

# Fusible Disconnect switches



## Fusible disconnect switches 30A – 1200A, 600VAC

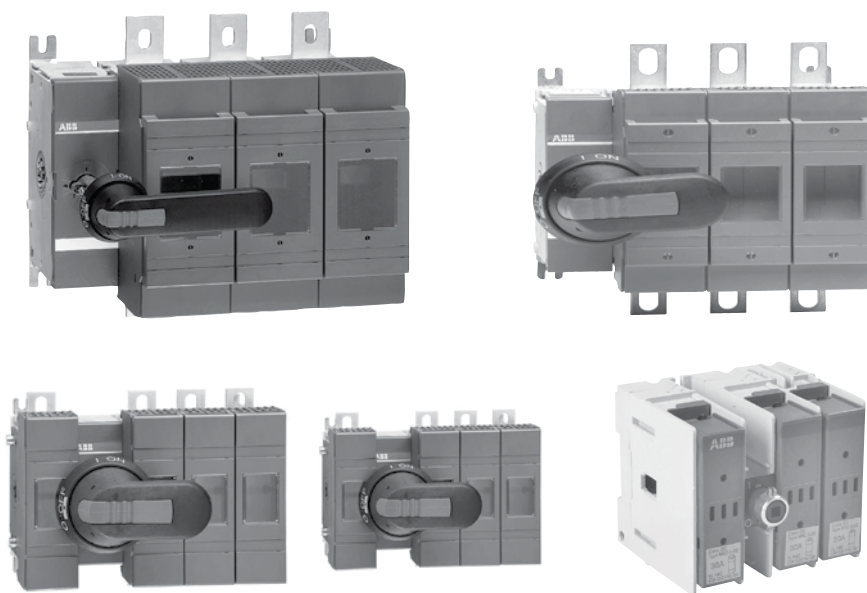


ABB PowerLine includes seven different amperage sizes from 30A to 1200A. All ABB fusible switches are designed to meet customer requirements in terms of high interrupting capacity and long electrical life while occupying little more panel space than the appropriate fuses. The basic construction provides flexibility and high performance in an extremely compact size. ABB PowerLine switches are a perfect choice to withstand the heat and humidity of the tropics, the extreme cold of the arctic and any rugged industrial environment you may have.

### International acceptance

ABB fusible switches are available with a wide range of fuse clip options:

UL	USA	CSA	Canada
DIN	Europe	BS	United Kingdom
NFC	France	Ultra-rapid	

As well as the corresponding approvals: UL listed, CSA approved, IEC rated, CE marked, and most other international standards.

**UL98 (CSA 22.2 No.4)** – UL File # E101914, CSA File #LR58077

*For 30A – 1200A switches, OH\_\_ pistol grip handles*

Suitable for use as motor disconnects or industrial control panel disconnects on service entrance equipment, panelboards, switchboards, industrial control equipment, motor control centers, etc. and are horsepower rated and ampere rated.

### IEC

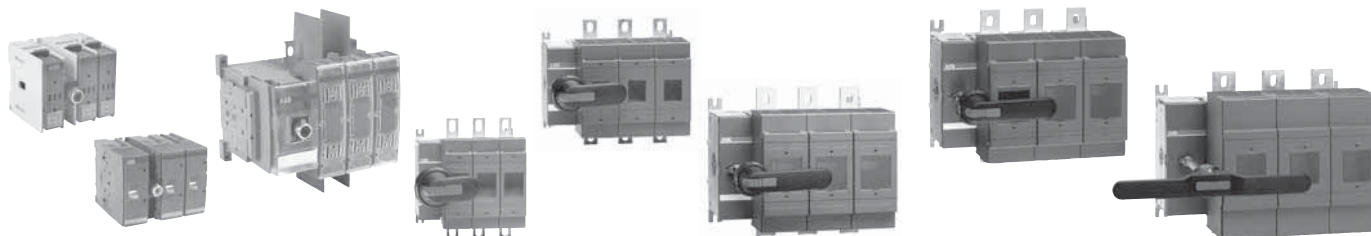
Tested in accordance to IEC 947-1 and 3, IEC 664, IEC 269, and IEC 204

