

A close-up photograph of a grey metal double-throw safety switch. The switch handle is in the 'OFF' position, indicated by a red arrow pointing downwards. The handle has three red labels: 'ON' at the top, 'OFF' in the middle, and 'ON' at the bottom. A red circular cap is attached to the end of the handle. The background is a red, marbled texture. A yellow warning label is partially visible on the left side of the switch.

EAT•N

Cutler-Hammer

Double Throw Safety Switch

Product Focus

Industrial
Light Commercial
Residential
Agricultural

Cutler-Hammer Double Throw Safety Switches



Cutler-Hammer® Double Throw Safety Switches are used to transfer service from a normal power source to an alternate source, or to switch from one load circuit to another. The manually operated double throw safety switch provides an economical means of transferring power. Eaton offers a full line of general-duty and heavy-duty double throw safety switches.

General-Duty

Cutler-Hammer General-Duty Double Throw Safety Switches are commonly applied in emergency power or generator applications to reduce or eliminate the costly impact of power loss from the typical source in residential, agricultural and light commercial markets. All General-Duty Double Throw Safety Switches are non-fusible and are available up to 400 amperes.

A standby generator connected to a residential wiring system must be installed according to the National Electrical Code®. A double throw switch must be installed to isolate and disconnect wiring from normal utility lines so generator-produced electricity is not back-fed onto normal utility lines. Whether normal electrical service is disrupted by severe weather conditions, accidents or other issues, a Cutler-Hammer General-Duty Double Throw Safety Switch is a critical component in your standby generator applications.

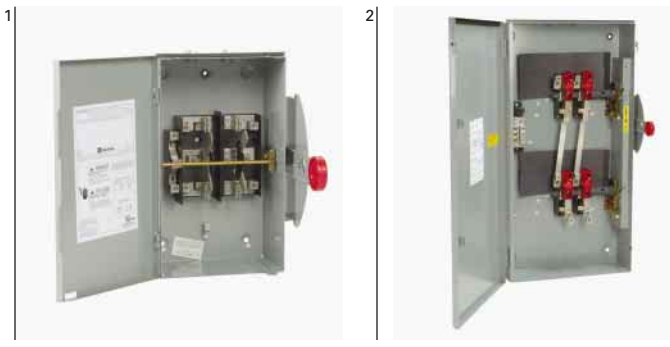
Heavy-Duty

Cutler-Hammer Heavy-Duty Double Throw Safety Switches are designed for commercial and industrial applications. Fusible switches are available through 600 amperes, while non-fusible switches are manufactured up to 800 amperes. The wiring configuration from the factory allows a single load to be supplied by a normal or alternate source; however, where necessary, the wiring can be field modified to allow two loads to be alternately supplied by a single power source.

Heavy-Duty Double Throw Safety Switches are designed to accommodate a wide range of accessories which can be factory or field installed. Customized solutions including key interlocks, viewing windows and receptacles are also available through the Switching Device Flex Center.



Double Throw General-Duty Non-Fusible Safety Switches



- 1. DT223URH-N**
Compact Design, 100 Amperes, 240 Volts.
- 2. DT224URK-NPS**
Quick-Make, Quick-Break Design, 200 Amperes, 240 Volts.

Double Throw, 240 Vac General- Duty, Non-Fusible Compact Design

Specifications

- 30 – 100 amperes.
- Suitable for service entrance use with neutral kit installed.
- Suitable for use as a manually operated switch per 2005 NEC Article 702.
- UL® listed File No. E5239.

Features

- Palm-fitting, visible red handle.
- Tri-lingual nameplate.
- NEMA® 3R enclosure with side opening door.
- Visible, embossed ON-OFF indication.
- Concentric knockouts on bottom endwall and sides.
- Lockable door hasp.
- Lockable handle.
- Three-point mounting.
- Factory-installed neutral (optional catalog numbers are available without a neutral).
- Terminals suitable for 60° or 75°C Al or Cu wire.
- Rounded shroud.
- Mechanical door interlock to prevent easy access when the switch is in the ON position.
- Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes.
- Compact size.

Double Throw, 240 Vac General- Duty, Non-Fusible, Quick-Make, Quick- Break Design

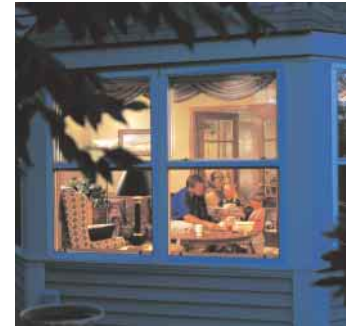
Specifications

- 30 – 400 amperes.
- Horsepower rated.
- Suitable for service entrance use with neutral kit installed.
- Suitable for use as a manually operated switch per 2005 NEC Article 702.
- UL listed File No. E5239.
- Quick-make, quick-break operating mechanism.

