

# X-Switch motor controllers & disconnect switches

Project Name:	Prepared By:
Project Number:	Date:
Catalog Number:	Type:

## Product description

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

## Design features

- Compact NEMA 4X, NEMA 12, IP66 & IP69K rated, stainless steel enclosure is ideal for washdown environments
- NSF Listed for food processing areas
- Sloped enclosure enhances wash down & water run off
- High-visibility red handle can be padlocked to meet OSHA lockout/tagout requirements
- Retained, Tri-Combo screws for easy access
- Mounting feet provide full 1/4" clearance from mounting surface
- Optional breather drain prevents interior condensation buildup
- Expanded silicone gasket for superior ingress protection and easy cleaning
- Heavy-duty rotary disconnect switches designed for long life
- Auxiliary contacts are available for PLC or VFD applications
- Enclosure assembly made of 316L stainless steel for increased corrosion resistance



AHDS30SSR



AHDS30SSR (Inside)

**Table 1. Common X-Switch Configurations**

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



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**Table 2. Max Horse Power Ratings**

Voltage	30A	60A	100A
1Ø 120 VAC	1.5	3	5
1Ø 220 - 240 VAC	5	7.5	15
1Ø 277 VAC	5	7.5	15
1Ø 440 - 480 VAC	7.5	15	30
3Ø 220 - 240 VAC	10	15	25
3Ø 440 - 480 VAC	20	30	50
3Ø 600 VAC	25	40	50

## Applications

The X-Switch is designed specifically for industrial manufacturing applications exposed to frequent washdown. It uses a UL 508 motor disconnect "suitable as motor disconnect" to comply with requirements of NEC® 430. The X-Switch is ideal for food processing, storage and service. Applications include meat and poultry processing, dairy, bottling, bakeries, distilleries and commercial kitchens. The X-Switch also ideal for harsh environments such as mining, wastewater treatment, testing labs and heavy industrial manufacturing. The X-Switch enclosure is specially designed to prevent the penetration of external contaminants while delivering dependable motor control. A variety of options including breather drains and auxiliary contacts for PLC & VFD provide for maximum flexibility.

**Table 3. Specifications**

Device Type	30A , 60A & 100A X-Switch motor controllers & disconnects
<b>Testing &amp; code compliance</b>	<ul style="list-style-type: none"> <li>cULus Listed to UL 508, file no. E135083</li> <li>NSF evaluated for use in hose-down areas and to NSF/ANSI/3-A Standard 14159-1 Hygiene Requirements for the design of meat and poultry processing equipment</li> </ul>
<b>Environmental specifications</b>	<b>Flammability:</b> Meets UL 94 requirements; rated 94-5V <b>Protection:</b> Type 4X, 12 & IP66, IP69K
<b>Electrical specifications</b>	<b>Maximum continuous current:</b> 30A, 60A, 100A <b>Endurance, mechanical:</b> 10,000 cycles minimum <b>Endurance, electrical:</b> 6,000 cycles minimum <b>Short circuit current rating (SCCR):</b> Rated up to 65kA RMS symmetrical amps, see chart <b>Motor loads:</b> Horsepower rated per UL 508, see chart #2
<b>Mechanical Specifications</b>	<b>Terminal accommodation:</b> (30A) #10 AWG; (60A) #6 AWG; (100A) #1/0 AWG <b>Voltage ratings:</b> Permanently marked on device

**Table 4. Materials**

Device Type	30A , 60A & 100A X-Switch motor controllers & disconnects
<b>Enclosure - body</b>	14 gauge type 316L stainless steel
<b>Mounting feet</b>	11 gauge type 316L stainless steel
<b>Enclosure handle</b>	Red nylon thermoplastic
<b>Enclosure - screws</b>	Captivated tri-Combo
<b>Lock-out/tag-out bracket</b>	Polycarbonate/Polybutylene Cerephthalate (PC/PBT)
<b>Enclosure gasket</b>	Expanded silicone

