

Switching Devices

Safety Switches

Safety Switch Selection Guide

Type	Voltage	Fuse Type	Fuse Class	Ampere Rating	Number of Poles ^③	Enclosure Type			Type 4 Painted Steel	Type 4X Stainless Steel	Type 4X Non Metallic	NEMA 7/9 Hazardous Location	
						Type 1	Type 3R	Type 12 ^①					
Air Conditioning Disconnect	Max. 240Vac	Fusible	Cartridge	H	30 and 60	2	—	Yes	—	—	—	—	
	Max. 240Vac	Non-Fusible	—	—	60	2	—	Yes	—	—	—	—	
		Moulded Case Switch	—	—	60	2	—	Yes	—	—	—	—	
	Max. 600Vac	Non-Fusible	—	—	30-80	3	—	Yes	—	—	—	—	
General Duty	Single Throw	Fusible	Plug	—	30	1 and 2	Yes	Yes	—	—	—	—	
	Max. 240Vac	Cartridge	—	—	30-600	2 and 3	Yes	Yes	—	—	—	—	
		Non-Fusible	—	—	30-600	2 and 3	Yes	Yes	—	—	—	—	
Heavy Duty	Single Throw	Fusible	Cartridge	H	30-600	2, 3, and 4	Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—	
	Max. 600Vac	Non-Fusible	—	—	800-1200	Up to 1200A	Yes	Up to 1200A	Up to 1200A	400-1200A	Up to 1200A	—	
		250 Vdc & 600 Vdc	Non-Fusible	—	—	30-1200	2, 3, and 4	Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—
6-Pole Motor Circuit^②	Single Throw	Fusible	Cartridge	H	30-200	6	—	Yes	Yes ^{①②}	—	Yes ^②	—	
	Max. 600Vac	Non-Fusible	—	—	30-200	6	—	Yes	Yes ^{①②}	—	Yes ^②	—	
Double Throw^③	Max. 600VAV 250Vdc	Fusible	Cartridge	H	30-200	2 and 3	Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—	
							Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—	
							Yes	Yes	Yes ^{①②}	Yes ^②	Yes ^②	—	
		Non-Fusible ^③	—	—	30-1200	3	Yes	Yes	Up to 400A	400-600A	Up to 200A	—	
Enclosed Rotary Switches	Max. 600Vac	Non-Fusible	—	—	30-80	3			Yes ^①	—	Yes	Yes	
Hazardous Location Disconnect Switch	Max. 600Vac 250Vdc	Fusible	Cartridge	J	30-100	3			—	—	—	—	
Enviroline All Stainless^②	Single Throw Max. 600Vac/ DC	Fusible	Cartridge	H	30-400	2 and 3			—	—	Yes ^②	—	
Viewing Window	Single Throw Max. 600Vac/ DC	Fusible	Cartridge	H	30-1200	2, 3, 4, 6			Yes ^①	Yes	Yes	—	
Receptacle (Pin & Sleeve)^②	Single Throw Max. 600Vac/ DC	Fusible	Cartridge	H	30-100	3			Yes ^{①②}	—	Yes ^②	—	
Quick Connect (Cam & Posi Lok)	Single Throw Max. 600Vac	Fusible	Cartridge	H	100-600	2, 3, and 4	Yes	Yes	—	—	—	—	
							Yes	Yes	—	—	—	—	
	Double Throw Max. 600Vac	Non-Fusible w Non-Fusible w Fuse	—	—	—	100-800	2, 3, and 4	Yes	Yes	—	—	—	—
								Yes	Yes	—	—	—	—
		Cartridge	H	100-200	2, 3, and 4	Yes	Yes	—	—	—	—		
		—	T	400-800	2, 3, and 4	Yes	Yes	—	—	—	—		
Solar	Single Throw Max. 600Vdc	Fusible	—	R	30-600	1 (3)		Yes	Yes ^{①②}	Yes ^②	—	—	
								Yes	Yes ^{①②}	Yes ^②	—	—	

Notes

- ① Type 12 enclosures (30-1200 amperes) can be field modified to meet Type 3R rainproof requirements when a factory provided drain screw is removed.
- ② Optional windows also available with type 12 or 4/4X enclosures.
- ③ Double throw non-fusible 4 pole 30-800A, 6 pole 30-100A.