### CE

Compliance with the European Machine Directive IEC 204 (EN 60204)

## Selection guide

### OS30FACC12 – OS1200L03



OS30FA\_12 OS60J12

OS100J03

OS200J03

OS400J03

OS600J03

OS800L3

OS1200L03

Catalog number 3 pole			OS30FACC12	OS30FAJ12	OS60GJ12	OS100GJ03	OS200J03	OS400J03	OS600J03	OS800L3	OS1200L03	
General purpose amp rating			A	30	30	60	100	200	400	600	800	1200
Approvals ①			2 pole 3 pole 4 pole	N/A UL98 & IEC UL98 & IEC	N/A UL98 & IEC UL98 & IEC	N/A UL98 & IEC UL98 & IEC	UL98 & IEC UL98 & IEC UL98 & IEC	UL98 & IEC UL98 & IEC UL98 & IEC	UL98 & IEC UL98 & IEC UL98 & IEC	UL98 & IEC UL98 & IEC UL98 & IEC	UL98 & IEC UL98 & IEC UL98 & IEC	
Technical ratings (UL, CSA)												
Max operating voltage			V	600	600	600	600	600	600	600	600	
Max horsepower rating												
Three phase												
	240V	HP	7.5	7.5	15	30	60	125	200	250	—	
	480V	HP	15	15	30	60	125	250	400	500	—	
	600V	HP	20	20	50	75	150	350	500	600	—	
Single phase												
	120V	HP	2	2	—	—	—	—	—	—	—	
	240V	HP	3	3	—	—	—	—	—	—	—	
UL fuse class				CC	J	J	J	J	J	L	L	
Technical ratings (IEC)												
Rated insulation and operational voltage. AC20 and DC20			V	1000	1000	1000	1000	1000	1000	1000	1000	
Rated thermal current, I <sub>th</sub>												
	AC 20/DC 20	open	A	32	32	63	160	200	400	630	800	
	AC 20/DC 20	enclosed	A	32	32	63	160	200	400	600	720	
	AC 21A	≤500V	A	32	32	63	160	200	400	630	800	
		≤690V	A	32	32	63	160	200	400	630	800	
Rated operational power AC23												
	400/415V	kW	14/15	14/15	30	80/90	110	220/230	355	350/380	560	
	690V	kW	25	25	60	132	200	400	560	600	1000	
Physical characteristics												
Weight												
	3 pole switch	lb	1.54	1.54	2.86	3.30	5.9	12.56	28.66	37.44	63.93	
	4 pole	lb	1.98	1.98	3.52	3.96	7.5	15.21	37.48	46.26	—	
Dimension												
	3 pole	H in	3.66	3.60	3.94	5.67	6.5	9.29	12.03	12.03	16.7	
		W in	4.15	4.15	5.63	7.07	7.1	10.04	13.86	13.86	16.42	
		D in	4.10	4.10	5.04	5.10	5.2	6.93	9.18	9.18	11.62	
Accessories												
Double break contacts				S	S	S	S	S	S	S	S	
Fuse cover				S	S	S	S	S	S	S	S	
Terminal lug kit				Integral	Integral	Integral	OZXA-24	OZXA-200	OZXA-400	OZXA-800	OZXA-1200	
Terminal shroud				Not required	Not required	Not required	●	●	●	●	●	
Auxiliary contact				●	●	●	●	●	●	●	●	
Shaft/handle diameter				6mm .24 x .24"	6mm .24 x .24"	6mm .24 x .24"	6mm .24 x .24"	6mm .24 x .24"	12mm .47 x .47"	12mm .47 x .47"	12mm .47 x .47"	
Handle UL/NEMA type												
	Type 1, 3R, 12		●	●	●	●	●	●	●	●	●	
	Type 1, 3R, 4, 4X, 12		●	●	●	●	●	●	●	●	●	
Recommended pistol handle length				45 - 65mm	45 - 65mm	45 - 65mm	45 - 65mm	65 - 80mm	125 - 175mm	125 - 175mm	125 - 175mm	
Maximum recommended shaft length				290mm	290mm	290mm	290mm	290mm	595mm	595mm	595mm	
Electrical interlock				—	—	—	—	—	●	●	●	

S = Standard  
• = Available  
— = Not available

① UL listed switches are also CSA approved.

