Reliable motor control for industrial environments
The ideal motor control switch solutions for industrial environments

Arrow Hart understands the unique switching needs of complex environments. Eaton motor control disconnect switches are built for use in harsh industrial applications to address the needs of safety, reduced downtime and code compliance.

Switching solutions designed to keep your business productive, safe and compliant

- Specially designed for harsh environments with exposure to chemicals, detergents and washdowns
- Ensures personnel and equipment safety in the workplace
- Designed and built tough to withstand rough service in a physically abusive environment
- Provides compliance with relevant codes and standards
- Innovative design facilitates quick and easy installation and change-outs
- Part of a complete line of motor control solutions for all your facility's needs

Table of contents

<table>
<thead>
<tr>
<th></th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Switch applications</td>
<td>3</td>
</tr>
<tr>
<td>X-Switch features &amp; benefits</td>
<td>4</td>
</tr>
<tr>
<td>X-Switch configurations &amp; ordering</td>
<td>5</td>
</tr>
<tr>
<td>X-Switch technical specs &amp; accessories</td>
<td>6</td>
</tr>
<tr>
<td>Non-fused motor controller &amp; disconnect switches</td>
<td>7-8</td>
</tr>
<tr>
<td>Other motor control switches</td>
<td>9-10</td>
</tr>
<tr>
<td>X-Switch &amp; non-fused disconnect specifications</td>
<td>11</td>
</tr>
</tbody>
</table>

National Sanitation Foundation

For a device to earn National Sanitation Foundation (NSF) Certification, the product and manufacturing facility must have passed the stringent requirements of food and beverage facilities.
Choose the switch designed for longevity in complex environments
The Arrow Hart X-Switch excels where standard industrial switches are most susceptible to fail: in physically abusive areas exposed to washdowns, extreme temperatures, chemicals and corrosive elements.

Applications
X-Switch is designed specifically for industrial manufacturing applications exposed to frequent washdowns.

UL 508 motor controller “suitable as motor disconnect” to comply with requirements of NEC® 430.

X-Switch is ideal for food processing, storage and service. Applications include meat and poultry processing, dairy, bottling, bakeries, distilleries and commercial kitchens.

X-Switch is also ideal for harsh environments such as mining, wastewater treatment, testing labs and heavy industrial manufacturing.

X-Switch enclosures are specially designed to prevent the penetration of external contaminants while delivering dependable motor control.

A variety of input/output options including a location for a breather drain and pre-designated center punch locations provide for maximum flexibility and customization.
NSF certified motor control solution

Designed specifically around the needs of the food and beverage industry’s processing areas, Arrow Hart’s X-Switch is the ideal motor control solution for complex environments.

X-Switch motor control disconnect switch (non-fused)

Features & benefits

Multiple input and output configurations available

- Sloped enclosure enhances washdown and water run off
- Compact NEMA Type 4X - 316L stainless steel enclosure is ideal for washdown environments
- High-visibility red handle can be padlocked to meet OSHA lockout/tagout requirements
- Two optional auxiliary contacts available for PLC & VFD applications
- Heavy-duty rotary disconnect switches designed for long life
- DIN-rail mounting system
- Optional breather drain prevents interior condensation build-up
- Mounting feet provide full 1/4” clearance from mounting surface per NEC® 300.6(D)
- Expanded silicone gasket for superior ingress protection and easy cleaning

Compliances, specifications and availability are subject to change without notice.
Industrial grade complex environment switch

Product description
3-pole, 3-phase
30A, 60A or 100A, 600V/AC max.
NEMA Type 4X, 12 & IP66, IP69K

Features
- NSF certified for use in food processing areas per NSF 3-A 14159-1
- Can be padlocked to conform to OSHA lockout/tagout 1910.147 requirements
- Compact size and small footprint designed for installation versatility
- Durable, NEMA Type 4X enclosure is made of non-magnetic, non-corrosive type 316L stainless steel ideal for washdown environments
- IP69K breather drain option available to prevent interior condensation buildup (enclosure with breather drain is NSF listed, IP69K certified)
- IP69K rated for high temperature & high pressure wash down
- Mounting feet provide 1/4” spacing from mounting surface (NEC® 300.6(D))
- 30A, 60A & 100A switch options available
- Heavy-duty switch designed to deliver dependability, long life and excellent electrical continuity
- Auxiliary contact options available for PLCs and external indicators (break after main break, make before main make)
- Durable lever handle and switch mechanism will withstand repeated use in harsh environments

