

DH362NRK Safety Switch



## 1.1 Safety Switches

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# 1.1

## Switching Devices

### Safety Switches

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General-Duty Safety Switch



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### Product Overview

### Product Selection Guide

#### Safety Switch



Description	General-Duty	Heavy-Duty	Six-Pole Motor Circuit	Double-Throw	Enclosed Rotary Switches
Type	Single-throw maximum 240 Vac horsepower rated	Single-throw maximum 600V AC/DC horsepower rated	Single-throw maximum 600 Vac	Maximum 600 Vac horsepower rated	Maximum 600 Vac
Fuse type	Plug	Cartridge	Cartridge	Cartridge	—
Fusible	Cartridge				
Fuse class	1	1	1	1	1
Fusible					
Ampere rating	30–600	30–1200	30–200	30–1200	—
Fusible					
Non-fusible	30–600	30–1200	30–200	30–1200	16–125
Number of poles	1, 2 and 3	2, 3 and 4	6	2 and 3	—
Fusible	2 and 3				
Non-fusible	2 and 3	2, 3, 4 and 6	6	2, 3, 4 and 6	3 and 4
Enclosure types					
NEMA® 1					
Fusible	Yes	Yes	—	Yes	Yes
Non-fusible	Yes	Yes	—	Yes	Yes
NEMA 3R					
Fusible	Yes	Yes	—	Yes	Yes
Non-fusible	Yes	Yes	Yes	Yes	Yes <sup>2</sup>
NEMA 12					
Fusible	—	Yes <sup>2</sup>	Yes, up to 200A <sup>2</sup>	Yes	Yes
Non-fusible	—	Yes, up to 1200A <sup>2</sup>	Yes <sup>2</sup>	Yes, up to 400A	Yes <sup>2</sup>
NEMA 4 painted steel					
Fusible	—	Yes, 400–800A	—	—	—
Non-fusible	—	Yes, 400–800A	—	—	—
NEMA 4X stainless steel					
Fusible	—	Yes	Yes, up to 200A	Yes	Yes
Non-fusible	—	Yes, up to 1200A	Yes	Yes, up to 400A	Yes
NEMA 4X non-metallic					
Fusible	—	Yes, up to 200A	—	—	Yes
Non-fusible	—	Yes, up to 200A	—	—	Yes
NEMA 7/9					
Fusible	—	Yes, up to 100A	—	—	—
Non-fusible	—	Yes, up to 100A <sup>3</sup>	—	—	—

#### Notes

- <sup>1</sup> See specific catalog number page for Fuse Class details. Enclosed rotary switches are non-fusible only.
- <sup>2</sup> NEMA Type 12 enclosures (30–800A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain screw is removed.
- <sup>3</sup> Class J fuse clips provided.

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## Switching Devices

### Safety Switches

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#### Product Description

- 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 overcurrent protection by means of installed fuses
- Also commonly referred to as a disconnect switch or disconnect
- Available from 30 to 1200A

#### Standards and Certifications

- UL® 98
- UL 50
- NEMA KS-1



## Cross-Reference

## General-Duty

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

## General-Duty, continued

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

**Notes**<sup>1</sup> Separate neutral kit required.

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

# 1.1

## Switching Devices

### Safety Switches

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#### Heavy-Duty

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 1</b>				
30	DH221FGK	TH3221	N/A	H221N
60	DH222NGK	TH3222	N/A	H222N
100	DH223NGK	TH3223	N/A	H223N
200	DH224NGK	TH3224	N/A	H224N
400	DH225FGK	TH3225	N/A	H225
600	DH226FGK	TH3226	N/A	H226
800	DH227FGK	TC72267	N/A	H227
1200	DH328FGK	TC72268	N/A	H228
<b>Fusible, Two-Pole, Three-Wire, 240 Vac, NEMA 1</b>				
30	DH221NGK	TH3221	HF221N	H221N
60	DH222NGK	TH3222	HF222N	H222N
100	DH223NGK	TH3223	HF223N	H223N
200	DH224NGK	TH3224	HF224N	H224N
400	DH225NGK	TH3225	HF225N	H225N
600	DH226NGK	TH3226	HF226N	H226N
800	DH227NGK	TC72267 <sup>1</sup>	HF227N	H227N
1200	DH328NGK	TC72268 <sup>1</sup>	HF228N	H228N
<b>Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 1</b>				
30	DH321FGK	TH4321	N/A	H321N
60	DH322FGK	TH4322	N/A	H322N
100	DH323FGK	TH4323	N/A	H323N
200	DH324FGK	TH4324	N/A	H324N
400	DH325FGK	TH3325	N/A	H325
600	DH326FGK	TH3326	N/A	H326
800	DH327FGK	TC72367	N/A	H327
1200	DH328FGK	TC72368	N/A	H328
<b>Fusible, Three-Pole, Four-Wire, 240 Vac, NEMA 1</b>				
30	DH321NGK	TH4321	HF321N	H321N
60	DH322NGK	TH4322	HF322N	H322N
100	DH323NGK	TH4323	HF323N	H323N
200	DH324NGK	TH4324	HF324N	H324N
400	DH325NGK	TH4325	HF325N	H325N
600	DH326NGK	TH4326	HF326N	H326N
800	DH327NGK	TC72367 <sup>1</sup>	HF327N	H327N
1200	DH328NGK	TC72368 <sup>1</sup>	HF328N	H328N
<b>Fusible, Four-Pole, Four-Wire, 240 Vac, NEMA 1</b>				
30	DH421FGK	N/A	F421	H461 <sup>2</sup>
60	DH422FGK	N/A	F422	H462 <sup>2</sup>
100	DH423FGK	N/A	F423	H463 <sup>2</sup>
200	DH424FGK	N/A	F424	H464 <sup>2</sup>
400	DH425FGK	N/A	F425	H465 <sup>2</sup>
600	DH426FGK	N/A	F426	H466 <sup>2</sup>

#### Heavy-Duty, continued

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Non-Fusible, Three-Pole, Three-Wire, 240 Volt/600 Vac, NEMA 1</b>				
30	DH361UGK	THN3361	HNF361	HU361
60	DH362UGK	THN3362	HNF362	HU362
100	DH363UGK	THN3363	HNF363	HU363
200	DH364UGK	THN3364	HNF364	HU364
400	DH365UGK	THN3365	HNF365	HU365
600	DH366UGK	THN3366	HNF366	HU366
800	DH367UGK	TC36367	HNF367	HU367
1200	DH368UGK	TC36368	HNF368	HU368
<b>Fusible, Three-Pole, Two-Wire, 240 Vac, NEMA 3R</b>				
30	DH221NRK	TH3221R	N/A	H221NRB
60	DH222NRK	TH3222R	N/A	H222NRB
100	DH223NRK	TH3223R	N/A	H223NRB
200	DH224NRK	TH3224R	N/A	H224NRB
400	DH225FRK	TH3225R	N/A	H225R
600	DH226FRK	TH3226R	N/A	H226R
800	DH227NRK	TC72267R	N/A	H227R
1200	DH328FRK	TC72268R	N/A	H228R
<b>Fusible, Two-Pole, Three-Wire, 240 Vac, NEMA 3R</b>				
30	DH221NRK	TH3221R	HF221NR	H221NRB
60	DH222NRK	TH3222R	HF222NR	H222NRB
100	DH223NRK	TH3223R	HF223NR	H223NRB
200	DH224NRK	TH3224R	HF224NR	H224NRB
400	DH225NRK	TH3225R	HF225NR	H225NR
600	DH226NRK	TH3226R	HF226NR	H226NR
800	DH227NRK	TC72267R <sup>1</sup>	HF227NR	H227NR
1200	DH328NRK	TC72268R <sup>1</sup>	HF228NR	H228NR
<b>Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 3R</b>				
30	DH321FRK	TH4321R	N/A	H321NRB
60	DH322FRK	TH4322R	N/A	H322NRB
100	DH323FRK	TH4323R	N/A	H323NRB
200	DH324FRK	TH4324R	N/A	H324NRB
400	DH325FRK	TH3325R	N/A	H325NR
600	DH326FRK	TH3326R	N/A	H326NR
800	DH327FRK	TC72367R	N/A	H327NR
1200	DH328FRK	TC72368R	N/A	H328NR

#### Notes

<sup>1</sup> Separate neutral kit required.

<sup>2</sup> 600V switch.