Product Overview

- Used to open or close a circuit
- Non-fusible safety switches provide a means to manually connect or disconnect the load from the source
- Fusible safety switches provide a means to manually open and close a circuit and provide overcurrent protection by means of installed fuses
- Fusible switches certified for use as service entrance equipment (unless noted)
- Also commonly referred to as a disconnect switch or disconnect

- Available from 30–1200A
- All Padlockable
- Horsepower rated
- 100% load break rated (unless noted)
- Non-Fusible switches are 100% continuous duty rated and fusible switches are 80% continuous duty rated per CSA C22.2 No.4

Standards and Certifications

- C22.2 No.4 File #69743
- C22.2 No.14 (Enclosed Rotary) File #162136
- Det Norske Veritas
- ISO 9001:2008
- CSA certified Class I, Div, 1 & 2, Groups B, C & D; Class II, Div 1 & 2, Groups E, G & F; Class III, Div 1 & 2, Zone 1, IIB + H2 for NEMA 7/9.
- Seismic qualified (UBC and CBC) for Heavy Duty 30-800A
- ISO 1400



Fuse Clips/Class

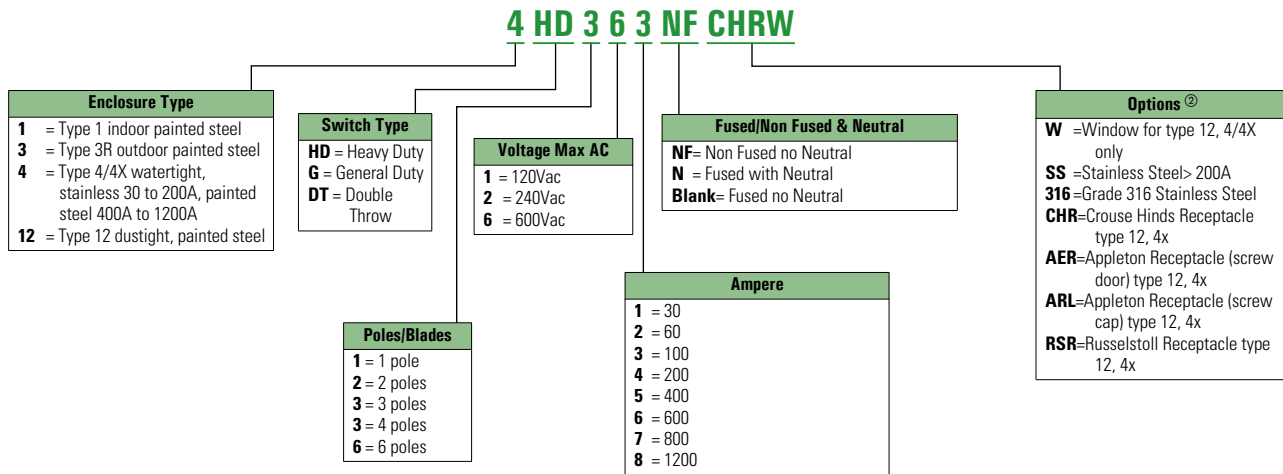
Adaptable to Accept the Following Fuse Class

Safety Switch Type	Standard Fuse Class Clips Supplied with Switch	R	J	T
AC Disconnect	H	—	—	—
General Duty	H	30A-600A	400-600A	400-600A
Heavy Duty	H 30-600A L 800-1200A	30A-600A	240V-100-600A 600V-30-600A	200A-800A 1200A
Heavy Duty 6 Pole	H	30A-200A	60A-200A	200A
Double Throw	H 30-200A T 240V-600A-1200A T 600V-400A-800A L 600V-1200A	30A-400A	240V-200A Only 600V-200A-400A	240V-600A-1200A 600V-400A-1200A (Standard)
Enviroline All Stainless & Window	Same as Heavy Duty	Same as Heavy Duty		Same as Heavy Duty
Receptacle (Pin & Sleeve)	H	30A-100A	60A-100A	—
Solar	R	30A - 600A	—	—

Note: Refer to specific switch technical data page for field adaptation notes.

