

Disconnect Switches

Non-Fusible

Fusible



ABB

Low Voltage Disconnect Switches from ABB

ABB is committed to offering high quality and innovative low voltage products. ABB's disconnect switch lines are no exception.

Modern materials and manufacturing technology coupled with advanced features allow ABB's disconnect switches to offer superior customer benefits – exceptional performance, easy installation, and ultimate protection – like no other.

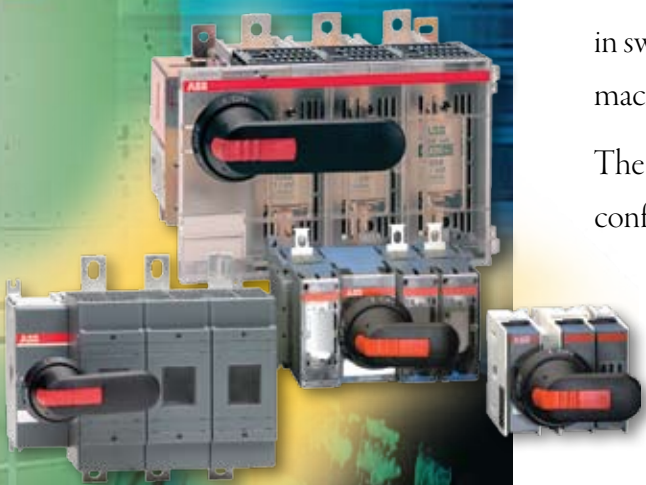
Through a broad range of product offerings, ABB sets the standard for disconnect switches industry-wide.

The disconnect switch is largely used in low voltage switchgear for distribution of power, for starting and stopping motors and for isolating loads during maintenance. ABB's range of disconnect switches are suitable for diverse applications, in motor control centers, in switchboards and as main switches in various equipment and machinery.

The disconnect product line ranges from standard 3-pole configurations to specialty combination switches for transfer, bypass and reversing. The comprehensive ABB range of Low Voltage Disconnect Switch products is the perfect choice for all switching applications.



*Non-Fusible
Disconnect
Switches*



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Designed for Safety

Disconnect switches are integral to ABB's line of circuit protection devices to guard against equipment damage in multiple applications. ABB prides itself in being the Safety Pioneer for the low voltage electrical product industry as our products offer maximum protection of the electrical installation and the user. Designed to meet customer requirements for safety, ABB's disconnect switch lines feature:

Fingerproof Construction – IP 20

Dead-front construction plus terminal shrouds reduce the risk of touching live parts.

Padlockable Mechanisms & Handles

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.

Welded Contact Protection

Positive opening operation safeguards users in case of welded contacts due to an extreme overcurrent situation. The ABB switch design cannot reach the OFF position unless the contacts are truly open. This safeguards the user by alerting them of the problem, maintains door interlock safety and does not allow a padlock to be inserted.

Track Resistant Material

Excellent track resistant material reduces the risk of flashover between phases even in the most severe circumstances.

Door Interlock

The handle and shaft provide door interlock so that the door cannot be opened when the switch is in the ON position.

Clear Position Indication

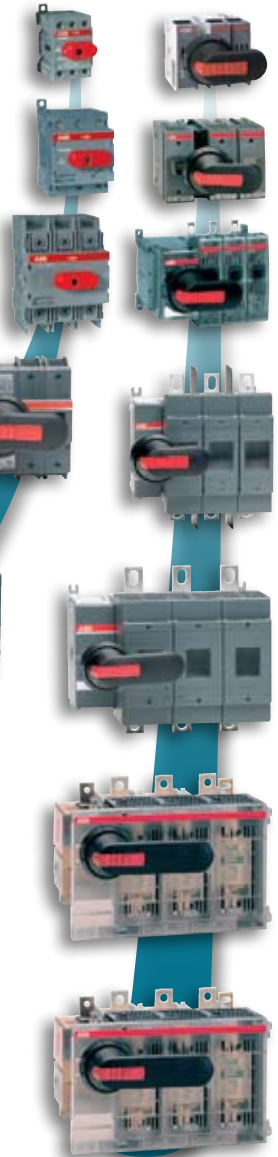
All ABB disconnect switches and handles are clearly marked with ON and OFF designations, which allow for quick position identification whether the door is open or closed.



