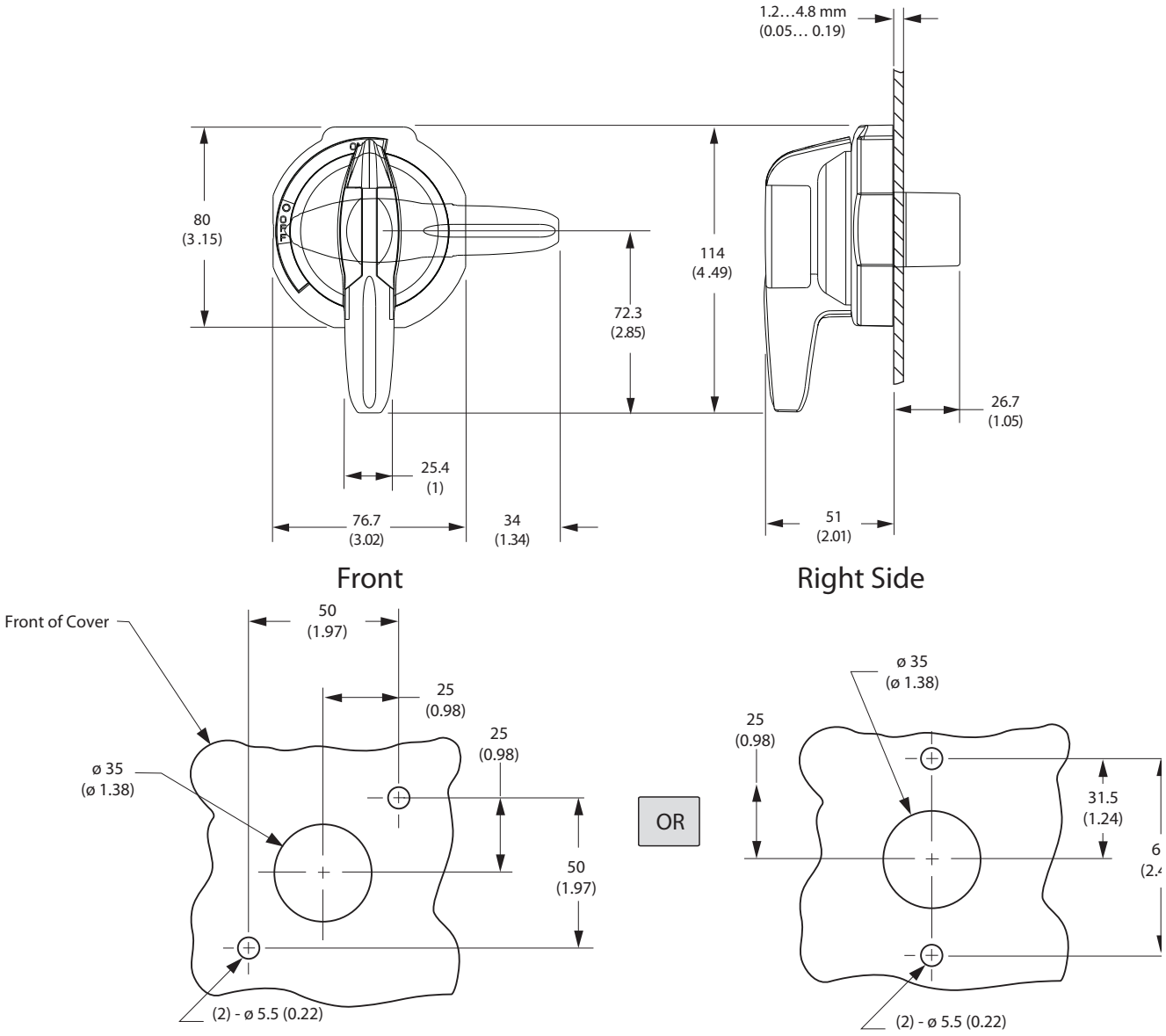


Figure 19 - Cat. No. 194R-HM4, -HM4E

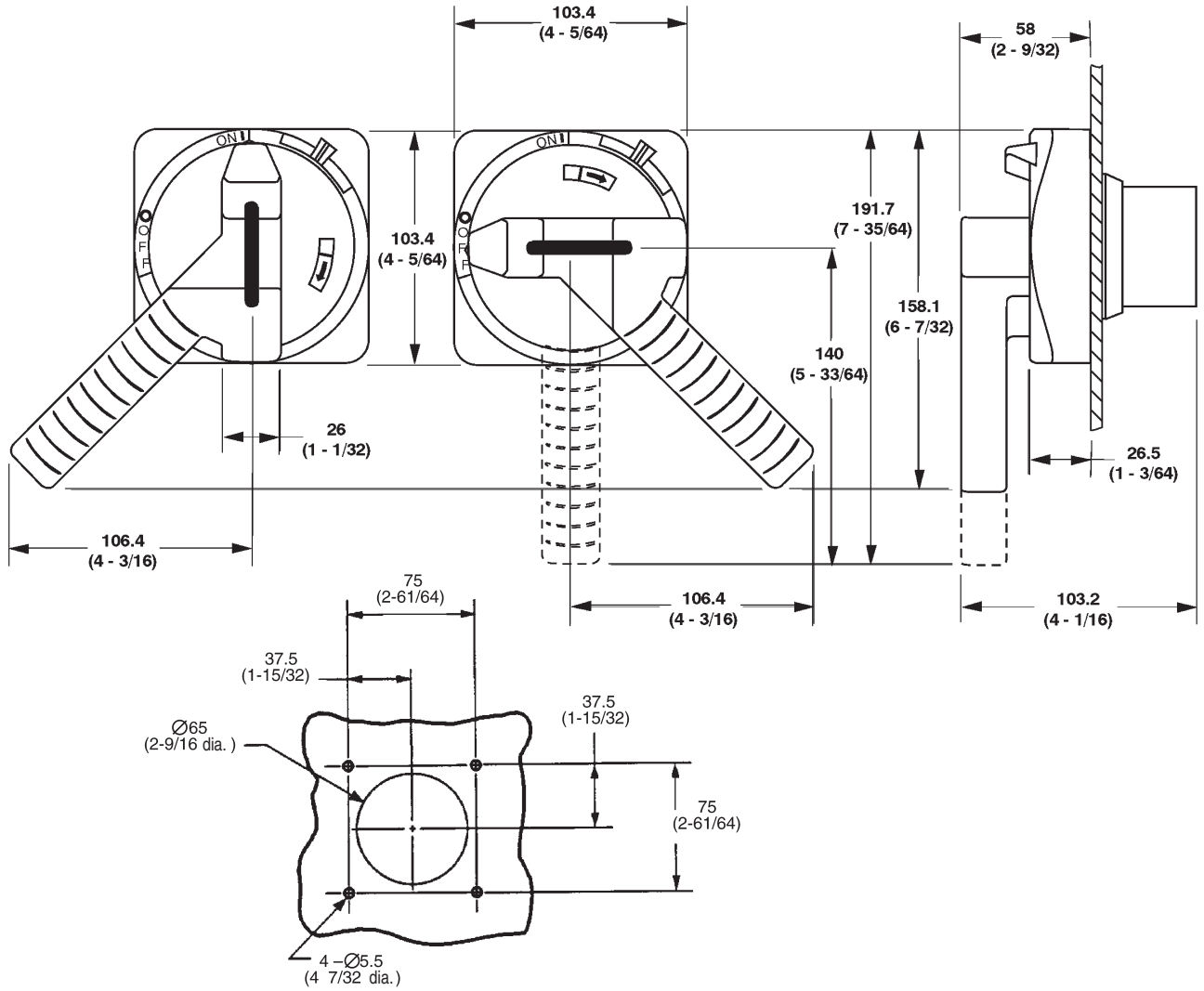


Figure 20 - Cat. No. 194R-HM4-L, -HM4E-L, -HM4-N2-L, -HM4E-N2-L

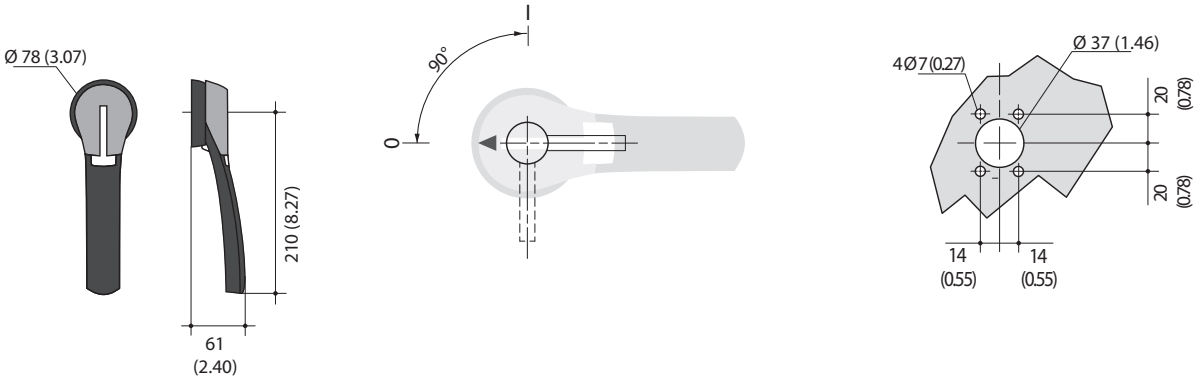
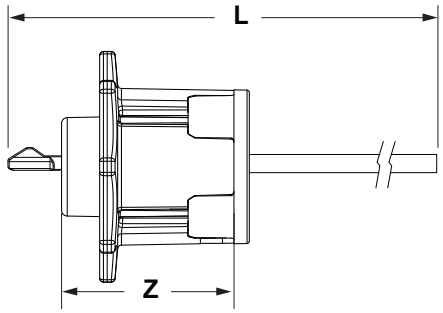
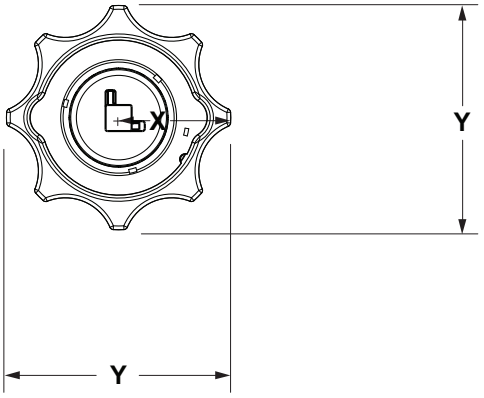
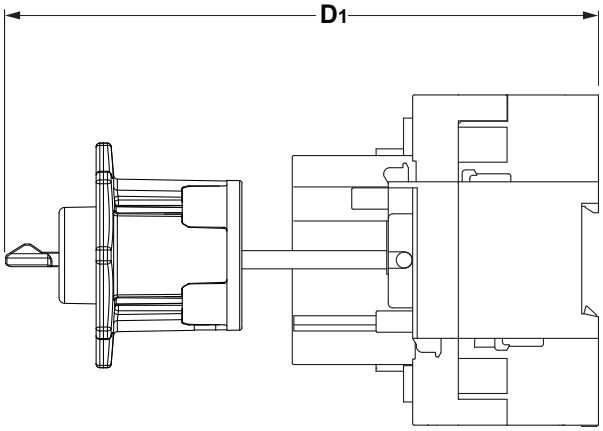


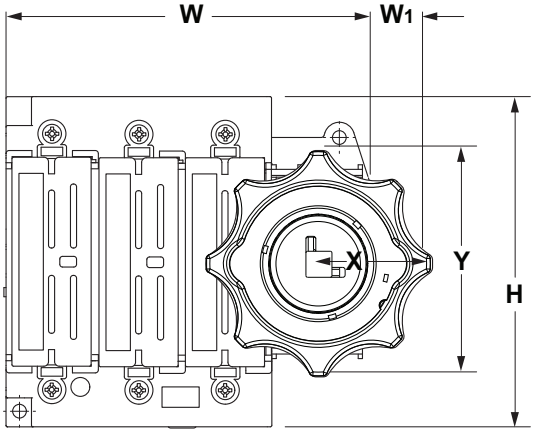
Figure 21 - NFPA 79 Internal Handle with Shaft





Catalog No.		$L_{(max)}$	X	Y	Z
194R -N1	mm	305	38	76	57
	(in.)	(12)	(1-1/2)	(3)	(2-1/4)
194R -N2	mm	533	38	76	57
	(in.)	(21)	(1-1/2)	(3)	(2-1/4)

