

# Fusible Disconnects

## FUSERBLOC Series



### Overview

Ferraz Shawmut FUSERBLOC fusible disconnect switches employ double break contacts per pole to isolate the fuse when the switch is in the OFF position. They are durable, manually operated, and supplied with fuse covers and line side shrouding as a standard safety feature. When used with AutomationDirect's Class CC or J fuses, these switches are tops in short circuit protection. Designed using the latest technology, they comply with UL 98 requirements. FUSERBLOC switches are tested

and approved for heavy duty applications, such as "service entrance" or main panel disconnects. Choose from a wide selection of handles meeting OSHA padlocking requirements, NEMA configurations, defeater options and NFPA 79 requirements.

### Features

- Double break contacts per pole up to 200 A
- Touch-safe fuse covers and line shrouding standard
- Service entrance rated
- Compact footprints
- Front operated switches
- Defeatable pistol handles automatically re-latch when panel door is closed - no tool necessary to reset latch
- External or direct operation handles.

### Applications

- Service entrance or main panel disconnects
- "Make and Break" power circuit applications on load
- Fusible isolation switches
- NFPA 79 Solutions

### Ratings

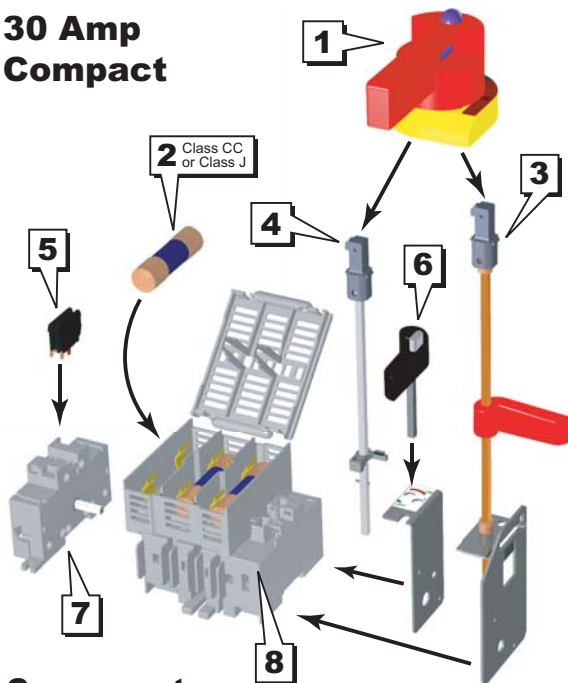
- 600 VAC, 250 VDC
- 30, 60, 100 and 200 Amperes
- Up to 200 kA short circuit rating with Class CC or J fuses

### Approvals

- All FUSERBLOC switches are UL 98 rated
- UL Listed Guide WHTY, File E191605
- CSA C22.2 # 4 Class 4652 04, File 703166
- IEC 947-3
- CE mark

### Components

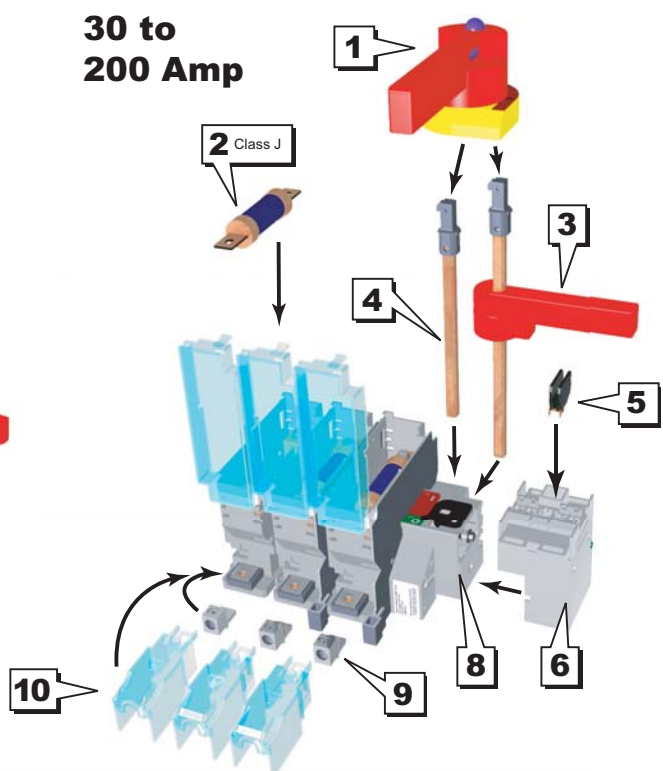
#### 30 Amp Compact



#### Components

- 1 – External Door Handle
- 2 – Fuse
- 3 – NFPA 79 Compliant Handle Option
- 4 – Standard Shaft

