

FUSERBLOC

FUSIBLE DISCONNECT SWITCHES



Ferraz Shawmut FUSERBLOC disconnect switches are extremely durable, manually operated, fusible disconnect switches. The switches employ double break contacts per pole that ensure complete isolation of the fuse when the switch is in the OFF position. With safety in mind, all FUSERBLOC switches are supplied with fuse covers and line side shrouding as a standard feature. These switches provide the ultimate in short circuit protection when used with Ferraz Shawmut's Class CC, J or L fuses.

These heavy-duty switches are designed with the most up-to-date disconnect fuse and switch technology available. Designed to meet the UL98 standard, the FUSERBLOC gives you the product that "makes and breaks" power circuits on load. FUSERBLOC switches are tested and approved for use in the most demanding applications, such as "Service Entrance". The optional TEST function (up to 400A) enables testing of the control circuit auxiliaries without switching the main contacts. This function provides a simple alternative to a separately wired push button. A wide array of handles are available to meet OSHA padlocking requirements, NEMA configurations, defeater options and NFPA 79 requirements.

HIGHLIGHTS:

- Double break contacts per pole up to 400 A
- Touch safe fuse covers/line shrouding standard
- Service Entrance Rated
- Compact Footprints
- Front operated switches
- Side operated switches
- Defeatable pistol handles automatically re-latch when panel door is closed - no tool necessary to reset latch
- Test positions available up to 400A
- External or direct operation handles
- Flange operation

APPLICATIONS:

- Service entrance or main panel disconnects up to 600VAC, 800A
- "Make and Break" power circuit applications on load
- Fusible isolation switches
- NFPA 79 Solutions

Ratings

- 600 VAC, 250VDC
- 30, 60, 100, 400, 600, and 800 amperes
- up to 200kA Short Circuit Rating with Class CC, J, or L Fuses

Approvals

- All FUSERBLOC switches meet the requirements of UL98
- UL Listed Guide WHTY, File E191605
- CSA C22.2 # 4 Class 4652 04, File 703166
- IEC 947-3 CE mark



Recommended fuse usage

FBCC use with ATDR*, ATMR, ATQR
 FBJ use with AJT, AJJ, HSJ
 FBL use with A4BQ, A4BY, A4BT

* Recommended for DC applications

FUSERBLOC

SIDE OPERATED FUSIBLE DISCONNECT SWITCHES

FUSERBLOC RANGE: Side operated Fusible Disconnect Switches from 30 to 400 A



SELECT A SWITCH

AMPERE RATING

CATALOG NUMBER: 3 POLE

CATALOG NUMBER: 4 POLE

FUSE CLASS

30	30	60
FBCC30S0	FBJ30S0	FBJ60S0
FBCC304S0	FBJ304S0	FBJ604S0
CC	J	J

FLANGE OPERATED HANDLE (Square D type - class 9422)



SELECT A HANDLE

NEMA TYPE	IEC TYPE	DEFEATABLE	PADLOCKABLE	CATALOG NUMBER ⁽¹⁾		
1, 3, 3R, 4, 12	IP54	YES	YES	HAF1 ⁽²⁾	HAF1 ⁽²⁾	HAF1 ⁽²⁾
4, 4X	IP65	YES	YES	HAF2 ⁽³⁾	HAF2 ⁽³⁾	HAF2 ⁽³⁾



SELECT A CABLE

CABLE LENGTH (inches/mm)	CATALOG NUMBER		
36 / 914.4	HAFC36	HAFC36	HAFC36
60 / 1524	HAFC60	HAFC60	HAFC60
120 / 3048	HAFC120	HAFC120	HAFC120

DIRECT OPERATION



SELECT A HANDLE

PADLOCKABLE	COLOR	CATALOG NUMBER		
YES	Black	HADB3	HADB4	HADB4

OPTIONS FOR FLANGE & DIRECT OPERATION HANDLE FROM 30 TO 60 A

		CATALOG NUMBER		
Terminal Lugs Kit	For 3 and 4 pole fuse switches	Integral	Integral	Integral
Terminal Shrouds	For 3 and 4 pole fuse switches	Integral	Integral	Integral
Shorting Links Kit	(3 links per kit - for 3 pole fuse switches)	—	—	—
Auxiliary Contacts ⁽⁴⁾	(1) NO + NC side mount contact block, A600-N600	AC5	AC5	AC5
	(2) NO + NC side mount contact blocks, A600-N600	AC6	AC6	AC6