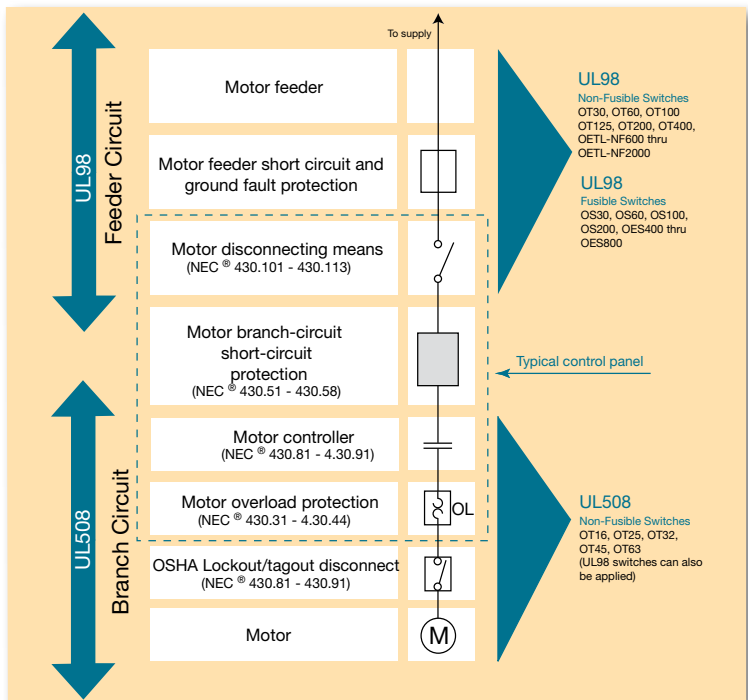
Selecting Disconnect Switches

ABB differentiates itself in the disconnect switch market by offering UL98, UL508 and IEC rated switches. ABB's UL98 listed disconnect range includes 30 to 2,000 amp non-fusible and 30 to 800A fusible switches. These may be used in a variety of applications — on service equipment, motor control centers, or as motor branch circuits. The UL508 listed offering has clearance distances less than those required by UL98. ABB's line of UL508 listed non-fusible disconnects ranges from 16 to 80 amps and can be used as motor controllers.

IEC rated switches are available from 16 - 3150A (non-fusible) and 80 - 800A (fusible.)



Fusible



Non-Fusible Disconnect Switches



OT16E3 OT25E3 OT32E3



OT45E3 OT63E3



OT30E3 OT60E3 OT100E3



OT160E3

Standard catalog number	3 pole	OT16E3	OT25E3	OT32E3	OT45E3	OT63E3	OT30E3	OT60E3	OT100E3	OT160E3
Amp rating	A	16	25	40	60	80	30	60	100	125
Approvals ①										
	2 pole	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	UL98
	3 pole	UL508	UL508	UL508	UL508	UL508	UL98	UL98	UL98	UL98
	4 pole	UL508	UL508	UL508	UL508	UL508	UL98	UL98	UL98	UL98
Technical ratings – UL, CSA										
Max operating voltage	V	600	600	600	600	600	600	600	600	600
Max horsepower rating										
Three phase										
200 – 208V	HP	3	7.5	10	15	20	10	20	25	30
240V	HP	5	7.5	10	15	20	10	20	30	40
480V	HP	10	15	20	30	40	20	40	50	75
600V	HP	10	20	25	30	40	30	40	50	100
Single phase										
120V		1	1.5	2	2	2	2	3	5	7.5
240V		2	3	5	5	5	5	7.5	15	20
Technical ratings – IEC										
Rated insulation and operational voltage, AC20 and DC20	V	750	750	750	750	750	750	750	750	750
Rated thermal current, I _{th}										
AC 20/DC 20 open	A	25	32	40	63	80	40	63	115	200
AC 20/DC 20 enclosed	A	25	32	40	63	80	40	63	115	160
AC 21A ≤500V	A	16	25	32	63	80	40	63	100	160
≤690V	A	16	25	32	63	80	40	63	100	160
Rated operational power AC23										
400/415V	kW	7.5	9	11	22	37	15	18.5	37	75
690V	kW	7.5	9	11	15	18.5	15	15	37	75
Short circuit interrupting capacity										
Fuse type CC	kA	10	10	10	—	—	—	—	—	—
Fuse type J	kA	10	10	10	100	100	50	50	50	50
Fuse type T	kA	10	10	10	100	100	50	50	50	50
Fuse type RK1	kA	10	—	10	—	—	—	—	—	—
Fuse type RK5	kA	5	5	5	10	5	—	—	—	—
Fuse type L	kA	—	—	—	—	—	—	—	—	—
Fuse type H	kA	—	—	—	—	5	—	—	—	—
Physical characteristics										
Weight ②	3 pole	lb	0.24	0.24	0.24	0.59	0.59	0.79	0.79	2.42
Dimension	3 pole	H in	2.68	2.68	2.68	3.60	3.60	3.94	3.94	5.00
		W in	1.38	1.38	1.38	2.07	2.07	2.76	2.76	4.96
		D in	2.20	2.20	2.20	2.85	2.85	2.95	2.95	2.95