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

## Heavy-Duty, continued

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Fusible, Three-Pole, Four-Wire, 240 Vac, NEMA 3R</b>				
30	DH321NRK	TH4321R	HF321NR	H321NRB
60	DH322NRK	TH4322R	HF322NR	H322NRB
100	DH323NRK	TH4323R	HF323NR	H323NRB
200	DH324NRK	TH4324R	HF324NR	H324NRB
400	DH325NRK	TH3325R <sup>1</sup>	HF325NR	H325R
600	DH326NRK	TH3326R <sup>1</sup>	HF326NR	H326R
800	DH327NRK	TC72367R <sup>1</sup>	HF327NR	H327R
1200	DH328NRK	TC72368R <sup>1</sup>	HF328NR	H328R
<b>Non-Fusible, Three-Pole, Three-Wire, 240 Volt/600 Vac, NEMA 3R</b>				
30	DH361URK	THN3361R	HN361R	HU361RB
60	DH362URK	THN3362R	HN362R	HU362RB
100	DH363URK	THN3363R	HN363R	HU363RB
200	DH364URK	THN3364R	HN364R	HU364RB
400	DH365URK	THN3365R	HN365R	HU365R
600	DH366URK	THN3366R	HN366R	HU366R
800	DH367URK	N/A	HN367R	HU367R
1200	DH368URK	N/A	HN368R	HU368R
<b>Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 4/4X</b>				
30	DH221NWK	TH2221SS	HF221S	H221DS
60	DH222NWK	TH2222SS	HF222S	H222DS
100	DH223NWK	TH3223SS	HF223S	H223DS
200	DH224NWK	TH3224SS	HF224S	H224DS
400	DH225FWK	TH3225SS	HF325S	H225DS
600	DH226FWK	TH3226SS	HF326S	H226DS
<b>Fusible, Two-Pole, Three-Wire, 240 Vac, NEMA 4/4X</b>				
30	DH221NWK	TH3221SS	HF321S <sup>1</sup>	H221DS <sup>1</sup>
60	DH222NWK	TH3222SS	HF322S <sup>1</sup>	H222DS <sup>1</sup>
100	DH223NWK	TH3223SS	HF323S <sup>1</sup>	H223DS <sup>1</sup>
200	DH224NWK	TH3224SS	HF324S <sup>1</sup>	H224DS <sup>1</sup>
400	DH225NWK	TH3225SS	HF325S <sup>1</sup>	H225NDS
600	DH226NWK	TH3226SS	HF326S <sup>1</sup>	H226NDS
800	DH227NWK	N/A	HF327S <sup>1</sup>	N/A
<b>Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 4/4X</b>				
30	DH321FWK	TH3321SS	HF321S	H321DS
60	DH322FWK	TH3322SS	HF322S	H322DS
100	DH323NWK	TH4323SS	HF323S	H323DS
200	DH324NWK	TH4324SS	HF324S	H324DS
400	DH325FWK	TH4325SS	HF325S	H325DS
600	DH326FWK	TH4326SS	HF326S	H326DS
800	DH327FWK	N/A	HF327S	N/A
<b>Fusible, Three-Pole, Four-Wire, 240 Vac, NEMA 4/4X</b>				
30	DH321NWK	TH4321SS	HF321S <sup>1</sup>	H321DS <sup>1</sup>
60	DH322NWK	TH4322SS	HF322S <sup>1</sup>	H322DS <sup>1</sup>
100	DH323NWK	TH4323SS	HF323S <sup>1</sup>	H323DS <sup>1</sup>
200	DH324NWK	TH4324SS	HF324S <sup>1</sup>	H324DS <sup>1</sup>
400	DH325NWK	TH4325SS	HF325S <sup>1</sup>	H325NDS
600	DH326NWK	TH4326SS	HF326S <sup>1</sup>	H326NDS

## Heavy-Duty, continued

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 12</b>				
30	DH221NDK	TH2221J	HF221J	H221AWK
60	DH222NDK	TH2222J	HF222J	H222AWK
100	DH223NDK	TH3223J	HF223J	H223AWK
200	DH224NDK	TH3224J	HF224J	H224AWK
400	DH225FDK	TH3225J	HF325J	H225AWK
600	DH226FDK	TH3226J	HF326J	H226AWK
800	DH227FDK	N/A	HF327J	H227AWK
1200	N/A	N/A	N/A	H228AWK
<b>Fusible, Two-Pole, Three-Wire, 240 Vac, NEMA 12</b>				
30	DH221NDK	TH3221J	HF221J <sup>1</sup>	H221AWK
60	DH222NDK	TH3222J	HF222J <sup>1</sup>	H222AWK
100	DH223NDK	TH3223J	HF223J <sup>1</sup>	H223AWK
200	DH224NDK	TH3224J	HF224J <sup>1</sup>	H224AWK
400	DH225NDK	TH3225J	HF325J <sup>1</sup>	H225NAWK
600	DH226NDK	TH3226J	HF326J <sup>1</sup>	H226NAWK
800	DH227NDK	N/A	HF327J <sup>1</sup>	H227NAWK
1200	N/A	N/A	N/A	H228NAWK
<b>Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 12</b>				
30	DH321FDK	TH3321J	HF321J	H321AWK
60	DH322FDK	TH3322J	HF322J	H322AWK
100	DH323FDK	TH4323J	HF323J	H323AWK
200	DH324FDK	TH4324J	HF324J	H324AWK
400	DH325FDK	TH4325J	HF325J	H325AWK
600	DH326FDK	TH4326J	HF326J	H326AWK
800	DH327FDK	N/A	HF327J	H327AWK
1200	N/A	N/A	N/A	H328AWK
<b>Fusible, Three-Pole, Four-Wire, 240 Vac, NEMA 12</b>				
30	DH321NDK	TH4321J	HF321J <sup>1</sup>	H321AWK <sup>1</sup>
60	DH322NDK	TH4322J	HF322J <sup>1</sup>	H322AWK <sup>1</sup>
100	DH323NDK	TH4323J	HF323J <sup>1</sup>	H323AWK <sup>1</sup>
200	DH324NDK	TH4324J	HF324J <sup>1</sup>	H324AWK <sup>1</sup>
400	DH325NDK	TH4325J	HF325J <sup>1</sup>	H325NAWK
600	DH326NDK	TH4326J	HF326J <sup>1</sup>	H326NAWK
800	N/A	N/A	HF327J <sup>1</sup>	H327NAWK
1200	N/A	N/A	N/A	H328NAWK
<b>Fusible, Four-Pole, Four-Wire, 240 Vac, NEMA 12</b>				
30	DH421FDK	N/A	N/A	N/A
60	DH422FDK	N/A	N/A	N/A
100	DH423FDK	N/A	N/A	N/A
200	DH424FDK	N/A	N/A	N/A

**Notes**<sup>1</sup> Separate neutral kit required.

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

# 1.1

## Switching Devices

### Safety Switches

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#### Heavy-Duty, continued

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 1</b>				
30	DH261FGK	TH2261DC	HF261	H361
60	DH262FGK	TH2262DC	HF262	H362
100	DH263FGK	TH2263DC	HF263	H363
200	DH264FGK	N/A	N/A	H364
400	DH265FGK	N/A	HF265	H265
600	DH266FGK	N/A	HF266	H266
800	DH267FGK	N/A	N/A	H267
1200	N/A	N/A	N/A	H268
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 1</b>				
30	DH361FGK	TH3361	HF361	H361
60	DH362FGK	TH3362	HF362	H362
100	DH363FGK	TH3363	HF363	H363
200	DH364FGK	TH3364	HF364	H364
400	DH365FGK	TH3365	HF365	H365
600	DH366FGK	TH3366	HF366	H366
800	DH367FGK	TC72367	HF367	H367
1200	DH368FGK	TC72368	HF368	H368
<b>Fusible, Three-Pole, Four-Wire, 600 Vac, NEMA 1</b>				
30	DH361NGK	TH3361 <sup>1</sup>	HF361N	H361N
60	DH362NGK	TH3362 <sup>1</sup>	HF362N	H362N
100	DH363NGK	TH3363 <sup>1</sup>	HF363N	H363N
200	DH364NGK	TH3364 <sup>1</sup>	HF364N	H364N
400	DH365NGK	TH3365 <sup>1</sup>	HF365N	H365N
600	DH366NGK	TH3366 <sup>1</sup>	HF366N	H366N
800	DH367NGK	TC72367 <sup>1</sup>	HF367N	H367N
1200	DH368NGK	TC72368 <sup>1</sup>	HF368 <sup>1</sup>	H368N
<b>Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 1</b>				
30	DH461FGK	TH6661	N/A	H461
60	DH462FGK	TH6662	N/A	H462
100	DH463FGK	TH6663	N/A	H463
200	DH464FGK	TH6664	N/A	H464
400	DH465FGK	N/A	N/A	H465
600	DH466FGK	N/A	N/A	H466
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 1</b>				
30	DH261UGK	THN2261DC	HN261	HU361
60	DH262UGK	THN2262DC	HN262	HU362
100	DH263UGK	THN2263DC	HN263	HU363
200	DH264UGK	N/A	N/A	HU364
400	DH265UGK	N/A	HN265	HU265
600	DH266UGK	N/A	HN266	HU266
800	DH267UGK	N/A	N/A	HU267
1200	N/A	N/A	N/A	HU268

#### Heavy-Duty, continued

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 1</b>				
30	DH461UGK	THN6661	N/A	HU461
60	DH462UGK	THN6662	N/A	HU462
100	DH463UGK	THN6663	N/A	HU463
200	DH464UGK	THN6664	N/A	HU464
400	DH465UGK	N/A	N/A	HU465
600	DH466UGK	N/A	N/A	HU466
<b>Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 3R</b>				
30	DH361FRK	TH2261RDC	HF261R	H361RB
60	DH362FRK	TH2262RDC	HF262R	H362RB
100	DH363FRK	TH2263RDC	HF263R	H363RB
200	DH364FRK	N/A	N/A	H364RB
400	DH365FRK	N/A	N/A	H265R
600	DH366FRK	N/A	HF265R	H266R
800	DH367FRK	N/A	HF266R	H267R
1200	DH368FRK	N/A	N/A	H268R
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 3R</b>				
30	DH361FRK	TH3361R	HF361R	H361RB
60	DH362FRK	TH3362R	HF362R	H362RB
100	DH363FRK	TH3363R	HF363R	H363RB
200	DH364FRK	TH3364R	HF364R	H364RB
400	DH365FRK	TH3365R	HF365R	H365R
600	DH366FRK	TH3366R	HF366R	H366R
800	DH367FRK	TC72367R	HF367R	H367R
1200	DH368FRK	TC72368R	HF368R	H368R
<b>Fusible, Three-Pole, Four-Wire, 600 Vac, NEMA 3R</b>				
30	DH361NRK	TH3361R <sup>1</sup>	HF361NR	H361NRB
60	DH362NRK	TH3362R <sup>1</sup>	HF362NR	H362NRB
100	DH363NRK	TH3363R <sup>1</sup>	HF363NR	H363NRB
200	DH364NRK	TH3364R <sup>1</sup>	HF364NR	H364NRB
400	DH365NRK	TH3365R <sup>1</sup>	HF365NR	H365NR
600	DH366NRK	TH3366R <sup>1</sup>	HF366NR	H366NR
800	DH367NRK	TC72367R <sup>1</sup>	HF367NR	H367NR
1200	DH368NRK	TC72368R <sup>1</sup>	HF368R	H368NR
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 3R</b>				
30	DH361URK	THN2261RDC	HN261R	HU361RB
60	DH362URK	THN2262RDC	HN262R	HU362RB
100	DH363URK	THN2263RDC	HN263R	HU363RB
200	DH364URK	N/A	N/A	HU364RB
400	DH365URK	N/A	HN265R	HU265R
600	DH366URK	N/A	HN266R	HU266R
800	DH367URK	N/A	N/A	HU267R
1200	DH368URK	N/A	N/A	HU268R

#### Notes

<sup>1</sup> Separate neutral kit required.

