

Product Overview

Product Selection Guide

Safety Switch

Switch Type	NEMA Rating	Fused/non-fused	Number of Poles				
			1	2	3	4	6
Heavy-duty single-throw	NEMA 1	Fused and non-fused ^①	—	30–800A	30–1200A	30–600A	—
	NEMA 3R	Fused and non-fused ^②	30–600A	30–800A	30–1200A	—	—
	NEMA 12/3R	Fused and non-fused ^{①②}	30–600A	30–800A	30–1200A	30–600A	30–200A
	NEMA 4	Fused and non-fused	—	400–800A	400–800A	—	—
	NEMA 7/9	Fused and non-fused ^③	—	—	30–100A	—	—
	NEMA 4X Non-Metallic	Fused and non-fused ^③	—	—	30–200A	—	—
	NEMA 4X stainless-steel (304 or 316 grade)	Fused and non-fused ^{①②}	30–600A	30–800A	30–1200A	30–600A	30–200A
General-duty single-throw	NEMA 1	Plug fuse	30A	30A	—	—	—
	NEMA 1 and 3R	Fused	—	30–600A	30–600A	—	—
	NEMA 1	Non-fused	—	30–100A	30–600A	—	—
	NEMA 3R	Non-fused	—	30–200A	30–600A	—	—
Heavy-duty double-throw	NEMA 1	Fused	—	200A	30–1200A	—	—
	NEMA 3R	Fused ^④	—	200A	100–1200A	—	—
	NEMA 12	Fused	—	—	30–400A	—	—
	NEMA 4X stainless-steel (304 or 316 grade)	Fused	—	—	30–400A	—	—
	NEMA 1	Non-fused	—	30–1200A	30–1200A	200–800A	—
	NEMA 3R	Non-fused ^④	—	200–1200A	30–1200A	30–800A	30–100A
	NEMA 12	Non-fused	—	—	30–800A	—	—
	NEMA 4X stainless-steel (304 or 316 grade)	Non-fused	—	—	30–800A	—	—
General-duty double-throw	NEMA 3R	Non-fused	—	30–400A	—	—	—
Shunt trip safety switches	NEMA 1, 3R, 4, and 12	Fused and non-fused	—	30–800A	30–800A	30–400A	—
Window switches	NEMA 12/3R and 4X stainless-steel (304 or 316 grade)	Fused and non-fused ^①	—	30–1200A	30–1200A	30–600A	30–200A
Enviroline stainless-steel switch	NEMA 4X (304 or 316 grade)	Fused and non-fused ^⑤	—	30–400A	30–400A	—	—
Mill Duty Switches	NEMA 12/3R and 4X stainless-steel (304 or 316 grade)	Fused and non-fused	—	30–600A	30–600A	—	—
Quick connect double-throw	NEMA 1 and 3R	Fused and non-fused ^④	—	100–1200A	100–1200A	100–1200A	—
Quick connect single-throw	NEMA 1 and 3R	Fused and non-fused ^④	—	100–1200A	100–1200A	100–1200A	—
Elevator control switches	NEMA 1, 3R, 4, and 12	Fused	—	—	30–400A	—	—
OEM Line Isolation Switches (OLI)	NEMA 12/3R and 4X stainless-steel (304 or 316 grade)	Fused and non-fused	—	30–400A	30–400A	—	—
Receptacle switches	NEMA 12/3R and 4X stainless-steel (304 or 316 grade)	Fused and non-fused ^⑥	—	—	30–100A	—	—
Auxiliary power switch	NEMA 3R	Fused and non-fused ^④	—	—	30–200A	—	—
Left-handed switches	NEMA 1, 3R, 12, and 4X stainless-steel (304 or 316 grade)	Fused and non-fused ^⑦	—	—	30–200A	—	—
Heavy-duty CUBEFuse®	NEMA 1	Fused	—	—	30–100A	30–100A	—
	NEMA 3R	Fused	—	—	30–100A	—	—
	NEMA 12/3R	Fused	—	—	30–100A	100A	—
	NEMA 4X stainless-steel (304 or 316 grade)	Fused	—	—	30–100A	—	—
Surge switches	NEMA 12/3R and 4X stainless-steel (304 or 316 grade)	Fused and non-fused	—	30–1200A	30–1200A	—	—
Heavy-duty double door	NEMA 12/3R and 4X stainless-steel (304 or 316 grade)	Fused	—	30–1200A	30–1200A	—	—
Enclosed rotary	NEMA 1, 12/3R, NEMA 4X stainless-steel	Non-fused	—	—	16–80A	16–80A	—
	NEMA 4X non-metallic	Non-fused	—	—	16–80A	16–80A	—
	NEMA 4X polycarbonate non-metallic	Non-fused	—	—	30A and 60A	16–80A	—

Notes

① 400–800A 6-pole, and 800A 4-pole heavy-duty, single-throw switches are non-UL Listed and available.