SELECT A SWITCH

AMPERE RATING

CATALOG NUMBER: 3 POLE

CATALOG NUMBER: 4 POLE

FUSE CLASS

100	200	400
FBJ100S0	FBJ200S0	FBJ400S0
FBJ1004S0	FBJ2004S0	FBJ4004S0
J	J	J

FLANGE OPERATED HANDLE



SELECT A HANDLE

NEMA TYPE	IEC TYPE	DEFEATABLE	PADLOCKABLE	CATALOG NUMBER ⁽¹⁾		
1, 3, 3R, 4, 12	IP54	YES	YES	HAF1 ⁽²⁾	HAF1 ⁽²⁾	HAF1 ⁽²⁾
4, 4X	IP65	YES	YES	HAF2 ⁽³⁾	HAF2 ⁽³⁾	HAF2 ⁽³⁾



SELECT A CABLE

CABLE LENGTH (inches/mm)	CATALOG NUMBER		
36 / 914.4	HAFC36	HAFC36	HAFC36
60 / 1524	HAFC60	HAFC60	HAFC60
120 / 3048	HAFC120	HAFC120	HAFC120

DIRECT OPERATION



SELECT A HANDLE

PADLOCKABLE	COLOR	CATALOG NUMBER		
YES	Black	HADB4	HADB4	HADB4



OPTIONS FOR FLANGE & DIRECT OPERATION HANDLE FROM 100 TO 400 A

		CATALOG NUMBER		
Terminal Lugs Kit	(6 lugs per kit - for 3 pole fuse switches)	TL100	TL200	TL400
	(8 lugs per kit - for 4 pole fuse switches)	TL1004	TL2004	TL4004
3-pole Terminal Shrouds Kit ⁽⁵⁾	(for line or load side)	TS100FB	TS200FB	—
4-pole Terminal Shrouds Kit ⁽⁵⁾	(for line or load side)	TS1004FB	TS2004FB	—
3-pole Terminal Screen	(for line or load side)	—	—	TS400FB ⁽⁶⁾
4-pole Terminal Screen	(for line or load side)	—	—	TS4004FB ⁽⁶⁾
Shorting Links Kit	(3 links per kit - for 3 pole fuse switches)	SL100	SL200	SL400
Auxiliary Contacts ⁽⁴⁾	(1) NO+NC side mount contact block, A600-N600	AC5	AC5	AC5
	(2) NO+NC side mount contact blocks, A600-N600	AC6	AC6	AC6

(1) Flange handle includes the flange operator and the coupling mechanism to connect switch and cable together

(2) All external metal parts are sheet steel - (3) All external metal parts are either stainless steel or a chrome-plated non-ferrous die casting

(4) Two AC5 or one AC6 can be side mounted

(5) Line side Shrouding supplied as standard with switch

(6) As replacement part (two terminal screens supplied as standard with switch)

Note: Side-external handle and shaft available, consult with factory.

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FUSIBLE DISCONNECT SWITCHES FROM 30 TO 800 A

UL, cUL AND CSA TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number		FBCC30CDT	FBJ30CDT	FBCC30 / FBCC304 FBCC30T / FBCC304T FBCC30S0 / FBCC304S0	FBJ30 / FBJ304 FBJ30T / FBJ304T FBJ30S0 / FBJ304S0
Rating		30	30	30	30
Fuse type	A	CC	J	CC	J
Operating voltage	V	600	600	600	600
Max horsepower rating/ Max motor FLA current					
Three phase					
208 V		5/17.5	5/17.5	5/17.5	5/17.5
240 V		7.5/22	7.5/22	7.5/22	7.5/22
480 V		15/21	15/21	15/21	15/21
600 V		20/22	20/22	20/22	20/22
DC 125 V } 2 poles in series		3/25	3/25	3/25	3/25
DC 250 V } except (1)		5/20	5/20	5/20	5/20
Short circuit rating with fuses	kA	65	65	100	200
Branch circuit fuse type		CC	J	CC	J
Max fuse rating (A)		30	30	30	30
Dimension 3 pole (front operated switches)	H in	4.56	4.56	5.87	5.87
	W in	3.78	4.13	5.63	6.72
	D in	3.28	3.89	3.89	5.62
Shaft size square (front operated switches)	in	0.2 x 0.2	0.2 x 0.2	0.4 x 0.4	0.4 x 0.4
	mm	5 x 5	5 x 5	10 x 10	10 x 10
3-pole switch operating torque (front operation)	lb. in.	21	21	53	88
Terminal lugs kit (# of lugs per kit)		Integral	Integral	Integral	Integral
Wire range AWG (# of wire holes per lug)		#10-#14 (1)	#10-#14 (1)	#10-#14 (1)	#3-#10 (1)
Wire tightening torque	lb. in.	27	27	48	58