## Selection information

Disconnect  
switches  
Fusible

### Standard part number designation ①

#### Fusible OS Switches (30A)

**OS 30 F A J 22 F**

**Amperage**  
30 = 30 amps

**Fuse Type/Class**  
J = Class J fuse compatible      CC = Class CC fuse compatible

**Number of poles and placement of the mechanism**  
12 = 1 Pole to the left of mechanism, 2 poles to the right of mechanism  
22 = 2 Poles to the left of mechanism, 2 poles to the right of mechanism

#### Fusible OS Switches (60 to 100A)

**OS 100G J 03**

**Amperage**  
60 = 60 amps      100 = 100 amps

**Fuse Type/Class**  
J = Class J fuse compatible

**Number of poles and placement of the mechanism**  
03 = 3 Poles to the right of mechanism      04 = 4 poles to the right of mechanism

#### Fusible OS Switches (200A and above)

**OS 200 J 04 F**

**Amperage**  
200 = 200 amps      400 = 400 amps      600 = 600 amps      800 = 800 amps      1200 = 1200 amps

**Fuse Type/Class**  
J = Class J fuse compatible

**Number of poles and placement of the mechanism**  
03 = 3 Poles to the right of mechanism      04 = 4 poles to the right of mechanism  
12 = 1 Pole to left of mechanism, 2 poles to right      22 = 2 Poles to left of mechanism, 2 poles to right  
30 = 3 Poles to the left of mechanism      40 = 4 Poles to the left of mechanism

#### Pistol Handles

**O H B 65 J 6 E011**

**Handle Color**  
B = Black      Y = Red/Yellow      M = Stainless Steel

**Handle Length**  
65 = 65mm      80 = 80mm      125 = 125mm      145 = 145mm      175 = 175mm      274 = 274mm      275 = 275mm      330 = 330mm

**Environmental Rating**  
J = 1, 3R, 12      L = 1, 3R, 12, 4, 4X

**Shaft Diameter**  
6 = 6mm      12 = 12mm

**Special Configuration**  
E011 = 3 position transfer switch handle  
EH = Stainless Steel Hasp

① Part designation keys are provided for reference only. Not all variations or configurations are available.

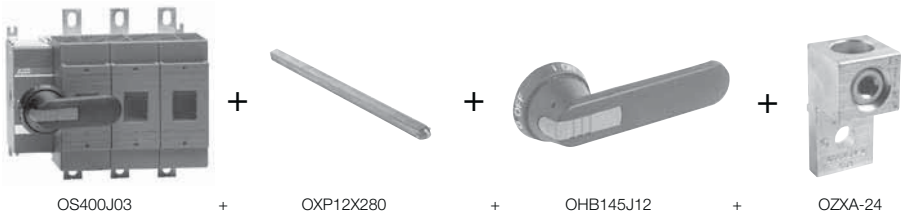
Base & DIN rail mounted  
30 – 1200A

For a complete assembly, please select  
one of each:

- 1 switch (page 19.22)
- 1 handle (page 19.30)
- 1 shaft (page 19.32)
- 1 terminal lug kit (page 19.34)

NOTE: For additional accessories, see  
pages 19.29 - 19.42.

(Only required for 100A & above.)