#### 30 to 200 Amp



- 5 – Auxiliary Contact Block
- 6 – Direct Mount Handle Option
- 7 – Auxiliary Contact Holder

- 8 – Disconnect Switch Body
- 9 – Terminal Lugs
- 10 – Terminal Shroud

# Fusible Disconnects

## FUSERBLOC Series Selection Guides

FUSERBLOC Series Front-operated Fusible Disconnects						
Style	Part Number	Price	Weight lb(kg)	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)
Compact	FBCC30CDT	<--->	1.3(0.60)	30	15 Hp @ 480V	50
	FBJ30CDT	<--->	1.3(0.60)	30	15 Hp @ 480V	50
Standard	FBJ30	<--->	4.9(2.20)	30	15 Hp @ 480V	200
	FBJ60	<--->	4.9(2.20)	60	30 Hp @ 480V	200
	FBJ100	<--->	6.2(2.80)	100	60 Hp @ 480V	200
	FBJ200	<--->	6.6(2.99)	200	125 Hp @ 480V	200

Ferraz Fusible Disconnects Component Selection Guide				
Part Number	Price	Weight lb(kg)	Description	Use With
SD200-5	<--->	0.2(0.09)	Operator shaft, type D, 7.9" (200 mm) length, 5x5 mm thick (purchase handle separately)	FBCC30CDT, FBJ30CDT
SD320-5	<--->	0.3(0.14)	Operator shaft, type D, 12.6" (320 mm) length, 5x5 mm thick (purchase handle separately)	FBCC30CDT, FBJ30CDT
SG120-5	<--->	0.15(0.07)	Operator shaft, type G, 4.7" (120 mm) length, 5x5 mm thick (purchase handle separately)	FBCC30CDT, FBJ30CDT
SG200-10	<--->	0.3(0.14)	Operator shaft, type G, 7.9" (200 mm) length, 10x10 mm thick (purchase handle separately)	FBJ30 thru FBJ200
SG200-5	<--->	0.2(0.09)	Operator shaft, type G, 7.9" (200 mm) length, 5x5 mm thick (purchase handle separately)	FBCC30CDT, FBJ30CDT
SG320-10	<--->	0.5(0.23)	Operator shaft, type G, 12.6" (320 mm) length, 10x10 mm thick (purchase handle separately)	FBJ30 thru FBJ200
SG320-5	<--->	0.2(0.09)	Operator shaft, type G, 12.6" (320 mm) length, 5x5 mm thick (purchase handle separately)	FBCC30CDT, FBJ30CDT
SG400-10	<--->	0.7(0.32)	Operator shaft, type G, 15.7" (400 mm) length, 10x10 mm thick (purchase handle separately)	FBJ30 thru FBJ200
HADB1	<--->	0.1(0.05)	Direct mount handle	FBCC30CDT
HADB2	<--->	0.2(0.09)	Direct mount handle	FBJ30CDT
HADB6	<--->	0.4(0.18)	Direct operation, optional handle, 12.415" (315.314 mm) long padlocking on the switch, NFPA 79 compliant	FBCC30CDT, FBJ30CDT
HADB8	<--->	0.4(0.18)	Direct operation, optional handle, 12.415" (315.314 mm) long padlocking on the switch, NFPA 79 compliant	FBJ30 thru FBJ200
HGPB	<--->	0.5(0.23)	Black Pistol handle, NEMA 12, 2.78" long, Type G, defeatable and lockable	FBCC30CDT, FBJ30CDT
HGPB4	<--->	0.6(0.27)	Black Pistol handle, NEMA 4X, 2.78" long, Type G, defeatable and lockable	FBCC30CDT, FBJ30CDT
HGPB4L	<--->	0.7(0.32)	Black long Pistol handle, NEMA 4X, 4.98" long, Type G long, defeatable and lockable	FBJ30 thru FBJ200
HGPBL	<--->	0.6(0.27)	Black long Pistol handle, NEMA 12, 4.98" long, Type G long, defeatable and lockable	FBJ30 thru FBJ200
HGPR	<--->	0.6(0.27)	Red and yellow Pistol handle, NEMA 12, 2.78" long, Type G, defeatable and lockable	FBCC30CDT, FBJ30CDT
HGPR4	<--->	0.6(0.27)	Red and yellow Pistol handle, NEMA 4X, 2.78" long, Type G, defeatable and lockable	FBCC30CDT, FBJ30CDT
HGPR4L	<--->	0.6(0.27)	Red and yellow long Pistol handle, NEMA 4X, 4.98" long, Type G long, defeatable/lockable	FBJ30 thru FBJ200
HGPRL	<--->	0.6(0.27)	Red and yellow long Pistol handle, NEMA 12, 4.98" long, Type G long, defeatable/lockable	FBJ30 thru FBJ200