Catalog number		FBCC30CDT	FBJ30CDT	FBCC30 / FBCC304 FBCC30T / FBCC304T FBCC30S0 / FBCC304S0	FBJ30 / FBJ304 FBJ30T / FBJ304T FBJ30S0 / FBJ304S0
Rating	A	32 CD	32 CD	32	32
Rated Insulation voltage Ui (V)	V	800	800	750	750
Rated impulse voltage (Uimp)		8 kV	8 kV	8 kV	8 kV
Operating current Ie (A)					
400 V AC	AC 22A	32	32	32	32
	AC 23A	32	32	32	32
690 V AC	AC 22A	32	32	32	32
	AC 23A	32	32	32	32
Motor Power (kW)					
400 V AC	AC 23A	15	15	15	15
500 V AC	AC 23A	18.5	18.5	18.5	18.5
690 V AC	AC 23A	25	25	25	25
Max. peak let through current (gG)	kA peak	5.5	5.5	7.6	17.6
Connection					
Minimum Cu cable section	mm ²	6	6	6	6
Minimum CU busbar section	mm ²	—	—	—	—

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FUSIBLE DISCONNECT SWITCHES FROM 30 TO 800 A

UL, cUL AND CSA TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number	FBJ60 / FBJ604 FBJ60T / FBJ604T FBJ60S0 / FBJ604S0	FBJ100 / FBJ1004 FBJ100T / FBJ1004T FBJ100S0 / FBJ1004S0	FBJ200 / FBJ2004 FBJ200T / FBJ2004T FBJ200S0 / FBJ2004S0	FBJ400 / FBJ4004 FBJ400T / FBJ4004T FBJ400S0 / FBJ4004S0	FBJ600 / FBJ6004	FBL800 / FBL8004
Rating	60	100	200	400	600	800
Fuse type	J	J	J	J	J	L
Operating voltage	600	600	600	600	600	600
Max horsepower rating/ Max motor FLA current						
Three phase						
208 V	15/48.5	25/78.5	50/150	100/286	150/415	200/554
240 V	15/42	30/80	60/154	125/312	250/602	250/602
480 V	30/40	60/77	125/156	250/302	500/590	500/590
600 V	50/52	75/77	150/144	350/336	500/472	500/472
DC 125 V } 2 poles in series	3/25	7.5/58	15/112	20/148	—	—
DC 250 V } except (1)	10/38	20/38	40/140(1)	50/173(1)	—	—
Short circuit rating with fuses	200	200	200	200	200	200
Branch circuit fuse type	J	J	J	J	J	L
Max fuse rating (A)	60	100	200	400	600	800
Dimension 3 pole (front operated switches)	5.87	7.19	8.13	14.31	14.25	14.25
	6.72	8.26	9.44	11.93	17.18	17.18
	5.62	5.63	6	5.56	12.87	12.87
Shaft size square (front operated switches)	0.4 X 0.4	0.4 X 0.4	0.4 X 0.4	0.4 X 0.4	0.59 x 0.59	0.59 x 0.59
	10 x 10	10 x 10	10 x 10	10 x 10	15 x 15	15 x 15
3-pole switch operating torque (front operation)	88	88	106	132	350	350
Terminal lugs kit (# lugs per kit)	Integral	Optional (6)	Optional (6)	Optional (6)	Optional (6)	Optional (6)
Wire range AWG (# of wire holes per lug)	#3-#10 (1)	2/0-#14 (1)	3/0-#6 (1)	600 kcmil-#2 (2)	600 kcmil-#2 (2)	600 kcmil-#2 (3)
Wire tightening torque	58	120	200	500	500	500