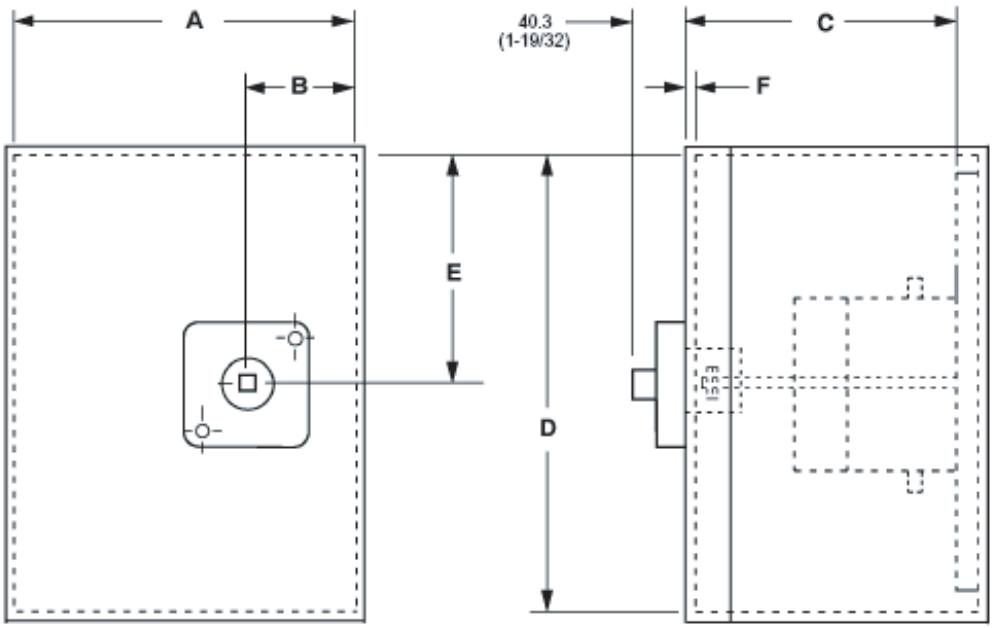




Catalog No.	Dim. Ref.		H	W	W_1	$D_{1\,(min)}$	X	Y
194R-B20-* 194R-F25-* 194R-B32-* 194R-F32-* 194R-C30-* 194R-J30-*	A1	mm	108	120	19	184	38	76
		(in.)	(4-1/4)	(4-3/4)	(3/4)	(7-1/4)	(1-1/2)	(3)
194R-N30-*	A2	mm	108	120	19	160	38	76
		(in.)	(4-1/4)	(4-3/4)	(3/4)	(6-5/16)	(1-1/2)	(3)
194R-B63-* 194R-H30-* 194R-D32-* 194R-H60-* 194R-D63-* 194R-J60-* 194R-F63-*	B1	mm	113	142	19	196	38	76
		(in.)	(4-29/64)	(5-19/32)	(3/4)	(7-49/64)	(1-1/2)	(3)
194R-N60-*	B2	mm	113	142	19	176	38	76
		(in.)	(4-29/64)	(5-19/32)	(3/4)	(6-59/64)	(1-1/2)	(3)