Common X-Switch Configurations

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>Description</th>
<th>Amp</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHDS30SSR</td>
<td>Motor Control Disconnect X-Switch, NEMA 4X</td>
<td>30</td>
</tr>
<tr>
<td>AHDS60SSR</td>
<td>Motor Control Disconnect X-Switch, NEMA 4X</td>
<td>60</td>
</tr>
<tr>
<td>AHDS100SSR</td>
<td>Motor Control Disconnect X-Switch, NEMA 4X</td>
<td>100</td>
</tr>
<tr>
<td>AHDS30RS</td>
<td>Replacement switch</td>
<td>30</td>
</tr>
<tr>
<td>AHDS60RS</td>
<td>Replacement switch</td>
<td>60</td>
</tr>
<tr>
<td>AHDS100RS</td>
<td>Replacement switch</td>
<td>100</td>
</tr>
<tr>
<td>AHDS30RAC</td>
<td>Aux contact - PLC</td>
<td>30</td>
</tr>
<tr>
<td>AHDS30RVFD</td>
<td>Aux contact - VFD</td>
<td>30</td>
</tr>
<tr>
<td>AHDS60RAC</td>
<td>Aux contact - PLC</td>
<td>60</td>
</tr>
<tr>
<td>AHDS60RVFD</td>
<td>Aux contact - VFD</td>
<td>60</td>
</tr>
<tr>
<td>AHDS100RAC</td>
<td>Aux contact - PLC</td>
<td>100</td>
</tr>
<tr>
<td>AHDS100RVFD</td>
<td>Aux contact - VFD</td>
<td>100</td>
</tr>
<tr>
<td>AHDS30CH</td>
<td>X-Switch Conduit Hub, Size 3/4” For 30A Enclosure</td>
<td></td>
</tr>
<tr>
<td>AHDS60CH</td>
<td>X-Switch Conduit Hub, Size 1-1/4” For 60A Enclosure</td>
<td></td>
</tr>
<tr>
<td>AHDS100CH</td>
<td>X-Switch Conduit Hub, Size 2” For 100A Enclosure</td>
<td></td>
</tr>
<tr>
<td>AHDSBD</td>
<td>Breather Drain IP69K rated</td>
<td>—</td>
</tr>
<tr>
<td>AHDS30RTCASSR</td>
<td>Replacement top cover assembly For 30A Enclosure</td>
<td></td>
</tr>
<tr>
<td>AHDS61RTCASSR</td>
<td>Replacement top cover assembly For 60/100A Enclosure</td>
<td></td>
</tr>
</tbody>
</table>

Short Circuit Current Ratings

30A X-Switch SCCR:
Suitable for use as a Motor Disconnect with the following short-circuit current ratings:
- 65kA RMS symmetrical amps, 600 VAC max. when protected with 40A class J fuses

60A X-Switch SCCR:
Suitable for use as a Motor Disconnect with the following short-circuit current ratings:
- 65kA RMS symmetrical amps, 600 VAC max. when protected with 70A class J fuses

100A X-Switch SCCR:
Suitable for use as a Motor Disconnect with the following short-circuit current ratings:
- 65kA RMS symmetrical amps, 600 VAC max. when protected with 100A class J fuses

Max Horse Power Ratings

<table>
<thead>
<tr>
<th>Voltage</th>
<th>30A</th>
<th>60A</th>
<th>100A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Ø 120 VAC</td>
<td>1.5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>1Ø 220 - 240 VAC</td>
<td>5</td>
<td>7.5</td>
<td>15</td>
</tr>
<tr>
<td>1Ø 277 VAC</td>
<td>5</td>
<td>7.5</td>
<td>15</td>
</tr>
<tr>
<td>1Ø 440 - 480 VAC</td>
<td>7.5</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>3Ø 220 - 240 VAC</td>
<td>10</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td>3Ø 440 - 480 VAC</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>3Ø 600 VAC</td>
<td>25</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>

Compliances, specifications and availability are subject to change without notice.
Non-fused 30 or 60 Ampere motor control disconnect switch “Suitable as Motor Disconnect” per NEC® 430.102(B) and 430.109(A)(6)

Arrow Hart’s new line of NEMA Type 4X disconnect switches are made from VALOX™ resin and are a flexible and economical solution to 3-phase power switching applications. They are ideal for washdown and corrosive environments where an OSHA lockout/tagout disconnecting means is required. They also are suitable for use with metallic conduit and are available with auxiliary contacts for a variety of control circuit applications.

