

socomec

Innovative Power Solutions

Disconnect Switches



Compact UL 98 Non-Fusible Switches 30 - 100 Amp Range

- Touch safe
- DIN-rail or back-plate mounted
- Direct or external operation handle
- Double breaking per pole



UL 98 Non-Fusible Heavy Duty Switches 100 - 600 Amp Range

- Fully visible disconnection
- High thermal and dynamic withstand
- High electrical and mechanical endurance



UL 508 Non-Fusible Switches 16 - 100 Amp Range

- Compact and modular
- Direct or external operation
- DIN-rail or base mount
- Suitable as motor disconnect



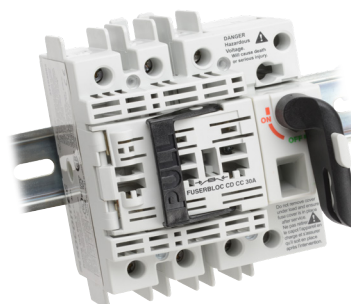
UL 508 Enclosed Non-Fusible Switches 30 - 60 Amp Range

- 1 removable ground terminal
- Ability to add 1 power pole and 1 auxiliary contact
- NEMA/UL type 1, 3R, 12, 4, 4X
- Suitable as motor disconnect



UL 98 Manual Multipolar Load Switches 100 - 250 Amp Range

- Ideal for photovoltaic applications
- 600VDC per UL 98 / CSA
- 1000VDC per UL98B
- Up to 1000VDC per UL IEC 60947-3 characteristics



UL 489 Compact Fusible Disconnect Switches 30 Amp Rating

- Front operation
- Touch safe covers
- Voltage sensing terminals
- Up to 200kA SCCR



- #### UL 98 Fusible Disconnect Switches 30 - 600 Amp Range
- Front and side operation
 - Touch safe covers
 - Up to 200kA SCCR
 - Double break contact



To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at www.AutomationDirect.com

Disconnect Switches

Introduction

UL®/CSA® Standards for Disconnect Switches

UL 98 – Enclosed and Deadfront Switches (CSA C22.2 No. 4)

These requirements cover enclosed or deadfront switches, with or without provision for fuses, at 600V or less. These products are used as disconnecting means without restrictions; they are heavy-duty products requiring 2 inches (50mm) minimum of creepage distance between phases, which gives maximum safety for users and installation. The short-circuit withstand of these products goes up to 200kA.

UL 489 – Molded Case Switches (CSA C22.22 No. 5)

These requirements cover molded case circuit breakers, molded case switches and fused molded case switches, rated at 600V or less and 6000A or less.

NFPA® 79 Electrical Standard for Industrial Machinery

The following types of machines are identified as industrial machinery:

- Metalworking machine tools, including machines that cut or form metal
- Plastics machinery
- Wood machinery, including woodworking, laminating and sawmill machines
- Assembly machines
- Material handling machines, including industrial robots and transfer machines
- Inspection and testing machines, including coordinate measuring and in-process gauging machines

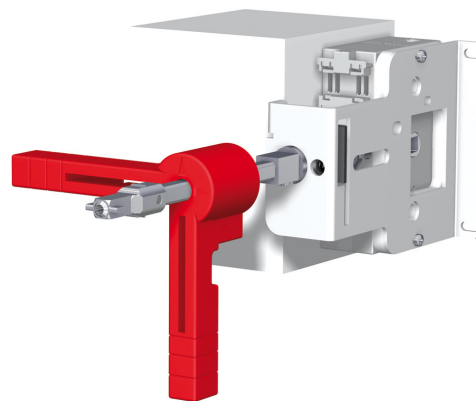
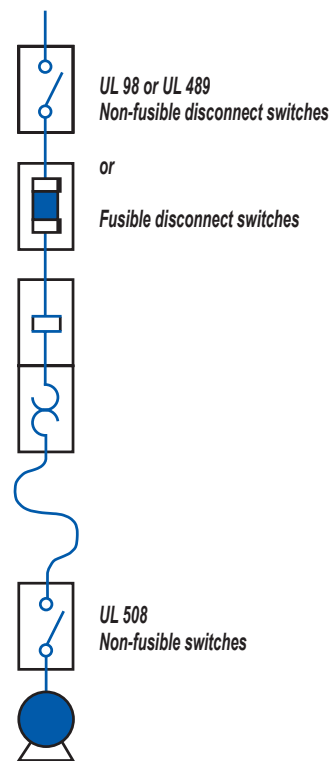
UL® Standards for Electrical Machinery

