

Heavy Duty, Fusible, Single Throw

600V AC Heavy Duty, Fusible, Single Throw

Specifications

- 30 through 1200 amperes.
- Horsepower rated through 800 amperes.
- Suitable for service entrance use, except 1200 ampere on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215-10 and 230-95, and 4-pole switches.
- UL Listed File No. E5239.
- For factory modifications refer to Pages 8-6 through 8-9.



DH362NRK

8

Table 8-39. Fusible 277/480-600 Volts

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						NEMA 1 Enclosure Indoor		NEMA 3R Enclosure Rainproof	
			1-Phase AC		3-Phase AC		DC		Catalog Number	Price U.S. \$	Catalog Number	Price U.S. \$
			480V	600V	480V	600V	250V	600V				
2-Pole — 480V AC — 600V AC or DC ③ (Suitable for Service Entrance Use With a Neutral or Ground Lug Kit Installed)												
	30	H	7-1/2	10	—	—	—	15	DH261FGK	348.	②	—
	60	H	20	25	—	—	—	25	DH262FGK	416.	②	—
	100	H	30	40	—	—	—	25	DH263FGK	780.	②	—
	200	H	50	50	—	—	—	50	DH264FGK	1,125.	②	—
	400	H	—	—	—	—	50	—	DH265FGK	2,990.	②	—
	600	H	—	—	—	—	—	—	DH266FGK	4,720.	②	—
	800	L	—	—	—	—	—	—	DH267FGK	7,370.	②	—
1200	L	—	—	—	—	—	—	④	—	②	—	
3-Pole — 480V AC — 600V AC, 250V DC (Suitable for Service Entrance Use With a Neutral or Ground Lug Kit Installed)												
	30	H	7-1/2	10	15	20	—	—	DH361FGK	368.	DH361FRK	645.
	60	H	20	25	30	50	—	—	DH362FGK	436.	DH362FRK	755.
	100	H	30	40	60	75	—	—	DH363FGK	850.	DH363FRK	1,115.
	200	H	50	50	125	150	—	—	DH364FGK	1,180.	DH364FRK	1,590.
	400	H	—	—	250	350	—	—	DH365FGK	3,165.	DH365FRK	3,790.
	600	H	—	—	400	500	—	—	DH366FGK	5,580.	DH366FRK	7,510.
	800	L	—	—	500	500	—	—	DH367FGK	9,350.	DH367FRK	11,520.
1200	L	—	—	—	—	—	—	DH368FGK	11,700.	DH368FRK	13,300.	
3-Pole — 480V AC — 600V AC, 250V DC, NEMA 7 and 9 Enclosure												
	30	R	—	—	15	20	5	—	DS361FX	2,545.	—	—
	60	R	—	—	30	50	10	—	DS362FX	2,795.	—	—
	100	R	—	—	60	75	20	—	DS363FX	3,495.	—	—
	200	R	—	—	125	150	40	—	DS364FX	6,220.	—	—
4-Wire (Three Blades, 3-Fuses, S/N) 480V AC — 600V AC, 250V DC												
	30	H	7-1/2	10	15	20	—	—	DH361NGK	417.	DH361NRK	685.
	60	H	20	25	30	50	—	—	DH362NGK	505.	DH362NRK	800.
	100	H	30	40	60	75	—	—	DH363NGK	910.	DH363NRK	1,215.
	200	H	50	50	125	150	—	—	DH364NGK	1,315.	DH364NRK	1,655.
	400	H	—	—	250	350	—	—	DH365NGK	3,415.	DH365NRK	4,025.
	600	H	—	—	400	500	—	—	DH366NGK	5,770.	DH366NRK	7,780.
	800	L	—	—	500	500	—	—	DH367NGK	9,900.	DH367NRK	12,120.
1200	L	—	—	—	—	—	—	DH368NGK	12,160.	DH368NRK	13,980.	
4-Pole — 480V AC — 600V AC, 250V DC												
	30	H	20	25	15	20	—	—	DH461FGK	595.	①	—
	60	H	40	50	30	50	—	—	DH462FGK	695.	①	—
	100	H	50	50	60	75	—	—	DH463FGK	1,150.	①	—
	200	H	—	—	125	150	40	—	DH464FGK	1,900.	①	—
	400	H	—	—	250	350	50	—	DH465FGK	5,200.	④	—
	600	H	—	—	400	500	—	—	DH466FGK	8,440.	④	—
800	L	—	—	—	—	—	—	④	—	④	—	