Features

- Palm-fitting, visible red handle.
- Tri-lingual nameplate.
- NEMA 3R enclosure with side opening door.
- Visible, embossed red ON-OFF indication.
- Tangential knockouts (30 – 100 amperes) on bottom endwall; concentric knockouts on higher ratings, and sides and rear of 30 – 100 amperes.
- Lockable door hasp.
- Lockable handle.
- Factory-installed neutral (optional catalog numbers are available without a neutral).
- Three-point mounting (30 – 100 amperes).
- Four-point mounting (200 – 400 amperes).
- Terminals suitable for 60° or 75°C Al or Cu wire on 30 – 100 amperes; 75°C Al or Cu wire on higher ratings.

- Rounded shroud.
- Door cannot be opened with the switch ON. Switch cannot be turned ON with door open (without operating interlock defeater).
- Suitable for use on a circuit capable of delivering not more than 100,000 rms symmetrical amperes when protected by Class R or J fuses (30 – 200 amperes); R, T or J fuses (400 amperes). Short circuit rating is 10,000 rms symmetrical amperes when protected by any other overcurrent protective device.
- Double break visible rotary blades, quick-make, quick-break operation.



DOUBLE THROW COMPACT DESIGN

Ampere Rating Main and Standby	NEMA 3R Enclosure Rainproof Catalog Number		
Non-Fusible 2-Pole — 240 Vac			
30	DT221URH		Non-Fusible 2-Pole Two Sources or Two Loads
60	DT222URH		
100	DT223URH		
Non-Fusible 2-Pole, 3-Wire — 240 Vac — Solid Neutral			
30	DT221URH-N		Non-Fusible 2-Pole with Neutral Two Sources or Two Loads
60	DT222URH-N		
100	DT223URH-N		

DOUBLE THROW QUICK-MAKE, QUICK-BREAK DESIGN

Ampere Rating Main and Standby	Maximum Horsepower Ratings	NEMA 3R Enclosure Rainproof Catalog Number	
	1-Phase ac 240 Volt	dc 250 Volt	
Non-Fusible 2-Pole — 240 Vac — 250 Vdc			
30	3	5	
60	10	10	
100	20	20	
200	15	40	
400	—	50	
Non-Fusible 2-Pole, 3-Wire — 240 Vac — 250 Vdc — Solid Neutral			
30	3	5	
60	10	10	
100	20	20	
200	15	40	
400	—	50	

Double Throw Heavy-Duty Fusible Safety Switches



1. DT363FGK

Double Throw Heavy-Duty Fusible Safety Switch, 100 Amperes, 600 Volts.



Double Throw 240 and 600 Vac Heavy-Duty, Fusible

Specifications

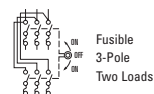
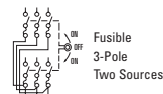
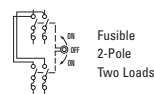
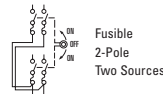
- 30 – 600 amperes.
- Horsepower rated.
- Suitable for service entrance use with neutral or ground lug kit installed.
- Suitable for use as a manually operated switch per 2005 NEC Article 702.
- UL listed File No. E5239.

Features

- Palm-fitting, visible red handle.
- Tri-lingual nameplate.
- Side opening doors on all enclosures.
- Clear line shield to prevent accidental contact with energized parts. Probe holes enable line side testing without removing the shield.
- Wiring configuration from factory allows a single load to be supplied by a normal or alternate source. Can be modified to allow two loads to be alternately supplied by a single power source.
- Visible, embossed red ON-OFF indication.
- Tangential knockouts (30 – 100 amperes) on top and bottom endwall (bottom only on NEMA 3R); concentric knockouts on higher ratings, and sides and rear of 30 – 100 amperes.
- Lockable door hasp.
- Lockable handle.
- Three-point mounting (30 – 100 amperes).
- Four-point mounting (200 – 600 amperes).
- Terminals suitable for 60° or 75°C Al or Cu wire on 30 – 100 amperes; 75°C Al or Cu wire on higher ratings.
- Rounded shroud.
- Full range of accessories.
- Door cannot be opened with the switch ON. Switch cannot be turned ON with door open (without operating interlock defeater).
- Suitable for use on a circuit capable of delivering not more than 100,000 rms symmetrical amperes when protected by Class R or J fuses (30 – 200 amperes); R, T or J fuses (400 – 600 amperes). Short circuit rating is 10,000 rms symmetrical amperes when protected by any other overcurrent protective device.
- Double-break visible rotary blades, quick-make, quick-break operation.