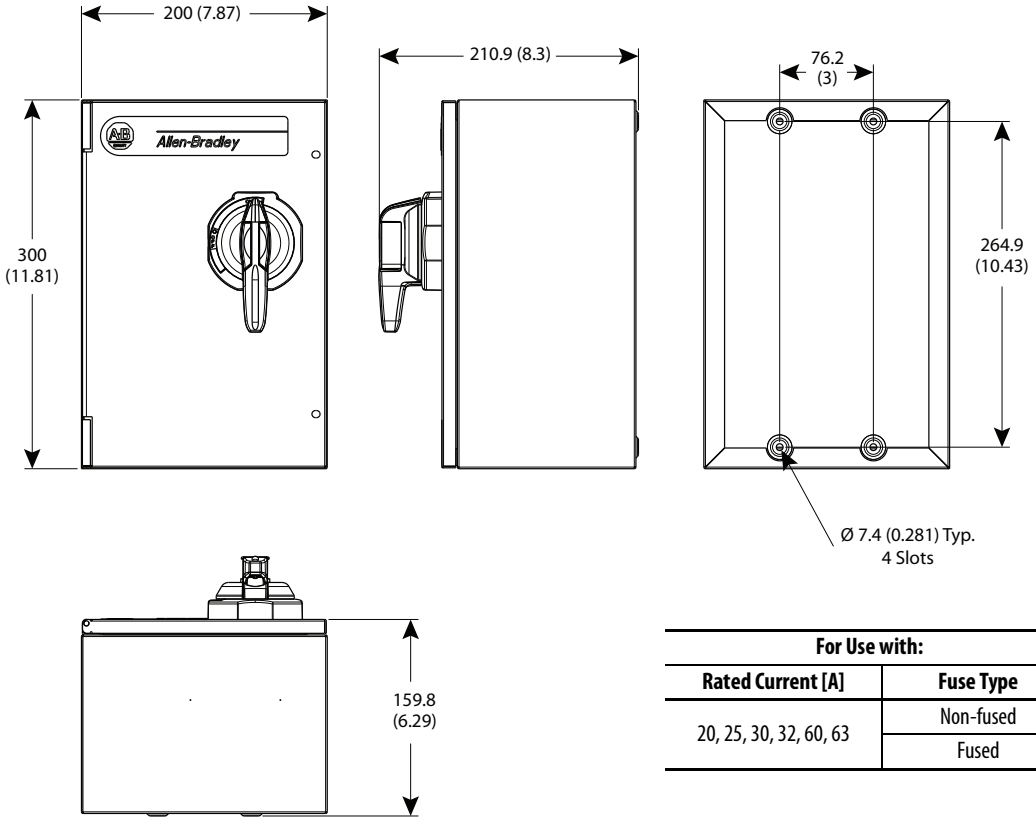
Enclosures

Figure 22 - Disconnect Switch Dimension References: A1, A2, B1, B2 (30 A and 60 A) Enclosure and Operating Handle



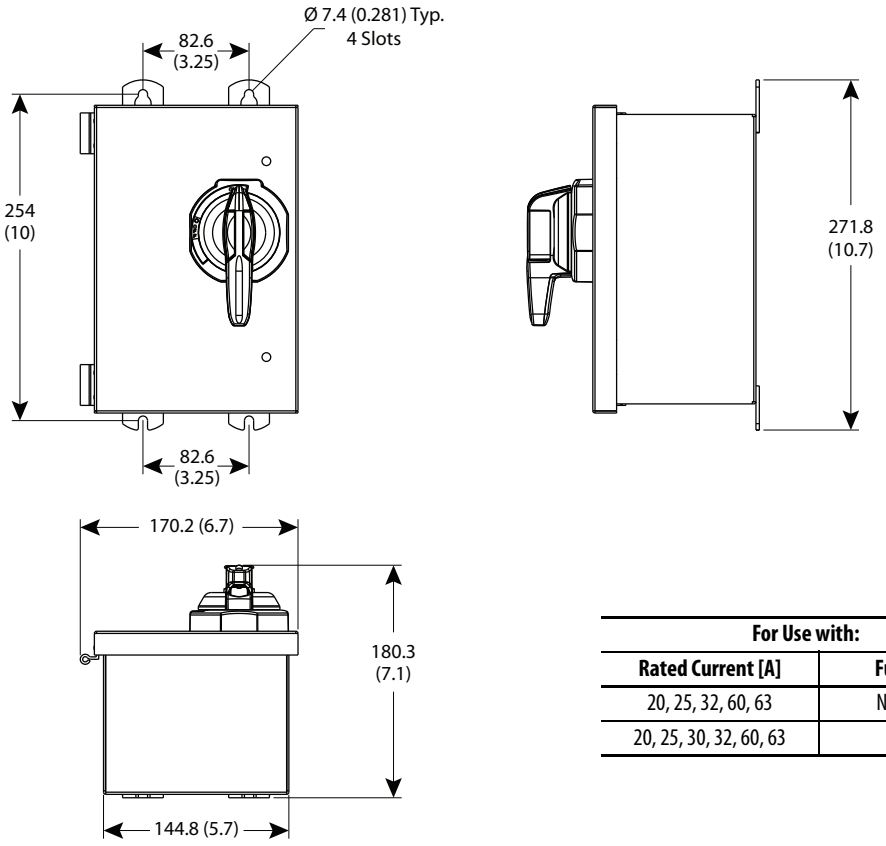
Cat. No.	Dimension Reference	A	B	C		D	E	F	
		Maximum	Minimum	Minimum	Maximum	Minimum	Minimum	Minimum	Maximum
194R-B20-1753	A1	171 (6-3/4)	45 (1-49/64)	147.6 (5-13/16)	454 (17-7/8)	248 (9-3/4)	89 (3-1/2)	1.4 (1/16)	4/78 (3/16)
194R-B32-1753									
194R-C30-1753									
194R-F32-1753									
194R-J30-1753									
194R-N30-1753	A2	171 (6-3/4)	45 (1-49/64)	111 (4-3/8)	454 (17-7/8)	248 (9-3/4)	89 (3-1/2)	1.4 (1/16)	4/78 (3/16)
194R-B63-1753	B1	197 (7-3/4)	45 (1-49/64)	147.6 (5-13/16)	454 (17-7/8)	248 (9-3/4)	105 (4-9/64)	1.4 (1/16)	4/78 (3/16)
194R-D32-1753									
194R-D63-1753									
194R-F63-1753									
194R-H30-1753									
194R-H60-1753									
194R-J60-1753									
194R-N60-1753	B2	197 (7-3/4)	45 (1-49/64)	111 (4-3/8)	454 (17-7/8)	248 (9-3/4)	105 (4-9/64)	1.4 (1/16)	4/78 (3/16)

Figure 23 - IP66 (Type 3/4/12) Watertight, Dusttight Sheet Metal Enclosure



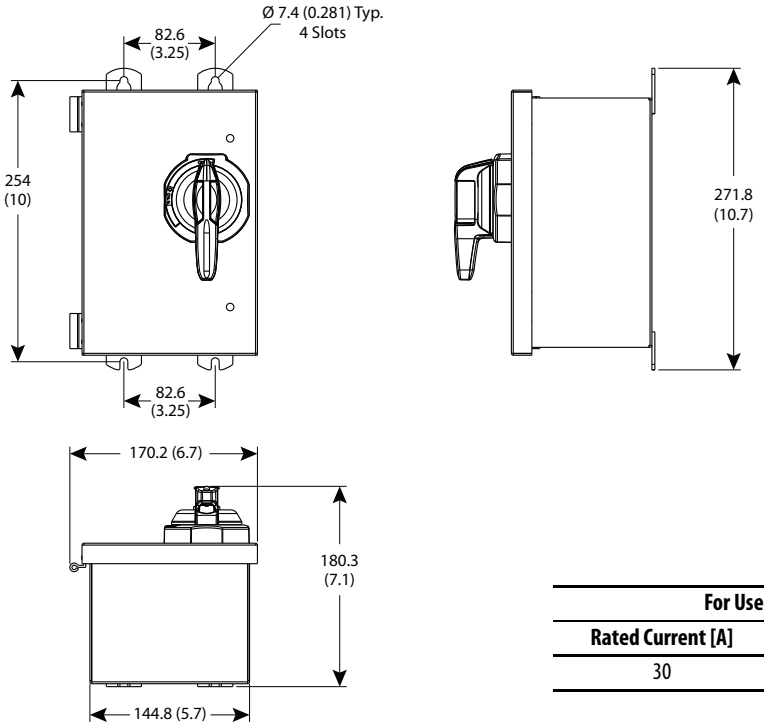
For Use with:	
Rated Current [A]	**Fuse Type**
20, 25, 30, 32, 60, 63	Non-fused
	Fused