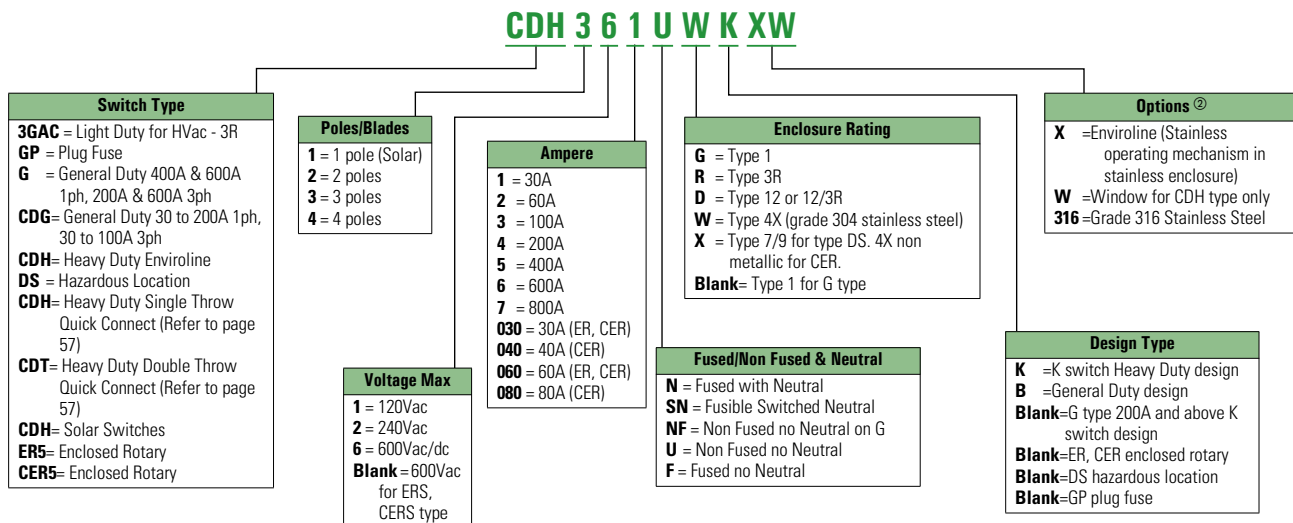
Catalogue Number Selection

Safety Switch



Notes

- ① Always verify the number of poles and wires required since catalogue numbers may appear in multiple tables.
 - ② See **Pages 12** through **14** for additional Flex Centre options.
- This table is intended for use in breaking down existing catalogue numbers. It is not intended for building new catalogue numbers.



Heavy Duty/Window Switch



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Heavy Duty Window Switches

Application Description

Typically used but not limited to industrial applications such as mining, forestry, saw mills, steel mills. Recommended for any application where verification of the blade contact status is required without opening the door of the switch.

Product Description

- Available on type 12 and 4 painted steel and 4X stainless steel heavy duty switches
- 30–1200Ampere
- 30-60A full window design provides visible blade and blown fuse verification
- 100A-1200A window design provides visible blade verification
- Fusible and non-fusible
- Also available on double throw, receptacle switches, 6 pole, and enviroline switches
- Windows are constructed from tempered safety glass.
- 30-100A field replaceable window kit available (effective August 2003)
- Fusible switches with neutral installed suitable for service entrance

Features & Benefits

- Full range offering 30A–1200A
- Tempered safety glass, resists scratching, fading and blistering
- Large full window at 30 & 60A, provides unrestricted view without opening the door of the switch
 - Visible blade indication
 - Fuse presence, condition and type
 - Better visibility in low light or restricted areas
- Benefits operator safety
- Labour savings
- Field replaceable window kit for 30-100Ampere
- Type 12 enclosure can be field converted to 3R

Standards and Certifications

- CSA certified File No. 69743
- Meets C22.2 No.4 standard for enclosed switches
- ISO 9001:2008



Product Selection

12HD361W



240 Vac Heavy-Duty, Fusible Single-Throw with Viewing Window

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V	Type 12 ^② Enclosure Dust-Tight Catalogue Number	Type 4 Enclosure Watertight, Painted Steel Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
			AC Standard Fuse		Time Delay					
			Single-Phase	Three-Phase	Single-Phase	Three-Phase				
Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc^①										
	30	H	—	3	—	7-1/2	—	12HD321NW ^②	—	4HD321NW
	60	H	—	7-1/2	—	15	—	12HD322NW ^②	—	4HD322NW
	100	H	—	15	—	30	20	12HD323NW ^②	—	4HD323NW
	200	H	—	25	—	60	40	12HD324NW ^②	—	4HD324NW
	400	H	—	50	—	125	50	12HD325NW ^②	4HD325NW	4HD325NWSS
	600	H	—	75	—	200	—	12HD326NW ^②	4HD326NW	4HD326NWSS
	800	L	—	100	—	250	—	12HD327NW ^②	4HD327NW	4HD327NWSS
	1200	L	—	—	—	—	—	③	③	③