(1) 3 pole in series

IEC 947-3 TECHNICAL CHARACTERISTICS FOR FRONT & SIDE OPERATION

Catalog number	FBJ60 / FBJ604 FBJ60T / FBJ604T FBJ60S0 / FBJ604S0	FBJ100 / FBJ1004 FBJ100T / FBJ1004T FBJ100S0 / FBJ1004S0	FBJ200 / FBJ2004 FBJ200T / FBJ2004T FBJ200S0 / FBJ2004S0	FBJ400 / FBJ4004 FBJ400T / FBJ4004T FBJ400S0 / FBJ4004S0	FBJ600 / FBJ6004	FBL800 / FBL8004
Rating	60	100	200	400	600	800
Rated Insulation voltage Ui (V)	750	750	750	800	1000	1000
Rated impulse voltage (Uimp)	8 kV	8 kV	8 kV	8 kV	12 kV	12 kV
Operating current Ie (A)						
400 V AC	63	100	200	400	630	800
	63	100	200	400	630	800
690 V AC	63	100	200	400	630	800
	63	100	200	250	630	630
Motor Power (kW)						
400 V AC	30	51	100	220	355	450
500 V AC	40	63	140	220	450	560
690 V AC	55	90	185	220	600	600
Max. peak let through current (gG)	17.6	22	32	36	77	77
Connection						
Minimum Cu cable section	10	25	50	185	2 x 150	—
Minimum CU busbar section	—	—	—	—	—	2 x 40 x 5

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SIDE OPERATED FUSIBLE DISCONNECT SWITCHES

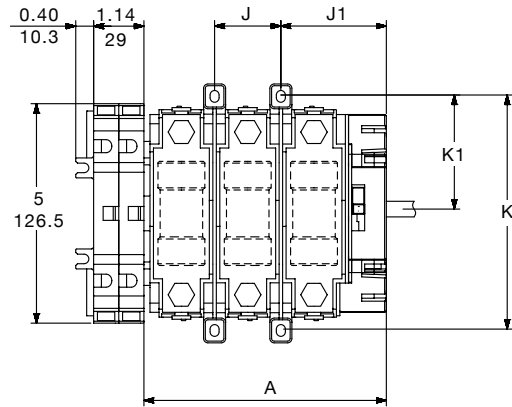
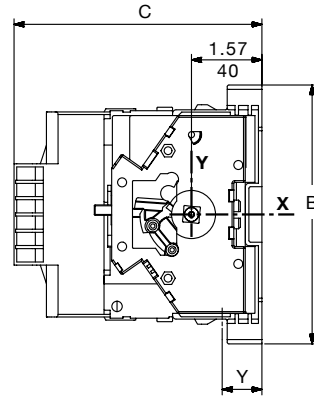
DIMENSIONS (dual dimensions: in/mm)

FUSERBLOC 30A CC - 30A J - 60A J

FBCC30SO / FBCC304SO

FBJ30SO / FBJ304SO

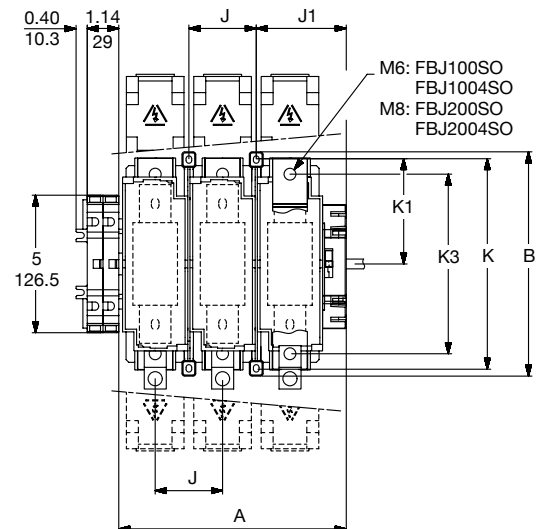
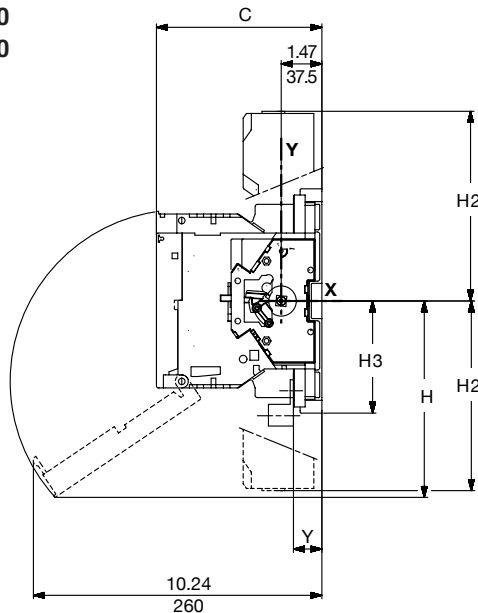
FBJ60SO / FBJ604SO