① NEMA 12 enclosures (30 – 200 amperes) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
 ② Use 3-pole catalog numbers below.
 ③ DC rating for 400 – 800 ampere switches is 250 volts.
 ④ Contact the Safety Switch Flex Center (1-888-329-9272) for availability of this product.

Discount Symbol 22-CD

- Tangential knockouts on sides, top, and bottom. Enables any size of conduit to be mounted close to the wall, providing for cable installation closer to the wall and a neat appearance.



Enclosed Rotary

Provide users with the ability to lock directly wired motor loads in the OFF position to comply with new OSHA lockout/tagout regulations. Also for machine applications that require compact, economical disconnect switches.

- Meets NEC article 430 requirements for a separate disconnect means within sight of all motor loads.
- Padlockable in the OFF position (up to three padlocks) to meet OSHA lockout requirements.
- Available in 16 – 100 ampere ratings.
- 600V AC, three- and four-pole non-fusible device.
- Rated for making and breaking loads.
- Accepts auxiliary contacts. Capability to signal PLC controllers.
- Ground lug connection provided.



EnviroLine

Cutler-Hammer offers a line of safety switches designed for your special application and/or extreme environmental conditions.

- **EnviroLine Stainless Steel Switch** — primarily for use in the meatpacking and food processing industries or any application where water is frequently used to hose down equipment. In addition to the stainless steel NEMA 4X enclosure, the interior mechanism, back pan, and springs are stainless steel. Ratings for these Heavy Duty switches are 30 – 400 amperes, 240 – 600V AC, available as fusible and non-fusible switches.
- **Window Switches** — These switches are available with either an upper window over the switch contacts or a lower window over the fuse block. The upper window provides visual verification of ON/OFF status. The lower window switch allows for visual verification of fuse status if used in conjunction with Littelfuse, Inc fuses with blown fuse indicator. Ratings are 30-800 amperes, 240 – 600V AC, fusible and non-fusible. Available in NEMA 12/3R, 4X stainless steel enclosures.
- **Receptacle Switches** — These Heavy Duty Switches are pre-wired and interlocked to polarized receptacles for three-phase, three-wire, grounded type power plugs. These are used for portable power applications such as welders, infrared ovens, batch feeders, conveyors, truck and marine docks. Receptacles are interlocked to handle mechanisms so that power plugs may not be inserted or removed when the switch is in the ON position unless noted otherwise. Ratings are 30 – 100 amperes, 600V AC, NEMA 12, 4X stainless steel enclosures.
- **Non-Metallic Switch** — This switch has a KRYDON™ enclosure. This is a compression molded fiberglass reinforced polyester enclosure, which is capable of withstanding almost any corrosive environment. Ratings are 30 – 200 amperes, 240 – 600V AC, fusible and non-fusible. Enclosure is NEMA 4X rated.