Figure 24 - Type 4/4X Watertight, Corrosion-resistant Stainless Steel Enclosure



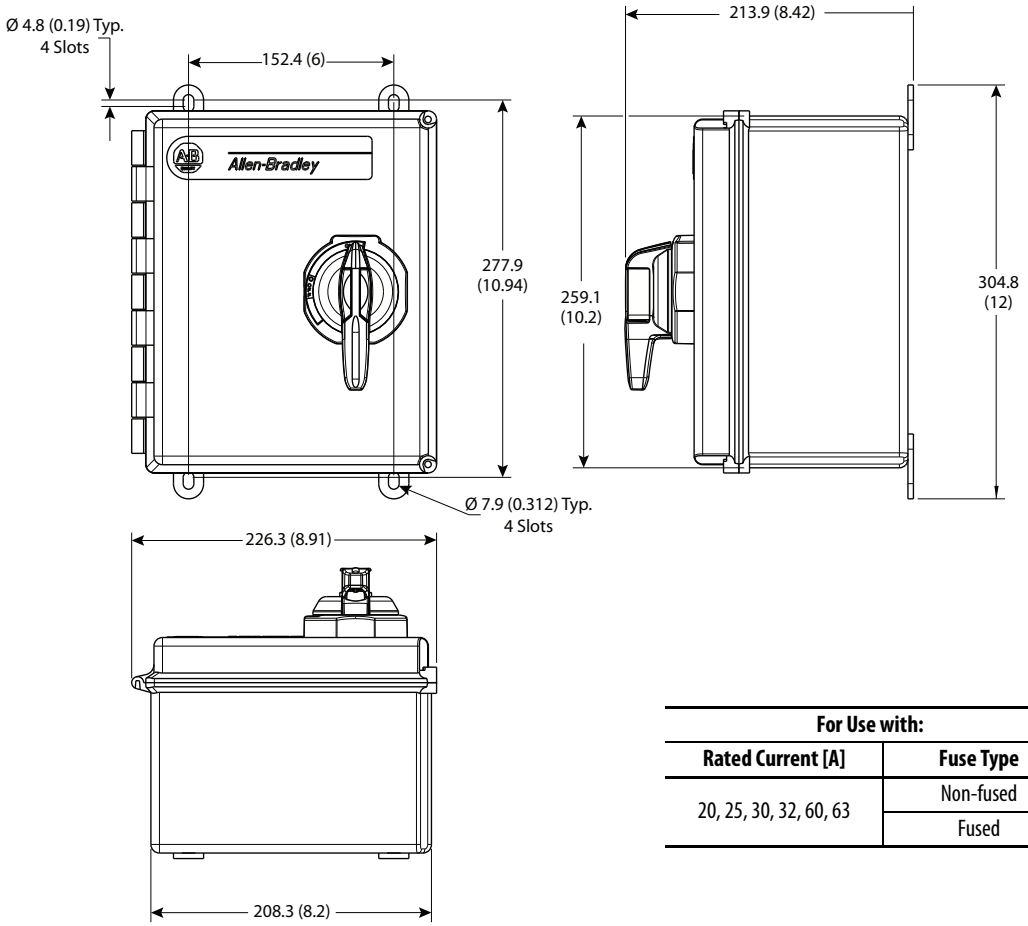
For Use with:	
Rated Current [A]	**Fuse Type**
20, 25, 32, 60, 63	Non-fused
20, 25, 30, 32, 60, 63	Fused

Figure 25 - Type 4/4X Watertight, Corrosion-resistant Stainless Steel Enclosure



For Use with:	
Rated Current [A]	**Fuse Type**
30	Non-fused

Figure 26 - IP66 (Type 3/4/4X/12) Corrosion-resistant, Non-metallic Enclosure



For Use with:	
Rated Current [A]	**Fuse Type**
20, 25, 30, 32, 60, 63	Non-fused
	Fused

Disconnect Switch Kits

Bulletin 194R-FC and 194R-LFC NFPA 79 Compliant IEC Cable-Operated Mechanism for Flange-Style Enclosures

Standards Compliance and Certifications

Standards Compliance
IEC 60947-4-1/EN60947-3
BS EN60947-3
VDE 0660
CSA 22.2 No. 4
NEMA KS-1
UL 98

Certifications
CE Marked
CSA Certified (File No. LR1234)
UL Listed (File No. E 47426, Guide WHTY)
ASTA Certified
LOVAG Certified

Product Overview

The Bulletin 194R-FC and 194R-LFC cable-operated mechanism with interlock provide a fully compliant solution to the 2002 changes in the National Fire Protection Association 79 (NFPA 79).

The194R-FC cable-operated mechanism combines the small size of the 194R IEC rotary disconnect switch with the flexibility of a cable-operated mechanism to provide an NFPA 79 IEC solution for flange-style enclosures. The 194R-FC bracketed mechanism for 194R 30 and 60 A devices attaches to the 194R disconnect switch base and operates the ON-OFF action via cable to a standard 1494F handle. The 194R-LFC mechanism attaches to the side of the 194R-J100-1753 and 194R-J200-1753 disconnect switch and operates the ON-OFF action via cable to a standard 1494F handle.

The handle/interlock mechanism provides the 'no-tools' operation and the secondary interlock as required by NFPA 79 2002. The cable-operated mechanism is offered in 3...10 ft cable lengths, which allows a variety of placement options for the 194R disconnect switch within the enclosure. The handle (ordered separately) is available in 3 different styles: plastic, stainless steel, or painted metal.

Features:

- Cable-operated mechanism with interlock
- 194R-FC is compatible with all Bulletin 194R 30 and 60 A fused and non-fused disconnect switches (sold separately)
- 194R-LFC is compatible with all Bulletin 194R-J100-1753 and 194J200- 1753 disconnect switches (sold separately)
- Uses Bulletin 1494U handles (sold separately)
  - IP66 (Type 3R, 3, 12, 4, 4X)
- Padlockable handle mounts to flange-styled enclosures
- Cable options available in 3...10 ft. lengths
- NFPA 2002 Compliant

Product Selection

For product selection information, see page 15.

