Disconnect Switches

Rotary and Visible Blade

A·B *Allen-Bradley*

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Rockwell Automation

Disconnect Switch Portfolio

Designed for global markets, the Allen-Bradley disconnect switch portfolio offers multiple operating mechanisms, switch bodies and mounting options to meet customer-specific requirements.

Importance of Disconnect Switches

Isolation

A disconnect switch interrupts the power to an electrical circuit or group of electrical circuits. They may be used as main disconnecting devices in switchboards or as feeder disconnects.

Interrupting Capacity

- Interrupting capacity up to 200 kA allows a single unit to address many applications
- Short circuit current rating (SCCR) coordination with Allen-Bradley contactors, overload relays and motor starters
- See our Global SCCR website for more information http://www.rockwellautomation.com/support/global-sccr.page

Operation

Mounted within an enclosure, disconnect switches are available with a range of flange-mount handles or rotary-style handles to comply with global requirements. Enclosure and door interlocks provide an additional level of operator safety by preventing the handles and doors from being opened while the disconnect switch is energized.

Operational Styles

Rotary Style

Rotary – fused

- Expands up to 1250 A for IEC, and 800 A for UL
- Suitable as at-motor disconnecting means (UL 508)
- Suitable as service entrance disconnecting means (UL 98)

Rotary – non-fused

- Expands up to 1250 A for IEC and 1200 A for UL
- Suitable as at-motor disconnecting means (UL 508)
- Suitable as service entrance disconnecting means (UL 98)

Visible Blade Style

Visible blade

- Clearly visible blades to determine if the switch in ON or OFF
- 30…100 A, 3-pole, 600 V AC/DC ratings
- 200…600 A, 3 pole, 600V AC/DC also available
- Suitable as service entrance disconnecting means (UL 98)

Fused style available with modular fuse block kits

Feature	Rotary	Visible Blade
Flange Mount Option	✓	✓
Rotary Handle Option	✓	
Cable Actuation	✓	✓
Rod/Shaft Actuation	✓	✓
IEC Ratings Up To	1250 A	600 A
UL Ratings Up To	1200 A	600 A
Withstand Ratings To	200 kA	200 kA
NFPA 79 Compliant	✓	✓
At-motor Disconnect	*	

*Options are available

Rotary Style

194R – Fused

The Bulletin 194R fused disconnect switch's compact design and integral fuse carriers reduce your panel space requirements.

• High short circuit current rating
• Touch-safe design
• Each phase is electrically isolated – minimizing possible phase to phase short
• Double-break switching for full fuse line and load side isolation when switch is OFF
• RoHS compliant

Fused: 20...1250 A for IEC markets
Fused: 30...800 A for UL markets

Certification
• CE
• CSA Certified — File No. LR1234
• UL Listed — File No. E 14841; Guide No. NLRV
• UL Listed — File No. E 47426; Guide No. WHTY

Fuses are electrically isolated from line and load when the disconnect is in the OFF position

Side operation available for 100... 1250 A fused disconnects, also available on 30... 60 A with additional accessory

194R – Non-fused

The Bulletin 194R non-fusible disconnect switches are rugged, durable, non-fused and approved for use in demanding applications and environments.

• Compact footprint for both UL and IEC switch bodies
• Suitable for severe utilization categories (AC-22 & AC-23)
• Fast opening and closing, independent from operator allows the switch to close on short circuit and also to operate high inductive load

Certification
• CE
• CSA Certified — File No. LR1234
• UL Listed — File No. E 14841; Guide No. NLRV
• UL Listed — File No. E 47426; Guide No. WHTY

Target Industries
• Food & Beverage
• Material Handling
• Packaging
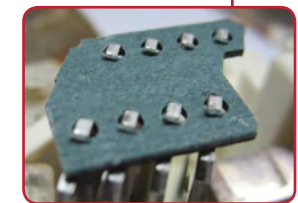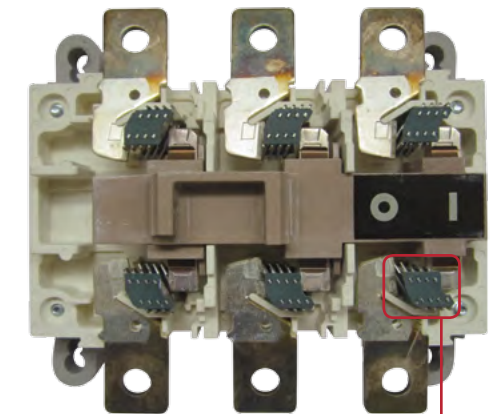
Sweeping contacts allows a high short circuit withstand

Enclosed options available

Visible Blade Style

1494U – Universal

Providing the extra level of visual ON or OFF indication of a knife-blade disconnect, the Bulletin 1494U offers a universal design that supports either rod or cable operation.