UL 508 – Industrial Control Equipment (CSA C22.2 No. 14)

These requirements cover manual, magnetic and solidstate starters and controllers, overload relays, pushbuttons, selector switches and control lights. These products are smaller, requiring only a creepage distance between phases of 0.50 inch (12.7 mm). Their use as a disconnecting means is limited to local disconnection of motors. These products can be used as a disconnect means only when they have been additionally tested "suitable as motor disconnect." This additional testing ensures that the switch has a proper closing capacity on a short circuit.

UL 508 devices **cannot** be used as main disconnect of an electrical panel, e.g., at the entrance of control panels. A manual motor controller marked "suitable as motor disconnect" shall be installed only on the load side of the branch circuit protective device [UL 508A 30.3.3 and NEC 430.109 (6)].

Typical Control Panel



Meeting the requirements of UL508A and NFPA79

The disconnect shall be operable independent of the door position.

The disconnect must be operable, by qualified persons, independent of the door position without the use of accessory tools or devices.

Note: NFPA 79; Paragraph 5.3.3.1 (5).

An operating mechanism for the disconnecting means shall be operable independent of the door position without the use of accessory tools or devices.


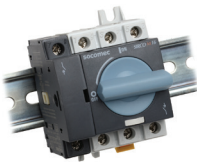



Note: UL 508A; Paragraph 66.6.3 c.

Non-Fusible Disconnect Switches



Selection Guide

- Which application?
- Which function?
- Which operation handle?
- Which type of breaking?

Machine Control			Power Distribution	
UL 98 Compact Non-Fusible Disconnect Switches	UL 508 Non-Fusible Disconnect Switches*	UL 508 Non-Fusible Enclosed Disconnect Switches	UL 98 Non-Fusible Disconnect Switches	UL 98B DC Non-Fusible Disconnect Switches
				
22013003 22013006 22003010	22003000 , 22003001 22003002 , 22003003 22003004 , 22003006 22003008	22143503 22243503 22243506	27003011 , 27004011 27003021 , 27004021 27003041 , 27003060	27DC3011 27DC4011 27DC3021 27DC4021

Applications					
Main switchboard		✓	✓	✓	✓
Distribution panel		✓	✓	✓	✓
Emergency disconnect		✓	✓	✓	✓
Local safety disconnect (padlockable)		✓	✓	✓	✓
Photovoltaic disconnect					✓
Enclosed switches		✓	✓	✓	✓
Functions					
3/4 pole non-fusible disconnect switch		✓	✓	✓	✓
Characteristics					
Operation	Manual (rotating)	✓	✓	✓	✓
Direct operation handle	Front	✓	✓	✓	✓
External operation handle	Front	✓	✓	✓	✓
	Right side	✓	✓		
Indication of breaking	Positive break indication	✓	✓	✓	✓
Switch body	Modular	✓	✓		