Motor control disconnect switch (non-fused)

Features & benefits

- Optional 1/4” gap or flush mount feet for easy washdown
- Captivated, combination head stainless steel screws for long life and easy access
- Thermoplastic enclosure made from VALOX™ resin provides high impact strength and excellent corrosion resistance
- High-visibility red handle can be padlocked to meet OSHA lockout/tagout requirements
- Adjustable mounting feet for flexible positioning options
- Heavy-duty industrial switches designed for long life
- Optional auxiliary contact for PLC and VFD applications available
- One piece gasket provides superior watertight protection and easy cleaning
- Integrated grounding plate and DIN rail mounting allows automatic grounding and easy installation

NSF Listed for use in food processing areas per NSF 3-A 14159-1 standard

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Motor control disconnect switch (non-fused)

Non-fused 30 or 60 ampere motor control disconnect switch

Product description
3-pole, 3-phase
30A or 60A, 600V/AC max.
NEMA Type 4X, 12 & IP67

Features
• Durable, NEMA Type 4X thermoplastic enclosure made from VALOX™ resin is ideally suited to withstand corrosive environments
• Compact size and small footprint designed for installation versatility
• Can be padlocked to conform to OSHA lock-out, tag-out 1910.147 requirements
• Robust mounting feet provide either flush mount or 1/4" spacing allowing washdown behind the enclosure (NEC® 300.6(D))
• Mounting feet are adjustable for flexible horizontal or vertical positioning
• DIN rail and integrated grounding plate allow easy installation

Motor control disconnect switches

<table>
<thead>
<tr>
<th>Rating</th>
<th>V/AC</th>
<th>Description</th>
<th>Catalog no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>600 max.</td>
<td>30A disconnect switch</td>
<td>AHDS30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30A disconnect switch aux contacts</td>
<td>AHDS30AC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30A disconnect switch var freq drive</td>
<td>AHDS30VFD</td>
</tr>
<tr>
<td>60</td>
<td>600 max.</td>
<td>60A disconnect switch</td>
<td>AHDS60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60A disconnect switch aux contacts</td>
<td>AHDS60AC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60A disconnect switch var freq drive</td>
<td>AHDS60VFD</td>
</tr>
</tbody>
</table>

Horsepower ratings

<table>
<thead>
<tr>
<th>Voltage</th>
<th>30A</th>
<th>60A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1Ø 120V</td>
<td>1.5</td>
<td>3</td>
</tr>
<tr>
<td>1Ø 220-240V</td>
<td>5</td>
<td>7.5</td>
</tr>
<tr>
<td>1Ø 277V</td>
<td>5</td>
<td>7.5</td>
</tr>
<tr>
<td>1Ø 440-480V</td>
<td>7.5</td>
<td>15</td>
</tr>
<tr>
<td>3Ø 220-240V</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>3Ø 440-480V</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>3Ø 600V</td>
<td>25</td>
<td>40</td>
</tr>
</tbody>
</table>

Short Circuit Current Ratings

**30A X-Switch SCCR:**
Suitable for use as a Motor Disconnect with the following short-circuit current ratings:
• 65kA RMS symmetrical amps, 600 VAC max.
  when protected with 40A class J fuses

**60A X-Switch SCCR:**
Suitable for use as a Motor Disconnect with the following short-circuit current ratings:
• 65kA RMS symmetrical amps, 600 VAC max.
  when protected with 70A class J fuses

Non-fused motor control disconnect switch ordering matrix

3-pole, 30A or 60A, 600V/AC

Motor control disconnect switch sample number:
AH30AC

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Indicates ROHS compliant

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Other motor control disconnect switches

Bussmann fused rotary disconnects

Product description
3-pole, 3-phase
30A or 60A, 600V/AC max.
NEMA Type 4X, 12

Features
• Lock/tagout: Up to three ¼” shank padlocks can be installed on external handles
• Multiple field installed accessories to enhance the enclosed disconnect switches to fit the desired application
• Auxiliary contacts
• NEMA Type 4X polycarbonate construction
• Uses class J fuses such as Bussmann LPJ
• UL98 Listed for general purpose, main disconnect, or branch circuit protection up to 600 V/AC file E182262
• UL 508 Listed for motor disconnect applications up to 600 V/AC File E155129
• cULus Listed to CSA Standard 22.2, No. 14, No. 4
• Conforms with IEC 60947-3
• RoHS Compliant