UL listed, CSA approved, IEC rated, CE marked

UL98 (CSA 22.2 No. 4) - UL File # E101914; CSA File # LR58077
IEC 947-1 and 3, IEC 664, IEC 269 & IEC 204

UL508 (CSA 22.2 No. 14) - UL File #E63822; CSA File # LR58247
CE - Compliance with the European Machine Directive IEC 204 (EN60204)

① UL listed switches are also CSA approved.
② Switch only.

ABB's non-fusible disconnect switches are designed to offer maximum versatility to meet specific customer requirements. All sizes are compact, heavy duty, 600V disconnect switches. The basic construction provides flexibility, safety, and high performance in an extremely compact size.

The non-fusible switch line includes 17 amperage sizes ranging from 16A to 3150A, and includes both UL98, UL 508 and IEC switches.

ABB non-fusible disconnects are also customizable in that they are available in a number of special premium configurations.

- Side operated
- Flange operated
- Multiple poles, (4 & 6)
- Maintenance bypass
- Manual transfer
- Motor operators



Catalog number	3 pole	OT200U03	OT400U03	OETL-NF600A	OETL-NF800A	OETLNF1200	OETL-NF1600	OETL-NF2000	OETL-NF3150
General purpose amp rating	A	200	400	600	800	1200	1600	2000	3150
Approvals ①									
2 pole		N/A	N/A	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	IEC
3 pole		UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	IEC
4 pole		IEC	UL98 & IEC	UL98 & IEC	IEC	IEC	IEC	IEC	IEC
Technical ratings – UL,CSA									
Max operating voltage	V	600	600	600	600	600	600	600	600
Max horsepower rating									
Three phase									
200 – 208V	HP	60	100	150	15	—	—	—	—
240V	HP	75	125	200	15	—	—	—	—
480V	HP	150	250	400	30	—	—	—	—
600V	HP	200	350	500	30	—	—	—	—
Single phase									
120V		—	—	—	—	—	—	—	—
240V		—	—	—	—	—	—	—	—
Technical ratings – IEC									
Rated insulation and operational voltage, AC20 and DC20	V	1000	1000	1000	1000	1000	1000	1000	1000
Rated thermal current, I _{th}									
AC 20/DC 20 open	A	250	400	800	1250	1600	2500	2500	3150
AC 20/DC 20 enclosed	A	250	400	720	1250	1600	2300	2500	2600
AC 21A ≤500V	A	250	400	800	1250	1600	2500 ③	2500 ③	3150 ③
≤690V	A	250	400	800	1250	1600	2500 ③	2500 ③	3150 ③
Rated operational power AC23									
400/415V	kW	132	220	355	400	400	400	400	400
690V	kW	240	355	355	—	—	—	—	—
Short circuit interrupting capacity									
Fuse type CC	kA	—	—	—	—	—	—	—	—
Fuse type J	kA	100	100	100	—	—	—	—	—
Fuse type T	kA	—	—	100	—	—	—	—	—
Fuse type RK1	kA	—	—	—	—	—	—	—	—
Fuse type RK5	kA	—	—	100	—	—	—	—	—
Fuse type L	kA	—	—	—	100	100	100	100	—
Fuse type H	kA	—	—	—	—	—	—	—	—
Physical characteristics									
Weight ② 3 pole	lb	2.9	5.7	13.66	35.9	38.55	127.7	127.7	127.7
Dimension 3 pole									
H in		6.69	8.66	11.77	19.09	19.09	25.04	25.04	25.04
W in		6.67	8.7	11.93	14.29	14.29	18.43	18.43	18.43
D in		3.30	3.35	5.12	4.92	4.92	10.67	10.67	10.67
UL listed, CSA approved, IEC rated, CE marked									
• = Available		UL98 (CSA 22.2 No. 4) - UL File # E101914; CSA File # LR58077			UL508 (CSA 22.2 No. 14) - UL File #E63822; CSA File # LR58247				
— = Not available		IEC 947-1 and 3, IEC 664, IEC 269 & IEC 204			CE - Compliance with the European Machine Directive IEC 204 (EN60204)				