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



## Heavy-Duty, continued

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 3R</b>				
30	DH461UDK	THN6661	N/A	N/A
60	DH462UDK	THN6662	N/A	N/A
100	DH463UDK	THN6663	N/A	N/A
200	DH464UDK	THN6664	N/A	N/A
<b>Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 4/4X Stainless Steel</b>				
30	DH261FWK	TH2261SSDC	HF261S	H361DS
60	DH362FWK	TH2262SSDC	HF262S	H362DS
100	DH363FWK	TH2263SSDC	HF263S	H363DS
200	DH264FWK	N/A	N/A	H364DS
400	DH365FWK	N/A	HF265S	H265DS
600	DH366FWK	N/A	HF266S	H266DS
800	DH367FWK	N/A	N/A	N/A
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 4/4X Stainless Steel</b>				
30	DH361FWK	TH3361SS	HF361S	H361DS
60	DH362FWK	TH3362SS	HF362S	H362DS
100	DH363FWK	TH3363SS	HF363S	H363DS
200	DH364FWK	TH3364SS	HF364S	H364DS
400	DH365FWK	TH3365SS	HF365S	H365DS
600	DH366FWK	TH3366SS	HF366S	H366DS
800	DH367FWK	N/A	HF367S	N/A
<b>Fusible, Three-Pole, Four-Wire, 600 Vac, NEMA 4/4X Stainless Steel</b>				
30	DH361NWK	TH3361SS <sup>1</sup>	HF361S <sup>1</sup>	H361DS <sup>1</sup>
60	DH362NWK	TH3362SS <sup>1</sup>	HF362S <sup>1</sup>	H362DS <sup>1</sup>
100	DH363NWK	TH3363SS <sup>1</sup>	HF363S <sup>1</sup>	H363DS <sup>1</sup>
200	DH364NWK	TH3364SS <sup>1</sup>	HF364S <sup>1</sup>	H364NDS
400	DH365NWK	TH3365SS <sup>1</sup>	HF365S <sup>1</sup>	H365NDS
600	DH366NWK	TH3366SS <sup>1</sup>	HF366S <sup>1</sup>	H366NDS
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 4/4X Stainless Steel</b>				
30	DH361UWK	THN2261SSDC	HNF261S	HU361DS
60	DH362UWK	THN2262SSDC	HNF262S	HU362DS
100	DH363UWK	THN2263SSDC	HNF263S	HU363DS
200	DH364UWK	N/A	N/A	HU364DS
400	DH365UWK	N/A	HNF265S	HU265DS
600	DH366UWK	N/A	HNF266S	HU266DS
800	DH367UWK	N/A	N/A	N/A
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 4/4X Stainless Steel</b>				
30	DH361UWK	THN3361SS	HNF361S	HU361DS
60	DH362UWK	THN3362SS	HNF362S	HU362DS
100	DH363UWK	THN3363SS	HNF363S	HU363DS
200	DH364UWK	THN3364SS	HNF364S	HU364DS
400	DH365UWK	THN3365SS	HNF365S	HU365DS
600	DH366UWK	THN3366SS	HNF366S	HU366DS
800	DH367UWK	N/A	HNF367S	N/A

## Heavy-Duty, continued

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 4/4X Stainless Steel</b>				
30	DH461UWK	N/A	N/A	HU461DS
60	N/A	N/A	N/A	HU462DS
100	N/A	N/A	N/A	HU464DS
200	N/A	N/A	N/A	HU464DS
<b>Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 12</b>				
30	DH261FDK	TH2261JDC	HF261J	H361AWK
60	DH262FDK	TH2262JDC	HF262J	H362AWK
100	DH263FDK	TH2263JDC	HF263J	H363AWK
200	DH264FDK	N/A	N/A	H364AWK
400	DH265FDK	N/A	HF265J	H265AWK
600	DH266FDK	N/A	HF266J	H266AWK
800	DH267FDK	N/A	N/A	H267AWK
1200	N/A	N/A	N/A	H268AWK
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 12</b>				
30	DH361FDK	TH3361J	HF361J	H361AWK
60	DH362FDK	TH3362J	HF362J	H362AWK
100	DH363FDK	TH3363J	HF363J	H363AWK
200	DH364FDK	TH3364J	HF364J	H364AWK
400	DH365FDK	TH3365J	HF365J	H365AWK
600	DH366FDK	TH3366J	HF366J	H366AWK
800	DH367FDK	N/A	HF367J	H367AWK
1200	N/A	N/A	N/A	H368AWK
<b>Fusible, Three-Pole, Four-Wire, 600 Vac, NEMA 12</b>				
30	DH361NDK	THN3361J <sup>1</sup>	HF361J <sup>1</sup>	H361AWK <sup>1</sup>
60	DH362NDK	THN3362J <sup>1</sup>	HF362J <sup>1</sup>	H362AWK <sup>1</sup>
100	DH363NDK	THN3363J <sup>1</sup>	HF363J <sup>1</sup>	H363AWK <sup>1</sup>
200	DH364NDK	THN3364J <sup>1</sup>	HF364J <sup>1</sup>	H364NAWK
400	DH365NDK	THN3365J <sup>1</sup>	HF365J <sup>1</sup>	H365NAWK
600	DH366NDK	THN3366J <sup>1</sup>	HF366J <sup>1</sup>	H366NAWK
800	DH367NDK	N/A	HF367J <sup>1</sup>	H367NAWK
1200	N/A	N/A	N/A	H368NAWK
<b>Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 12</b>				
30	N/A	TH6661	N/A	H461AWK
60	N/A	TH6662	N/A	H462AWK
100	DH463FDK	TH6663	N/A	H463AWK
200	DH464FDK	TH6664	N/A	H464AWK
400	N/A	N/A	N/A	H465AWK

**Notes**

<sup>1</sup> Separate neutral kit required.

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

# 1.1

## Switching Devices

### Safety Switches

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#### Heavy-Duty, continued

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 12</b>				
30	DH261UDK	THN2261JDC	HN261J	HU361AWK
60	DH262UDK	THN2262JDC	HN262J	HU362AWK
100	DH263UDK	THN2263JDC	HN263J	HU363AWK
200	DH264UDK	N/A	N/A	HU364AWK
400	DH265UDK	N/A	HN265J	HU265AWK
600	DH266UDK	N/A	HN266J	HU266AWK
800	DH267UDK	N/A	N/A	HU267AWK
1200	N/A	N/A	N/A	HU268AWK
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 12</b>				
30	DH361UDK	THN3361J	HN361J	HU361AWK
60	DH362UDK	THN3362J	HN362J	HU362AWK
100	DH363UDK	THN3363J	HN363J	HU363AWK
200	DH364UDK	THN3364J	HN364J	HU364AWK
400	DH365UDK	THN3365J	HN365J	HU365AWK
600	DH366UDK	THN3366J	HN366J	HU366AWK
800	DH367UDK	N/A	HN367J	HU367AWK
1200	N/A	N/A	N/A	HU368AWK
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 12</b>				
30	DH461UDK	THN6661	N/A	HU461AWK
60	DH462UDK	THN6662	N/A	HU462AWK
100	DH463UDK	THN6663	N/A	HU463AWK
200	DH464UDK	THN6664	N/A	HU464AWK
400	N/A	N/A	N/A	HU465AWK

#### Heavy-Duty Six-Pole

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
<b>Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 3R</b>				
30	DH661FDK	TH6661	F651H	N/A
60	DH662FDK	TH6662	F652H	N/A
100	DH663FDK	TH6663	F653H	N/A
200	DH664FDK	TH6664	N/A	N/A
<b>Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 12</b>				
30	DH661FDK	TH6661	F651H	N/A
60	DH662FDK	TH6662	F652H	N/A
100	DH663FDK	TH6663	F653H	H663AWK
200	DH664FDK	TH6664	N/A	H664RWK
<b>Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 4X</b>				
30	N/A	N/A	F651SS	N/A
60	N/A	N/A	F652SS	N/A
100	N/A	N/A	F653SS	H663DS
200	N/A	N/A	N/A	H664DS
<b>Non-Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 3R</b>				
30	DH661UDK	THN6661	NF651H	N/A
60	DH662UDK	THN6662	NF652H	N/A
100	DH663UDK	THN6663	NF653H	N/A
200	DH664UDK	THN6664	N/A	N/A
<b>Non-Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 12</b>				
30	DH661UDK	THN6661	NF651H	HU661AWK
60	DH662UDK	THN6662	NF652H	HU662AWK
100	DH663UDK	THN6663	NF653H	HU663AWK
200	DH664UDK	THN6664	N/A	HU664RWK
<b>Non-Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 4X</b>				
30	DH661UWK	N/A	NF651SS	HU661DS
60	DH662UWK	N/A	NF652SS	HU662DS
100	DH663UWK	N/A	NF653SS	HU663DS
200	DH664UWK	N/A	N/A	HU664DS