DOUBLE THROW 240 VAC HEAVY-DUTY, FUSIBLE

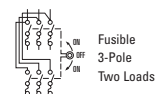
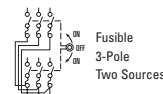
Ampere Rating Main and Standby	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses			NEMA 1 Enclosure Indoor	NEMA 3R Enclosure Rainproof
		1-Phase ac 240 Volt	3-Phase ac 240 Volt	dc 250 Volt	Catalog Number	Catalog Number
2-Pole — 240 Vac — 250 Vdc						
200	H	15	—	40	DT224FGK	DT224FRK
3-Pole — 240 Vac — 250 Vdc						
30	H	3	7-1/2	5	DT321FGK	DT321FRK
60	H	10	15	10	DT322FGK	DT322FRK
100	H	15	30	20	DT323FGK	DT323FRK
200	H	15	60	40	DT324FGK	DT324FRK
400	H	—	125	50	DT325FGK	DT325FRK
600 ¹	T	—	50	50	DT326FGK	DT326FRK



¹ Only available for use with fast-acting fuses. Standard hp rating is shown.

DOUBLE THROW 600 VAC HEAVY-DUTY, FUSIBLE

Ampere Rating Main and Standby	Fuse Class	Maximum Horsepower Ratings with Time Delay Fuses			NEMA 1 Enclosure Indoor	NEMA 3R Enclosure Rainproof	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel
		1-Phase ac 480 Volt	3-Phase ac 480 Volt	600 Volt	dc 250 Volt	Catalog Number	Catalog Number
3-Pole — 600 Vac — 250 Vdc							
30	H	7-1/2	10	15	20	—	DT361FWK
60	H	20	25	30	50	—	DT362FWK
100	H	30	40	60	75	—	DT363FWK
200	H	50	50	125	150	40	DT364FWK
400	T	—	—	250	350	50	DT365FWK



Double Throw Heavy-Duty Non-Fusible Safety Switches



1. DT363URK

Double Throw Heavy-Duty Non-Fusible Safety Switch, 100 Amperes, 600 Volts.



Double Throw 240 and 600 Vac Heavy-Duty, Non-Fusible

Specifications

- 30 – 800 amperes.
- Horsepower rated.
- Suitable for service entrance use with neutral or ground lug kit installed.
- Suitable for use as a manually operated switch per 2005 NEC Article 702.
- UL listed File No. E5239.

Features

- Palm-fitting, visible red handle.
- Tri-lingual nameplate.
- Side opening doors on all enclosures.
- Visible, embossed red ON-OFF indication.
- Tangential knockouts (30 – 100 amperes) on top and bottom endwall (bottom only on NEMA 3R); concentric knockouts on higher ratings, and sides and rear of 30 – 100 amperes.
- Lockable door hasp.
- Lockable handle.
- Three-point mounting (30 – 100 amperes).
- Four-point mounting (200 – 800 amperes).
- Terminals suitable for 60° or 75°C Al or Cu wire on 30 – 100 amperes; 75°C Al or Cu wire on higher ratings.
- Rounded shroud.
- Full range of accessories.
- Door cannot be opened with the switch ON. Switch cannot be turned ON with door open (without operating interlock defeater).

- Suitable for use on a circuit capable of delivering not more than 100,000 rms symmetrical amperes when protected by Class R or J fuses (30 – 200 amperes); R, T or J fuses (400 – 800 amperes). Short circuit rating is 10,000 rms symmetrical amperes when protected by any other overcurrent protective device.
- Double-break visible rotary blades, quick-make, quick-break operation.