Approximate Dimensions

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

Figure 27 - 194R-FC Cable-Operated Handle

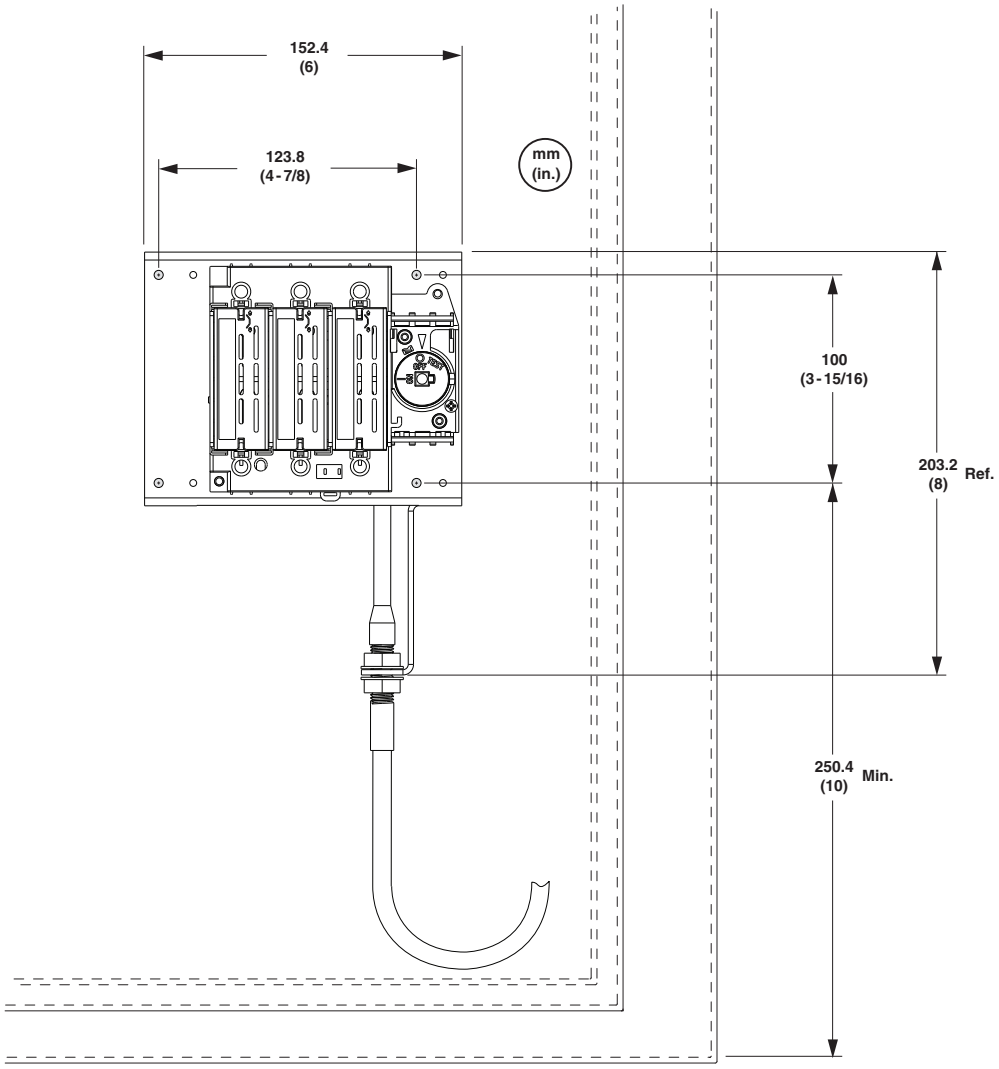
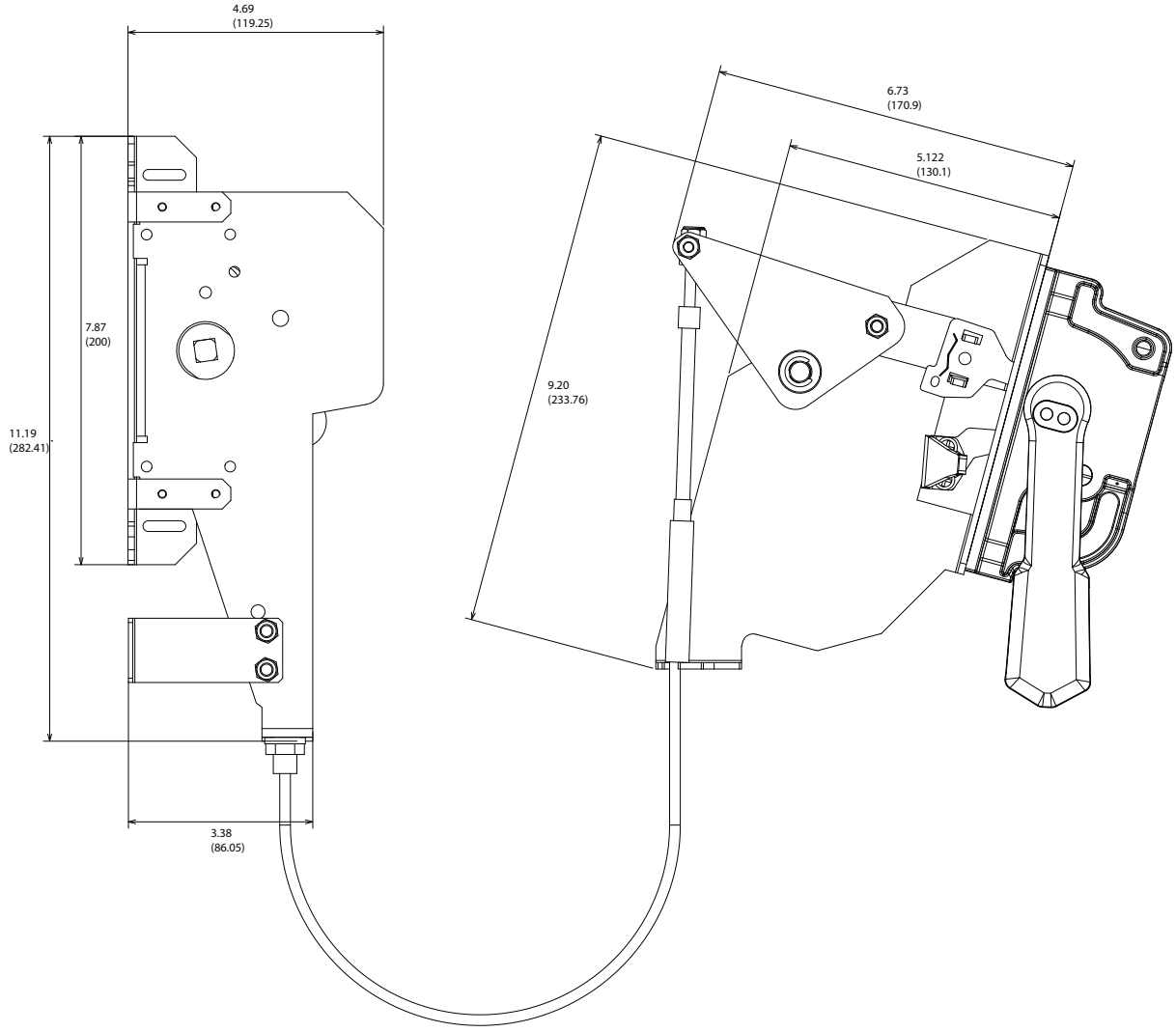
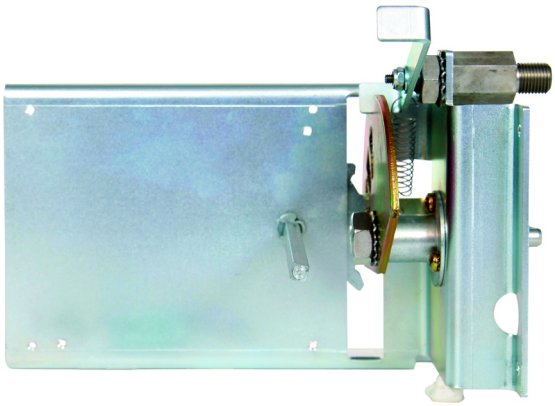


Figure 28 - 194R-LFC Cable-Operated Handle



Cat. No. 194R-SDK2 NFPA 79 Compliant IEC Fused and Non-Fused Disconnect Switches, Side-mounted Kit



Cat. No. 194R-SDK2 Side-mounted Disconnect Switch Kit for all Bul. 194R 30 and 60 A Next Generation switches and Cat. No. 194R-P… handles

Standards Compliance and Certifications

Standards Compliance for Disconnect Switch
IEC 60947-4-1/EN60947-3
BS EN60947-3
VDE 0660
CSA 22.2 No. 4
NEMA KS-1
UL 489

Standards Compliance for Kit: Side-mounted Handle Mechanism with Disconnect Switch
UL 98
CSA 22.2 No. 4

Certifications
UL Listed (File No. E119349, Guide WJAZ)
CSA Certified (File No. LR1234)
CE Marked

Certifications for Kit: Side-mounted Handle Mechanism with Disconnect Switch
UL Listed (File No. E 47426, Guide WHTY)
CSA Certified (File No. LR1234)

Product Overview

The Cat. No. 194R-SDK2 side-mounted handle provides NFPA 79 compliance with a bracketed switch and interlock system. The 194R-P rotary handle is mounted to the side of the enclosure and attaches to the 194R disconnect switch and interlock mechanism. The side handle remains connected to the switch and interlock mechanism at all times. This solution provides the single, side handle design with the NFPA 79 compliance of the secondary interlock. This kit is used with the 194R-P family of disconnect switch handles (sold separately).

