

SafeLine Enclosed Disconnect switches



SafeLine

Compact, heavy duty
Enclosed disconnect switches
16A – 200A Non-fusible
30A – 200A Fusible



SafeLine enclosed disconnect switches are designed to meet customer requirements in terms of safety, ease of installation, space savings and operational convenience. They are available in a wide range of amperage ratings, are UL approved and NEMA rated to satisfy rugged industrial environments.

- Suitable for use as:**
- OSHA Lockout/Tagout disconnects
 - Safety switches
 - Load break switches
 - Isolators

General information Non-fusible

NF 16 1 - 3P BJ A 11

Disconnect switch type

NF = Non-fusible
FC = UL Fused Class CC, (30A)
FJ = UL Fused Class J, (30A – 200A)

Disconnect switch frame size

Non-Fusible switches

16	25	30	32	45	60
63	100	125	200		

Fusible switches

30	60	100	200
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Environmental rating ③

1 = NEMA/UL Type 1
2 = NEMA/UL Type 12
3 = NEMA/UL Type 3R
4 = NEMA/UL Type 4

Accessories

10 = 1 N.O. auxiliary contact
01 = 1 N.C. auxiliary contact
11 = 1 N.O. & 1 N.C. auxiliary contacts
22 = 2 N.O. & 2 N.C. auxiliary contacts
N = Neutral terminal
G = Ground terminal, isolated ①
U = Service entrance, 3-wire ②
V = Service entrance, 4-wire

Series

Handle type

the appropriate handle is provided for each enclosure in accordance with the application.

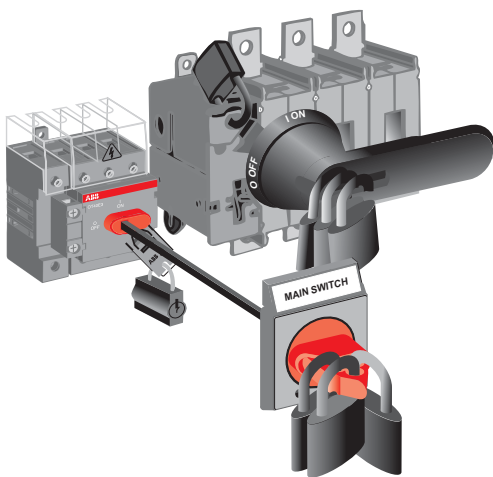
B_ = black
Y_ = Red/Yel

Poles or conversion mechanisms

3P = 3 poles
6P = 6 poles
3T = 3 pole transfer
3B = 3 pole by-pass

OSHA

Suitable for use as OSHA Lockout/tagout disconnect when applied in accordance with part IV, Department of Labor Occupational Safety and Health Administrations, 29 CFR Part 1910, Control of Hazardous Energy Source (Lockout/Tagout): Final Rule.



Handle and mechanism padlocked OFF

Padlockable

Handles can be padlocked in the “OFF” position with up to three padlocks: Additionally, the switch mechanism can be directly padlocked in the “OFF” position when the door is open. NOTE: Some handles can be ordered with the ability to padlock in both the “ON” & “OFF” positions, please consult your ABB sales office. When the handle is padlocked, the enclosure cannot be opened.

① All enclosed switches are provided with a ground lug. See page 3.9.

② Only for UL 98 switches

③ Consult factory for other types of enclosures.

General information Non-Fusible and Fusible

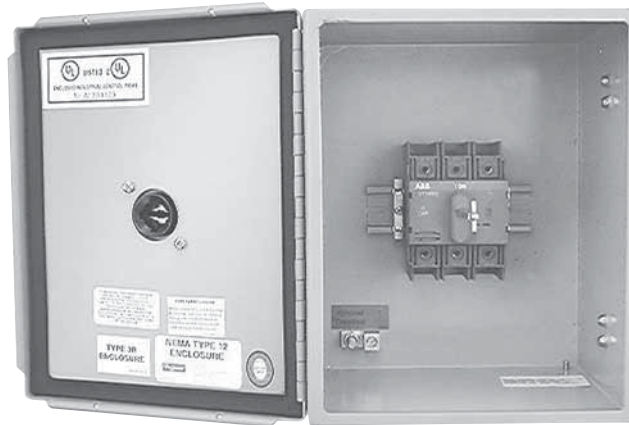
Disconnect
switches
Non-fusible
Enclosed

Non-Fusible

UL Listed to UL 508 and UL 98.
CSA approved
IEC rated
CE marked

Snap on accessories include additional poles, auxiliary contacts, etc.