<table>
<thead>
<tr>
<th>Bussmann fused rotary disconnect switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rating</strong></td>
<td><strong>V/AC</strong></td>
</tr>
<tr>
<td>30</td>
<td>600 max.</td>
</tr>
<tr>
<td>60</td>
<td>600 max.</td>
</tr>
</tbody>
</table>

Eaton enclosed rotary disconnects

Product description
3-pole, 3-phase
NEMA Type 4X

Features
• Padlockable in the OFF position (up to three padlocks) to meet OSHA lockout requirements
• Rated for making and breaking loads
• Accepts auxiliary contacts; capability to signal PLC controllers
• Ground lug connection provided
• Possibility of adding one power pole and one auxiliary contact
• NEMA Type 4X
• Meets NEC® Article 430 requirements for a separate disconnect means within sight of all motor loads
• UL listed under Section 508, File No. E165150
• CSA listed to 22.2 No. 14, File 162136

<table>
<thead>
<tr>
<th>Eaton enclosed rotary disconnect switches</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rating</strong></td>
<td><strong>V/AC</strong></td>
</tr>
<tr>
<td>16</td>
<td>600 max.</td>
</tr>
<tr>
<td>25</td>
<td>600 max.</td>
</tr>
<tr>
<td>40</td>
<td>600 max.</td>
</tr>
<tr>
<td>80</td>
<td>600 max.</td>
</tr>
</tbody>
</table>

[✓] Indicates ROHS compliant

Compliances, specifications and availability are subject to change without notice.
Other motor control switches

Choose from a variety of rugged, dependable motor control solutions

From NEMA Type 1 to NEMA Type 4X enclosures and replacement switches, Arrow Hart has the devices you need for safe, dependable motor control

Motor controllers & disconnects
Ruggedly built to provide dependable manual motor control for 2- and 3-pole applications up to 60A; available in 10/20, 20/30, 30, 40 & 60 Amp configurations for AC and AC/DC single-phase and three-phase applications

Motor controllers & disconnects in enclosures
Arrow Hart’s switch and NEMA Type 1 and Type 3R enclosure combinations suit a wide variety of indoor and outdoor applications; all enclosures are OSHA Lockout/Tagout compliant. Available in 10, 20, 30, 40 & 60 Amp configurations; NEMA Type 3, 7, & 9 Hazardous Location enclosures also available with 30A switches

Fused & non-fused disconnects
Available in both non-fused and fused designs, these devices combine an HP-rated switch with a compact, durable, watertight enclosure that’s NEMA Type 3R, 4X or 12 rated, OSHA Lockout/Tagout compliant and fulfills NEC® Article 430 requirements. Available in 30, 60 & 100 Amp configurations

Popular manual motor controllers & disconnects

<table>
<thead>
<tr>
<th>Rating</th>
<th>V/AC</th>
<th>Description</th>
<th>Catalog no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>250</td>
<td>Two-position maintained contact switch, single throw, 2-Pole single phase, front wired screw termination</td>
<td>AH6810U</td>
</tr>
<tr>
<td>30</td>
<td>600</td>
<td>Two-position maintained contact switch, single throw, 3-Pole three phase, front wired screw &amp; clamp termination</td>
<td>AH78010U</td>
</tr>
<tr>
<td>30</td>
<td>250</td>
<td>Two-position maintained contact switch, single throw, 2-Pole single phase, in NEMA Type 1 enclosure</td>
<td>AH6810G</td>
</tr>
<tr>
<td>30</td>
<td>600</td>
<td>Two-position maintained contact switch, single throw, 3-Pole three phase, in NEMA Type 1 enclosure</td>
<td>AH7810GD</td>
</tr>
<tr>
<td>40</td>
<td>600</td>
<td>Two-position maintained contact switch, single throw, 3-Pole three phase, in NEMA Type 3R enclosure</td>
<td>AHMC340L-3</td>
</tr>
<tr>
<td>60</td>
<td>600</td>
<td>Two-position maintained contact switch, single throw, 3-Pole three phase, in NEMA Type 3R enclosure</td>
<td>AHMC360L-3</td>
</tr>
</tbody>
</table>

Related products
Whether you need to get power quickly and easily from one point to another, preserve cable connections for safety and reliability or simply replace a switch, we have the devices you need to get the job done.