Features, Benefits and Functions

General Duty (Cartridge Fuse)

- Visible double break rotary blade mechanism
- Side opening door on all enclosures
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- With Class R fuses, switches may be used on systems capable of delivering 100,000 amperes RMS symmetrical
- Clearly visible and accessible neutral where applicable
- Visible ON/OFF indication
- Tangential knockouts on 30 – 60A designs
- Ample wiring space
- Double padlocking capability on 30 – 100A
- Triple padlocking capability on 200 – 600A
- Additional door locking capability
- Bilingual English/Spanish name-plate and door label on 30 – 100A

Heavy Duty

- Visible double break rotary blade mechanism
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- Clear line shield with probe holes
- Clearly visible palm fitting red handle
- Triple padlocking capability
- Tangential knockouts on NEMA 1 and NEMA 3R enclosures through 200A
- Built-in fuse pullers on NEMA 4X and NEMA 12 enclosures through 200A
- Additional door locking capability
- Complete accessory and renewal parts data shown on inner door label
- 30 – 200A NEMA 12 designs convertible to NEMA 3R by opening factory installed drain hole

Standards and Certifications

- UL 98
- UL 50
- NEMA KS-1

Product Specifications

Table 8-23. Safety Switch Selection Guide

Type	Fuse Type	Fuse Class	Ampere Rating	Number of Poles	Enclosure Types							
					NEMA 1	NEMA 3R	NEMA 12	NEMA 4 Painted Steel	NEMA 4X Stainless Steel	NEMA 4X Non-Metallic		
General Duty	Single Throw Max. 240V AC Horsepower Rated	Fusible	Plug	—	30	1 and 2	YES	YES	—	—	—	—
		Cartridge	H	30 – 600	2 and 3	YES	YES	—	—	—	—	
	Non-Fusible	—	—	30 – 600	2 and 3	YES	YES	—	—	—	—	
Heavy Duty	Single Throw Max. 600V AC Horsepower Rated	Fusible	Cartridge	H L	30 – 600 800 – 1200	2, 3 and 4	YES Up to 1200A	YES Up to 1200A	YES ① Up to 800A	YES 400- 800A	YES Up to 800A	YES Up to 200A
		Non-Fusible	—	—	30-1200	2, 3 and 4	YES	YES	YES ① Up to 800A	YES 400- 800A	YES Up to 800A	YES Up to 200A
6-Pole Motor Circuit	Single Throw Max. 600V AC	Fusible	Cartridge	H	30 – 200	6	—	YES	YES ①	—	YES	—
		Non-Fusible	—	—	30 – 200	6	—	YES	YES ①	—	YES	—
Double Throw	Max. 600V AC Horsepower Rated	Fusible	Cartridge	H T (600V) T (240V)	30 – 200 400 600	2 and 3	YES Up to 600A	YES Up to 200A	—	—	—	—
		Non-Fusible	—	—	30 – 800	2, 3, 4 and 6	YES	YES	YES Up to 400A	—	YES Up to 400A	—
Rotary Switches	Max. 600V AC	Non-Fusible	—	—	40 – 100	3, 4	YES	YES ①	YES ①	—	YES	YES

① NEMA 12 enclosures (30 – 200 amperes) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain screw is removed.

Table 8-24. EnviroLine Safety Switch Selection Guide

EnviroLine	Fuse Type	Fuse Class	Ampere Rating	Number of Poles	Enclosure Types						
					NEMA 1	NEMA 3R	NEMA 12	NEMA 4 Painted Steel	NEMA 4X Stainless Steel	NEMA 4X Non-Metallic	
Stainless Enclosure with Stainless Mechanism	Fusible	Cartridge	H	30 – 400	2 and 3	—	—	—	—	YES	—
	Non-Fusible	—	—	30 – 400	3	—	—	—	—	YES	—
Viewing Window Upper and Lower	Fusible	Cartridge	H	30 – 800	3	—	—	YES ②	YES	YES	—
	Non-Fusible	—	—	30 – 800	3	—	—	YES ②	YES	YES	—
Receptacle	Fusible	Cartridge	H	30 – 100	3	—	—	YES	—	YES	—
	Non-Fusible	—	—	60	3	—	—	YES	—	YES	—
Non-Metallic	Fusible	Cartridge	H	30 – 200	3	—	—	—	—	—	YES
	Non-Fusible	—	—	30 – 200	3	—	—	—	—	—	YES

② NEMA 12 enclosures (30 – 200 amperes) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain screw is removed.