Enclosures available in NEMA 1, 3R, 12 & 4 environmental categories ①



Modern appearance

Quick make, quick brake mechanism

Heavy duty disconnect, 600VAC

Extremely compact size

Finger-proof construction. No hazardous exposed parts

3/6 pole constructions; transfer switches and by-pass switches available

Fusible

UL Listed to UL 98 standards.
CSA approved
IEC rated
CE marked

Snap on accessories include fuse monitors, auxiliary contacts, etc.

Enclosures available in NEMA 1, 3R, 12 & 4 environmental categories ①

Fuse carriers available for US standards, BS, DIN, NFC standard and for various high speed fuse patterns



Modern appearance

Quick make, quick brake mechanism

Heavy duty disconnect, 600VAC, 200kA, I_{sc}

Extreme compact size as fuse carriers are decked above contacts

Double contacts enabling feed from any direction and preventing back feed

Finger-proof construction. No hazardous exposed parts

3/6 pole constructions; transfer switches and by-pass switches available

Lockable

Clear position indications:
I-ON
O-OFF

Door interlocked when handle padlocked to OFF position

Handle padlockable with up to three padlocks



Door interlocked when handle is in ON position. Door interlock can be defeated by authorized personnel.

Pilot devices can be added

① All enclosed switches are provided with a ground lug. See page 5.8.

**Disconnect
switches**
Non-fusible
Enclosed

General information

Non-fusible, 16A - 3150A

Switch ratings, 16 – 3150 Amps, 600V

UL General purpose amp rating	Maximum horsepower rating							Wire size for terminal lugs	For wire type	Approval
	Single phase			Three phase						
	120V	200V	240V	200V – 208V	240V	480V	600V			
UL 508 ↑ 16 25 40	1	2	2	3	5	10	10	#18 – 8	Cu	CSA, UL
	1.5	3	3	7.5	7.5	15	20	#18 – 8	Cu	CSA, UL
	2	5	5	10	10	20	25	#18 – 8	Cu	CSA, UL
UL 98 ↑ 60 80 30 60 100 125 200 400 600 800 1200 1600 2000 3150 ① ↓	2	5	5	15	15	30	30	#14 – 1	Cu	CSA, UL
	2	5	5	20	20	40	40	#14 – 1	Cu	CSA, UL
	2	5	5	10	10	20	30	#14 – 4	Cu	CSA, UL
	3	7.5	7.5	20	20	40	40	#14 – 4	Cu	CSA, UL
	5	15	15	25	30	50	50	#8 – 1/0	Cu	CSA, UL
	7.5	20	20	30	30	75	100	#8 – 1/0	Cu	CSA, UL
	—	—	—	60	75	150	200	#6 – 300 kcmil	Cu	CSA, UL
	—	—	—	100	125	250	350	#2 – 600 kcmil	Cu	CSA, UL
	—	—	—	150	200	400	500	(2) #2 – 600 kcmil	Cu	CSA, UL
	—	—	—	200	250	500	600	(2) #2 – 600 kcmil	Cu/Al	CSA, UL
	—	—	—	—	—	—	—	(4) #2 – 600 kcmil	Cu/Al	CSA, UL
	—	—	—	—	—	—	—	(4) #2 – 600 kcmil	Cu/Al	CSA, UL
—	—	—	—	—	—	—	(8) #2 – 600 kcmil	Cu/Al	CSA, UL	
—	—	—	—	—	—	—	(8) #2 – 600 kcmil	Cu/Al	IEC	