**Note**

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

### Double-Throw

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 1</b>				
30	DT321FGK	TDT3321	N/A	N/A
60	DT322FGK	TDT3322	N/A	N/A
100	DT323FGK	TDT3323	N/A	DT223
200	DT224FGK	TDT3324	DTF224	DT224
400	DT325FGK	TDT3325	N/A	N/A
600	DT326FGK	TDT3326	N/A	N/A
<b>Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 1</b>				
30	DT321FGK	TDT3321	DTF321	DT321
60	DT322FGK	TDT3322	DTF322	DT322
100	DT323FGK	TDT3323	DTF323	DT323
200	DT324FGK	TDT3324	DTF324	DT324
400	DT325FGK	TDT3325	DTF325	N/A
600	DT326FGK	TDT3326	DTF326	N/A
<b>Non-Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 1</b>				
30	DT221UGK	N/A	DTNF221	92251
60	DT222UGK	N/A	DTNF222	DTU222
100	DT223UGK	N/A	DTNF223	DTU223
200	DT224UGK	N/A	DTNF224	DTU224
400	DT225UGK	N/A	DTNF225	92255
600	DT226UGK	N/A	DTNF226	N/A
800	DT227UGK	N/A	N/A	N/A
<b>Non-Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 1</b>				
30	DT321UGK	TC35321	DTNF321	DTU321
60	DT322UGK	TC35322	DTNF322	DTU322
100	DT323UGK	TC35323	DTNF323	DTU323
200	DT324UGK	TC35324	DTNF324	DTU324
400	DT325UGK	TC35325	DTNF325	92355
600	DT326UGK	TC35326	DTNF326	92356
800	DT327UGK	N/A	DTNF327	N/A
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 1</b>				
30	DT361FGK	TDT3361	DTF361	DT361
60	DT362FGK	TDT3362	DTF362	DT362
100	DT363FGK	TDT3363	DTF363	DT363
200	DT364FGK	TDT3364	DTF364	DT364
400	DT365FGK	TDT3365	DTF365	N/A
600	N/A	N/A	N/A	N/A
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 1</b>				
30	DT261UGK	N/A	DTNF261	N/A
60	DT262UGK	N/A	DTNF262	82342
100	DT263UGK	N/A	DTNF263	82343
200	DT264UGK	N/A	DTNF264	82344
400	DT265UGK	N/A	DTNF265	92345
600	DT266UGK	N/A	DTNF266	92346

### Double-Throw, continued

Ampere Rating	Catalog Number		Siemens	Square D
	Eaton	General Electric		
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 1</b>				
30	DT361UGK	TC35361	DTNF361	DTU361
60	DT362UGK	TC35362	DTNF362	DTU362
100	DT363UGK	TC35363	DTNF363	DTU363
200	DT364UGK	TC35364	DTNF364	DTU364
400	DT365UGK	TC35365	DTNF365	92345
600	DT366UGK	TC35366	DTNF366	92346
800	DT367UGK	N/A	DTNF367	N/A
1200	N/A	N/A	N/A	N/A
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 1</b>				
30	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	DTU462
100	N/A	N/A	N/A	DTU463
200	DT464UGK	N/A	NF454DTK	DTU464
400	DT465UGK	N/A	NF455DTK	92445
600	DT466UGK	N/A	NF456DTK	92446
800	DT467UGK	N/A	NF457DTK	N/A
<b>Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 3R</b>				
30	DT321FRK	TDT3321R	N/A	N/A
60	DT322FRK	TDT3322R	N/A	N/A
100	DT323FRK	TDT3323R	N/A	DT223RB
200	DT224FRK	TDT3324R	DTF224R	DT224RB
<b>Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 3R</b>				
30	DT321FRK	TDT3321R	DTF321R	DT321RB
60	DT322FRK	TDT3322R	DTF322R	DT322RB
100	DT323FRK	TDT3323R	DTF323R	DT323RB
200	DT324FRK	TDT3324R	DTF324R	DT324RB
400	DT325FRK	N/A	FR325DTK	N/A
600	DT326FRK	N/A	FR326DTK	N/A
<b>Non-Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 3R</b>				
30	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	N/A
100	DT223URK	N/A	N/A	DTU223RB
200	DT224URK	N/A	DTNF224R	DTU224RB
400	DT225URK	N/A	DTNF225R	92255R
<b>Non-Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 3R</b>				
30	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	N/A
100	DT323URK	N/A	DTNF323R	DTU323RB
200	DT324URK	N/A	DTNF324R	DTU324RB
400	DT325URK	N/A	N/A	92355R
600	N/A	N/A	N/A	92356R

**Note**

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

## Double-Throw, continued

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 3R</b>				
30	N/A	N/A	N/A	DT361RB
60	N/A	N/A	N/A	DT362RB
100	DT363FRK	N/A	DTF363R	DT363RB
200	DT364FRK	N/A	DTF364R	DT364RB
400	DT365FRK	N/A	FR355DTK	N/A
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 3R</b>				
30	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	82342RB
100	N/A	N/A	N/A	82343RB
200	DT264URK	N/A	DTNF264R	82344RB
400	DT265URK	N/A	DTNF265R	92345RB
600	DT266URK	N/A	NFR256DTK	92346RB
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 3R</b>				
30	DT361URK	N/A	DTNF361R	DTU361RB
60	DT362URK	N/A	DTNF362R	DTU362RB
100	DT363URK	N/A	DTNF363R	DTU363RB
200	DT364URK	N/A	DTNF364R	DTU364RB
400	DT365URK	N/A	DTNF365R	92345RB
600	DT366URK	N/A	DTNF366R	92346RB
800	DT367URK	N/A	DTNF367R	N/A
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 3R</b>				
30	DT461URK	N/A	NFR451DTK	N/A
60	DT462URK	N/A	NFR452DTK	92442RB
100	DT463URK	N/A	NFR453DTK	92443RB
200	DT464URK	N/A	NFR454DTK	92444RB
400	DT465URK	N/A	NFR455DTK	92445R
600	DT466URK	N/A	NFR456DTK	92446R
800	DT467URK	N/A	NFR457DTK	N/A
<b>Non-Fusible, Six-Pole, Six-Wire, 600 Vac, NEMA 3R</b>				
30	DT661URK	N/A	NFR651DTK	N/A
60	DT662URK	N/A	NFR652DTK	N/A
100	DT663URK	N/A	NFR653DTK	N/A
<b>Non-Fusible, Two-Pole, Two-Wire, 240 Vac, NEMA 12<sup>1</sup></b>				
30	DT361UDK	N/A	DTNF361J	H92251
60	DT362UDK	N/A	DTNF362J	H82252
100	DT363UDK	N/A	DTNF363J	H82253
200	DT364UDK	N/A	DTNF364J	H82254
400	DT365UDK	N/A	NF355HDTK	H92255
<b>Non-Fusible, Three-Pole, Three-Wire, 240 Vac, NEMA 12<sup>1</sup></b>				
30	DT361UDK	N/A	DTNF361J	H92351
60	DT362UDK	N/A	DTNF362J	DTU362AWK
100	DT363UDK	N/A	DTNF363J	DTU363AWK
200	DT364UDK	N/A	DTNF364J	DTU364AWK
400	DT365UDK	N/A	NF355HDTK	H92355
600	N/A	N/A	N/A	H92356
<b>Non-Fusible, Four-Pole, Four-Wire, 240 Vac, NEMA 12</b>				
30	N/A	N/A	N/A	H92451
60	N/A	N/A	N/A	DTU462AWK
100	N/A	N/A	N/A	DTU463AWK
200	N/A	N/A	N/A	DTU464AWK
400	N/A	N/A	N/A	H92455
600	N/A	N/A	N/A	H92456

## Double-Throw, continued

Ampere Rating	Catalog Number			
	Eaton	General Electric	Siemens	Square D
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 12</b>				
30	DT361UDK	N/A	DTNF361J	N/A
60	DT362UDK	N/A	DTNF362J	H82342
100	DT363UDK	N/A	DTNF363J	H82343
200	DT364UDK	N/A	DTNF364J	H82344
400	DT365UDK	N/A	NF355HDTK	H92345
600	N/A	N/A	N/A	H92346
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 12</b>				
30	DT361UDK	N/A	DTNF361J	N/A
60	DT362UDK	N/A	DTNF362J	DTU362AWK
100	DT363UDK	N/A	DTNF363J	DTU363AWK
200	DT364UDK	N/A	DTNF364J	DTU364AWK
400	DT365UDK	N/A	NF355HDTK	H92345
600	N/A	N/A	N/A	H92346
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 12</b>				
30	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	DTU462AWK
100	N/A	N/A	N/A	DTU463AWK
200	N/A	N/A	N/A	DTU464AWK
400	N/A	N/A	N/A	H92445
600	N/A	N/A	N/A	H92446
<b>Non-Fusible, Two-Pole, Two-Wire, 600 Vac, NEMA 4X</b>				
30	DT361UWK	N/A	DTNF361S	N/A
60	DT362UWK	N/A	DTNF362S	82342DS
100	DT363UWK	N/A	DTNF363S	82343DS
200	DT364UWK	N/A	DTNF364S	82344DS
400	DT365UWK	N/A	NF355SSDTK	N/A
<b>Non-Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 4X</b>				
30	DT361UWK	N/A	DTNF361S	N/A
60	DT362UWK	N/A	DTNF362S	DTU362DS
100	DT363UWK	N/A	DTNF363S	DTU363DS
200	DT364UWK	N/A	DTNF364S	DTU364DS
400	DT365UWK	N/A	NF355SSDTK	N/A
<b>Non-Fusible, Four-Pole, Four-Wire, 600 Vac, NEMA 4X</b>				
30	N/A	N/A	N/A	N/A
60	N/A	N/A	N/A	DTU462DS
100	N/A	N/A	N/A	DTU463DS
200	N/A	N/A	N/A	DTU464DS
<b>Fusible, Three-Pole, Three-Wire, 600 Vac, NEMA 4X</b>				
30	DT361FWK	N/A	F351SSDTK	N/A
60	DT362FWK	N/A	F352SSDTK	N/A
100	DT363FWK	N/A	F353SSDTK	N/A
200	DT364FWK	N/A	F354SSDTK	N/A
400	DT365FWK	N/A	F355SSDTK	N/A