	UL general purpose amp rating	UL Fuse Type 600V	2 Pole	3 Pole	4 Pole
			Catalog number	Catalog number	Catalog number
UL 98	30	J CC ①	—	OS30FAJ12 OS30FACC12	OS30FAJ22F OS30FACC22F
	60	J	—	OS60GJ12 ② OS60GJ03	OS60GJ22F
	100	J	—	OS100GJ12 ② OS100GJ03 ②	OS100GJ04F
	200	J	OS200J02	OS200J03 OS200J30 OS200J12	OS200J04F OS200J13F OS200J22F
	400	J	OS400J02	OS400J03 OS400J30 OS400J12	OS400J04F
	600	J	OS600J02	OS600J03 OS600J30 OS600J12	OS600J04F
	800	L	OS800L02	OS800L03	OS800L04F
	1200	L	OS1200L02	OS1200L03	OS1200L04F

① Rejection style fuses only.  
② Din Rail Mountable: 60A & 100A requires Din Rail Adapter OSGZD1

## Other configurations

### Side operated

### 30A – 400A, UL fuse class J,CC

For a complete assembly,  
please select one of each:

- 1 switch
- 1 handle
- 1 shaft
- 1 terminal lug



OS30FAJS30

+



OXP6X170

+



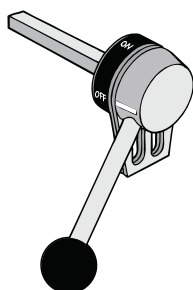
OHY65L6E00S



OS60GJS30



OS100GJS30



OETL-ZX74



OZXA-24

### Side operated switches — 3 pole

UL general purpose amp rating	UL fuse type 600V	Maximum horsepower rating					Weight (Lbs.)	Catalog number
		Three phase						
		200V	208V	240V	480V	600V		
30	J	5	7.5	7.5	15	20	1.54	OS30FAJS30
30	CC	5	7.5	7.5	15	20	1.54	OS30FACCS30
60	J	15	15	15	30	50	3.52	OS60GJS30
100	J1	25	25	30	60	75	3.97	OS100GJS30
200	J1	50	50	60	125	150	15.21	OES200J3-S
400	J1	100	100	125	250	350	17.20	OES400J3-S

### Handles

UL/NEMA type	IEC type	Color	Length (Inches/mm)	Marking	Defeatable	Padlockable	Weight	Catalog number
<b>For use with OS30A_S30</b>								
1, 3R, 12	IP65	Black Red/Yel	2.6/65	OFF/ON	Yes	Yes	0.29	OHB65J6E00S OHY65L6E00S
<b>For use with OS60GJS30, OS60JS30 &amp; OS100GJS30</b>								
1, 3R, 12	IP65	Black Red/Yel	3.1/80	OFF/ON	Yes	Yes	0.30	OHB80J6E00S OHY80J6E00S
<b>For use with OES200J3-S &amp; OES400J3-S</b>								
1, 3R, 12	IP65	Black Red/Yel	4.9/145	OFF/ON	Yes	Yes	0.39	OHB145J12E00S OHY145J12E00S
		Metal			No	Yes	1.50	OETL-ZX74

### Shaft

For use with:	Length (Inches/mm)	Description	Weight (Lbs.)	Catalog number
OS30AJS30 & OS30ACCS30	6.7/170	.20 x .20" (5 x 5mm)	0.08	OXP6X170
OS60GJS30 & OS100GJS30	8.3/210	.24 x .24" (6 x 6mm)	0.10	OXP6X210
OES200J3-S & OES400J3-S	12.8/325	.47 X .47" (12 X 12mm)	0.90	OXP12X325