Handle ratings, 16 – 3150 Amps, 600V

Amperage range	Style type	NEMA	Color	Marking	Defeatable	Padlockable	Catalog number suffix	Catalog number	
16 – 100	Selector	1,3R,12	Black	O/I & OFF/ON	Yes	Yes	BJ	OHBS2AJ	
	Selector	1,3R,12	Red/Yel				YJ	OHYS2AJ	
	Pistol	1,3R,12	Black				B6	OHBS65J6	
	Pistol	1,3R,12	Red/Yel				Y6	OHYS65J6	
	Pistol	1,3R,4,4X,12	Black				B6	OHBS65L6	
	Pistol	1,3R,4,4X,12	Red/Yel				Y6	OHYS65L6	
125 - 200	Pistol	1,3R,12	Black	O/I & OFF/ON	Yes	Yes	B6	OHB65J6	
		1,3R,12	Red/Yel				Y6	OHY65J6	
		1,3R,4,4X,12	Black				B8	OHB80L6	
		1,3R,4,4X,12	Red/Yel				Y8	OHY80L6	
400 – 3150	Pistol	1,3R,12	Black	O/I & OFF/ON	Yes	Yes	B4	OHB145J12	
		1,3R,12	Red/Yel				Y4	OHY145J12	
		1,3R,12	Black				B7	OHB175J12	
		1,3R,12	Red/Yel				Y7	OHY175J12	
		1,3R,4,4X,12	Black				B4	OHB145L12	
		1,3R,4,4X,12	Red/Yel				Y4	OHY145L12	
		1,3R,4,4X,12	Black				B7	OHB175L12	
		1,3R,4,4X,12	Red/Yel				Y7	OHY175L12	
1,3R,4,4X,12	Metal	8	YASDA-8						
16 – 200	Pistol	1,3R,12	Black	I/O/II	Yes	Yes	B8	OHB80J6E011	
		1,3R,4,4X,12						OHB80L6E011	
400	Pistol	1,3R,12	Black	I/O/II	Yes	Yes	B4	OHB145J12E011	
		1,3R,4,4X,12						OHB145L12E011	
400 – 3150	Pistol	1,3R,12	Black	I/O/II	Yes	Yes	B7	OHB175J12E011	
	Pistol	1,3R,4,4X,12						OHB175L12E011	
	Metallic	1,3R,4,4X,12						21	YASDA-21
	Metallic	1,3R,4,4X,12						6	YASDA-6

① IEC rated only.

General information

Fusible, 30A – 800A

Disconnect
switches
Fusible
Enclosed

Switch ratings

UL general purpose amp rating	Maximum horsepower rating								Wire size for terminal lugs	For wire type	Approval ①
	Single phase				Three phase						
	120V	200V	240V	200V	208V	240V	480V	600V			
30	2	3	5	5	7.5	7.5	15	20	#18 – 8	Cu	CSA, UL
60	3	7.5	10	15	15	15	30	50	#14 – 4	Cu	CSA, UL
100	5	10	15	25	25	30	60	75	#14 – 2/0	Cu/Al	CSA, UL
200	—	—	—	50	50	60	125	150	#6 – 300 kcmil	Cu/Al	CSA, UL
400	—	—	—	100	125	125	250	350	#2 – 600 kcmil	Cu/Al	CSA, UL
600	—	—	—	150	150	200	400	500	(2) #2 – 600 kcmil	Cu/Al	CSA, UL
800	—	—	—	200	200	250	500	600	(2) #2 – 600 kcmil	Cu/Al	CSA, UL

Handle ratings

Amperage range	Style type	NEMA	Color	Marking	Defeatable	Padlockable	Catalog number suffix	Catalog number
30	Selector	1,3R,12	Black	O/I & OFF/ON	Yes	Yes	BJ	OHBS2AJ
	Selector	1,3R,12	Red/Yel				YJ	OHYS2AJ
	Pistol	1,3R,12	Black				B6	OHBS65J6
	Pistol	1,3R,12	Red/Yel				Y6	OHYS65J6
	Pistol	1,3R,4,4X,12	Black				B6	OHBS65L6
	Pistol	1,3R,4,4X,12	Red/Yel				Y6	OHYS65L6
60 – 200	Pistol	1,3R,12	Black	O/I & OFF/ON	Yes	Yes	B6	OHBS65J6
		1,3R,12	Red/Yel				Y6	OHYS65J6
		1,3R,12	Black				B8	OHBS80J6
		1,3R,12	Red/Yel				Y8	OHYS80J6
		1,3R,4,4X,12	Black				B8	OHBS80L6
		1,3R,4,4X,12	Red/Yel				Y8	OHYS80L6
400 – 800	Pistol	1,3R,12	Black	O/I & OFF/ON	Yes	Yes	B4	OHBS145J12
		1,3R,12	Red/Yel		Yes		Y4	OHYS145J12
		1,3R,12	Black		Yes		B7	OHBS175J12
		1,3R,12	Red/Yel		Yes		Y7	OHYS175J12
		1,3R 4,4X,12	Black		Yes		B4	OHBS145L12
		1,3R,4,4X,12	Red/Yel		Yes		Y4	OHYS145L12
		1,3R 4,4X,12	Black		Yes		B7	OHBS175L12
		1,3R,4,4X,12	Red/Yel		Yes		Y7	OHYS175L12
		1,3R,4,4X,12	Metal		No		8	YASDA-8
30	Pistol	1,3R,12	Black	I/O/II	Yes	Yes	B6	OHBS65J6E011
		1,3R,4,4X,12					OHBS65L6E011	
60 – 200	Pistol	1,3R,12	Black	I/O/II	Yes	Yes	B8	OHBS80J6E011
		1,3R,4,4X,12					OHBS80L6E011	
400 – 800	Pistol	1,3R,12	Black	I/O/II	Yes	Yes	B4	OHBS145J12E011
	Pistol	1,3R,4,4X,12	Black		Yes		B4	OHBS145L12E011
	Pistol	1,3R,12	Black		Yes		B7	OHBS175J12E011
	Pistol	1,3R,4,4X,12	Black		Yes		B7	OHBS175L12E011
	Metallic	1,3R,4,4X,12	Metal		No		21	YASDA-21
	Metallic	1,3R,4,4X,12	Metal		No		6	YASDA-6