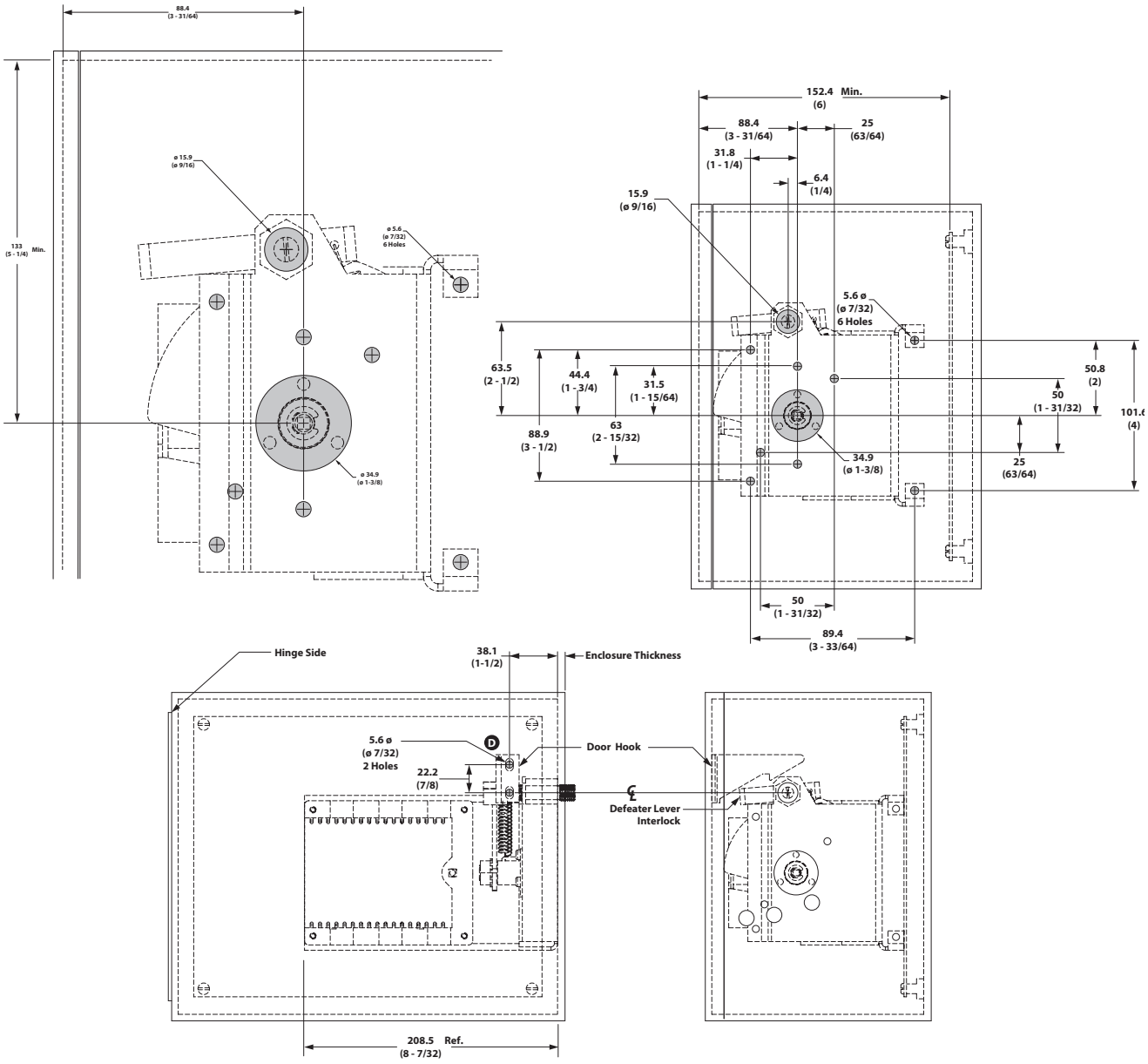
- Used with all 30/60 A fused and non-fused disconnect switches and Bulletin194R-P handles (both sold separately)
- Open switches
- Operating handle ingress ratings:
  - IP66 (Type 3R, 3, 12, 4, 4X)
- Padlockable handle

Product Selection

Description	For Use With	Cat. No.
Side-mounted kit (disconnect switch mechanism and bracket)	All Bul. 194R 30/60 A disconnect switches and Bul. 194R-P handles	194R-SDK2

Approximate Dimensions

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



Fuse Description

Proper Selection of Disconnect Switches—Applications Within Canada and the United States

General

The requirements for disconnect switches that are used in motor branch circuits rated 600V and less are defined in Article 430, Part J of the U.S. National Electrical Code (NEC), NFPA70. Canadian Electrical Code (CEC) requirements are similar in the area of motor branch circuit disconnect requirements. For simplicity, we treat the NEC and CEC requirements as being the same — and reference specific sections of the U.S. National Electrical Code.

The requirements for properly sizing a disconnect switch are dependent on the type of application. The NEC refers to two types of applications: single motor and combination loads. A combination load consists of an application where two or more motors are used together or where one or more motors are used in combination with other loads, such as resistance heaters.

Single Motor Applications

Section 430-110 Paragraph (a) states that the disconnect switch must have an ampere rating of at least 115% of the full-load current rating of the motor.

Example 1: For a motor with a full-load current of 22 A, the disconnect switch must be rated at least 25.3 A (22 x 1.15). If the disconnecting means under evaluation is rated in horsepower, the selection of the disconnect switch is even more straightforward; a disconnect switch must have a horsepower rating equal to, or greater than the horsepower rating of the motor at the applicable voltage.

Example 2: For a motor with a 10 Hp rating at 460V AC, the disconnect switch must be rated at least 10 Hp at 460V AC. If the disconnect switch is rated in horsepower, and UL Listed, UL Component Recognized, or CSA Certified, it meets the requirements for the 115% full load current rating stipulated by the NEC.

Combination Load Applications

Section 430-110 Paragraph (c) addresses the rating of the disconnecting means for combination loads. This paragraph essentially requires that the loads that "may be simultaneous on a single disconnecting means" be combined to provide equivalent full-load and locked-rotor currents for what is then to be considered as a single motor for the purpose of selecting the appropriate disconnecting means. This means that it is necessary to identify the particular combination of connected loads that can operate simultaneously and will result in the maximum full-load and locked-rotor current sums.

The individual full-load current values are to be selected from Tables 430-148, 430-149, or 430-150 and the locked-rotor values are to be from Table 430-151.

The equivalent single motor full-load current is the sum of the simultaneously operating motor full-load currents and the rating in amperes of other loads operating simultaneously. The equivalent locked-rotor current is the sum of the simultaneously started motors' locked-rotor currents and the full-load currents of the remaining operating motor and non-motor loads.

The disconnecting means shall have a current rating equal to or greater than 115% of the equivalent single motor full-load current and have a horsepower rating equal to or greater than the horsepower rating determined from the equivalent locked-rotor summation.

Consider the following 460V application:

Load	Hp	Full-Load Current [A]
Motor 1	5	7.6 (simultaneous)
Motor 2	10	14.0 (not included)
Motor 3	15	21.0 (simultaneous)
Motor 4	20	27.0 (simultaneous)
Other		7.0 (simultaneous)
Total Equivalent		62.6 (simultaneous)

Motor 2 is not included in the total since it cannot operate simultaneously with the other motors; therefore, the disconnect switch must be rated at least 72 A (1.15 x 62.6).

Consider now the locked-rotor current analysis for the same application:

Load	Hp	Full-Load Current [A]
Motor 1	5	(7.6FLA) 45.6 (simultaneous)
Motor 2	10	84.0 (not included)
Motor 3	15	126.0 (simultaneous)(1)
Motor 4	20	162.0 (simultaneous)(1)
Other		7.0 (simultaneous)
Total Equivalent		302.6 (simultaneous)

(1) The largest equivalent locked-rotor current occurs when motors 3 and 4 start together while the other loads marked "simultaneous" are already operating. Since Motor 1 is not starting with Motors 3 and 4, its full-load current is added to the total instead of its locked-rotor current.

Note again that Motor 2 cannot operate simultaneously with the other loads.

Table 430-151, which provides the correlation between locked-rotor currents and Hp ratings, shows that a 40 Hp rating is the equivalent for 302.6 locked-rotor amperes.