② Single-pole product is the single circuit 600 Vdc switch series.

③ No viewing windows or other enclosure modifications are available with this product.

④ NEMA 3R stainless versions are available and are UL Listed.

⑤ Enviroline stainless-steel switches have stainless-steel enclosures, sub pans, handles, and mechanisms.

⑥ Switches with non-standard receptacles or at higher amperages are non-UL Listed and available.

⑦ All left-handed switches are non-UL Listed. Higher amperages are not available.

Cross-Reference

General-Duty

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
Plug Fuse, Single-Pole, Two-Wire, 120 Vac, NEMA 1				
30	DP111NGB	TPF130	LF111N	D211N
Plug Fuse, Two-Pole, Three-Wire, 240 Vac, NEMA 1				
30	DP221NGB	TPF230	LF211N	D211N
Fusible, Two-Pole, Three-Wire, 240 Vac, NEMA 1				
30	DG221NGB	TG3221	GF221N	D221N
60	DG222NGB	TG3222	GF222N	D222N
100	DG223NGB	TG3223	GF223N	D223N
200	DG224NGK	TG3224	GF224N	D224N
400	DG225NGK	TG3225	GF225N	D225N
600	DG226NGK	TG3226	GF226N	D226N
Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 1				
30	DG321NGB	TG4321	GF321N	D321N
60	DG322NGB	TG4322	GF322N	D322N
100	DG323NGB	TG4323	GF323N	D323N
200	DG324NGK	TG4324	GF324N	D324N
400	DG325FGK	TG3325	GF325N	D325N
600	DG326FGK	TG3326	GF326N	D326N
Fusible, Three-Pole, Four-Wire, 240 Vac, NEMA 1				
30	DG321NGB	TG4321	GF321N	D321N
60	DG322NGB	TG4322	GF322N	D322N
100	DG323NGB	TG4323	GF323N	D323N
200	DG324NGK	TG4324	GF324N	D324N
400	DG325NGK	TG4325	GF325N	D325N
600	DG326NGK	TG4326	GF326N	D326N
Non-Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 1				
30	DG221UGB	TGN3321	N/A	N/A
60	DG222UGB	TGN3322	N/A	Q0260NATS
100	DG223UGB	TGN3323	N/A	Q02000NS
200	DG324UGK	TGN3324	N/A	DU324
400	DG325UGK	TGN3325	N/A	DU325
600	DG326UGK	TGN3326	N/A	DU326
Non-Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 1				
30	DG321UGB	TGN3321	GNF321	DU321
60	DG322UGB	TGN3322	GNF322	DU322
100	DG323UGB	TGN3323	GNF323	DU323
200	DG324UGK	TGN3324	GNF324	DU324
400	DG325UGK	TGN3325	GNF325	DU325
600	DG326UGK	TGN3326	GNF326	DU326

General-Duty, continued

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
Fusible, Two-Pole, Three-Wire, 240 Vac, NEMA 3R				
30	DG221NRB	TG3221R	GF221NR	D221NRB
60	DG222NRB	TG3222R	GF222NR	D222NRB
100	DG223NRB	TG3223R	GF223NR	D223NRB
200	DG224NRK	TG3224R	GF224NR	D224NRB
400	DG225NRK	TG3225R	GF225NR	D225NR
600	DG226NRK	TG3226R	GF226NR	D226NR
Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 3R				
30	DG321NRB	TG4321R	GF321NR	D321NRB
60	DG322NRB	TG4322R	GF322NR	D322NRB
100	DG323NRB	TG4323R	GF323NR	D323NRB
200	DG324NRK	TG4324R	GF324NR	D324NRB
400	DG325FRK	TG3325R	GF325NR	D325NR
600	DG326FRK	TG3326R	GF326NR	D326NR
Fusible, Three-Pole, Four-Wire, 240 Vac, NEMA 3R				
30	DG321NRB	TG4321R	GF321NR	D321NRB
60	DG322NRB	TG4322R	GF322NR	D322NRB
100	DG323NRB	TG4323R	GF323NR	D323NRB
200	DG324NRK	TG4324R	GF324NR	D324NRB
400	DG325NRK	TG3325R ①	GF325NR	D325NR
600	DG326NRK	TG3326R ①	GF326NR	D326NR
Non-Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 3R				
30	DG221URB	TGN3321R	GNF321R	DU221RB
60	DG222URB	TGN3322R	GNF322R	DU222RB
100	DG223URB	TGN3323R	GNF323R	Q02000NRB
200	DG324URK	TGN3324R	GNF324R	DU324RB
Non-Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 3R				
30	DG321URB	TGN3321R	GNF321R	DU321RB
60	DG322URB	TGN3322R	GNF322R	DU322RB
100	DG323URB	TGN3323R	GNF323R	DU323RB
200	DG324URK	TGN3324R	GNF324R	DU324RB
400	DG325URK	N/A	N/A	N/A
600	DG326URK	N/A	N/A	N/A