Ferraz Fusible Disconnects Accessories Selection Guide				
Part Number	Price	Weight lb(kg)	Description	Use With
ACHCD	<--->	0.2(0.09)	Auxiliary contact holder	FBCC30CDT, FBJ30CDT
ACH	<--->	0.1(0.05)	Auxiliary contact holder	FBJ30 thru FBJ200
AC3	<--->	0.1(0.05)	Auxiliary contact for FUSERBLOC non-fused disconnect switches. <b>One N.O.</b> contact.10 A. 600 VAC	All FUSERBLOC switches
AC4	<--->	0.1(0.05)	Auxiliary contact for FUSERBLOC non-fused disconnect switches. <b>One N.C.</b> contact.10 A. 600 VAC	All FUSERBLOC switches
TL100	<--->	0.2(0.09)	Terminal lug kit, Aluminum, tin-plated, 2/0 to #14, 6 lugs per kit	FBJ100
TL200	<--->	0.4(0.18)	Terminal lug kit, Aluminum, tin-plated, 3/0 to #6, 6 lugs per kit	FBJ200
TS100FB*	<--->	0.15(0.07)	Terminal shroud kit, Use with 100 amp fusible switch, 3 per kit	FBJ100
TS200FB*	<--->	0.5(0.23)	Terminal shroud kit, Use with 200 amp fusible switch, 3 per kit	FBJ200

\*Note: Line side terminal shroud supplied standard with switch.

# Fusible Disconnects

## FUSERBLOC Series - Build a Complete Switch 30 Amp Compact

### STEP 1

Choose a switch body



#### Switch body

Ultra-Compact Switch Body	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)
<b>FBCC30CDT*</b>	30	15 Hp @ 480V	50
<b>FBJ30CDT*</b>	30	15 Hp @ 480V	50

\*Note: Lugs, shrouds and screens are integrated into these switches.

Use these fuses

Switch	Fuse Type	ADC Series Fuse	Current Range
<b>FBCC30CDT</b>	CC	EDCC	1-30
		HCTR	
		HCLR	
<b>FBJ30CDT</b>	J	JDL	1-30



### STEP 2

Choose a handle



#### Short handles

Handle	Description
<b>HDPB</b>	Pistol, Black, NEMA 1, 3R, 12, Type D
<b>HDPR</b>	Pistol, Red/yellow, NEMA 1, 3R, 12, Type D



#### Standard handles

Handle	Description
<b>HGPB</b>	Pistol, Black, NEMA 1, 3R, 12, Type G.
<b>HGPB4</b>	Pistol, Black, NEMA 4, 4X, Type G,
<b>HGPR</b>	Pistol, Red /yellow, NEMA 1, 3R, 12, Type G
<b>HGPR4</b>	Pistol, Red /yellow, NEMA 4, 4X, Type G

#### Direct handles

Handle	Description
<b>HADB1</b>	Direct mount handle for FBCC30CDT, Black
<b>HADB2</b>	Direct mount handle for FBJ30CDT, Black

#### NFPA 79 compliant handle

Optional Handle	Description
<b>HADB6</b>	NFPA 79-compliant, allows operation and padlocking the switch when door is open. Red. Shaft not required.