DOUBLE THROW 240 VAC HEAVY-DUTY, NON-FUSIBLE

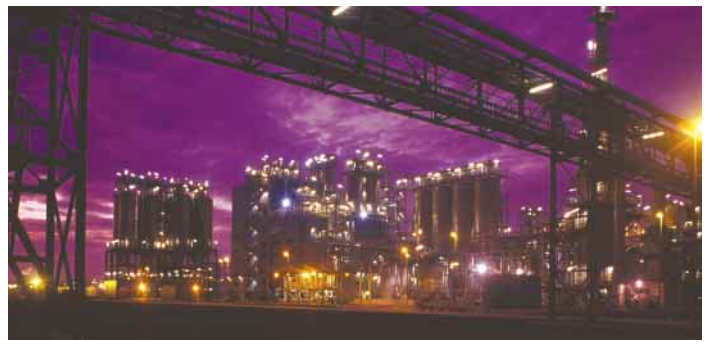
Ampere Rating Main and Standby	Maximum Horsepower Ratings			NEMA 1 Enclosure Indoor	NEMA 3R Enclosure Rainproof	
	1-Phase ac 240 Volt	3-Phase ac 240 Volt	dc 250 Volt	Catalog Number	Catalog Number	
Non-Fusible 2-Pole — 240 Vac — 250 Vdc						
30	3	—	5	DT221UGK	—	
60	10	—	10	DT222UGK	—	
100	20	—	20	DT223UGK	—	
200	15	—	40	DT224UGK	DT224URK	
400	—	—	50	DT225UGK	DT225URK	
600	—	—	—	DT226UGK	—	
Non Fusible 3-Pole — 240 Vac — 250 Vdc						
30	3	10	5	DT321UGK	—	
60	10	20	10	DT322UGK	—	
100	20	40	20	DT323UGK	DT323URK	
200	15	60	40	DT324UGK	DT324URK	
400	—	125	50	DT325UGK	DT325URK	
600	—	125	50	DT326UGK	—	
800	—	125	50	DT327UGK ^{1 2}	—	
800	—	125	50	DT327UGK-N	—	

1 WARNING! Switch is not approved for service entrance.

2 Field installable neutral kit is not available. If a neutral is required, order the catalog number shown in the table with "N" suffix.

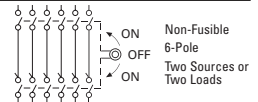
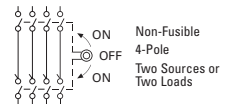
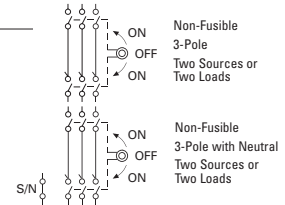
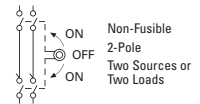


Double Throw Heavy-Duty Non-Fusible Safety Switches



DOUBLE THROW 600 VAC HEAVY-DUTY, NON-FUSIBLE

Ampere Rating Main and Standby	Maximum Horsepower Ratings					NEMA 1 Enclosure Indoor	NEMA 3R Enclosure Rainproof	NEMA 12 Enclosure Industrial, Dust-Tight	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel
	1-Phase ac		3-Phase ac		dc	Catalog Number	Catalog Number	Catalog Number	Catalog Number
	480 Volt	600 Volt	480 Volt	600 Volt	250 Volt				
2-Pole — 600 Vac — 250 Vdc									
30	7-1/2	10	—	—	5	DT261UGK	—	—	—
60	20	25	—	—	10	DT262UGK	—	—	—
100	40	50	—	—	20	DT263UGK	—	—	—
200	50	50	—	—	40	DT264UGK ¹	DT264URK ¹	—	—
400	—	—	—	—	50	DT265UGK	DT265URK	—	—
600	—	—	—	—	50	DT266UGK	DT266URK	—	—
3-Pole — 600 Vac — 250 Vdc									
30	7-1/2	10	20	30	5	DT361UGK	DT361URK	DT361UDK ⁴	DT361UWK
60	20	25	50	60	10	DT362UGK	DT362URK	DT362UDK ⁴	DT362UWK
100	40	50	75	100	20	DT363UGK	DT363URK	DT363UDK ⁴	DT363UWK
200	50	50	125	150	40	DT364UGK	DT364URK	DT364UDK ⁴	DT364UWK
400	—	—	250	350	50	DT365UGK	DT365URK	DT365UDK ^{4,5}	DT365UWK
600	—	—	250	350	50	DT366UGK	DT366URK	— ⁴	—
800	—	—	250	350	50	DT367UGK ^{2,3}	DT367URK ^{2,3}	— ⁴	—
800	—	—	250	350	50	DT367UGK-N	DT367URK-N	— ⁴	—
4-Pole — 600 Vac — 250 Vdc ²									
30	7-1/2	10	20	30	5	—	DT461URK	—	—
60	20	25	50	60	10	—	DT462URK	—	—
100	40	50	75	100	20	—	DT463URK	—	—
200	—	50	125	150	40	DT464UGK	DT464URK	—	—
400	—	—	250	350	50	DT465UGK	DT465URK	—	—
600	—	—	250	350	50	DT466UGK	DT466URK	—	—
800	—	—	250	350	50	DT467UGK	DT467URK	—	—
6-Pole — 600 Vac — 250 Vdc ²									
30	7-1/2	10	15	30	5	—	DT661URK	—	—
60	20	25	50	60	10	—	DT662URK	—	—
100	40	50	75	100	20	—	DT663URK	—	—



- ¹ Rated 600 Vdc, 50 hp in addition to ratings shown in table.
- ² **WARNING!** Switch is not approved for service entrance.
- ³ Field installable neutral kit is not available. If a neutral is required, order the catalog number shown in the table with "N" suffix.
- ⁴ NEMA 12 enclosures (30 – 800 amperes) can be field modified to meet NEMA 3R rainproof requirements when a factory-provided drain hole is opened.
- ⁵ Also available in 240 Vac, catalog number DT325UDK.