Dimensions

Dimensions

Table 8-27. Heavy Duty, Non-Fusible, 600V, 3-Pole, Single Throw

Ampere Rating	NEMA 1, 3R			NEMA 12, 4XSS		
	Dimensions in Inches (mm)			Dimensions in Inches (mm)		
	Height	Width	Depth	Height	Width	Depth
30	15-7/8 (403)	8-1/8 (206)	10 (254)	12-1/8 (308)	8-1/8 (206)	10 (254)
60	15-7/8 (403)	8-1/8 (206)	10 (254)	12-1/8 (308)	8-1/8 (206)	10 (254)
100	21-11/16 (551)	11-1/8 (283)	10 (254)	24 (610)	11-1/8 (283)	10-1/4 (260)
200	27-5/8 (702)	16 (406)	11-1/4 (286)	34-3/8 (873)	16 (406)	11-1/2 (292)
400	53-7/8 (1368)	23 (584)	12-5/8 (321)	57-5/8 (1464)	23 (584)	12-5/8 (321)
600	59-3/8 (1508)	24 (610)	14-1/4 (362)	63 (1600)	24 (610)	14-1/4 (362)
800	68 (1727)	25-3/8 (645)	14-1/4 (362)	71-3/4 (1822)	25-3/8 (645)	14-1/4 (362)
1200	70-5/16 (1786)	41-15/32 (1053)	19-15/16 (507)	70-5/16 (1786)	41-15/32 (1053)	19-15/16 (507)

Note: Dimensions are for estimating purposes only.

8

Table 8-28. Heavy Duty, Fusible, 240V and 600V, 3-Pole Solid Neutral, Single Throw

Ampere Rating	NEMA 1, 3R			NEMA 12, 4XSS		
	Dimensions in Inches (mm)			Dimensions in Inches (mm)		
	Height	Width	Depth	Height	Width	Depth
30	15-7/8 (403)	8-1/8 (206)	10 (254)	17-7/8 (454)	8-1/8 (206)	10 (254)
60	15-7/8 (403)	8-1/8 (206)	10 (254)	17-7/8 (454)	8-1/8 (206)	10 (254)
100	21-11/16 (551)	11-1/8 (283)	10 (254)	24 (610)	11-1/8 (283)	10-1/4 (260)
200	27-5/8 (702)	16 (406)	11-1/4 (286)	34-3/8 (873)	16 (406)	11-1/2 (292)
400	53-7/8 (1368)	23 (584)	12-5/8 (321)	57-5/8 (1464)	23 (584)	12-5/8 (321)
600	59-3/8 (1508)	24 (610)	14-1/4 (362)	63 (1600)	24 (610)	14-1/4 (362)
800	68 (1727)	25-3/8 (645)	14-1/4 (362)	71-3/4 (1822)	25-3/8 (645)	14-1/4 (362)
1200	70-5/16 (1786)	41-15/32 (1053)	19-15/16 (507)	70-5/16 (1786)	41-15/32 (1053)	19-15/16 (507)

Note: Dimensions are for estimating purposes only.

Table 8-29. Heavy Duty, Non-Fusible, 240V and 600V, 3-Pole, Double Throw

Ampere Rating	NEMA 1, 3R			NEMA 12, 4XSS		
	Dimensions in Inches (mm)			Dimensions in Inches (mm)		
	Height	Width	Depth	Height	Width	Depth
30	24-5/8 (625)	11-15/16 (303)	9-7/8 (251)	25-7/8 (657)	12 (305)	10-1/4 (260)
60	24-5/8 (625)	11-15/16 (303)	9-7/8 (251)	25-7/8 (657)	12 (305)	10-1/4 (260)
100	24-5/8 (625)	11-15/16 (303)	9-7/8 (251)	25-7/8 (657)	12 (305)	10-1/4 (260)
200	37-3/8 (949)	19-9/16 (497)	11-1/4 (286)	41 (1041)	19-1/2 (495)	11-5/8 (295)
400	53-13/16 (1367)	23-1/8 (587)	12-1/2 (318)	57-1/2 (1460)	23 (584)	12-1/2 (318)
600	63-5/16 (1608)	24-1/8 (613)	14-1/8 (359)	—	—	—
800	63-5/16 (1608)	24-1/8 (613)	14-1/8 (359)	—	—	—

Note: Dimensions are for estimating purposes only.