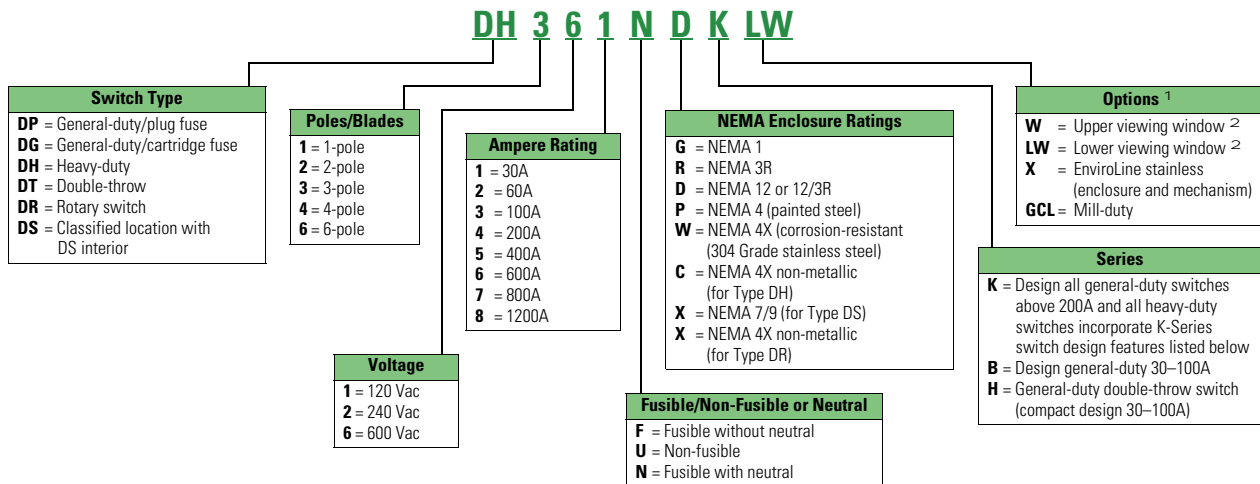
**Notes**

<sup>1</sup> Eaton and Siemens switches shown are 600V switches.

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

### Catalog Number Selection

#### Safety Switch



#### Notes

<sup>1</sup> See **Pages V2-T1-16** through **V2-T1-19** for additional Flex Center options.

<sup>2</sup> Effective August 2003, 30–100A window switches are replaced by a full view window that allows blade position verification and blown fuse indication. See **Page V2-T1-39** for catalog numbers.

**This table is intended for use in breaking down existing catalog numbers. It is not intended for building new catalog numbers.**

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

# 1.1

## Switching Devices

### Safety Switches

1

#### Options and Accessories

##### Safety Switches

	Description	Catalog Number
	<b>Neutral Kits/Ground Kits</b>	
	30A DG	<b>DG030NB</b>
	60–100A DG	<b>DG100NB</b>
	200A DG, DH (NEMA 1, 3R enclosures)	<b>DG200NK</b>
	30–60A DH	<b>DH030NK</b>
	100A DH	<b>DH100NK</b>
	200A DH (NEMA 4X, 12 enclosures)	<b>DH200NK</b>
	400A DG, DH	<b>DS400NK</b>
	600A DG, DH	<b>DS600NK</b>
	400–600A fusible DT, 800–1200A DH	<b>DS800NK</b>
	30–100A DT	<b>DT100NK</b>
	200A DT	<b>DT200NK</b>
	400A non-fusible DT	<b>DT400NK</b>
	600A non-fusible DT	<b>DT600NK</b>
800A DT	<b>DT800NK</b>	
1200A DT	<b>DT1200NK</b>	
	<b>Ground Lug Kits</b>	
	30–100A DG	<b>DG030GB</b>
	30–100A DH, DT <sup>1</sup>	<b>DS100GK</b>
	200A DG, DH, DT	<b>DS200GK</b>
400–600A DG, 400–1200A DH, 400–800A DT	<b>DS468GK</b>	
	<b>Switching Neutral Bonding Kits <sup>2</sup></b>	
	30–100A DT, 3P, 4P non-fusible	<b>DT100BK</b>
	200A DT, 3P, 4P non-fusible	<b>DT200BK</b>
	400A DT, 3P, 4P non-fusible	<b>DT400BK</b>
	600A DT, 3P, 4P non-fusible	<b>DT600BK</b>
800–1200A DT, 3P, 4P non-fusible	<b>DT800BK</b>	
	<b>Control Pole Kit (For 2P, 3P Switches)</b>	
	400–600A DG, 30–1200A DH, 30–800A DT	<b>DS16CP</b>
	<b>Auxiliary Contact Kits</b>	
	All switches (except 30–100A DG) 1NO/1NC	<b>DS200EK1 <sup>3</sup></b>
	All switches (except 30–100A DG) 2NO/2NC	<b>DS200EK2 <sup>3</sup></b>
	NEMA 7/9 switches (30–100A) 1NO/1NC	<b>178C265G05</b>
NEMA 7/9 switches (30–100A) 2NO/2NC	<b>178C265G06</b>	
	<b>Copper Lug Kits</b>	
	30A DH, DT <sup>4</sup>	<b>DS16CL</b>
	60A DH, DT <sup>4</sup>	<b>DS16CL</b>
	100A DH, DT <sup>4</sup>	<b>DS36CL</b>
	200A DH <sup>4</sup>	<b>DS46CL</b>
	400A DH (NEMA 4, 4X, 12 enclosures) <sup>5</sup>	<b>DS56CL</b>
600–800A DH (NEMA 4, 4X, 12 enclosures) <sup>5</sup>	<b>DS66CL</b>	

##### Safety Switches, continued

	Description	Catalog Number
	<b>Crimp Lug Pad Kit (NEMA 4, 4X, 12 Enclosures)</b>	
	400–600A DH <sup>4</sup>	<b>DS56CK</b>
	800A DH <sup>5</sup>	<b>DS76CK</b>
400–800A neutral DH <sup>2</sup>	<b>DS800CNK</b>	
	<b>Fuse Puller Kits</b>	
	30–60A DH <sup>4</sup>	<b>DS30FP</b>
	30–60A DH <sup>6</sup>	<b>DS60FP</b>
	100A DH <sup>4</sup>	<b>DS100FP</b>
200A DH <sup>4</sup>	<b>DS200FP</b>	
	<b>"J" Fuse Adapter Kits <sup>7B</sup></b>	
	60A 240V DH <sup>4</sup>	<b>DS22JK</b>
	60A DH, DT and receptacle switches <sup>4</sup>	<b>DS26JK</b>
400A 600V DT <sup>9</sup>	<b>DT400JK</b>	
600A 240–600V DH, 600A DG <sup>5</sup>	<b>DS600JK</b>	
	<b>"R" Fuse Adapter Kits <sup>4</sup></b>	
	30A DG	<b>DG030RB</b>
	100A DG	<b>DG100RB</b>
	30A 240V DH, DT	<b>DS12FK</b>
	30A 600V DH, DT, 60A 240V DH, DT, 60A DG	<b>DS16FK</b>
	60A 600V DH, DT	<b>DS26FK</b>
	100A 240–600V DH, DT	<b>DS36FK</b>
	200A 240–600V DH, DT, 200A DG	<b>DS46FK</b>
	400A 240–600V DH, 240V DT, 400A DG	<b>DS56FK</b>
	600A 240–600V DH, DT, 600A DG	<b>DS66FK</b>
		<b>"T" Fuse Adapter Kits</b>
200A 240V DH <sup>4</sup>		<b>DS426TK</b>
200A 600V DH <sup>4</sup>		<b>DS466TK</b>
400A 240V DG, DH, DT <sup>5</sup>		<b>DS526TK</b>
400A 600V DH <sup>5</sup>		<b>DS566TK</b>
600A 240V DG, DH <sup>5</sup>		<b>DS626TK</b>
600A 600V DH <sup>5</sup>		<b>DS666TK</b>
600A 240V <sup>5</sup>		<b>DT626TK</b>
600A 600V <sup>5</sup>		<b>DT666TK</b>
800A 240V DH <sup>5</sup>		<b>DS726TK</b>
800A 600V DH, DT <sup>5</sup>	<b>DS766TK</b>	
Hookstick handle	<b>DH800HSH</b>	
Lubricating grease for safety switch blades and contacts (each kit contains three 30 cc tubes of lubricating grease)	<b>DSLUBEKIT</b>	

#### Notes

- Ground bar kit is not listed on device publications.
- Order one kit per switch.
- For duty ratings, see table on following page.
- Order one kit for three poles.
- Order one kit for each pole.
- Receptacle switches.
- 30A Class J available as factory option only.
- If Class J fuse kit is not listed, then switch will accept Class J fusing by repositioning either fuse base or fuse clips. No drilling required.
- Order one kit for six poles.

Accessories are not applicable to NEMA 7/9 switches unless indicated otherwise.  
A factory-installed ground lug is supplied in all heavy-duty safety switches.