600 Vac Heavy-Duty, Fusible Single-Throw with Viewing Window

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V 600V	Type 12 ^② Enclosure Industrial, Dust-Tight Catalogue Number	Type 4 Enclosure Watertight, Painted Steel Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
			Single-Phase AC		Three-Phase AC					
			480V	600V	480V	600V				
Three Pole (Three Blades, Three Fuses), 600 Vac—250 Vdc^①										
	30	H	7-1/2	10	15	20	—	12HD361W ^②	—	4HD361W
	60	H	20	25	30	50	—	12HD362W ^②	—	4HD362W
	100	H	30	40	60	75	—	12HD363W ^②	—	4HD363W
	200	H	50	50	125	150	—	12HD364W ^②	—	4HD364W
	400	H	—	—	250	350	—	12HD365W ^②	4HD365W	4HD365WSS
	600	H	—	—	400	500	—	12HD366W ^②	4HD366W	4HD366WSS
	800	L	—	—	500	500	—	12HD367W ^②	4HD367W	4HD367WSS
	1200	L	—	—	—	—	—	③	③	③

4HD361NFW



600 Vac Heavy-Duty, Non-Fusible Single-Throw with Viewing Window

System	Ampere Rating	Maximum Horsepower Ratings						Type 12 Enclosure ^② Dust-Tight Catalogue Number	Type 4 Enclosure Watertight, Painted Steel Catalogue Number	Type 4X Enclosure Corrosion-Resistant, Stainless Steel Catalogue Number
		Single-Phase AC		Three-Phase AC		DC				
		480V	600V	480V	600V	250V	600V			
Three-Pole—600 Vac, 250 Vdc^① (Not Suitable for Service Entrance)										
	30	7-1/2	10	20	30	5	—	12HD361NFW ^②	—	4HD361NFW
	60	20	25	50	60	10	—	12HD362NFW ^②	—	4HD362NFW
	100	40	50	75	100	20	—	12HD363NFW ^②	—	4HD363NFW
	200	50	50	125	150	40	—	12HD364NFW ^②	—	4HD364NFW
	400	—	—	250	350	50	—	12HD365NFW ^②	4HD365NFW	4HD365NFWSS
	600	—	—	400	500	—	—	12HD366NFW ^②	4HD366NFW	4HD366NFWSS
	800	—	—	500	500	—	—	12HD367NFW ^②	4HD367NFW	4HD367NFWSS
	1200	—	—	—	—	—	—	③	③	③

Notes

- ① For two-pole applications, use outside poles of three-pole switch.
- ② Type 12 enclosures (30–800A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ③ Contact Customer Support (1-800-268-3578) for availability of this product.

Effective August 2003, 30–100A window switches offer visible blade verification and blown fuse indication in a single design as shown in the photos. The window is field replaceable 30–100A. Higher ampere ratings will continue to be manufactured with a non-replaceable epoxy affixed design with visible blade verification only.

Dimensions

Approximate Dimensions in Inches (mm)

Note: Dimensions are for estimating purposes only.

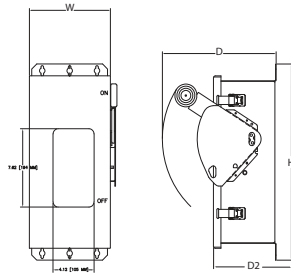
Heavy-Duty, Non-Fusible, 600V, Three-Pole, Single-Throw with Window

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
60	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
100	11.84 (301)	24.95 (634)	11.44 (291)	6.30 (160)	30 (13.64)
200	16.95 (430)	35.38 (899)	11.63 (295)	6.44 (164)	55 (24.97)
400	24.12 (612)	57.47(1460)	12.43 (316)	7.19 (183)	125 (56.75)
600	25.12 (638)	63.00 (1600)	13.92 (353)	8.91 (226)	167 (75.82)
800	25.34 (644)	71.75 (1823)	13.92 (353)	8.91 (226)	175 (79.45)
1200	41.47 (1053)	73.77 (1874)	20 (508)	13.50 (343)	519 (231.54)