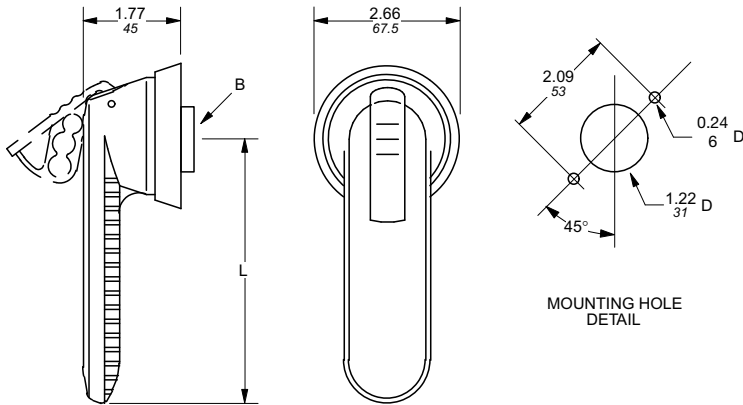
① Fusible switches are UL listed to the UL98 standard.

Approximate dimensions for Handles

Disconnect
switches
Dimensions

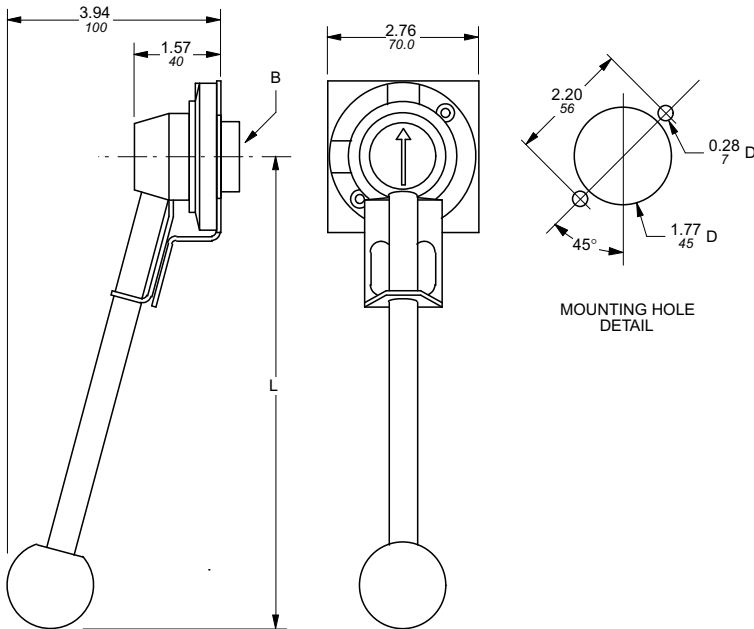
← 00.00 Inches
00.00 [Millimeters] →

Pistol handles

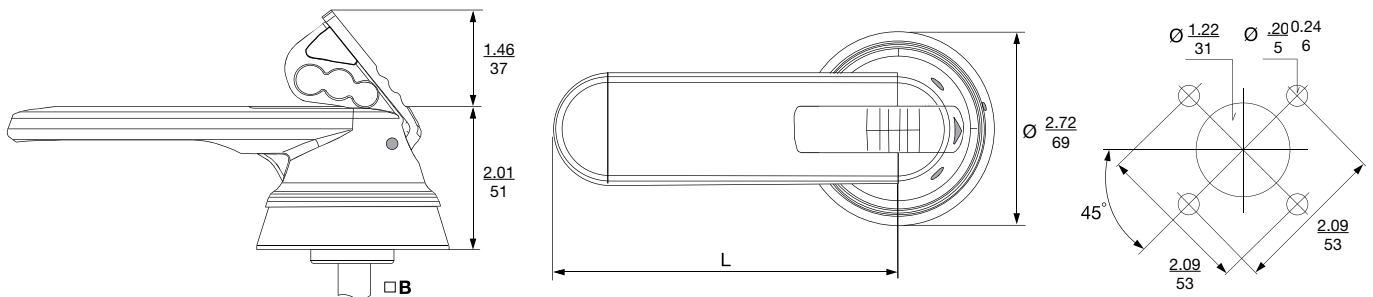


A Catalog number	L Inches/ mm	□B Shaft size Inches/ mm	NEMA / UL Type
OH_45J6	1.8/45	0.24/6	1, 3R, 12
OH_65J6	2.6/65	0.24/6	1, 3R, 12
OH_80J6	3.1/80	0.24/6	1, 3R, 12
OH_125J12	4.9/125	0.47/12	1, 3R, 12
OH_145J12	5.7/145	0.47/12	1, 3R, 12
OH_175J12	6.9/175	0.47/12	1, 3R, 12
OH_80L6	3.1/80	0.24/6	1, 3R, 4, 4X, 12
OH_145L12	5.7/145	0.47/12	1, 3R, 4, 4X, 12
OH_175L12	6.9/175	0.47/12	1, 3R, 4, 4X, 12

□ = Handle color, B (Black) or Y (Red/Yellow)



A catalog number	L inches/mm	□B Shaft size inches/mm	NEMA Type
YASDA-7	8.66/220	0.47/12	1, 3R, 4, 4X, 12
YASDA-8	8.66/220	0.47/12	1, 3R, 4, 4X, 12
YASDA-21	8.66/220	0.47/12	1, 3R, 4, 4X, 12
YASDA-6	12.60/320	0.47/12	1, 3R, 4, 4X, 12



Handle type	OHM65L6	OHM125L12	OHM175L12	OHM275L12
L	2.6/65	4.9/125	6.9/175	10.8/225
□B	.24/6	.47/12	.47/12	.47/12

Technical data

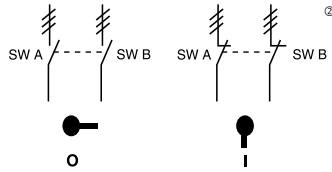