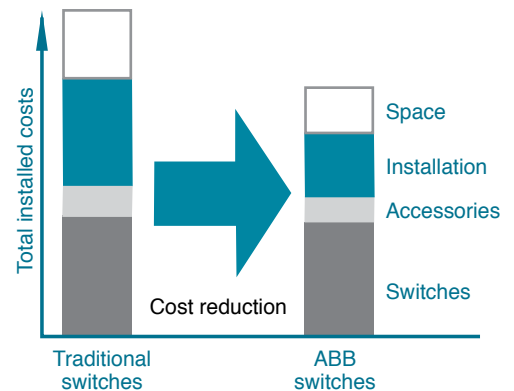
- ① UL listed switches are also CSA approved.
- ② Switch only
- ③ IEC 947-3 Utilization Category B, Infrequent operation

Flexible Installation & Mounting Options

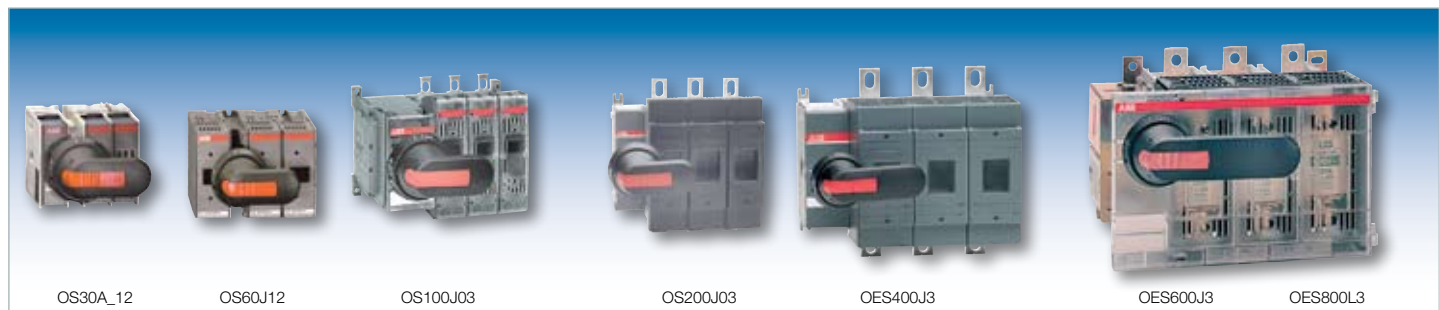
Mount the switch based on your specific panel requirements. Simply install the handle on the door, in line with the switch. The switch and handle are mechanically linked through an easy to install shaft, allowing fast and flexible installation into various panel depths and configurations.