### Terminal lug kits

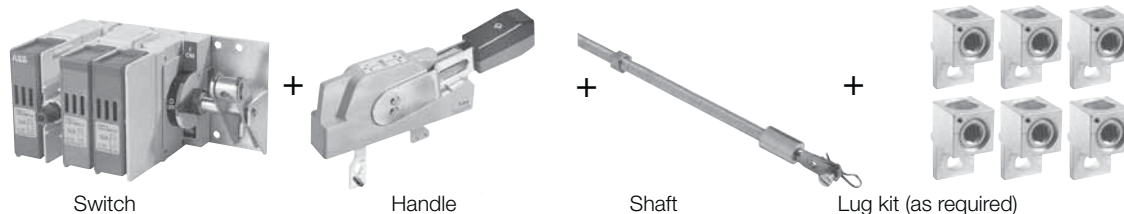
For use with:	Wire size	Weight	Wire type	Lugs per kit	Catalog number
OS30AJS30 & OS30ACCS30	#18 – 8	—	Cu	—	Integral
OS60GJS30	#14 – 4	—	Cu	—	Integral
OS100GJS30	#14 – 2/0	0.43	Cu/Al	6	OZXA-24
OES200J3-S	#6 – 300 kcmil	0.93	Cu/Al	6	OZXA-25
OES400J3-S	#2 – 600 kcmil	3.50	Cu/Al	6	OZXA-26

## Special configurations

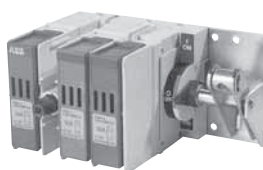
### Shaft operated flange

### 30A - 100A

For a complete assembly, please select one of each.



#### 30A -100A Flange operated fusible switches (Shaft) — 3 pole



OS30FAJF30

UL general purpose amp rating A	UL fuse type 600V	Maximum horsepower rating			Catalog number
		Three phase			
		240V	480V	600V	
30	J	7.5	15	20	OS30FAJF30
30	CC	7.5	15	20	OS30FACCF30
60	J	15	30	50	OS60GJF30
100	J	30	60	75	OS100GJF30

#### Flange handles



DSFH-HS\_

UL/ NEMA type	Marking	Defeatable	Padlockable	Catalog number
1, 3R, 12	OFF/ON	Yes	Yes	DSFH-HS12
4, 4X	OFF/ON	Yes	Yes	DSFH-HS4

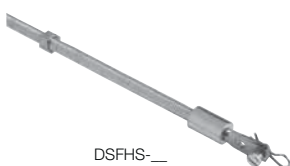
#### Shafts



DSFHS\_

For use with:	Maximum enclosure depth (inches)	Catalog number
OS30_ - OS100_	16 21 26.5	DSFHS-12 DSFHS-17 DSFHS-22

#### Terminal lug kits and accessories



DSFHS\_

For use on:	Description	Wire size	Wire type	Qty.	Catalog number
OS30_ OS60_ OS100_	Lug Lug Lug	#18 - #8 #14 - #4 #14 - 2/0	Cu Cu Cu/Al	-- -- 6	Integral Integral OZXA-24
OS30_ - OS100_	Aux. Contact Aux. Contact	1 NO 1 NC		1 1	OA1G10 OA3G01
OS30_	Adapter	Needed for mounting aux. Contacts on OS30_		1	OSZ4
OS100_	Shroud	Includes one set of 3 for use on line or load side		1	OSS160T3

#### Door hardware NEMA 12



OZXA-24

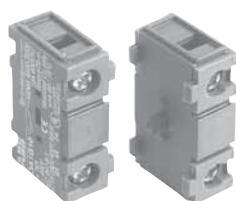
Item	Catalog number
Safety door latch, 2 point, door less than 40" high	KDH2R
Safety door latch, 3 point, door greater than 40" high	KDH3R

#### Flange operated fusible and non-fusible disconnect switches

ABB's solution for complying with the NFPA79 requirements is Flange Operated Fusible and Non-fusible Disconnect Switches. NFPA 79 changes requires main disconnecting means to be operable without the use of accessory tools or devices, independent of door position. This code also includes an interlocking provision to prevent the closing of disconnects while the enclosure door is open, unless an interlock is operated by a deliberate action.

The flange operated disconnect switches are available as ridged shaft or flexible cable operated versions. The cable operated version allows you to install the disconnect switch virtually anywhere in the enclosure depending on the length of the cable. Cables are available in lengths up to 84 inches.

The designs are cost-effective NFPA 79 solutions offering quick and easy installation.