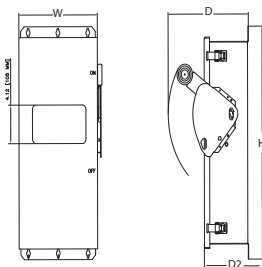
Note:

For 6 pole switches with windows, refer to page 40 for dimensions - NOTE 30, 60A same as 100A dimensions
 For DT (Double Throw) switches with windows refer to page 40 for dimensions.
 Type 12 enclosures (30-1200A) can be field modified to meet Type 3R rainproof requirements when factory provided drain hole is opened.

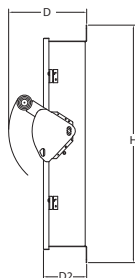
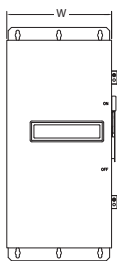
Type 12, 4X 30-60A



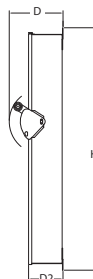
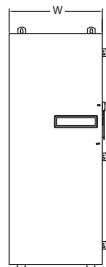
Type 12, 4X 100A



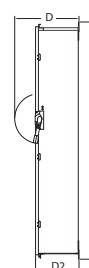
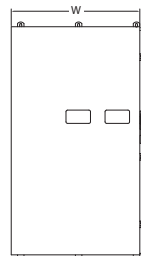
Type 12, 4/4X 200A



Type 12, 4/4X 400A - 800A



Type 12, 4/4X 1200A



Heavy-Duty, Fusible, 240V and 600V, Three-Pole Single-Throw, with Window

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
30	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
60	8.8 (224)	19.08 (485)	11.44 (291)	6.30 (160)	18 (8.18)
100	11.84 (301)	24.95 (634)	11.44 (291)	6.30 (160)	30 (13.64)
200	16.95 (430)	35.38 (899)	11.63 (295)	6.44 (164)	55 (24.97)
400	24.12 (612)	57.47(1460)	12.43 (316)	7.19 (183)	125 (56.75)
600	25.12 (638)	63.00 (1600)	13.92 (353)	8.91 (226)	167 (75.82)
800	25.34 (644)	71.75 (1823)	13.92 (353)	8.91 (226)	175 (79.45)
1200	41.47 (1053)	73.77 (1874)	20 (508)	13.50 (343)	519 (231.54)

Terminal Capacity for Heavy Duty Safety Switch 600V Max

Ampere	Line/Load Terminal Capacity (per phase)	Ground Terminal Capacity	Neutral Catalogue #	Neutral Terminal Capacity
30	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
60	#14 - #2	#14 - 4	DH030NK	4x #14 - #2
100	#14 - 1/0	#14 - 4	DH100NK	2x #14-#2 AND 2x #14 - 1/0
200 (Type 12 & 4X)	#6 - 300mcm	#14 - #4	DH200NK	2x #6 - 300mcm AND 2x #14 - #2
400	(2) 1/0 - (2)300mcm OR (1) 1/0 - 750mcm	#6 - 250mcm	DS400NK	2X 1/0 - 750mcm OR (2)1/0 - (2)300mcm AND 3x#6 - 250mcm
600	(1)#2 - 600mcm AND (1) 1/0 - 750mcm	#6 - 250mcm	DS600NK	2 x 1/0 - (1)750mcm OR 1/0 - (2) 300mcm AND 1 x #2 - 600mcm AND 3 x #6 - 250mcm
800	(4) 3/0 - (4)750mcm	#6 - 250mcm	DS800NK	2 X (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm
1200	(4) 1/0 - (4)750mcm	#6 - 250mcm	DS800NK	2 X (4)3/0 - (4)750mcm AND 3 x #6 - 250mcm

Note

* Order neutral catalogue number when neutral required and not included with switch.

All terminals are rating al/cu unless otherwise noted.

Ground terminal is standard on all switches. For optional ground lug kits or copper lug kits see page 5 and 6