Table 8-30. Heavy Duty, Fusible, 240V and 600V, 3-Pole, Double Throw

Ampere Rating	NEMA 1, 3R			NEMA 12, 4XSS		
	Dimensions in Inches (mm)			Dimensions in Inches (mm)		
	Height	Width	Depth	Height	Width	Depth
30	36-5/8 (930)	11-15/16 (303)	9-7/8 (251)	39-13/16 (1011)	12 (305)	10-1/4 (260)
60	36-5/8 (930)	11-15/16 (303)	9-7/8 (251)	39-13/16 (1011)	12 (305)	10-1/4 (260)
100	36-5/8 (930)	11-15/16 (303)	9-7/8 (251)	39-13/16 (1011)	12 (305)	10-1/4 (260)
200	50-7/8 (1292)	19-9/16 (497)	11-1/4 (286)	55-5/8 (1413)	19-9/16 (497)	11-5/8 (295)
400	74-3/4 (1898)	25-3/8 (645)	14-1/8 (359)	74-3/4 (1899)	25-3/8 (645)	14-1/8 (359)
600	86-1/8 (2188)	27-7/16 (697)	14-1/8 (359)	—	—	—

Note: Dimensions are for estimating purposes only.

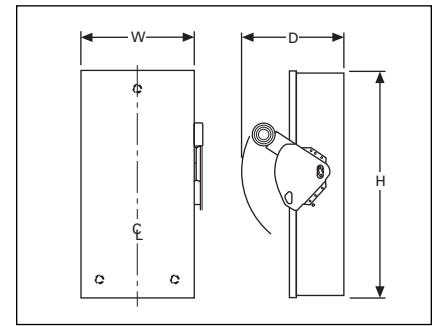


Figure 8-4. NEMA 1-3R Heavy Duty 30-1200 Amperes

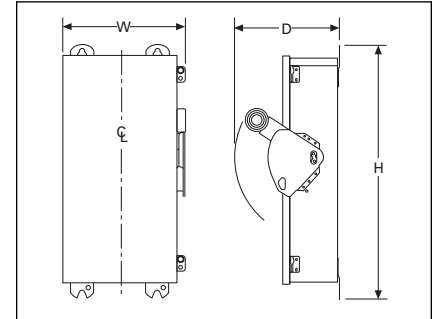


Figure 8-5. NEMA 4, 4X and 12 Heavy Duty 30-800 Amperes

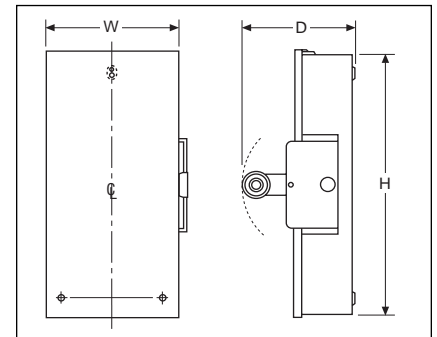


Figure 8-6. NEMA 1-3R Double Throw 30-800 Amperes

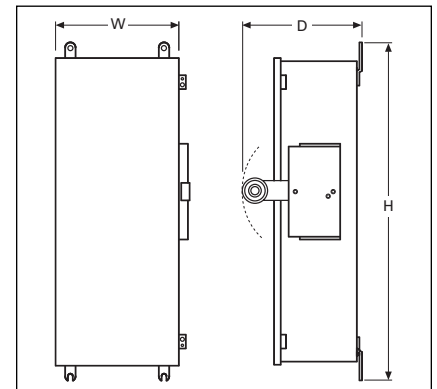
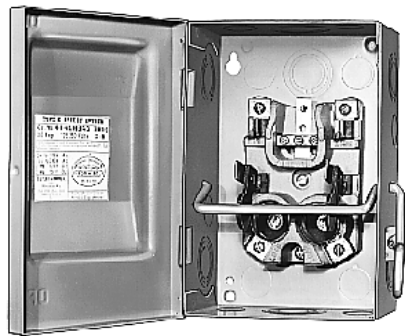


Figure 8-7. NEMA 12-4X Double Throw 30-400 Amperes

120/240V AC General Duty, Fusible, Single Throw

Specifications

- 30 through 600 amperes.
- Suitable for service entrance applications unless otherwise noted.
- Horsepower rated.
- Bolt-on hub provision. Provided for general duty switches in a NEMA 3R enclosure. See **Page 8-5** for selection.
- UL Listed File No. E5239. Meets UL 98 for enclosed switches and NEMA Std. KS-1.
- 200 – 600 ampere switches incorporate K-Series design.



DP221NGB
(New design available first quarter of 2001 — existing design is shown.)



DG321NRB

Table 8-35. 120/240V AC General Duty, Fusible, Single Throw