### Auxiliary Contact Rating

#### AC Pilot Duty Ratings

Catalog Number	Description	Volts	Break (Amperes)	Make (Amperes)
DS200EK1	1NO-1NC	110	15.0	40.0
DS200EK1	1NO-1NC	220	10.0	20.0
DS200EK1	1NO-1NC	440	6.0	10.0
DS200EK1	1NO-1NC	600	5.0	8.0
DS200EK2	2NO/2NC	110	3.0	30.0
DS200EK2	2NO/2NC	220	1.5	15.0
DS200EK2	2NO/2NC	440	1.0	8.0
DS200EK2	2NO/2NC	600	0.8	6.0

#### DC Pilot Duty Ratings

Catalog Number	Description	Volts	Single Throw (Amperes)	Double Throw (Amperes)
DS200EK1	1NO-1NC	115	2.0	0.5
DS200EK1	1NO-1NC	230	0.5	0.2
DS200EK1	1NO-1NC	600	0.1	0.02
DS200EK2	2NO/2NC	115	1.0	0.2
DS200EK2	2NO/2NC	230	0.3	0.1
DS200EK2	2NO/2NC	600	0.1	—

Approximate Dimensions in Inches (mm)

#### DS050MH



#### Myers Type Hubs

NEMA 3R (400A and above)  
NEMA 4, 4X (stainless steel), 12

Catalog Number	Conduit Size
DS050MH	0.50 (12.7)
DS075MH	0.75 (19.1)
DS100MH	1.00 (25.4)
DS125MH	1.25 (31.8)
DS150MH	1.50 (38.1)
DS200MH	2.00 (50.8)
DS250MH	2.50 (63.5)
DS300MH	3.00 (76.2)
DS350MH	3.50 (88.9)
DS400MH	4.00 (101.6)
DS500MH	5.00 (127.0)

#### DS075H1



#### Plate Type Hubs

For NEMA 3R enclosures (up to 200A)

**Group 1**  
General-Duty, Heavy-Duty,  
Double-Throw Through 100A

Catalog Number	Conduit Size
DS075H1	0.75 (19.1)
DS100H1	1.00 (25.4)
DS125H1	1.25 (31.8)
DS150H1	1.50 (38.1)
DS200H1	2.00 (50.8)

**Group 2**  
General-Duty, Heavy-Duty,  
Double-Throw—200A

Catalog Number	Conduit Size
DS200H2	2.00 (50.8)
DS250H2	2.50 (63.5)
DS300H2	3.00 (76.2)
—	—
—	—

Catalog number **DS900AP** adapter kit permits installation of Group 1 hubs on 200A type general-duty, heavy-duty and double-throw switches.

Contact the Flex Center at 1-888-329-9272 or FlexSwitches@eaton.com for information on hubs for non-metallic NEMA 4X switches.

# 1.1

## Switching Devices

### Safety Switches

1

#### Modifications—Flex Center

##### Introduction

The Safety Switch Flex Center is a special facility at the site of our Cleveland, Tennessee, plant that is dedicated to providing customized safety switches that meet customer's challenging applications.

Eaton's Flex Center is a solutions center that provides real value:

- A dedicated and knowledgeable engineering/manufacturing/customer service team to meet your needs
- A production facility stocked with a full arsenal of equipment to get the job done
- The industry's shortest lead-time
- Easy ordering through our distributors

Description	Suffix	Item
Nameplates	NP	1
Fungus proofing	FP	2
Special paint		3
Lock-on provisions on heavy-duty safety switches for most enclosure types	LO	4
Trapped key interlock systems	TK	5
Upper cover viewing window	W	6
Lower cover viewing window	LW	7
Neutral assemblies factory installed for double-throw safety switches	N	8
Class "R" fuse clips factory installed for heavy-duty switches	5 or 6	9
Class "T" fuse clips factory installed for heavy-duty switches	T	10
Class "J" fuse clips factory installed for heavy-duty and double-throw safety switches	J	11
Fuse pullers factory installed	FE	12
Special crimp lug pads factory installed for general-duty and heavy-duty switches	CK	13
Copper lugs factory installed	CL	14
Equipment ground lugs factory installed	G	15
Custom lug configurations	L	16
Auxiliary contacts factory installed	2 or 3	17
Control pole factory installed	CP	18
Switching neutral double-throw	SN	19
Neutral assemblies factory installed for single-throw non-fusible safety switches	N	20
How to order		21
How to price		22

#### 1. Nameplates

Price covers up to three lines of text with a maximum of 25 characters per line. Standard nameplates are laser-engraved plastic and have black letters on a white background. Rotary-engraved phenolic nameplates are also available at a premium. Additional color combinations and larger nameplates are available. Contact the Flex Center for price and availability for these special requirements. Customer must specify the text when placing an order.

##### Item 1

###### Description

Plastic nameplate—up to three lines  
Phenolic nameplate—up to three lines

#### 2. Fungus Proofing

All non-metallic components of the switch are coated with a moisture and fungus-resistant varnish. The inhibitor used meets military specification: MIL-V-173C for MOISTURE AND FUNGUS-RESISTANT TREATMENT. The treated switch meets military specification: MIL-T-152E for MOISTURE AND FUNGUS-RESISTANT TREATMENT OF COMMUNICATIONS, ELECTRONICS AND ASSOCIATED EQUIPMENT. Not UL listed.

##### Item 2

###### Ampere Rating

30
60
100
200
400
600
800
1200

To order, add Suffix **FP** to standard safety switch catalog number. *Example:* **DH363FGKFP**.

#### 3. Special Paint

Special paint colors are available for order quantities of five or more switches. Colors available are red, orange, yellow, green, black and white. Custom color is applied over the standard ANSI-61 gray finish.

Minimum quantity of five of the same color is required. Order by description. For quantities less than five, higher ampere ratings, or other color request, contact the Safety Switch Flex Center.

##### Item 3

###### Ampere Rating

30
60
100
200
400
600

#### 4. Lock-On Provisions on Heavy-Duty Safety Switches for Most Enclosure Types

Available on 30–800A heavy-duty and double-throw safety switches. Provision will accept a single lock.

To order, add Suffix **LO** to the standard catalog number. *Example:* **DH362FRKLO**.



### 5. Trapped Key Interlock Systems

Available only on heavy-duty and double-throw safety switches. Trapped key systems are used on safety switches to prevent unauthorized operations or to predetermine a series of power transfers by an authorized operator.

Before system construction can begin, the following information must be provided to the Flex Center:

- User—name, address and telephone number
- Complete coordination (lock scheme) required with order

To order, **add Suffix TK** to the standard catalog number. *Example: DH363FWKTK.*

#### Item 5

Ampere Rating	Switch Type
30–1200	Heavy-duty
30–800	Double-throw

### 6. Upper Cover Viewing Window

Upper viewing window is centered over the switching contacts to provide visual verification of ON/OFF status. Available on most heavy-duty NEMA 4X stainless steel and NEMA 12/3R and double-throw enclosures. Not available on non-metallic enclosures. To order, **add Suffix W** to the standard catalog number.

**Note:** 30–100A window switches are now provided with a full view cover window for blade verification and blown fuse indication.

### 7. Lower Cover Viewing Window

Lower viewing window is positioned over fuses and provides visual verification of blown fuse indicators for Littelfuse, Inc.™ fuses. Available in 200–600A, two- and three-pole heavy-duty NEMA 4X stainless steel and NEMA 12/3R enclosures. Not available on nonmetallic enclosures. To order, **add Suffix LW** to standard catalog number.

**Note:** 30–100A window switches are now provided with a full view cover window for blade verification and blown fuse indication.

#### Items 6 and 7

##### Viewing Window (Upper or Lower) Ampere Rating

30–200
400–800

Contact the Safety Switch Flex Center for lead-time.

### 8. Neutral Assemblies Factory Installed for Double-Throw Safety Switches

#### Item 8

Ampere Rating	Switch Type Two- and Three-Pole
30	Fusible and non-fusible
60	Fusible and non-fusible
100	Fusible and non-fusible
200	Fusible and non-fusible
400	Non-fusible
600	Non-fusible
400	Fusible
600	Fusible
800	Non-fusible

To order, **add Suffix N** on non-fusible switches OR replace 6th character F with N on fusible switches. The total price is the standard switch price plus the price adder.

*Example 1: DT361URKN* non-fusible double-throw, three-pole, 30A switch with factory-installed neutral assembly.

*Example 2: DT363NRK* fusible double-throw, three-pole, 100A switch with factory-installed neutral assembly.

### 9. Class “R” Fuse Clips Factory Installed for Heavy-Duty Switches

#### Item 9

Ampere Rating	Voltage
30	240 and 600
60	240 and 600
100	240 and 600
200	240 and 600
400	240 and 600
600	240 and 600

To order, **add Suffix 5** to the standard catalog number for 240V application.

**Add Suffix 6** to standard catalog number for 600V application. Total price is the standard catalog number price plus the price adder from the table above depending on the number of safety switch poles.

*Example: DH324FRK5* heavy-duty, three-pole, 200A switch at 240V with factory-installed Class “R” fuse clips.

### 10. Class “T” Fuse Clips Factory Installed for Heavy-Duty Switches

#### Item 10

Ampere Rating	Voltage
200	240
	600
400	240
	600
600	240
	600
800	240
	600
1200	240
	600

To order, **add Suffix T** to the standard catalog number (catalog number identifies voltage). Total price is the standard catalog number price plus the price adder depending on the number of safety switch poles.

*Example: DH364FGKT* heavy-duty, three-pole, 200A fusible switch at 480V with factory-installed Class “T” Fuse Clips.