- Door Mounting 16A - 125A
- DIN Rail Mounting 16A - 125A
- Base Mount with Screws 16A - 3150A

Lowered install costs



Fusible Disconnect Switches



Catalog number	3 pole	OS30ACC12	OS30AJ12	OS60J12	OS100J03	OS200J03	OES400J3	OES600J3	OES800L3
Standard amp rating	A	30	30	60	100	200	400	600	800
Approvals ①									
2 pole		N/A	N/A	N/A	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC
3 pole		UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC	UL98 & IEC
4 pole		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									
200 – 208V	HP	5/7.5	5/7.5	15	25	50	100/125	150	200
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,T	J,T	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_{th}									
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	630	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	210/230	315/340	350/380
690V	kW	25	25	60	132	200	330	540	600
Short circuit interrupting capacity									
UL Fuse size	kA	200	200	200	200	100	200	200	200
UL Fuse size	A	30	30	60	100	200	400	600	800
UL Fuse type		J/CC	J/CC	J	J/T	J/T	J/T	J/T	L
Physical characteristics									
Weight									
3 pole	lb	1.54	1.54	2.86	3.30	5.9	17.18	37.44	37.44
4 pole	lb	1.98	1.98	3.52	3.96	7.5	19.38	46.26	46.26
Dimension (3 pole)									
H in		3.66	3.60	3.94	5.67	6.5	8.90	10.10	10.10
W in		4.15	4.15	5.63	7.07	7.1	11.26	14.80	14.80
D in		4.10	4.10	5.04	5.10	5.2	8.07	9.17	9.17
UL listed, CSA approved, IEC rated, CE marked									
• = Available		UL98 (CSA 22.2 No. 4) - UL File # E101914; CSA File # LR58077			UL508 (CSA 22.2 No. 14) - UL File #E63822; CSA File # LR58247				
— = Not available		IEC 947-1 and 3, IEC 664, IEC 269 & IEC 204			CE - Compliance with the European Machine Directive IEC 204 (EN60204)				

① UL listed switches are also CSA approved.

All ABB UL98 listed 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. The fusible switch line's unique compact dimensions allow panel size reduction in new applications and easily retrofit into existing applications where space is limited.

ABB's fusible disconnect line includes seven amperage sizes from 30A to 800A and are complimented by a wide range of fuse clip options. ABB fusible switches offer an economical and reliable solution for fused short circuit protection.

Compact Design

Fuse clips are mounted above the switching mechanism, eliminating the need for a large, unsafe trailing fuse block. ABB fusible disconnect switches accept a wide range of North American fuses:

Class CC	30A
Class J	30A-600A
Class L	800A
Class T	400A-800A

Fuse Isolation

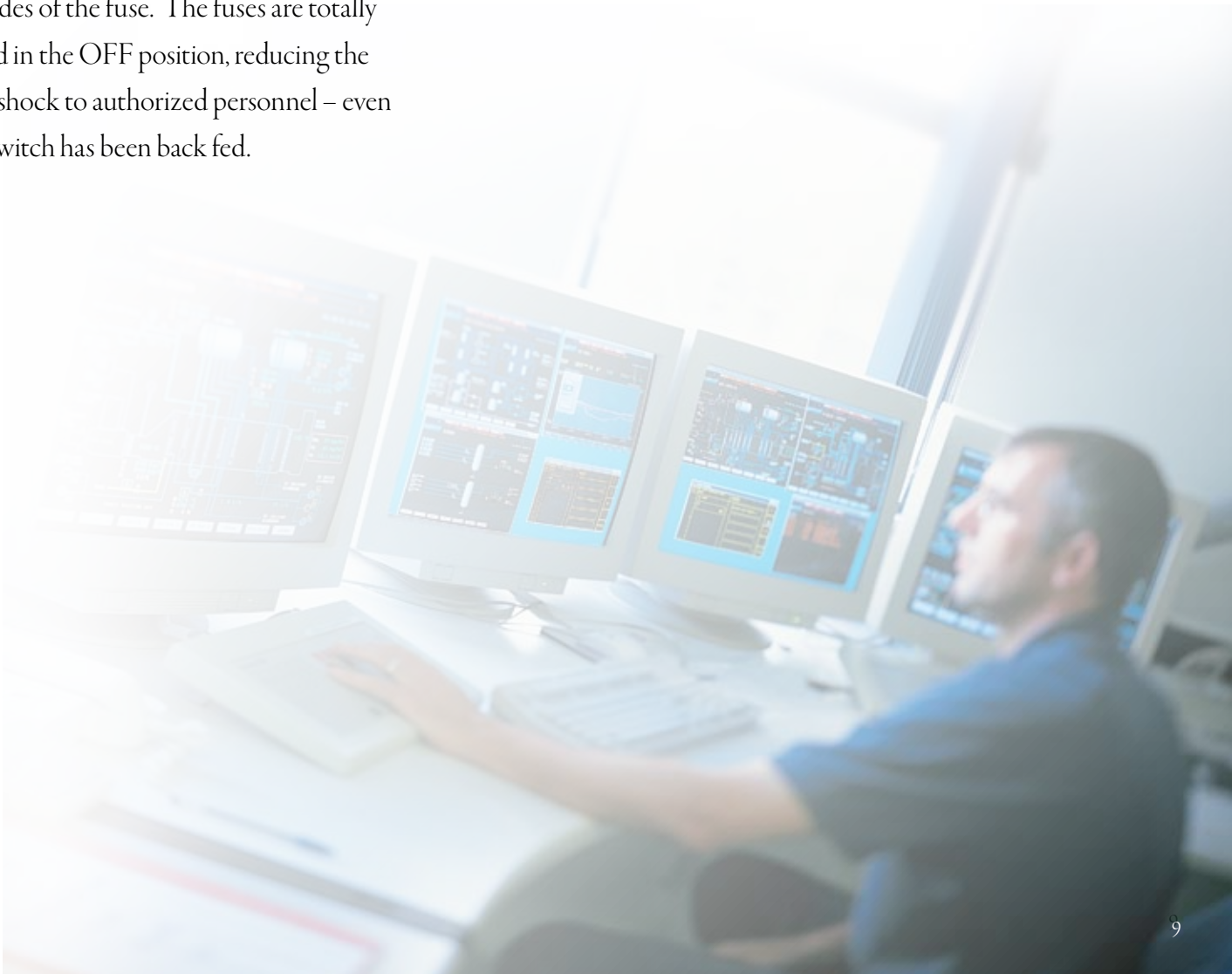
ABB fusible switches contain contacts on both sides of the fuse. The fuses are totally isolated in the OFF position, reducing the risk of shock to authorized personnel – even if the switch has been back fed.

Mounting Options

- DIN rail mounting 30-100A
- Base mounting with screws - 30-800A.

Superior Short Circuit Protection

ABB fusible switches efficiently limit the peak let-through current during a fault better than any other product, contributing to safety and reliability. Selectivity and coordination are easily accomplished with fused protection. All ABB fusible disconnect switch frames offer outstanding short circuit protection. ABB's 200A fusible disconnect is rated at 100kA. All other ABB fusible disconnect frames are rated at 200kA.



Disconnect switch accessories



Non-Fusible, 16-125A		OT16E3	OT25E3	OT32E3	OT45E3	OT63E3	OT30E3	OT60E3	OT100E3	OT160E3
Standard catalog number	3 pole									
Amp rating	A	16	25	40	60	80	30	60	100	125
Terminal lug kit		Integral	Integral	Integral	Integral	Integral	Integral	Integral	Integral	Integral
Terminal shroud		•	•	•	•	•	•	•	•	•
Auxiliary contact		•	•	•	•	•	•	•	•	—
Handle UL/NEMA type										
Type 1, 3R, 12		•	•	•	•	•	•	•	•	•
Type 1, 3R, 4, 4X, 12		•	•	•	•	•	•	•	•	•
Handle type										
Selector		•	•	•	•	•	•	•	•	—
Pistol		•	•	•	•	•	•	•	•	•
Conversion kits										
6 pole		•	•	•	•	•	•	•	•	•
Transfer		•	•	•	•	•	•	•	•	•
Bypass		•	•	•	•	•	•	•	•	•
Mechanical interlock		•	•	•	•	•	•	•	•	•
Electrical interlock		—	—	—	—	—	—	—	—	—