Wire mesh grips
Industrial cable strain relief

Compliances, specifications and availability are subject to change without notice.
Motor control disconnect switch (fused & non-fused) specification & performance data

Motor controllers & disconnects switches

**Product description**

3-pole, 3-phase
30A, 60A or 100A, 600V/AC max.

<table>
<thead>
<tr>
<th>Device type</th>
<th>30A, 60A &amp; 100A X-Switch motor controllers &amp; disconnects</th>
<th>30A &amp; 60A - disconnect switches (non-fused)</th>
</tr>
</thead>
</table>
| **Testing & code compliance** | • cULus Listed to UL508, file no. E135083  
• NSF evaluated for use in washdown areas and to NSF/ANSI/3-A Standard 14159-1 Hygiene requirements for the design of meat and poultry processing equipment | • cULus Listed to UL60947-1 & 60947-4, file no. E135083 |
| **Environmental specifications** | Flammability: Meets UL94 requirements; rated 94-SV  
Temperature rating: -40ºC to 105ºC (-40ºF to 221ºF)  
Protection: NEMA Type 4X, 12 & IP66, IP69K | Flammability: UL94 V0 and 5VA Classification  
Temperature rating**: Max continuous: +60ºC (+140ºF)  
Min continuous (without impact): -50ºC (-58ºF)  
Water/moisture resistance: NEMA Type 4, 4X, 12 & IP67  
UV resistance: All enclosure materials are UV stabilized |
| **Electrical specifications** | Maximum continuous current: 30A, 60A, 100A  
Max operating voltage: 600V/AC  
Short circuit current rating (SCCR): see chart on page 5  
Motor loads: Horsepower rated per UL508, see chart on page 5 | Maximum continuous current: 30A, 60A  
Dielectric voltage: 2200V AC minimum  
Max operating voltage: 600V/AC  
Short circuit current rating (SCCR)**: see chart on page 7  
Motor loads: Horsepower rated per UL508, see chart on page 7 |
| **Mechanical specifications** | Terminal accommodation: (30A) #10 AWG; (60A) #6 AWG; (100A) 1/0 AWG  
Mechanical life: 10,000 cycles minimum  
Voltage ratings: Permanently marked on device  
Mounting: Welded feet provide full 1/4" clearance | Impact resistance: As per UL746C  
Mechanical life: 10,000 cycles minimum  
Voltage ratings: Permanently marked on device  
Mounting: External adjustable feet with three positions (0, 45 & 90 degrees) 30A - flush and non-flush mounting feet options  
Terminal identification: (30A) #10 AWG, (60A) #6 AWG |
| **Material** | Enclosure - body: 14 gauge type 316L stainless steel  
Mounting feet: 11 gauge type 316L stainless steel  
Enclosure handle: Red nylon thermoplastic  
Enclosure - screws: Tri-Combo head pattern w/ captivated O-RWG  
Lock-out/tag-out bracket: Polycarbonate/Polybutylene Cerephthalate (PC/PBT)  
Enclosure gasket: Expanded silicone  
Manual contactor terminal type: 30A - front-wire screw termination; 40A & 60A - box lug termination  
Manual contactor terminal screws: Nickel plated 260 brass  
Manual contactor contacts: Silver  
Manual contactor moveable arm: Brass | Enclosure - top cover: VALOX™ resin  
Enclosure - base: VALOX™ resin  
Enclosure - screws: 300 Series stainless steel (captivated)  
Grounding - plate: Steel - galvanized  
Grounding - assembly screw: 300 series stainless steel  
Handle: VALOX™ resin  
Handle - seat: Neoprene  
Handle - shaft: VALOX™ resin  
Handle - screw: 300 series stainless steel (tamper resistant type)  
Mounting feet: VALOX™ resin  
Mounting feet - assembly screws: 300 series stainless steel  
Threaded inserts: Brass |
| **Optional equipment materials** | Breather drain material: Type 304 stainless steel  
Breather drain gasketing: Expanded silicone rubber | Impact resistance: As per UL746C |

* Break all lines  
**When used with 75ºC copper wire only  
***Not applicable for 1 Ø 120 and 277 VAC applications  
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At Eaton, we believe that power is a fundamental part of just about everything people do. Technology, transportation, energy and infrastructure—these are things the world relies on every day. That's why Eaton is dedicated to helping our customers find new ways to manage electrical, hydraulic and mechanical power more efficiently, safely and sustainably. To improve people's lives, the communities where we live and work, and the planet our future generations depend upon. Because that's what really matters. And we're here to make sure it works.

See more at Eaton.com/whatmatters