### 11. Class “J” Fuse Clips Factory Installed for Heavy-Duty and Double-Throw Safety Switches

#### Item 11

Ampere Rating	Voltage	Switch Type
30	240	Heavy-duty and double-throw
	600	Heavy-duty and double-throw
60	240	Heavy-duty and double-throw
	600	Heavy-duty and double-throw
100	240	Heavy-duty and double-throw
	600	Heavy-duty and double-throw
200	240	Heavy-duty and double-throw
	600	Heavy-duty and double-throw
400	600	Double-throw
600	240	Heavy-duty
	600	Heavy-duty

Total price is the standard catalog number price plus the price adder from the table above depending on the number of safety poles. Order by description. A table of common 30A heavy-duty switches with “J” fuse clips factory installed is shown on **Page V2-T1-18 (field modification kits are not available for 30A heavy-duty switches).**

# 1.1

## Switching Devices

### Safety Switches

1

#### Common 30A Heavy-Duty Switches with "J" Fuse Clips Factory Installed

Voltage	Switch Type Three-Pole	Catalog Number
240	NEMA 1	DH321FGKJ
	NEMA 3R	DH321FRKJ
	NEMA 12	DH321FDKJ
	NEMA 4X	DH321FWKJ
600	NEMA 1	DH361FGKJ
	NEMA 3R	DH361FRKJ
	NEMA 12	DH361FDKJ
	NEMA 4X	DH361FWKJ

To order, **add Suffix J** to the standard catalog number (catalog number identifies voltage). Total price is the standard catalog number price plus the price adder depending on the number of safety switch poles.

*Example:* **DH363FGKJ** heavy-duty, three-pole, 200A fusible switch at 480V with factory-installed Class "J" fuse clips.

#### 12. Fuse Pullers Factory Installed

##### Item 12

Ampere Rating	Switch Type
30–60	Heavy-duty
100	Heavy-duty
200	General-duty and heavy-duty

To order, **add Suffix FE** to the standard catalog number.  
*Example:* **DH361FRKFE**.

**Note:** Standard NEMA 12/3R, 4 and 4X switches through 200A are supplied with fuse pullers from the factory.

#### 13. Special Crimp Lug Pads Factory Installed for General-Duty and Heavy-Duty Switches (Crimp Lugs are Not Included)

To order **add Suffix CK** to the standard safety switch catalog number.

##### Item 13

###### Ampere Rating

400–600

800

Heavy-duty Type DH switches, 30–200A are adaptable to crimp lugs, simply remove the box lugs.

#### 14. Copper Lugs Factory Installed

##### Item 14

Ampere Rating	Switch Type
30	Heavy-duty
	Double-throw
60	Heavy-duty
	Double-throw
100	Heavy-duty
	Double-throw
200	Heavy-duty
400	General-duty and heavy-duty
600	General-duty and heavy-duty

To order, **add Suffix CL** to the standard safety switch catalog number. The total price is the standard switch price plus the price adder.

*Example:* **DH221FGKCL** heavy-duty, two-pole, 30A fusible switch at 240V with copper lugs factory installed.

#### 15. Equipment Ground Lugs Factory Installed for General-Duty and Heavy-Duty Switches

##### Item 15

###### Ampere Rating

30–100

200

400–1200

To order, **add Suffix G** to the standard Safety Switch Catalog Number. The total price is the standard switch price plus the price adder.

#### 16. Custom Lug Configurations

Customer-specified lug arrangements are available on heavy-duty and double-throw safety switches. Contact the Safety Switch Flex Center for price and lead-time.

#### 17. Auxiliary Contacts Factory Installed Provide Early-Make/Early-Break Operation

##### Item 17

**General-Duty Switches 200–600A, Non-Metallic 30–200A, Heavy-Duty 30–1200A and Double-Throw Switches 30–800A**

Ampere Rating	Description
30–200	1NO/1NC
	2NO/2NC
400–1200	1NO/1NC
	2NO/2NC

To order 1NO/1NC contacts, **add Suffix 2** to the standard safety switch catalog number.

To order 2NO/2NC contacts, **add Suffix 3** to the standard safety switch catalog number.

The total price is the standard switch price plus the price adder.

*Example:* **DH423FGK2** Heavy-duty, four-pole, 100A fusible switch at 240V with factory-installed 1NO/1NC contacts.

*Example:* **DT324FGK22** double-throw, three-pole, 200A fusible switch at 240V with two factory-installed contacts (one installed in the normal ON position and one installed in the auxiliary ON position).

#### 18. Control Pole Factory Installed Provides Late-Make/Early-Break Operation

The K-Series control pole provides one normally open contact, late-make, early-break operation. It mounts in the exact location as the neutral block using the same pre-drilled holes. This is directly connected to the power pole operating shaft. Direct connection and visible blades provide more secure electrical interlocking than handle linkage operation of a snap/switch type interlock. This reliability meets the requirements of many specifications for four-pole switches when the fourth pole is required for secure electrical interlocking.

##### Item 18

Ampere Rating	Switch Type
30–1200	Heavy-duty
30–200	Double-throw
400–600	General-duty

To order, **add Suffix CP** to the standard safety switch catalog number. The total price is the standard switch price plus the price adder.

*Example:* **DH267FGKCP** heavy-duty, two-pole, 800A fusible switch at 480V with factory-installed control pole.

### 19. Switching Neutral Double-Throw

UL listed for three-pole and four-pole non-fusible double-throw safety switches. Switching neutrals are required for separately derived systems when bonding the neutral of the generator to a grounding system at the generator.

#### Item 19

##### Ampere Rating

30–200
400
600
800

To order, add Suffix **SN** to the standard safety switch catalog number. The total price is the standard switch price plus the price adder.

*Example:* **DT324URKSN** non-fusible double-throw, three-pole, 200A switch with factory-installed switching neutral.

### 20. Neutral Assemblies Factory Installed for Single-Throw Non-Fusible Safety Switches

Available on 200–600A general-duty safety switches and 30–1200A heavy-duty safety switches.

#### Item 20

##### Ampere Rating

30–60
100
200 NEMA 4, 4X, 12
200 NEMA 1, 3R
400
600
800
1200

To order, add Suffix **N** to the standard safety switch catalog number.

*Example:* **DH364UWKN** Heavy-duty, three-pole, 200A, NEMA 4X.

### 21. How to Order

Step One: Contact the Safety Switch Flex Center for price and delivery on product being modified. An authorized negotiation (TSP) number will be provided to track your order.

Safety Switch Flex Center  
Phone: **1-888-329-9272** or  
FlexSwitches@eaton.com  
Fax: **1-423-478-0270**

Step Two: Enter the order on VISTALINE™ by description (with catalog number if it applies) and reference the authorized negotiation (TSP) number.

Vista suffix will be "ETS."  
Product code will be "BE90."

For order entry assistance, contact CSC at:  
Phone: **1-800-356-1243**  
Fax: **1-800-752-8602**

### 22. How to Price

Step One: Select catalog number from **Pages V2-T1-14** through **V2-T1-83** of this catalog or Vista of the switch that needs to be modified.

Step Two: Use the correct price (from Vista or the current Price and Availability Digest) of the switch that needs to be modified. If no price exists, Flex Center will provide one.

Step Three: Refer to the modification on **Pages V2-T1-16** through **V2-T1-19** for price additions.

*Example:* **DT363URK**  
*Options:* factory installed Neutral (N)  
Copper lugs (CL)  
(3 x 120.00)

Step Four: Contact the Safety Switch Flex Center for authorized price and lead-time.

**Note:** Existing DSP, CSP and DOP pricing does not apply.

For application, availability or pricing questions, contact the Safety Switch Flex Center at **1-888-329-9272** or FlexSwitches@eaton.com.

### Additional Safety Switch Flex Center Design Offerings

- Left-hand design (30–200A)
- Cover-mounted status lights and selector switches
- Integrated:
  - Transient Voltage Surge Suppression (TVSS)
  - Current transformers
- Double-throw receptacle switches
- 200% neutrals
- Seam-welded stainless steel
- Gang-operated kits:
  - Mechanically interlocks two or three separate switches
- Cam-Lok® and Posi-Lok® receptacles
- Reverse feed
- Integrated wattmeter
- Custom enclosures
- Double-throw switches with windows
- 316 grade stainless steel
- Breather/drains
- Voltage/phase monitor

### Literature

The Safety Switch Flex Center's innovative approach to flexible engineering, manufacturing and customer service provides the shortest production, design and delivery cycle in the industry. Find out more about how the Safety Switch Flex Center can give you the safety switch solution you need...when you need them. Order Sales Aid SA00801002E from Eaton's Literature Fulfillment Center by calling **1-800-957-7050**.

# 1.1

## Switching Devices

### Safety Switches

#### 1

#### Technical Data and Specifications

##### Standard Lug Capacities

Description	Minimum Wire Size	Maximum Wire Size	Wire Type
30A DP	#14 #12	#10 #10	Cu or <sup>1</sup> Al
30A DG	#14	#6	Cu/Al
30A DH, DT	#14	#2	Cu/Al
60A DG	#14	#1/0	Cu/Al
60A DH, DT	#14	#2	Cu/Al
100A DG <sup>2</sup>	#14	#1/0	Cu/Al
100A DH, DT	#14	#1/0	Cu/Al
200A DG, DT	#6	250 kcmil	Cu/Al
200A DH Type 1 and 3R	#6	250 kcmil	Cu/Al
200A DH Type 4 and 12	#6	300 kcmil	Cu/Al
400A DG, DH, DT	(2) #1/0 (1) #1/0	(2) 300 kcmil (1) 750 kcmil	Cu/Al or <sup>1</sup> Cu/Al
600A DG, DH	(1) #2 (1) #1/0	(1) 600 kcmil (1) 750 kcmil	Cu/Al and <sup>3</sup> Cu/Al
600A non-fusible DT	(2) #250	(2) 500 kcmil	Cu/Al
800A DH	(4) #1/0	(4) 750 kcmil	Cu/Al
800A DT, 600A fusible DT	(3) #250	(3) 500 kcmil	Cu/Al
1200A DH, DT	(4) #1/0	(4) 750 kcmil	Cu/Al
<b>Copper-Bodied Lugs</b>			
30A Cu	#14	#6	Cu
60A Cu	#14	#4	Cu
100A Cu	#6	#1/0	Cu
200A Cu	#6	250 kcmil	Cu
400A Cu	#1/0	500 kcmil	Cu
600–800A Cu	(2) #1/0	(2) 500 kcmil	Cu

##### Notes

- <sup>1</sup> Single barrel lug that accepts one or two cables per phase as detailed above.
- <sup>2</sup> The maximum size aluminum or copper-clad aluminum wire allowable for applications where the conductor enters or leaves the enclosure through the wall opposite its terminal is #1 gauge.
- <sup>3</sup> Double barrel lug that accepts two cables per phase as detailed above.