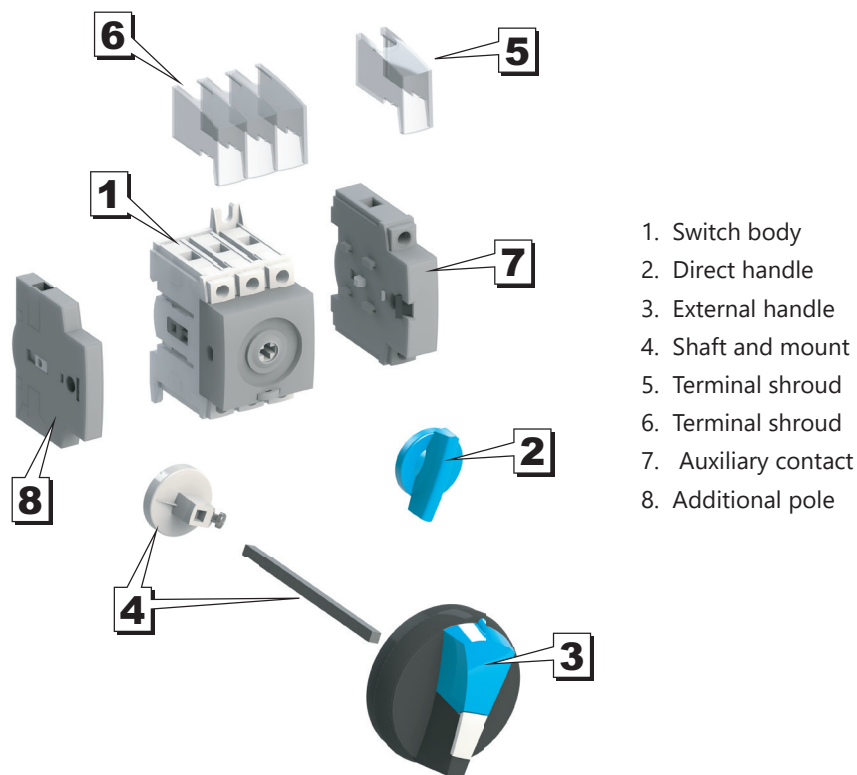
* Note: These part numbers are direct replacements for previous part numbers with a "-UL" suffix. They have identical technical specs, form, fit and function. There is no change in agency approvals, the UL mark, listing, or File numbers E173959 and E201138.

Non-Fusible Disconnect Switches

Assembly of Accessories

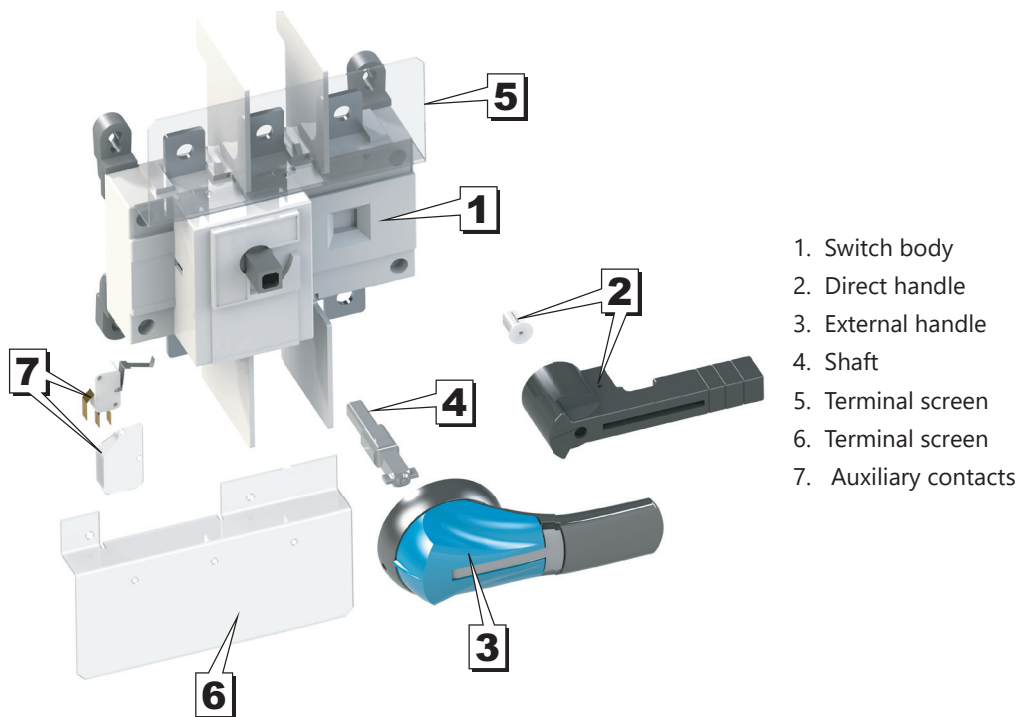


Non-fusible 16 - 100A Disconnect Switches Accessories



1. Switch body
2. Direct handle
3. External handle
4. Shaft and mount
5. Terminal shroud
6. Terminal shroud
7. Auxiliary contact
8. Additional pole

Non-fusible 100 - 600A Disconnect Switches Accessories



1. Switch body
2. Direct handle
3. External handle
4. Shaft
5. Terminal screen
6. Terminal screen
7. Auxiliary contacts