FUSERBLOC 100A J - 200A J

FBJ100SO / FBJ1004SO

FBJ200SO / FBJ2004SO



RATING	NUMBER OF POLES	A		B		C		H		H2		H3		J		J1		K		K1		K3		Y	
		In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
30A CC	3 P	4.37	111	5.87	149	3.89	99	—	—	—	—	—	—	1.14	29	1.97	50	5.31	135	2.63	66.5	—	—	1.21	31
	4 P	5.51	140																						
30A J	3 P	5.45	138.5	5.87	149	5.62	143	—	—	—	—	—	—	1.5	38	2.32	59	5.31	135	2.63	66.5	—	—	0.95	24.5
	4 P	6.95	176.5																						
60A J	3 P	5.45	138.5	5.87	149	5.62	143	—	—	—	—	—	—	1.5	38	2.32	59	5.31	135	2.63	66.5	—	—	0.95	24.5
	4 P	6.95	176.5																						
100A J	3 P	7.09	180	7.19	182.5	5.63	143	4.06	103	5.27	134	3.66	93	2.05	52	2.86	73	6.61	168	3.28	83.5	5.55	141	1	26
	4 P	9.13	232																						
200A J	3 P	9.47	240.5	8.13	206.5	6	152	7.27	184.5	6.87	174.5	4.79	122	2.44	62	4.47	113.5	7.56	192	3.75	95.5	6.53	166	1.03	26
	4 P	11.9	302.5																						

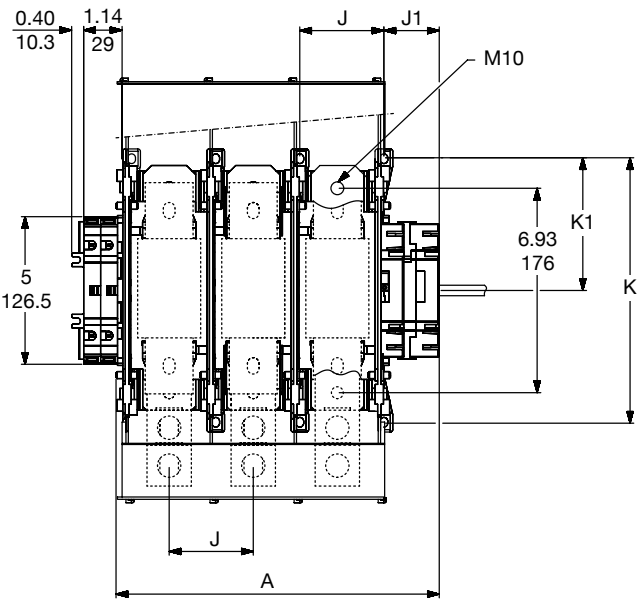
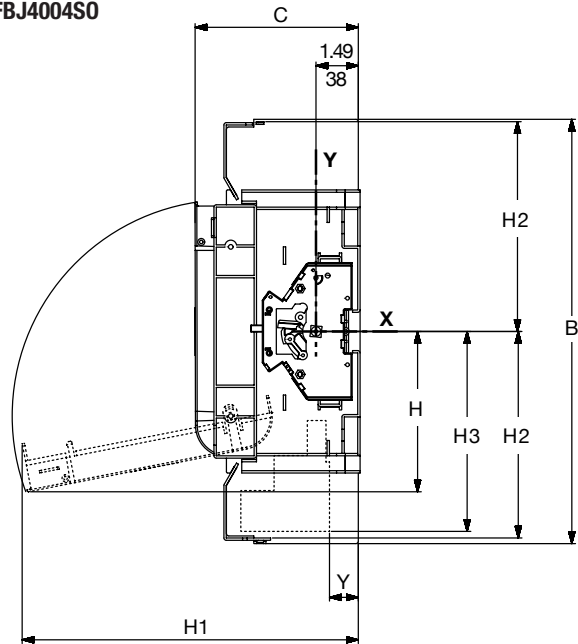
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SIDE OPERATED FUSIBLE DISCONNECT SWITCHES