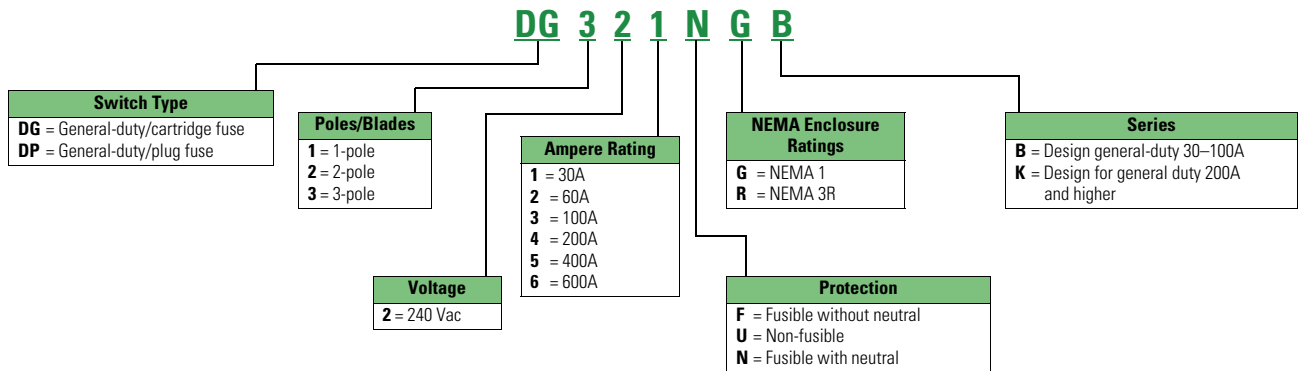
Notes

① Separate neutral kit required.

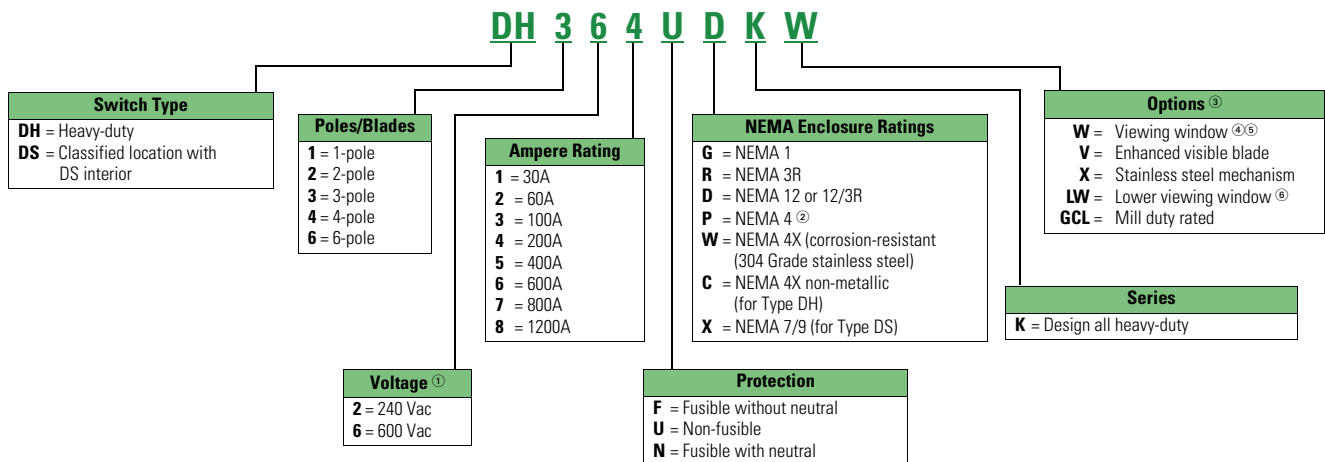
Always verify the number of poles and wires required since catalog numbers may appear in multiple tables.