Other configuration descriptions

Disconnect
switches
Technical
data

Conversion mechanisms

6 or 8 pole

6 (8) pole mechanism allows two switches controlled by one handle to open or close simultaneously.

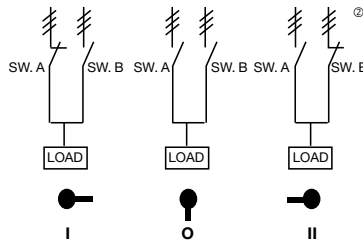


	POS. 0	POS. I
SW. A	O	X
SW. B	O	X

X = Closed
O = Open

Double throw^①

Transfer mechanism manually transfers between two power sources using two switches and a center "OFF" position.

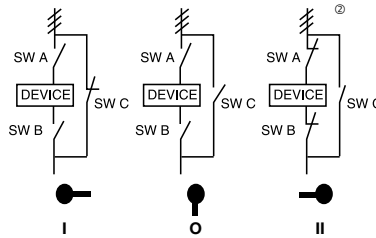


	POS. I	POS. O	POS. II
SW. A	X	O	O
SW. B	O	O	X

X = Closed
O = Open

Bypass^①

Bypass mechanism operates three switches: Two switches in series and one changeover switch to allow power bypass.

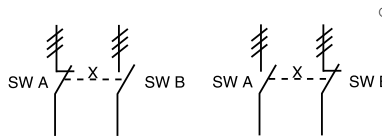


	POS. I	POS. O	POS. II
SW. A	O	O	X
SW. B	O	O	X
SW. C	X	O	O

X = Closed
O = Open

Mechanical interlock

Mechanical interlock mechanism prevents both switches from being in the ON position at the same time.



	SW. A POS. I	SW. B POS. O
SW. A	X	O
SW. B	O	X

X = Closed
O = Open

^① Transfer and bypass enclosed switches include the load side bussed or cabled together and all switches come standard with ground lugs.

^② = Three poles