Therefore, the disconnect selected for this application must have a current rating of at least 72 A and a Hp rating of at least 40 Hp. In this case, a Bulletin 194R rated for 100 A and 60 Hp at 460V is an appropriate choice. What can be seen from this analysis is that, depending upon the number of motors that can start simultaneously, the actual size of the required disconnect is sometimes determined by the equivalent full load current (72 A) and other times by the equivalent horsepower determined from the locked rotor analysis (40 Hp).

Applications Outside the United States and Canada

General

Disconnect switches designed to IEC Standards and used in applications outside of North America are selected based on the ampere, horsepower, or kilowatt rating of the disconnect switch, under various utilization categories. Utilization categories for disconnect switches are as follows:

Nature of Current	Utilization Category		Typical Applications
	Frequent Operation	Infrequent Operation	
AC	AC-20A(1)	AC-20B	Connecting and disconnecting under no load conditions
	AC-21A	AC-21B	Switching of resistive loads including moderate overloads
	AC-22A	AC-22B	Switching of mixed resistive and inductive loads, including moderate overloads
	AC-23A	AC-23B	Switching of motor loads or other highly inductive loads

(1) The use of these utilization categories is not permitted in the U.S.

For any application, the disconnect switch rating (A. Hp, or kW) must be greater than or equal to the application full-load current or power (Hp or kW), in the appropriate utilization category.

Example 1: For a 380V 50 Hz distribution application (AC-22A), with a 63 A full load current, the disconnect switch must be rated at least 63 A at 380V 50 Hz for use in AC-22A applications.

Example 2: For a 415V 50 Hz motor application (AC-23A), with a 75 kW rating, the disconnect switch must be rated at least 75 kW at 415V 50 Hz for use in AC-23A applications.

Fuse Description

With Bulletin 194R Fused Disconnect Switches

Bulletin 194R Fused Disconnect Switches have been designed to accept various fuses for worldwide application flexibility.

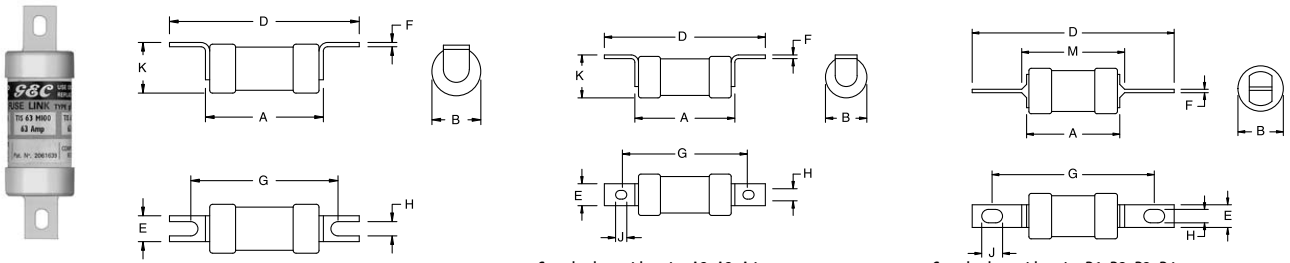
Following is a brief summary of typical fuse specifications, where the fuses are typically used, and which Bulletin 194R disconnect switches accommodate each fuse type. Fuse manufacturers should be contacted for more specific information about each fuse type. Fuses are not available from Rockwell Automation.

BS88 Fuses (63 A shown)

- IEC fuse type: Fuse-link for bolted connection
- Voltage rating: 660/690V AC
- Interrupting rating: 80 kA
- Standard cartridge sizes: A1, A2, A3, A4, B1, B2, B3, B4
- Typical ampere ratings: 2...400 A
- Construction: Blade type for bolted connection
- Can be installed on Bulletin 194R disconnect switch
- Where used: United Kingdom, Australia, New Zealand, Asia

Figure 29 - BS88 Fuse Dimensions

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



Standard cartridge size A1

Standard cartridge size A2, A3, A4

Standard cartridge size B1, B2, B3, B4

Dim. Ref	Current Range [A]	A	B	D	E	F	G	H	K
A1	2…20	36.50 (1-7/16)	13.90 (35/64)	55.60 (2-3/16)	11.10 (7/16)	0.80 (1/32)	4.50 (1-3/4)	4.40 (11/64)	14.30 (9/16)

Dim. Ref	Current Range [A]	A	B	D	E	F	G	H	J	K
A2	2…20	56.40 (2-7/32	23.80 (15/16)	85.80 (3-3/8)	8.70 (11/32)	1.20 (3/64)	73.00 (2-7/8)	5.20 (13/64)	7.10 (9/32)	23.80 (15/16)
A3	35…63	56.40 (2-7/32	23.80 (15/16)	85.80 (3-3/8)	8.70 (11/32)	1.20 (3/64)	73.00 (2-7/8)	5.20 (13/64)	7.10 (9/32)	23.80 (15/16)
A4	80…100	70.00 (2-3/4)	34.90 (1-3/8)	111.00 (4-3/8)	19.10 (3/4)	2.40 (3/32)	93.70 (3-11/ 32)	8.70 (11/32)	10.30 (13/32)	34.90 (1-3/8)

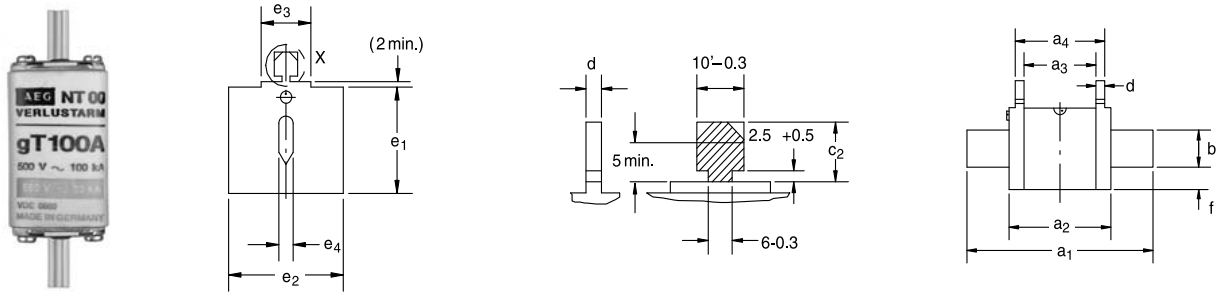
Dim. Ref	Current Range [A]	A	B	D	E	F	G	H	J	M
B1	2…20	70.00 (2-3/4)	34.90 (1-3/8)	136.50 (5-3/8)	19.10 (3/4)	3.20 (1/8)	111.00 (4-3/8)	8.70 (11/32)	11.90 (15/32)	79.40 (3-1/8)
B2	125…200	77.00 (3-1/32)	41.30 (1-5/8)	136.50 (5-3/8)	19.10 (3/4)	3.20 (1/8)	111.00 (4-3/8)	8.70 (11/32)	11.90 (15/32)	79.40 (3-1/8)
B3	250…315	83.00 (3-9/32)	54.00 (2-1/8)	136.50 (5-3/8)	25.40 (1)	3.20 (1/8)	111.00 (4-3/8)	8.70 (11/32)	11.90 (15/32)	82.00 (3-1/4)
B4	355…400	70.00 (2-3/4)	61.10 (2-13/32)	136.50 (5-3/8)	25.40 (1)	6.30 (1/4)	111.00 (4-3/8)	8.70 (11/32)	11.90 (15/32)	85.80 (3-3/8)

DIN Fuses (100 A shown)

- IEC fuse type: Fuse-link with blade contacts
- Voltage rating: 660/690V AC
- Interrupting rating: 120,000 A
- Standard cartridge sizes: 00, 0, 1 and 2
- Typical ampere ratings: 2...400 A
- Construction: Blade type
- Can be installed on Bulletin 194R disconnect switch
- Where used: Europe, South America, Middle East, and India