### STEP 3

Choose a shaft



#### Short handle shafts

Shaft	Description
<b>SD200-5</b>	Type D, 7.9" (200 mm) long
<b>SD320-5</b>	Type D, 12.6" (320 mm) long



#### Standard handle shafts

Shaft	Description
<b>SG120-5</b>	Type G, 4.7" (120 mm) long
<b>SG200-5</b>	Type G, 7.9" (200 mm) long
<b>SG320-5</b>	Type G, 12.6" (320 mm) long

**Shafts not used with direct handles**

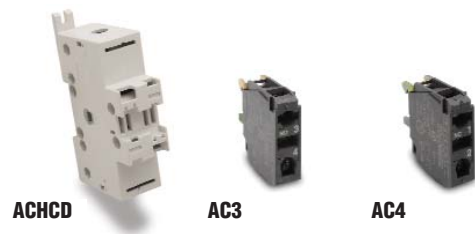
**Select a standard handle**

**Note: Short handles cannot be used with NFPA 79 compliant handle.**

### STEP 4

Choose your Accessories

Part Number	Description	Use With
<b>ACHCD</b>	Auxiliary contact holder. Maximum capacity: 4 switches. <b>REQUIRED</b> when using AC3 or AC4.	FBCC30CDT, FBJ30CDT
<b>AC3</b>	Auxiliary contact. <b>One N.O.</b> contact. 10 A. 600 VAC. <b>REQUIRES</b> ACHCD. Please purchase separately.	All FUSERBLOC switches
<b>AC4</b>	Auxiliary contact. <b>One N.C.</b> contact. 10 A. 600 VAC. <b>REQUIRES</b> ACHCD. Please purchase separately.	All FUSERBLOC switches



### STEP 1

Choose a switch body



#### Switch body

Switch	Ampere Rating	Hp @ Voltage	Interrupt Capacity (kA)
FBJ30*	30	15 Hp @ 480V	200
FBJ60*	60	30 Hp @ 480V	200
FBJ100**	100	60 Hp @ 480V	200
FBJ200***	200	125 Hp @ 480V	200

\*Note: Screws, shrouds and lugs integrated into switch

\*\*Note: Line side shroud included with this switch. Use terminal lug kit TL100 and TS100FB shroud, sold separately, for load side.

\*\*\*Note: Line side shroud included with this switch. Use terminal lug kit TL200 and TS200FB shroud, sold separately, for load side

#### Use these fuses

Switch	Fuse Type	ADC Series Fuse	Current Range
FBJ30	J	JDL	1-30
FBJ60	J	JDL	35 - 60
FBJ100	J	JDL	70 - 100
FBJ200	J	JDL	125 - 200

### STEP 2

Choose a handle



#### Standard handles

Handle	Description
HGPBL	Pistol, Long Black, NEMA 1, 3R, 12; 4.98" long, Type G
HGPB4L	Pistol, Long Black, NEMA 4, 4X, 4.98" long, Type G
HGPR4L	Pistol, Long Red/yellow NEMA 1, 3R, 12; 4.98" long, Type G
HGPR4L	Pistol, Long Red/yellow NEMA 4, 4X, 4.98" long, Type G



#### NFPA 79 compliant handle

Optional Handle	Description
HADB8	NFPA 79-compliant, allows operation and padlocking the switch when door is open. Red. Shaft not required.

### STEP 3

Choose a shaft



#### Standard handle shafts

Shaft	Description
SG200-10	Type G, 7.9" (200 mm) long
SG320-10	Type G, 12.6" (320 mm) long
SG400-10	Type G, 15.7" (400 mm) long

Select a standard shaft

### STEP 4

Choose your Accessories



ACH



AC3



AC4



TL100



TL200



TS100FB



TS200FB

Part Number	Description	Use With
ACH	Auxiliary contact holder. Maximum capacity: 8 switches. <b>REQUIRED</b> when using AC3 or AC4.	FBJ30 thru FBJ200
AC3	Auxiliary contact. <b>One N.O.</b> contact. 10 A. 600 VAC. <b>REQUIRES</b> ACH. Please purchase separately.	All FUSERBLOC switches
AC4	Auxiliary contact. <b>One N.C.</b> contact. 10 A. 600 VAC. <b>REQUIRES</b> ACH. Please purchase separately.	All FUSERBLOC switches
TL100	Terminal lug kit, Aluminum, tin-plated, 2/0 to #14, 6 lugs per kit	FBJ100
TL200	Terminal lug kit, Aluminum, tin-plated, 3/0 to #6, 6 lugs per kit	FBJ200
TS100FB*	Terminal shroud kit, Use with 100 amp fusible switch, 3 shrouds per kit. Use on line or load side.	FBJ100
TS200FB*	Terminal shroud kit, Use with 200 amp fusible switch, 3 shrouds per kit. Use on line or load side.	FBJ200

\*Note: Line side terminal shroud supplied standard with switch.