DIMENSIONS (dual dimensions: in/mm)

FUSERBLOC 400A J

FBJ400SO
FBJ4004SO



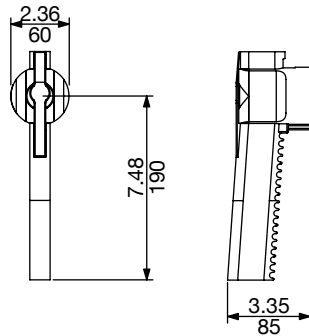
RATING	NUMBER OF POLES	A		B		C		H		H1		H2		H3		J		J1		K		K1		Y	
		In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm	In	mm
400A J	3 P	10.9	277	14.31	363.5	5.57	141.5	5.29	134.5	11.42	290	7.04	179	6.59	167.5	2.84	72	1.89	48	8.82	224	4.41	112	1.06	27
	4 P	13.74	349																						

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FUSIBLE DISCONNECT SWITCHES

PISTOL HANDLE TYPE H

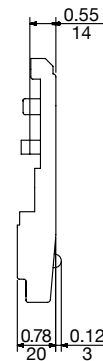
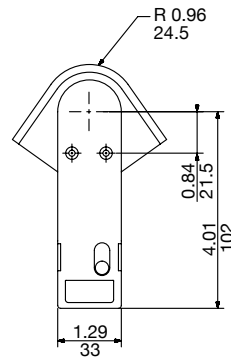
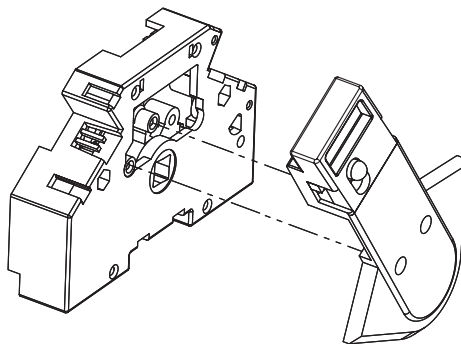
HADB5



HANDLES FOR DIRECT SIDE OPERATION

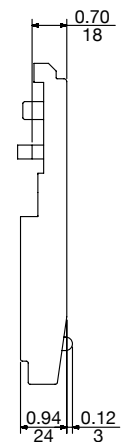
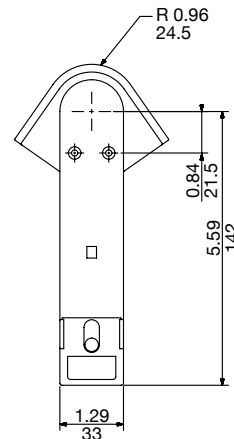
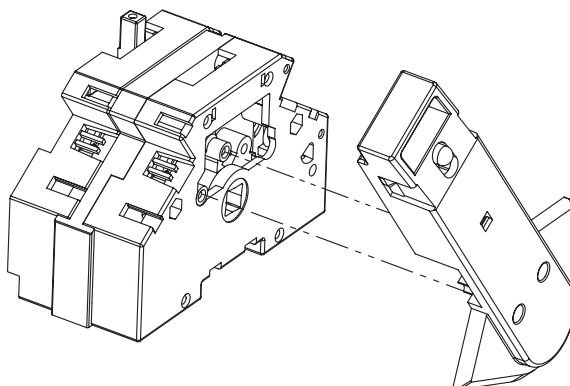
HANDLE TYPE F (SHORT VERSION)

HADB3



HANDLE TYPE F (LONG VERSION)

HADB4



FUSIBLE DISCONNECT SWITCHES

SQUARE D TYPE FLANGE HANDLE - CLASS 9422 (A1 & A2)



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