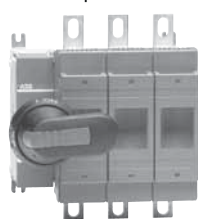
OA1G\_

## Special configurations

### Cable operated flange

### 30A - 800A

For a complete assembly, please select one each of the following:



Switch



Handle



Cable

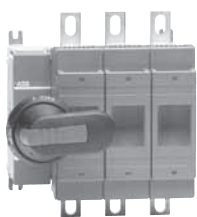


Lug kit (as required)



Operating mechanism

#### Fusible



OS200J03

UL general purpose amp rating	UL fuse type 600V	Catalog number
30	J	OS30FAJ12
30	CC	OS30FACC12
60	J	OS60GJ30
100	J	OS100GJ30
200	J	OS200J30
400	J	OES400J3-FC
600	J	OES600J3-FC
800	L	OES800L3-FC

#### Flange handles — UL98; File #E101914



OHF1C12

For use with:	Environmental rating	Catalog number
OS30_12, OS60J12, OS100AJ30, OS200J30	NEMA 1, 3R, 12	OHF1C12
	NEMA 4, 4X	OHF1C4
OES400_, OES600_, OES800_	NEMA 4, 4X	K7FCH4

#### Flexible cables



OXC1L36-  
OXC1L84

For use with:	Cable length (inches)	Catalog number
OS30_12, OS60J12, OS100AJ30, OS200J30	36	OXC1L36
	48	OXC1L48
	60	OXC1L60
	72	OXC1L72
	84	OXC1L84
OES400_, OES600_, OES800_	48	K7C048
	60	K7C060
	72	K7C072
	84	K7C084

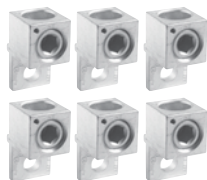
#### Operating mechanisms

For use with:	Catalog number
OS30AFJ12, OS30AFCC12	MKCS2
OS60GJ12	MKCS3
OS60GJ30, OS100GJ30, OS200J30	MKCS4

## Special configurations

### Cable operated flange

### 30A - 800A



Lug Kit



OZXA-200

#### Terminal lug kits

For use with	Wire size	Wire type	Description	Lugs per kit	Catalog number
OS100GJ30	#4 - 300 kcmil	Cu/Al	-	6	OZXA-24
OS200J30	#4 - 300 kcmil	Cu/Al	-	3	OZXA-200/3
	(6) #4-6 AWG	Cu/Al	Distribution lug	3	OZXA-206S
OES400	#2 - 600 kcmil	Cu/Al	-	6	OZXA-26
	#2 - 600 kcmil	Cu/Al	-	3	OZXA-26/3P
	(2) #2 - 500 kcmil	Cu/Al	Distribution lug	6	OZXA-33
OES600 - OES800	(12) #14 - 6 kcmil	Cu/Al	-	3	OZXA-175/400
	(2) #2 - 600 kcmil	Cu/Al	-	6	OZXA-27
	(2) #2 - 600 kcmil	Cu/Al	Distribution lug	3	OZXA-27/3P

#### Door hardware NEMA 12

Item	Catalog number
Safety door latch, 2 point, door less than 40" high	KDH2R
Safety door latch, 3 point, door greater than 40" high	KDH3R

#### Terminal shrouds

For use on	Description	Weight (lbs.)	Catalog number
OS100	1 Pole	0.04	OSS160T1
OS100	3 Pole	0.12	OSS160T3
OS200	3 Pole Long Type Shroud	0.2	OSS200G1L/3
OS200	3 Pole Short Type Shroud	0.13	OSS200G1S/3
OES400	3 Pole (includes one shroud for line and load side)	0.13	OESA-ZX123
OES600	3 Pole (includes one shroud for line and load side)	0.13	OESA-ZX125
OES800	3 Pole (includes one shroud for line and load side)	0.11	OESA-ZX125