Catalog Number Selection

General-Duty



Heavy-Duty



Notes

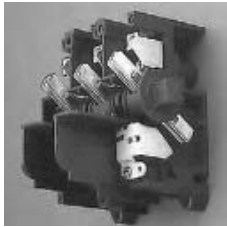
- ① For DC ratings, check individual switch ratings.
 ② Only available for 400A and higher safety switches.
 ③ See Modifications-Flex Center for additional available options.
 ④ All window switches feature enhanced visible blade design as standard.
 ⑤ Only available in NEMA 12/3R and NEMA 4X enclosures.
 ⑥ Only available in 200 to 1200A NEMA 12/3R and NEMA 4X enclosures.

These tables are intended for use in breaking down existing catalog numbers. They are not intended for building new catalog numbers.

A factory-installed ground lug is supplied in all heavy-duty safety switches.

All general-duty switches above 100A and all heavy-duty switches incorporate these K-Series switch design features.

- Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life



Visible Double-Break Rotary Blade Mechanism

- Protects against accidental contact with energized parts. Probe holes enable the user to test if the line side is energized without removing the shield. Not provided on general-duty switches, but available as a field kit or factory installed



Clear Line Shield



Clearly Visible Handle

- The position (ON or OFF) can be clearly seen from a distance and the length provides for easy operation



Triple Padlocking Capability

- Personnel safety feature because the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks



Additional Locking Capability

- Cabinet door can be further padlocked at the top and bottom as applicable



Interlocking Mechanism

- Door cannot be opened when the handle is in the ON position. Front and side operable defeater mechanism provides for user access when necessary on single-throw switches



Tangential Knockouts

- An ample number are provided on the top, bottom and sides of both NEMA Types 1 and 3R enclosures through 200A



Bolt-On Hub Kits

- For switches in a NEMA Type 3R, 30–200A. Use a Myers type hub for all others

Standards and Certifications

- UL listed File No. E5239
- Meets UL 98 for enclosed switches and NEMA Std. KS-1



Seismic Qualifications

- General-duty switches exceed the requirements of Uniform Building Code (UBC) and California Code Title 24 OSP-0011-10, OSP-0012-10



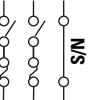
Product Selection

1

120/240 Vac General-Duty, Fusible, Single-Throw

DP221NGB



			Maximum Horsepower Ratings ^①						
System	Ampere Rating	Fuse Type Provision	Single-Phase AC 120V	240V	Three-Phase AC 240V	DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	
Plug Type—Two-Wire (One Blade, One Fuse, S/N)—120 Vac ^②									
	30	Plug (Type S, T or W)	1/2–2	—	—	—	DP111NGB ^②	—	
Plug Type—Three-Wire (Two Blades, Two Fuses, S/N)—120/240 Vac									
	30	Plug (Type S, T or W)	1/2–2	1-1/2–3	—	—	DP221NGB ^②	Use cartridge-type fuse catalog number DG221NRB	
Cartridge Type—Two-Pole Two-Wire (Two Blades, Two Fuses)—240 Vac									
	30	—	—	1-1/2–3	3–7-1/2	—	③	③	
	60	—	—	3–10	7-1/2–15	—	③	③	
	100	—	—	7-1/2–15	15–30	—	③	③	
	200	H	—	15	25–60	—	DG224FGK ^{④⑤}	DG224FRK ^{④⑤}	
	400	H	—	—	50–125	—	DG225FGK ^{④⑤}	DG225FRK ^{④⑤}	
	600	H	—	—	75–200	—	DG226FGK ^{④⑤}	DG226FRK ^{④⑤}	
Cartridge Type—Three-Wire (Two Blades, Two Fuses, S/N)—120/240 Vac									
	30	H	—	1-1/2–3	3–7-1/2 ^⑥	—	DG221NGB	DG221NRB	
	60	H	—	3–10	7-1/2–15 ^⑥	—	DG222NGB	DG222NRB	
	100	H	—	7-1/2–15	15–30 ^⑥	—	DG223NGB	DG223NRB	
	200	H	—	15	25–60 ^⑥	—	DG224NGK	DG224NRK	
	400	H	—	—	50–125 ^⑥	50	DG225NGK	DG225NRK	
	600	H	—	—	75–200 ^⑥	—	DG226NGK	DG226NRK	

Notes

- ① Maximum hp ratings apply only when dual element time delay fuses are used.
 ② These switches do not have an interlock that prevents door from being opened when switch is in the ON position.
 ③ Use three-wire catalog numbers below.
 ④ Solid neutral bars are not included. Order separately from table on **Page V2-T1-13**.
 ⑤ **WARNING!** Switch is not approved for service entrance unless a neutral kit is installed.
 ⑥ Grounded B phase rating, UL listed.

All general-duty safety switches are individually packaged.