Double Throw Heavy-Duty Switching Neutral Safety Switches



1. Double Throw Switching Neutral Safety Switch (upper switch base assembly is shown)



Double throw safety switches applied in emergency power or generator applications may require a switched neutral in lieu of a solid neutral. If the neutral of the generator is bonded to a grounding system at the generator, then a separately derived system (reference NEC 250-20(D) and Exhibit 250.7) has been created and a switched neutral in the double throw safety switch is required. The switching neutral is required to avoid the potential for backfeeding of the power which might occur if the safety switch neutral is also bonded. If the generator neutral is brought to the service where it is bonded and grounded, then a non-separately derived system has been created and a solid neutral must be used in the double throw safety switch. Most double throw safety switches in today's market are provided with solid neutrals and are NOT UL listed for switching neutral application. The market, some utilities and local codes are requiring the ability to break or switch the neutral on three- and four-pole double throw switches with a UL listing for that capability. Three-pole switches are used for single-phase switching neutral applications, while four-pole switches are used for three-phase switching neutral applications. In many cases, three- and four-pole double throw safety switches are being installed in the field with the left-most pole being used as the switching neutral, but the switch is not UL listed for that application.

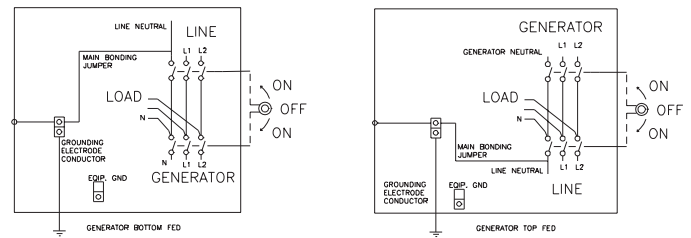
Cutler-Hammer non-fusible three-pole and four-pole double throw safety switches from 30 – 800 amperes are UL listed for switching neutral application with the proper installation of the applicable switching neutral bonding kit shown in the Accessories section of this brochure. Each bonding kit comes with applicable materials, hardware, instruction sheet, and adhesive-backed wiring schematic. The bonding kits can only be used on NON-FUSIBLE double throw safety switches. When a bonding kit is applied to a three-pole switch, the switch becomes a single-phase switch with single-phase horsepower ratings.

A double throw safety switch with the appropriate bonding kit installed is suitable for service entrance use. Typically, a four-pole double throw safety switch is not suitable for service entrance use; however, with the appropriate bonding kit installed, the four-pole switch is suitable for service entrance use as noted on the device publication of the product.

Switching neutral bonding kits can also be factory installed by our unique Switching Device Flex Center. See the end of this brochure for additional information on the Flex Center.

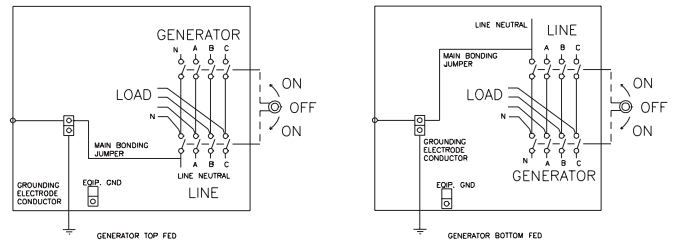
Bonding Kit Schematic

Single-phase applications requiring a neutral pole bonding kit.



Bonding Kit Schematic

Three-phase applications requiring a neutral pole bonding kit.



Schematic Notes

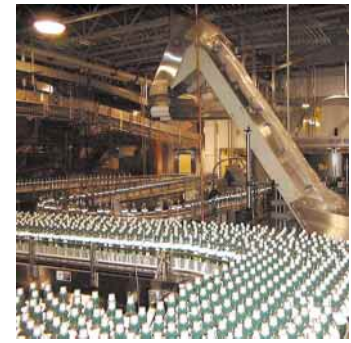
NEC 702 application, separately derived system and service equipment.

Two sources with switched neutral, generator is a separately derived system.

Proper installation is governed by interpretation of the NEC, applicable local codes, and local utility requirements. Applicable sections of these codes and requirements should be referenced prior to installation.