## Other configurations

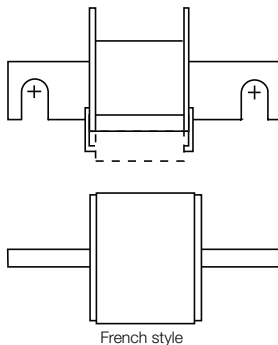
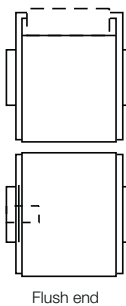
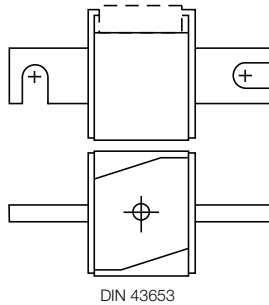
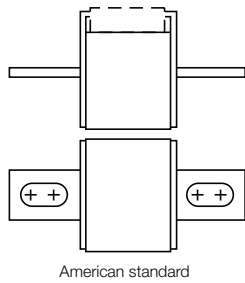
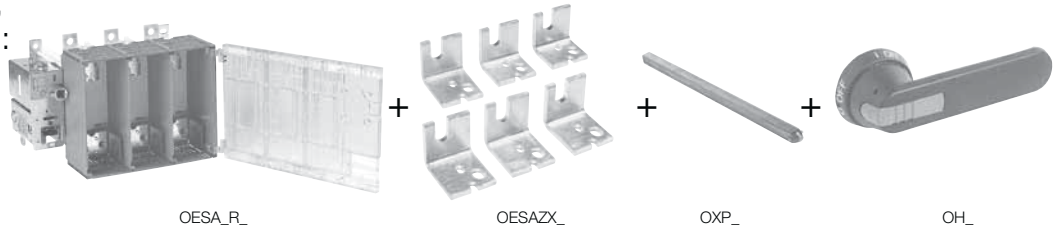
### High speed fuse pattern

### Special type fuses

Disconnect  
switches  
Fusible

For a complete assembly,  
please select one of each:

- 1 switch body
- 1 adapter kit
- 1 shaft
- 1 handle



### Selecting switch bodies and adapter kits

Please select switch body and adapter kit according to your fuses. Switch body alone can not be used — an adapter kit is always needed.

#### Switch bodies – 200 A through 800 A

UL general purpose amp rating	Maximum horsepower rating three phase			Max. allowed fuse power dissipation at rated current	Weight	Catalog number
	240 V	480 V	600 V			
200	60	125	150	22W	15.21	OES200R03
400	125	250	350	45W	17.20	OES400R03
600	200	400	500	60W	37.48	OES600R03
800	250	500	600	65W	37.48	OES800R03
200	60	125	150	22W	17.4	OES200R04
400	125	250	350	45W	19.4	OES400R04
600	200	400	500	60W	46.3	OES600R04
800	250	500	600	65W	46.3	OES800R04

#### Fuse adapter kits — for switches OES200 – OES400

Fuse standard	For 3 pole switch	For 4 pole switch
	Catalog number	Catalog number
American standard	OESAZX1-S4	OESAZX1-S4/4
DIN80 (DIN43653)	OESAZX1-S5	OESAZX1-S5/4
DIN80 sizes 00 and 000 (DIN 43653)	OESAZX1-S7	OESAZX1-S7/4
DIN110 (DIN43653)	OESAZX1-S9	OESAZX1-S9/4
DIN140 (DIN43653)	OESAZX1-S2	OESAZX1-S2/4
Flush-end, 70mm body	OESAZX1-S6	OESAZX1-S6/4
Flush-end, 50mm body	OESAZX1-S8	OESAZX1-S8/4
French	OESAZX1-S3	OESAZX1-S3/4
French with micro switches	OESAZX1-S10	OESAZX1-S10/4
	OESAZX1-S11	OESAZX1-S11/4