**Table 5. Equipment materials**

Device Type	30A , 60A & 100A X-Switch motor controllers & disconnects
<b>Breather drain material</b>	Type 304 stainless steel
<b>Breather drain gasket</b>	Expanded silicone rubber

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## 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

## Product Dimensions

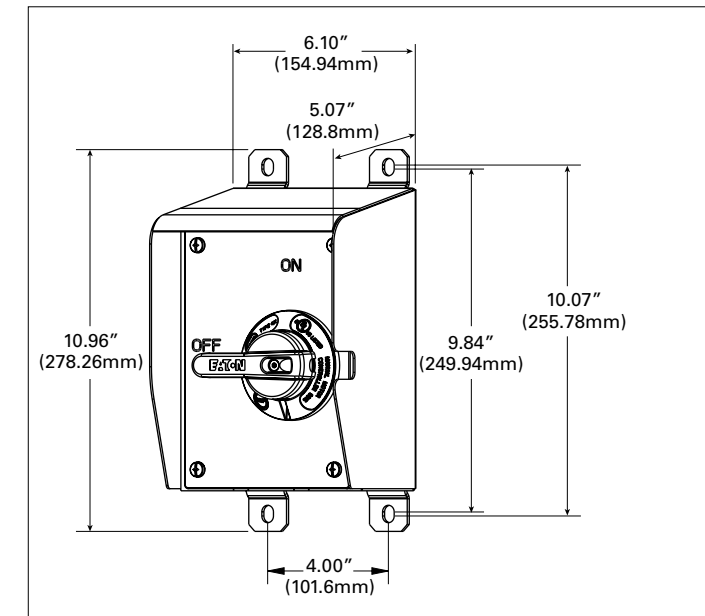


Figure 1. AHDS30SSR Dimensions

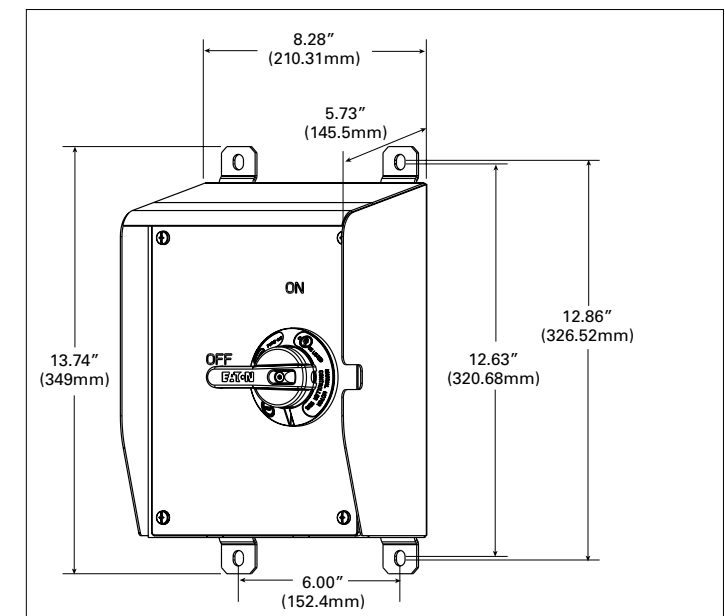






Figure 2. AHDS60SSR and AHDS100SSR Dimensions

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## Certifications & Compliances

Catalog No.		
AHDS30SSR	•	•
AHDS60SSR	•	•
AHDS100SSR	•	•
AHDS30RS	•	
AHDS60RS	•	
AHDS100RS	•	
AHDS30RAC	•	
AHDS30RVFD	•	
AHDS60RAC	•	
AHDS60RVFD	•	
AHDS100RAC	•	
AHDS100RVFD	•	
AHDS30CH	•	
AHDS60CH	•	
AHDS100CH	•	
AHDSBD	•	
AHDS30RTCASSR		
AHDS61RTCASSR		

**KEY:**  cULus  NSF

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