Accessories, Hubs and Standard Lug Capacities



ACCESSORIES

Neutral, ground lug, control pole and auxiliary contact kits contain materials for one switch base. Copper lug, 60 ampere J fuse and R fuse kits contain materials for one three-pole switch base. Switching neutral bonding and 400 ampere J fuse kit contents are for one complete double throw switch. Applicable accessories for a specific safety switch can also be found on the inside door publication of the switch.

Description	Catalog Number
Neutral Kits/Ground Kits ❶	
30 – 100 A	DT100NK
200 A	DT200NK
400 A Non-Fusible	DT400NK
600 A Non-Fusible	DT600NK
400 – 600 A Fusible	DS800NK
Ground Lug Kits ❶	
30 – 100 A ❷	DS100GK
200 A	DS200GK
400 – 800 A	DS468GK
Switching Neutral Bonding Kits ❸	
30 – 100 A, 3-Pole, 4-Pole Non-Fusible	DT100BK
200 A, 3-Pole, 4-Pole Non-Fusible	DT200BK
400 A, 3-Pole, 4-Pole Non-Fusible	DT400BK
600 A, 3-Pole, 4-Pole Non-Fusible	DT600BK
800 A, 3-Pole, 4-Pole Non-Fusible	DT800BK
Control Pole Kit ❶	
30 – 800 A	DS16CP
Auxiliary Contact Kits ❶	
1NO/1NC	DS200EK1
2NO/2NC	DS200EK2
Copper Lug Kits ❶	
30 – 60 A	DS16CL
100 A	DS36CL
“J” Fuse Adapter Kits ❹	
60 A	DS26JK
400 A 600 Volt	DT400JK
“R” Fuse Adapter Kits ❹	
30 A, 240 Volt	DS12FK
30 A, 600 Volt; 60 A, 240 Volt	DS16FK
60 A, 600 Volt	DS26FK
100 A, 240 – 600 Volt	DS36FK
200 A, 240 – 600 Volt	DS46FK
400 A, 240 Volt	DS56FK
Lubricating Grease for Safety Switch Blades and Contacts (Each kit contains three 30 cc tubes of lubricating grease.)	DSLUBEKIT

- ❶ For heavy-duty and general-duty quick-make, quick-break.
- ❷ Ground bar kit is not listed on device publications.
- ❸ For heavy-duty non-fusible.
- ❹ For heavy-duty fusible.

HUBS

Catalog Number DS900AP Adapter Kit permits installation of Group 1 Hubs on 200 ampere Double Throw Switches.

Plate Type Hubs For NEMA 3R Enclosures (Up to 200 Amperes)

Group 1 General-Duty, Heavy-Duty, Double Throw Through 100 A			Group 2 General-Duty, Heavy-Duty, Double Throw — 200 A		
Conduit Size Inches	mm	Catalog Number	Conduit Size Inches	mm	Catalog Number
.75	19.1	DS075H1	2.00	50.8	DS200H2
1.00	25.4	DS100H1	2.50	63.5	DS250H2
1.25	31.8	DS125H1	3.00	76.2	DS300H2
1.50	38.1	DS150H1	—	—	—
2.00	50.8	DS200H1	—	—	—

HUBS

Myers Type Hubs NEMA 3R (400 Amperes and Above) NEMA 4X (Stainless Steel) and 12

Conduit Size Inches	mm	Catalog Number
.50	12.7	DS050MH
.75	19.1	DS075MH
1.00	25.4	DS100MH
1.25	31.8	DS125MH
1.50	38.1	DS150MH
2.00	50.8	DS200MH
2.50	63.5	DS250MH
3.00	76.2	DS300MH
3.50	88.9	DS350MH
4.00	101.6	DS400MH
5.00	127.0	DS500MH

STANDARD LUG CAPACITIES

Although certain lug capacities are larger than required, only minimum wire bending space is provided per the requirements noted in NEC Tables 373-6 (a) and (b) for respective ampere ratings.

Description	Minimum Wire Size	Maximum Wire Size	Wire Type
30 A	#14	#2	Cu/Al
60 A	#14	#2	Cu/Al
100 A	#14	#1/0	Cu/Al
200 A	#6	250 kcmil	Cu/Al
400 A	(2) #1/0 (1) #1/0	(2) 300 kcmil (1) 750 kcmil	Cu/Al OR
600 A Fusible	(1) #2 (1) #1/0	(1) 600 kcmil (1) 750 kcmil	Cu/Al AND
600 A Non-Fusible	(2) #250	(2) 500 kcmil	Cu/Al
800 A	(3) #250	(3) 500 kcmil	Cu/Al
Copper-Bodied Lugs			
30 A	#14	#6	Cu
60 A	#14	#4	Cu
100 A	#6	#1/0	Cu
200 A	#6	250 kcmil	Cu
400 A	#1/0	500 kcmil	Cu
600 A	(2) #1/0	(2) 500 kcmil	Cu