# Fusible Disconnects

## FUSERBLOC Series Specifications

FUSERBLOC Fusible Disconnects Technical Specifications According to UL 508, cUL and CSA							
<b>Specifications</b>							
<b>Part Number</b>	<b>FBCC30CDT</b>	<b>FBJ30CDT</b>	<b>FBJ30</b>	<b>FBJ60</b>	<b>FBJ100</b>	<b>FBJ200</b>	
<b>Price</b>	<--->	<--->	<--->	<--->	<--->	<--->	<--->
<b>Rated Operating Voltage (VAC)</b>	600	600	600	600	600	600	
<b>Short Circuit Rating (kA)</b>	50	50	200	200	200	200	
<b>Fuse Type (if fusing separately)</b>	CC	J	J	J	J	J	
<b>Fuse Rating (A) (if fusing separately)</b>	30	30	30	60	100	200	
<b>Maximum UL Horsepower/Maximum Motor FLA Current, Three Phase</b>							
<b>208V</b>	5/17.5	5/17.5	5/17.5	15/48.5	25/78.5	50/150	
<b>240V</b>	7.5/22	7.5/22	7.5/22	15/42	30/80	60/154	
<b>480V</b>	15/21	15/21	15/21	30/40	60/77	125/156	
<b>600V</b>	20/22	20/22	20/22	50/52	75/77	150/144	
<b>DC 125V</b>	3/25	3/25	3/25	3/25	7.5/58	15/112 <sup>1</sup>	
<b>DC 250V</b>	5/20	5/20	5/20	10/38	20/38	40/140 <sup>1</sup>	
<b>Switch Operating Torque lb-in</b>	21	21	88	88	88	106	
<b>Wire Size Range AWG (# wire holes per lug)</b>	#10 - #14 (1)	#10 - #14 (1)	#3 - #10 (1)	#3 - #10 (1)	2/0 #14 (1)	3/0 #6 (1)	
<b>Terminal Lugs Kit (# of lugs per kit)</b>	Integral	Integral	Integral	Integral	Optional (6)	Optional (6)	
<b>Wire Tightening Torque lb-in</b>	27	27	58	58	120	200	
<b>Net Weight lb(kg)</b>	1.3(0.60)	1.3(0.60)	4.9(2.20)	4.9(2.20)	6.2(2.80)	6.6(2.99)	

Note 1: 3 pole in series

IEC 947-3 Technical Specifications for Front Operation								
<b>Part Number</b>	<b>Unit</b>	<b>FBCC30CDT</b>	<b>FBJ30CDT</b>	<b>FBJ30</b>	<b>FBJ60</b>	<b>FBJ100</b>	<b>FBJ200</b>	
<b>Rating</b>	A	32CD	32CD	32	60	100	200	
<b>Rated Insulation Voltage Ui (V)</b>	V	800	800	750	750	750	750	
<b>Rated Impulse Voltage (Uimp)</b>	kV	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV	
<b>Operation Current Ie (A)</b>								
	<b>*IEC Utilization Category</b>	<b>Unit</b>						
<b>400 VAC</b>	AC 22A	A	32	32	32	63	100	200
	AC 23A	A	32	32	32	63	100	200
<b>690 VAC</b>	AC 22A	A	32	32	32	63	100	200
	AC 23A	A	32	32	32	63	100	200
<b>Motor Power (kW)</b>								
<b>400 VAC</b>	AC 23A	A	15	15	15	30	51	100
<b>500 VAC</b>	AC 23A	A	18.5	18.5	18.5	40	63	140
<b>690 VAC</b>	AC 23A	A	25	25	25	55	90	185
<b>Max. Peak Let-through Current (gG)</b>	kA peak	5.5	5.5	17.6	17.6	22	32	
<b>Connection</b>								
<b>Minimum Cu cable section</b>	mm <sup>2</sup>	6	6	6	10	25	50	
<b>Minimum CU busbar section</b>	mm <sup>2</sup>	—	—	—	—	—	—	

\*Note: See Appendix for IEC utilization categories.