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings ^②				NEMA 1 Enclosure Indoor		NEMA 3R Enclosure Rainproof	
			1-Phase AC		3-Phase AC	DC	Catalog Number	Price U.S. \$	Catalog Number	Price U.S. \$
			120V	240V	240V	250V				

Fusible — Plug Type ^①

2-Wire (One Blade, One Fuse, S/N) — 120V AC

	30	Plug	1/2	—	—	—	DP111NGB	51.50	—	—
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3-Wire (Two Blades, Two Fuses, S/N) — 120/240V AC

	30	Plug	1/2	1	—	2	DP221NGB	59.00	Use cartridge fuse catalog number DG221NRB	—
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Fusible — Cartridge Type

2-Pole 2-Wire (Two Blades, Two Fuses) — 240V AC

	30	—	—	1-1/2 – 3	3 – 7-1/2	—	④	—	④	—	
	60	—	—	3 – 10	7-1/2 – 15	—	④	—	④	—	
	100	—	—	7-1/2 – 15	15 – 30	—	④	—	④	—	
	200	—	—	15 – 25	50	—	④	—	④	—	
	400	H	—	—	50 – 125	—	—	DG225FGK ^③	1,625.00	DG225FRK ^③	2,185.00
	600	H	—	—	75 – 200	—	—	DG226FGK ^③	3,280.00	DG226FRK ^③	4,195.00

3-Wire (Two Blades, Two Fuses, S/N) — 120/240V AC

	30	H	—	1-1/2 – 3	3 – 7-1/2 ^⑤	—	DG221NGB	83.00	DG221NRB	151.00
	60	H	—	3 – 10	7-1/2 – 15 ^⑤	—	DG222NGB	134.00	DG222NRB	257.00
	100	H	—	7-1/2 – 15	15 – 30 ^⑤	—	DG223NGB	279.00	DG223NRB	314.00
	200	H	—	15 – 25	50 ^⑤	—	DG224NGK	590.00	DG224NRK	780.00
	400	H	—	—	50 – 125 ^⑤	50	DG225NGK	1,860.00	DG225NRK	2,425.00
	600	H	—	—	75 – 200 ^⑤	—	DG226NGK	3,530.00	DG226NRK	4,470.00

① These switches do not have an interlock which prevents door from being opened when switch is in the ON position.

② Maximum hp ratings apply only when dual element fuses are used.

③ Solid neutral bars are not included in 400A and 600A switches. Order separately from table on **Page 8-4**.

④ Use 3-wire catalog numbers below.

⑤ Grounded B phase rating, UL listed.