Figure 30 - DIN Fuse Dimensions

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



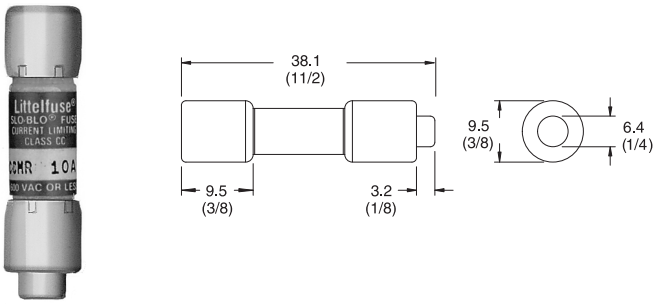
Size	Max. Rated Current [A]	a_1	a_2	a_3	a_4	b (min.)	d	e_1 (max.)	e_2	e_3	e_4 ±0.2	f
00	100	78.5 ± 1.5	53	45 ± 1.5	49 ±1.5	15	2 ±0.5	48	30	20 ±5	6	12.5
00	160	125 ±2.5	67	62 +3 –1.5	68 +1.5 –3	15	2 +1.5 –0.5	48	40	20 ±5	6	11.5
1	250	135 ±2.5	71	62 ±2.5	68 ±2.5	20	2.5 +1.5 –0.5	53	52	20 +5 –2	6	10
2	400	150 ±2.5	72	62 ±2.5	68 ±2.5	25	2.5 +1.5 –0.5	61	60	20 +5 –2	6	10

CSA HRCI and UL Class Fuses (10 A shown)

- UL fuse type: Class CC
- CSA fuse type: HRCI-MISC
- Voltage rating: 600V AC
- Interrupting rating: 200 000 A
- Standard cartridge sizes: 30 A
- Typical ampere ratings: 1...30 A
- Construction: Ferrule type
- Can be installed on Bulletin 194R disconnect switch
- Where used: North America

Figure 31 - CSA HRCI and UL Class Fuse Dimensions

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

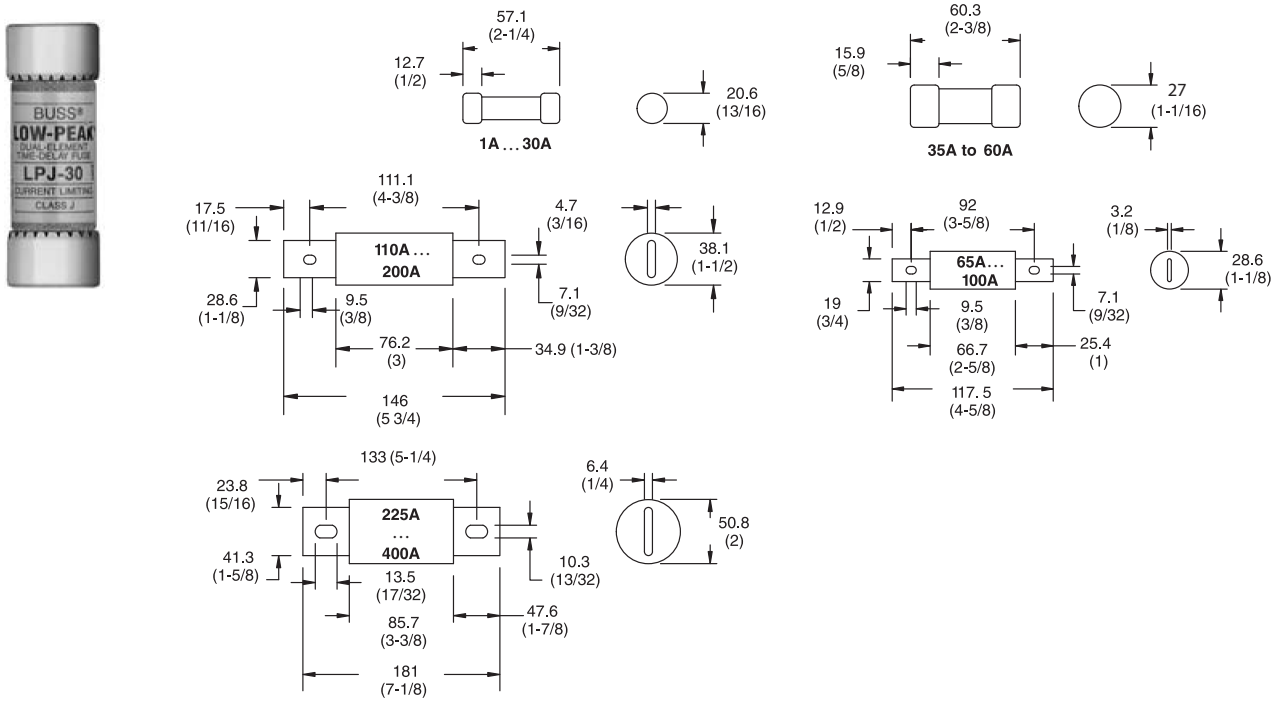


CSA HRCI and UL Class Fuses (30 A shown)

- CSA fuse type: HRCI-J
- UL fuse type: Class J
- Voltage rating: 600V AC
- Interrupting rating: 200 000 A
- Standard cartridge sizes: 30, 60, 100, 200, and 400 A
- Typical ampere ratings: 1...600 A; Blade type for bolted connection
- Can be installed on Bulletin 194R disconnect switch
- Where used: North America

Figure 32 - CSA HRCI and UL Class Fuse Dimensions (30 A)

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

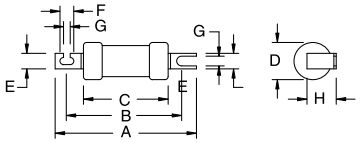


CSA HRCII Fuses (100 A shown)

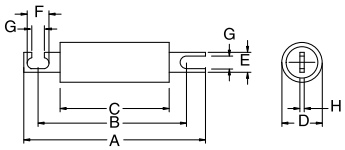
- CSA fuse type: HRCII-C
- Voltage rating: 600V AC
- Interrupting rating: 200 000 A
- Standard cartridge sizes: 30, 60, 100, 200, and 400 A
- Typical ampere ratings: 1...400 A
- Construction: Blade type for bolted connection
- Can be installed on Bulletin 194R disconnect switch
- Where used: Canada

Figure 33 - CSA HRCII Fuse Dimensions

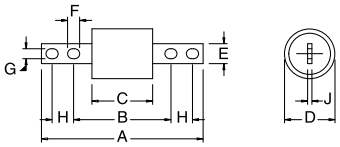
Dimensions in millimeters (inches). Dimensions are not intended to be used for manufacturing purposes.



Standard cartridge sizes 30, 60, and 100 A



Standard cartridge size 200 A



Standard cartridge size 400 A

Current Range [A]	A	B	C	D	E	F	G	H	J
0…30	84.14 (3-5/16)	71.04 (2-51/64)	50.8 (2)	20.64 (13/16)	8.73 (11/32)	7.54 (19/64)	5.56 (7/32)	23.81 (15/16)	1.59 (1/16)
31…60	88.9 (3-1/2)	71.04 (2-51/64)	50.8 (2)	20.64 (13/16)	12.7 (1/2)	7.54 (19/64)	5.56 (7/32)	26.99 (1-1/16)	1.59 (1/16)
61…100	109.54 (4-5/16)	92.47 (3-41/64)	60.72 (2-25/64)	34.13 (1-11/32)	19.05 (3/4)	11.91 (15/32)	8.73 (11/32)	34.93 (1-3/8)	2.38 (3/32)
101…200	134.94 (5-5/16)	109.14 (4-19/64)	76.2 (3)	38.1 (1-1/2)	19.05 (3/4)	11.91 (15/32)	8.73 (11/32)	3.18 (1/8)	—
201…400	207.96 (8-3/16)	133.35 (5-1/4)	76.2 (3)	60.33 (2-3/8)	25.4 (1)	12.7 (1/2)	9.53 (3/8)	25.4 (1)	4.76 (3/16)
401…600	207.96 (8-3/16)	133.35 (5-1/4)	76.2 (3)	76.2 (3)	25.4 (1)	15.08 (19/32)	10.32 (13/32)	25.4 (1)	9.53 (3/8)

Additional Resources

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

Resource	Description
Bulletin 194R/140U External Operating Handles Selection Guide, publication 194R-SG004B	Provides selection information and specifications for handles that are used on enclosed 194R products.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines for installing a Rockwell Automation industrial system.
Product Certifications website, rok.auto/certifications.	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.

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Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	www.rockwellautomation.com/global/support/direct-dial.page
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