• = Available
 — = Not available

Non-Fusible, 200-3150A		OT200U03	OT400U03	OETL-NF600A	OETL-NF800A	OETL-NF1200	OETL-NF1600	OETL-NF2000	OETL-NF3150
Catalog number	3 pole								
General purpose amp rating	A	200	400	600	800	1200	1600	2000	3150
Terminal lug kit		OZXA-200	OZXA-400	OZXA-27	OZXA-30	OZXA-28	OZXA-28	OZXA-28/2	OZXA-28/2
Terminal shroud		•	•	•	•	•	•	•	•
Auxiliary contact		•	•	•	•	•	•	•	•
Handle UL/NEMA type									
Type 1, 3R, 12		•	•	•	•	•	•	•	•
Type 1, 3R, 4, 4X, 12		•	•	•	•	•	•	•	•
Handle type									
Selector		—	—	—	—	—	—	—	—
Pistol		•	•	•	•	•	•	•	•
Conversion kits									
6 pole		•	•	•	•	•	—	—	—
Transfer		•	•	•	•	•	—	—	—
Bypass		•	•	•	•	•	—	—	—
Mechanical interlock		•	•	•	•	•	•	•	•
Electrical interlock		•	•	•	•	•	•	•	•

• = Available
 — = Not available

Fusible, 30-800A		OS30ACC12	OS30AJ12	OS60J12	OS100J03	OS200J03	OES400J3	OES600J3	OES800L3
Catalog number	3 pole								
General purpose amp rating	A	30	30	60	100	200	400	600	800
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-26	OZXA-27	OZXA-27
Terminal shroud									
Auxiliary contact		Not required	Not required	Not required	•	•	•	•	•
Handle UL/NEMA type		•	•	•	•	•	•	•	•
Type 1, 3R, 12		•	•	•	•	•	•	•	•
Type 1, 3R, 4, 4X, 12		•	•	•	•	•	•	•	•
Conversion kit		•	•	•	•	•	•	•	•
6 pole		•	•	•	•	•	•	•	•
Transfer		•	•	•	•	•	•	•	•
Bypass		—	—	•	•	•	•	•	•
Mechanical interlock		•	•	•	•	•	•	•	•
Electrical interlock		—	—	—	—	—	•	•	•

• = Available
 — = Not available
 S = Standard

Customize your ABB switch with our extensive line of disconnect switch accessories. From handles to power poles, our accessory line follows the same superior craftsmanship as the switches themselves.

Selector Handles

The design of the ABB selector handles incorporates quick and easy mounting, ergonomic and uniform design as well as safety in application. The selector handle range offers base mounting and door mounting options with screw and snap-on features. ABB selector handles provide door interlock in the ON position and when padlocked in the OFF position.

Pistol Handles

Robust construction coupled with stunning high torque allows the use of plastic handles even in a very large current area of switches. ABB pistol handles are easy to install as mounting hardware fastens to brass inserts in the back of the handle.

Pistol handles are available in a variety of lengths from 45mm to 275mm for 5mm, 6mm and 12mm shafts diameters. Black/Red and Red/Yellow plastic as well as 316L stainless steel versions are available for use with non-fusible and fusible disconnects.

Shafts

A full range of 5, 6, and 12mm shafts coordinate with selector and pistol grip handles for all disconnect switches. Shafts are offered in a variety of lengths in order to meet customer mounting depth specifications.

Flange operators

Flange operated disconnect switches are available as rigid shaft or flexible cable designs. The cable operated version allows installation of the disconnect anywhere in the enclosure depending on the length of the cable. Cables are available in lengths from 36 to 84 inches. Along with optional direct mount rotary handles, ABB's full flange offering provides compliance with NFPA79 and UL508A requirements for industrial machinery operation handles.

Conversion mechanisms

Convert a standard fusible or non-fusible ABB disconnect to a custom solution by installing one of the available conversion mechanisms.

- 6 or 8 pole mechanism - operates 2 switches with a single handle.
- Transfer mechanism - manually transfers between 2 power sources.
- Bypass mechanism - operates 3 switches (2 in a series and 1 transfer switch to provide bypass).
- Mechanical interlock - prevents 2 switches from simultaneously being in the ON position.

Other common accessories

- Motor operators
- Terminal shrouds
- Additional power poles
- Additional terminal poles (neutrals and grounds)
- Electro-mechanical interlocks
- Auxiliary contacts