#### Fuse adapter kits — for switches OES600 – OES800

Fuse standard	For 3 pole switch	For 4 pole switch
	Catalog number	Catalog number
American standard	OESAZX2-S4	OESAZX2-S4/4
DIN80, DIN 110, DIN 140 (DIN43653)	OESAZX2-S2	OESAZX2-S2/4
Flush-end, 50mm and 70mm body	OESAZX2-S3	OESAZX2-S3/4
French	OESAZX2-S5	OESAZX2-S5/4
French with micro switches	OESAZX2-S6	OESAZX2-S6/4

### Handles and shafts — see pages 19.30 - 19.32.

Selecting the right fusible disconnect for HSF fuses may be difficult. Due to UL restrictions it is not possible to give a general fuse selection table for your use. Therefore we ask you to contact ABB Inc., in application issues. Information needed is nominal current of the application and catalog number of the fuse.

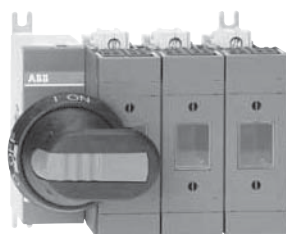
① Consult Factory.

## Other configurations

### High speed fuse pattern

### Standard switches

For a complete assembly, please select one switch catalog number which includes:



Switch body



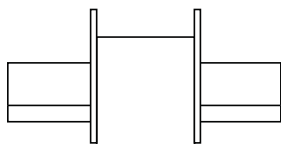
shaft



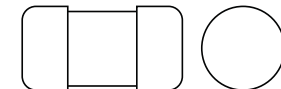
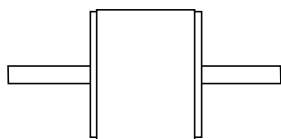
handle

### Selecting switch bodies

There are some HSF fuses that fit in standard pattern fusible disconnects, no adapter kits needed.



DIN 43620



NFC Style

### DIN-type fusible disconnects – 32-1200A

IEC Amp rating	AC23A operational power in kW		Fuse Type	Weight (kg)	3 Pole Catalog number	4 Pole Catalog number
	400V	500V				
32	15	18.5	DIN 000	1.3	OS32GD03	OS32GD04F
63	30	37	DIN 000	1.3	OS63GD03	OS63GD04F
160	75	90	DIN 000, 00	1.5	OS160GD03	OS160GD04F
250	145	170	DIN 0, 1	4.3	OS200D03	OS200D04F
400	230	280	DIN 0, 1, 2	7.1	OS400D03	OS400D04F
630	355	450	DIN 3	13.6	OS630D03	OS630D04F
800	450	560	DIN 3	13.6	OS800D03	OS800D04F
1200	560	710	DIN 4	46	OS1250D03	OS1250D04F

### NFC-style Fusible disconnects – 25-125A

IEC Amp rating	AC23A operational power in kW		Fuse Type	Weight (kg)	3 Pole Catalog number	4 Pole Catalog number
	400V	500V				
25	11	15	NFC 10x38	0.7	OS25FF1210	OS25FF2210F
32	15	18.5	NFC 14x51	0.7	OS32FF1214	OS32FF2214F
50	22	30	NFC 14x51	1.3	OS50GF12	OS50GF22F
125	55	75	NFC 22x58	1.5	OS125GF12	OS125GF22F

### BS-types fusible disconnects – 32-1200A

IEC Amp rating	AC23A operational power in kW		Fuse Type	Weight (kg)	3 Pole Catalog number	4 Pole Catalog number
	400V	500V				
32	15	18.5	A2,A3	1.3	OS32GB03	OS32GB04N1
63	30	37	A2,A3	1.3	OS63GB03	OS63GB04N1
100	55	55	A2, A3, A4	1.5	OS100GB03	OS100GB04N1
160	75	90	A2, A3, A4	1.5	OS160GB03	OS160GB04N1
200	145	170	B1-B2	3.3	OS200B03	OS200B04N2
400	230	280	B1-B4	7.1	OS400B03	OS400B04N2
630	355	450	C1-C2	13.6	OS630B03	OS630B04N2
800	450	560	C1-C3	13.6	OS800B03	OS800B04N2
1250	560	710	D1	46	OS1250B03	OS1250B04N2