- 1. DT200NK 200 A Neutral/Ground Kit
- 2. DS250H2 Plate Type Hub
- 3. DS26FK 60A 600V "R" Fuse Adapter Kit

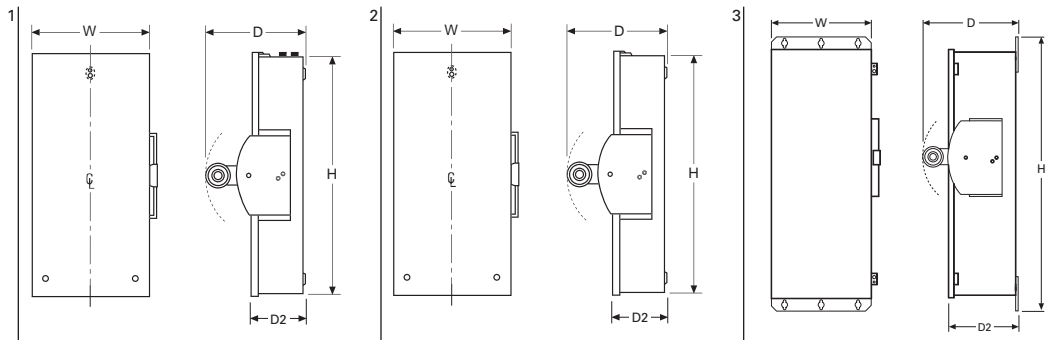
- 4. DT100BK 100 A Switching Neutral Bonding Kit
- 5. DS468GK 400 – 800 A Ground Lug Kit
- 6. DS050MH Myers Hub

- 7. DS200EK1 Auxiliary Contact Kit 1NO/1NC
- 8. DS16CP Control Pole Kit

- 9. DS26JK 60 A "J" Fuse Adapter Kit
- 10. DS16CL 30 – 60 A Copper Lug Kit



Dimensions and Weights



DOUBLE THROW GENERAL-DUTY, NON-FUSIBLE, 240 VOLT, 2-POLE SOLID NEUTRAL, QUICK-MAKE, QUICK-BREAK DESIGN

Ampere Rating	NEMA 3R Dimensions in Inches (mm)			Depth (D)	Depth (D2)	Weight Lbs (kg)
	Height (H)	Width (W)	Depth (D)			
30	24.63 (625.6)	11.94 (303.3)	9.88 (251.0)	5.38 (136.7)	34 (15.4)	34 (15.4)
60	24.63 (625.6)	11.94 (303.3)	9.88 (251.0)	5.38 (136.7)	34 (15.4)	34 (15.4)
100	24.63 (625.6)	11.94 (303.3)	9.88 (251.0)	5.38 (136.7)	34 (15.4)	34 (15.4)
200	37.38 (949.5)	19.56 (496.8)	11.25 (285.8)	6.10 (154.9)	80 (36.3)	80 (36.3)
400	53.81 (1366.8)	23.13 (587.5)	12.50 (317.5)	8.88 (225.6)	140 (63.6)	140 (63.6)

DOUBLE THROW GENERAL-DUTY, NON-FUSIBLE, 240 VOLT, 2-POLE SOLID NEUTRAL, COMPACT DESIGN

Ampere Rating	NEMA 3R Dimensions in Inches (mm)			Depth (D)	Depth (D2)	Weight Lbs (kg)
	Height (H)	Width (W)	Depth (D)			
30	14.69 (373.1)	9.63 (244.6)	10.81 (274.6)	5.23 (132.8)	12 (5.4)	12 (5.4)
60	14.69 (373.1)	9.63 (244.6)	10.81 (274.6)	5.23 (132.8)	12 (5.4)	12 (5.4)
100	14.69 (373.1)	9.63 (244.6)	10.81 (274.6)	5.23 (132.8)	12 (5.4)	12 (5.4)

DOUBLE THROW HEAVY-DUTY, NON-FUSIBLE, 240 AND 600 VOLT, 3-POLE

Ampere Rating	NEMA 1, 3R Dimensions in Inches (mm)					NEMA 12, 4X Stainless Steel Dimensions in Inches (mm)				
	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15.4)	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27.2)
60	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15.4)	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27.2)
100	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15.4)	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27.2)
200	19.56 (496.8)	37.38 (949.5)	11.25 (285.8)	6.10 (154.9)	80 (36.3)	19.50 (495.3)	41.00 (1041.4)	11.63 (295.4)	6.48 (164.6)	105 (47.7)
400	23.13 (587.5)	53.81 (1366.8)	12.50 (317.5)	7.25 (184.2)	140 (63.6)	23.00 (584.2)	57.50 (1460.5)	12.50 (317.5)	7.25 (184.2)	185 (84.0)
600	24.13 (612.9)	63.31 (1608.1)	14.13 (358.9)	8.88 (225.6)	175 (79.5)	—	—	—	—	—
800	24.13 (612.9)	63.31 (1608.1)	14.13 (358.9)	8.88 (225.6)	175 (79.5)	—	—	—	—	—