Accessories are limited in scope on general-duty safety switches. See **Page V2-T1-13** for availability. In addition, clear line shields are available as an accessory on 200–600A general-duty switches. Catalog Numbers: 200A = 70-7759-11, 400A = 70-8063-8, 600A = 70-8064-8.

Dimensions

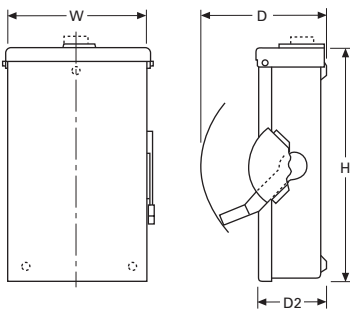
Approximate Dimensions in Inches (mm)

Plug Fuse, 120, 120/240V, Single-, Two-Pole Solid Neutral, Single-Throw

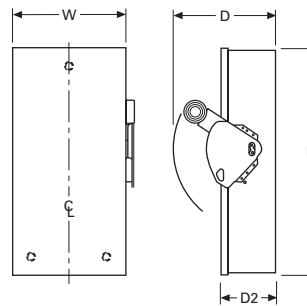
Ampere Rating	NEMA 1 Height	Width	Depth
30	6.88 (174.8)	4.94 (125.5)	3.44 (87.4)

General-Duty, Non-Fusible, 240V, Three-Pole, Single-Throw ^①

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
NEMA 1					
30	6.38 (162.1)	10.69 (271.5)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.19 (360.4)	7.38 (187.5)	4.21 (106.9)	9 (4.086)
100	9.13 (231.9)	18.81 (477.8)	7.38 (187.5)	4.23 (107.4)	12 (5.448)
200	16.00 (406.4)	24.75 (628.7)	11.25 (285.8)	6.14 (156.0)	48 (21.792)
400	23.00 (584.2)	44.75 (1136.7)	12.63 (320.8)	7.27 (184.7)	100 (45.4)
600	24.00 (609.6)	52.25 (1327.2)	14.25 (362.0)	8.95 (227.3)	130 (59.02)
NEMA 3R					
30	6.38 (162.1)	10.81 (274.6)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.38 (365.3)	7.38 (187.5)	4.21 (106.9)	9 (4.086)
100	9.13 (231.9)	19.25 (489.0)	7.38 (187.5)	4.23 (107.4)	12 (5.448)
200	16.00 (406.4)	25.50 (647.7)	11.25 (285.8)	6.14 (156.0)	55 (24.97)
400	23.00 (584.2)	45.19 (1147.8)	12.63 (320.8)	7.27 (184.7)	105 (47.67)
600	24.00 (609.6)	52.70 (1338.6)	14.25 (362.0)	8.95 (227.3)	135 (61.29)

NEMA 1, 3R 30–100A General-Duty Non-Fusible and Fusible Single-Throw ^②**General-Duty, Fusible, 240V, Three-Pole Solid Neutral, Single-Throw** ^①

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
NEMA 1					
30	6.38 (162.1)	10.69 (271.5)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.19 (360.4)	7.38 (187.5)	4.21 (106.9)	10 (4.54)
100	9.13 (231.9)	18.81 (477.8)	7.38 (187.5)	4.23 (107.4)	14 (6.356)
200	16.00 (406.4)	24.75 (628.7)	11.25 (285.8)	6.14 (156.0)	48 (21.792)
400	23.00 (584.2)	44.75 (1136.7)	12.63 (320.8)	7.27 (184.7)	110 (49.94)
600	24.00 (609.6)	52.25 (1327.2)	14.25 (362.0)	8.95 (227.3)	145 (65.83)
NEMA 3R					
30	6.38 (162.1)	10.81 (274.6)	6.88 (174.8)	3.75 (95.2)	6 (2.724)
60	8.69 (220.7)	14.38 (365.3)	7.38 (187.5)	4.21 (106.9)	10 (4.54)
100	9.13 (231.9)	19.25 (489.0)	7.38 (187.5)	4.23 (107.4)	14 (6.356)
200	16.00 (406.4)	25.50 (647.7)	11.25 (285.8)	6.14 (156.0)	55 (24.97)
400	23.00 (584.2)	45.19 (1147.8)	12.63 (320.8)	7.27 (184.7)	115 (52.21)
600	24.00 (609.6)	52.70 (1338.6)	14.25 (362.0)	8.95 (227.3)	150 (68.1)

NEMA 1, 3R 200–600A General-Duty Non-Fusible and Fusible Single-Throw**Notes**

- ① Dimensions are for estimating purposes only.
 ② Figure is not applicable to plug fuse.