- Fusible or non-fusible
- Smaller footprint
- NFPA 79 Compliant
- Enclosure interlock – Prevents handle from being moved to the ON position when door is open

Certification
- CE Marked
- CSA Certified
- UL Listed
- CCC

Fuse Blocks
- Common base across 30/60/100 A
- Integrated phase barriers
- J and R fuse clips are available for fusible styles

Visible Blade Construction
- Reliable visible blade indication
- Blades visible – switch is de-energized
- Blades hidden – switch is energized

Rod Operated System
- One rod length to cover enclosure depths with working depths up to 19"

Universal Design
- Provides flexibility of installation for either rod or cable operated applications

Cable Operated System
- Cable available in 3', 4', 5', and 6' lengths
- Thinner cable design for more flexibility and lower bend diameter (6")
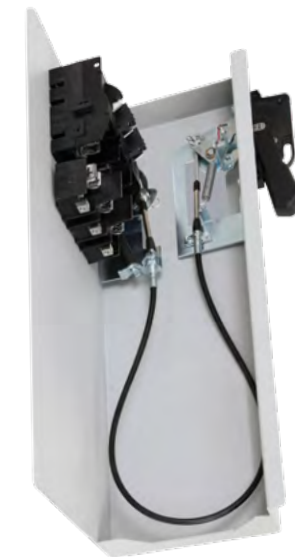
Target Industries
- Automotive
- Food & Beverage
- Oil & Gas
- Water/Wastewater
- Paper & Packaging
- Utilities & Mining
- Industrial Manufacturing

Accessories

The variety of accessories for our disconnect switch portfolio allows you to customize the switch to meet your application needs, while providing isolation to your downstream devices.

Operating Mechanisms & Handles
Flexible operating and mounting options adapt to almost any application.

194R & 1494U Handles   1494U Cable Mechanism   194R Rotary Handles   NFPA79 Internal Handle

Lugs
Single and multi-port lugs allow for easy installation of multiple wires.

194R Single and multi-port lugs   1494U Single and multi-port lugs

Protective Cover
Enhanced safety for customers with the optional one piece back-of-hand cover designed to protect against the line and load sides of the switch.
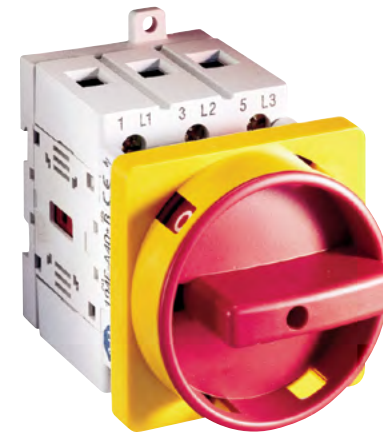
1494U Cover

At-motor Disconnect

194E – Load Switches

- Base/DIN Rail, or front-door mounting configurations
- Available in OFF-ON and changeover configurations
- 3- and 6-pole switches
- Padlockable handles available (up to 3 padlocks)

194L – Control & Load Switches

- Available in ON-OFF, changeover, star-delta (wye-delta), reversing, ammeter, voltmeter and step switch configurations
- Front door, Base/DIN Rail mounting configurations
- 1...6-pole versions
- Padlockable handles available (up to 3 padlocks)

Enclosed control & load switch options available

194R Rotary Disconnect Switches

- Lockout-Tagout functionality
- Use as at-motor isolation
- Enclosure options:
  - Thermoplastic, NEMA 4/4X
  - Painted Metal, NEMA 3/4/12
  - Stainless Steel, NEMA 4/4X

1494G Hazardous Location Safety Disconnect Switches

- Viewing window to display the switch blades
- 30…100 A switch ratings
- Type 3R, 7 & 9 bolted enclosure with breather and drain
- Class I, Division 1 & 2, Groups C & D and Class II, Groups E, F & G hazardous gas or dust locations certifications