DOUBLE THROW HEAVY-DUTY, FUSIBLE, 240 AND 600 VOLT, 3-POLE

Ampere Rating	NEMA 1, 3R Dimensions in Inches (mm)					NEMA 12, 4X Stainless Steel Dimensions in Inches (mm)				
	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (20.0)	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20.4)
60	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (20.0)	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20.4)
100	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (20.0)	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20.4)
200	19.56 (496.8)	50.88 (1292.4)	11.25 (285.8)	6.10 (154.9)	95 (43.1)	19.56 (496.8)	55.63 (1413.0)	11.63 (295.4)	6.46 (164.1)	100 (45.4)
400	25.38 (644.7)	74.75 (1898.7)	14.13 (358.9)	8.88 (225.6)	230 (104.4)	25.38 (644.7)	74.75 (1898.7)	14.13 (358.9)	8.92 (226.6)	260 (118.0)
600	27.44 (697.0)	86.13 (2187.7)	14.13 (358.9)	8.88 (225.6)	320 (145.3)	—	—	—	—	—

1. General-Duty NEMA 3R

30 – 400 Amperes.

2. Heavy-Duty NEMA 1, 3R

30 – 800 Amperes.

3. Heavy-Duty NEMA 12, 4X

30 – 400 Amperes.

Note

Contact your Eaton sales office for outline drawings and mounting dimensions.



Short Circuit Ratings



SHORT CIRCUIT RATINGS USING CLASS R, T OR J FUSING WHERE APPLICABLE

Class H fuse clips supplied as standard for 30 – 600 amperes except Class T for 400 amperes at 600 volts, and 600 amperes at 240 volts. Rated at 10,000 rms symmetrical when using Class H fuses.

Not applicable to the Compact Design. The Compact Design is suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes.

Ampere Rating	Voltage Ratings Type 1	Type 3R	Type 12	Type 4X
30	100k at 600	100k at 600	100k at 600	100k at 600
60	100k at 600	100k at 600	100k at 600	100k at 600
100	100k at 600	100k at 600	100k at 600	100k at 600
200	100k at 600	100k at 600	100k at 600	100k at 600
400	100k at 600	100k at 600	100k at 600	100k at 600
600	100k at 600	100k at 600	100k at 600	100k at 600
800	100k at 600	100k at 600	—	—

Non-Fusible Switches

The UL listed short circuit ratings for Cutler-Hammer Non-Fusible switches from Eaton Corporation are based on the switches being properly protected by overcurrent protective devices. For applications that require a UL listed short circuit rating of 10,000 rms symmetrical amperes or less, a Cutler-Hammer Non-Fusible switch must be properly protected by any overcurrent protective device rated no greater than the ampere rating of the switch. For applications that require a UL listed short circuit

rating of greater than 10,000 rms symmetrical amperes, a Cutler-Hammer Non-Fusible switch must be properly protected by the appropriate class and size fusing noted on the switch publication. Otherwise, this Non-Fusible switch must be replaced with a Cutler-Hammer Fusible switch that utilizes the appropriate fusing required.

Safety switch short circuit ratings are applicable to ac only.

Safety switch I^2t and I_p values are identical to UL maximum acceptable I^2t and I_p values for the corresponding class fuse.

Renewal Parts

Replacement parts for a specific catalog number are shown on the inside door label (publication) of the switch. Switch bases, fuse bases, line shields (fusible switches) and operating handles (400 amperes and above) are typically available as applicable. For additional information, refer to Renewal Parts Catalog RP00801001E.

Flex Center

Our Cleveland, TN, Switching Devices Flex Center is a solutions center that designs and modifies safety switches, enclosed circuit breakers and rotary disconnects for unique customer needs that are not met by standard products. The Flex Center is a one-of-a-kind operation that is capable of solving our customers' issues, while our competition is content to offer their customers only catalog items.

The Flex Center staff has over 120 years of design, manufacturing and industry experience, and has been providing solutions to our customers since 1998. While you may think that your power switching needs are unlike any other, chances are, the Flex Center staff has already "been there, done that."

For further information on our customized solutions for harsh environments, safety and convenience, please refer to our Flex Center brochure SA00801002E or contact the Flex Center at 1-888-329-9272.



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