1494G Heavy Industrial Safety Disconnect Switches

- Fully-exposed switch blades
- For use in indoor and outdoor applications
- 30…600 A switch ratings
- Enclosure Options:
  - Thermoplastic, NEMA 4/4X
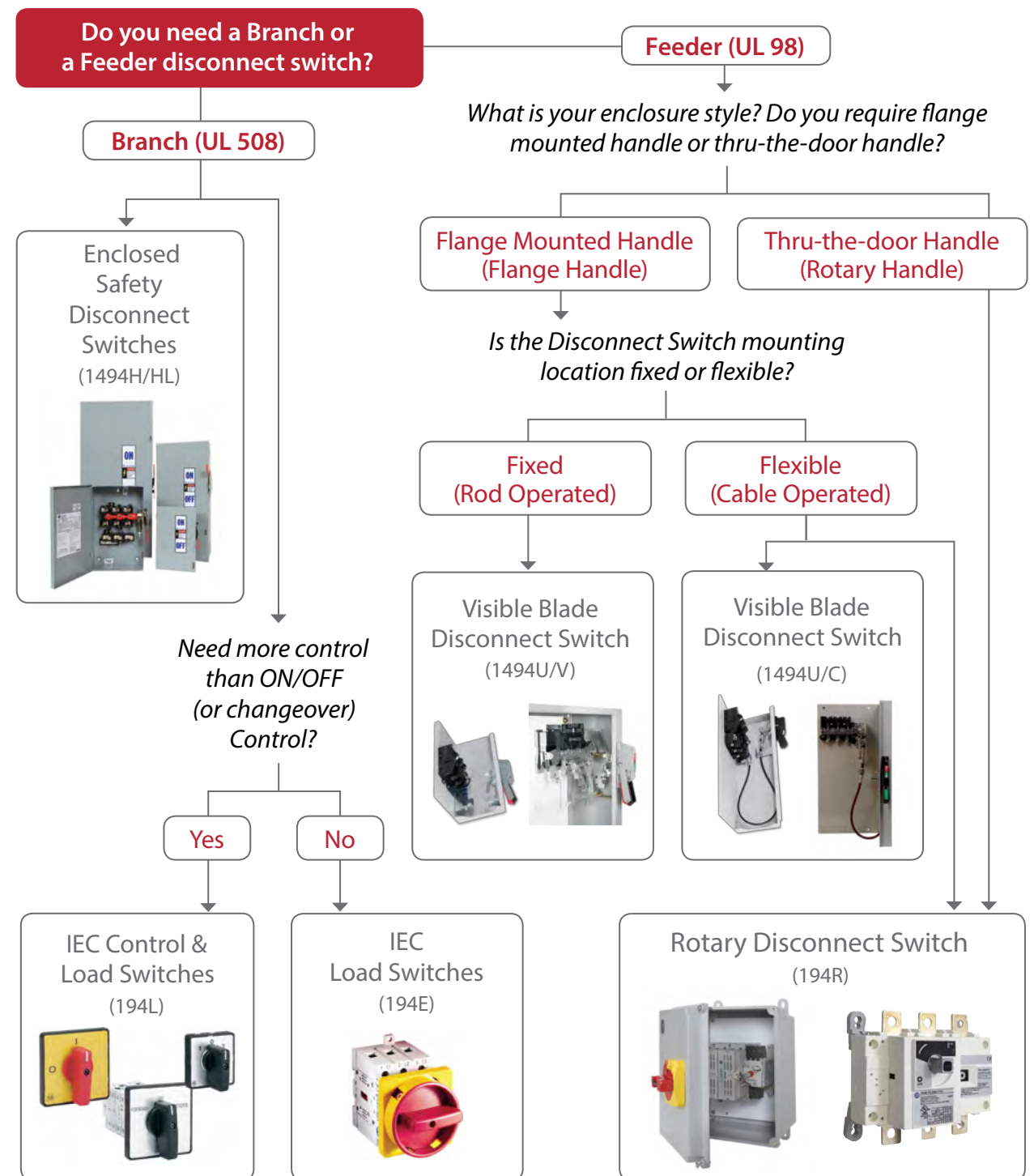 - Painted Metal, NEMA 3R/4/12
  - Stainless Steel, NEMA 4/4X

1494H Industrial/General Duty Safety Disconnect Switches

- 30…200 A switch ratings
- Enclosure Types 1, 3R or 12
- Internal mounting holes for time saving installation

Disconnect Switch Selection

Multiple types of disconnect switches are available to address local codes and varying application requirements. Addressing these basic questions can help to identify the disconnect switch best suited for your application.

Do you need a Branch or a Feeder disconnect switch?

Feeder (UL 98)

What is your enclosure style? Do you require flange mounted handle or thru-the-door handle?

Branch (UL 508)

Flange Mounted Handle (Flange Handle)

Thru-the-door Handle (Rotary Handle)

Enclosed Safety Disconnect Switches
(1494H/HL)

Is the Disconnect Switch mounting location fixed or flexible?

Fixed (Rod Operated)

Flexible (Cable Operated)

Need more control than ON/OFF (or changeover) Control?

Visible Blade Disconnect Switch
(1494U/V)

Visible Blade Disconnect Switch
(1494U/C)

Yes   **No**

IEC Control & Load Switches
(194L)

IEC Load Switches
(194E)

Rotary Disconnect Switch
(194R)

Local Distributor

Visit our website to find your local Distributor.

www.rockwellautomation.com/distributor

On-Line Product Directory

Our portfolio of disconnect switches are designed to protect your manufacturing investments.

ab.rockwellautomation.com/Circuit-and-Load-Protection
Disconnect-Switches

Global Short-Circuit Current Rating

Determine the short-circuit rating of your industrial panel with the SCCR selection tool.

www.rockwellautomation.com/global/support/global-sccr.page

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