Although certain lug capacities are larger than required, only minimum wire bending space is provided per the requirements noted in NEC<sup>®</sup> Tables 373.6 (a) and (b) for respective ampere ratings.

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

### General-Duty

#### Short-Circuit Ratings Using Class “R,” “J” or “T” Fusing Where Applicable <sup>1</sup>

Ampere Rating	Short-Circuit Ratings (Amperes)	
	Type 1	Type 3R
30	100k at 240V	100k at 240V
60	100k at 240V	100k at 240V
100	100k at 240V	100k at 240V
200	100k at 240V	100k at 240V
400	100k at 250V	100k at 250V
600	100k at 250V	100k at 250V

### Shunt Trip Safety Switch

#### Short-Circuit Ratings Using Class “R,” “J/L” or “T” Fusing <sup>2</sup>

Ampere Rating	Short-Circuit Ratings (Amperes)	
	480V	600V
30	200 kAIC	200 kAIC
60	200 kAIC	200 kAIC
100	200 kAIC	200 kAIC
200	200 kAIC	100 kAIC
400	200 kAIC	100 kAIC
600	200 kAIC	100 kAIC
800	200 kAIC	200 kAIC

### Heavy-Duty

#### Short-Circuit Ratings Using Class “R,” “J” or “T” Fusing Where Applicable <sup>1</sup>

Ampere Rating	Short-Circuit Ratings (Amperes)			
	Type 1	Type 3R	Type 12	Type 4 and 4X
30	200k at 600V	200k at 600V	200k at 600V	200k at 600V
60	200k at 600V	200k at 600V	200k at 600V	200k at 600V
100	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 600V	200k at 600V
200	200k at 600V	200k at 600V	200k at 600V	200k at 600V
400	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 480V 100k at 600V
600	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 480V 100k at 600V
800 <sup>3</sup>	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 480V 100k at 600V	200k at 480V 100k at 600V
1200 <sup>3</sup>	200k at 600V	200k at 600V	200k at 600V	200k at 600V

### Double Throw

#### Short-Circuit Ratings Using Class “R,” “J” or “T” Fusing where Applicable <sup>4,5,6,7,8</sup>

Ampere Rating	Short-Circuit Ratings (Amperes) (600V)			
	Type 1	Type 3R	Type 12	Type 4 and 4X
30	100k	100k	100k	100k
60	100k	100k	100k	100k
100	100k	100k	100k	100k
200	100k	100k	100k	100k
400	100k	100k	100k	100k
600	100k	100k	100k	100k
800	100k	100k	—	—
1200	100k	100k	—	—

#### Notes

- Class “H” fuse clips supplied as standard for 30–600A. Rated at 10,000A rms symmetrical when using Class “H” fuses.
- Non-fusible values are based on combination rating with upstream device (see TD00801005E).
- Class “L” fuse connectors supplied as standard for 800A and 1200A.
- Class “H” fuse clips supplied as standard for 30–600A, except Class “T” for 400A at 600V and 600A at 240V. Rated at 10,000A rms symmetrical when using Class “H” fuses.
- Class “L” fuse connectors supplied as standard for 800A and 1200A.
- 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.
- Table above is not applicable to the compact design shown on **Page V2-T1-47**. The compact design is suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes.

# 1.1

## Switching Devices

### Safety Switches

1

#### Short-Circuit Ratings of Non-Fusible Switches

The UL listed short-circuit ratings for Eaton non-fusible switches 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, an Eaton 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, an Eaton non-fusible switch

must be properly protected by the appropriate class and size fusing noted. Otherwise, this non-fusible switch must be replaced with an Eaton fusible switch that uses the appropriate fusing required. Molded-case circuit breaker protection of non-fusible Eaton switches for applications that require a short-circuit rating of greater than 10,000 rms symmetrical amperes has been evaluated and is summarized below. Refer to the reference tables for typical Eaton fusible switch UL listed short-circuit ratings.

#### UL Recognized Safety Switch/Circuit Breaker Series-Connected Ratings

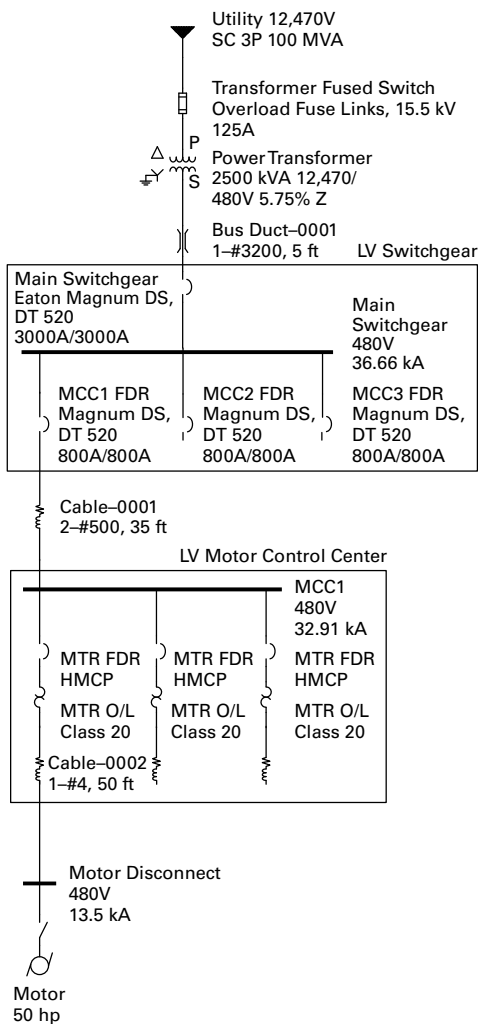
Safety Switch Ampere Rating	Maximum System Voltage AC	Circuit Breaker Maximum Short-Circuit Rating (rms Symmetrical)	Circuit Breaker Frame(s)
30 and 60	600	25,000	FDC, HFD, HFDE, EGH
		18,000	FD, EGE
		14,000	FDB
100	600	25,000	FDC, HFD, HFDE, EGH
		18,000	FD, EGE
		14,000	FDB
	480	35,000	EGH, EGS
200	600	25,000	FDC, HFD, HFDE, HJD, JGH
		18,000	FD, JD, JGE
		14,000	FDB
	480	65,000	HFD, HFDE, HJD, JGH

### Product Enhancement

Eaton non-fusible safety switches, per table below, within the noted ampere ratings, now carry series combination short-circuit ratings as shown when combined with the identified MCCB or fuse type. With this listed rating, the safety switch shown in the one-line diagram, can be correctly applied **when the motor feeder Eaton HMCP circuit breaker is replaced with an**

**Eaton molded-case circuit breaker** properly sized for the motor hp rating. This is a significant enhancement to the product's performance rating. To achieve these ratings, the switches have been tested in combination with all of the overcurrent devices shown. Furthermore, the applicable combination ratings are marked on the inside of the switch door, ensuring inspector approval.

### One-Line Diagram



### Information and Application

The circuit breaker or fuse rating is not to exceed the ampere rating of the non-fusible switch. When used on systems with greater than 10 kA short-circuit rating available, the UL Listed short-

circuit rating of the non-fusible switch is based upon the switch being used in combination with fuses or molded-case circuit breakers identified in the table below.

### Non-Fusible Safety Switches

Eaton Non-Fusible Safety Switch Ampere Rating <sup>1</sup>	Maximum System Voltage AC	Maximum Short-Circuit Rating	Upstream Device <sup>2</sup> Fuse Class	Breaker Frame
30 and 60	600	10,000	H, K	Any circuit breaker
		14,000		FDB
		18,000		FD, EGE
		25,000		FDC, HFD, HFDE, EGH
		200,000	R, T, J, L	
100	480	10,000	H, K	Any circuit breaker
		35,000		EGH, EGS
		200,000	R, T, J, L	
	600	10,000	H, K	Any circuit breaker
		14,000		FDB
18,000			FD, EGE	
25,000			FDC, HFD, HFDE, EGH	
200,000 <sup>3</sup>		R, T, J, L		
200	480	10,000	H, K	Any circuit breaker
		65,000		HFD, HFDE, HJD, JGH
		200,000	R, T, J, L	
	600	10,000	H, K	Any circuit breaker
		14,000		FDB
18,000			FD, JD, JGE	
25,000			FDC, HFD, HFDE, HJD, JGH	
200,000		R, T, J, L		

### Notes

- <sup>1</sup> For use on NEMA 1, 3R, 12/3R and 4X switches.
- <sup>2</sup> Fuse or circuit breaker rating is not to exceed switch rating.
- <sup>3</sup> NEMA 12, 4/4X only. NEMA 1, 3R are 100 kAIC at 600 Vac.

# 1.1

## Switching Devices

### Safety Switches

1

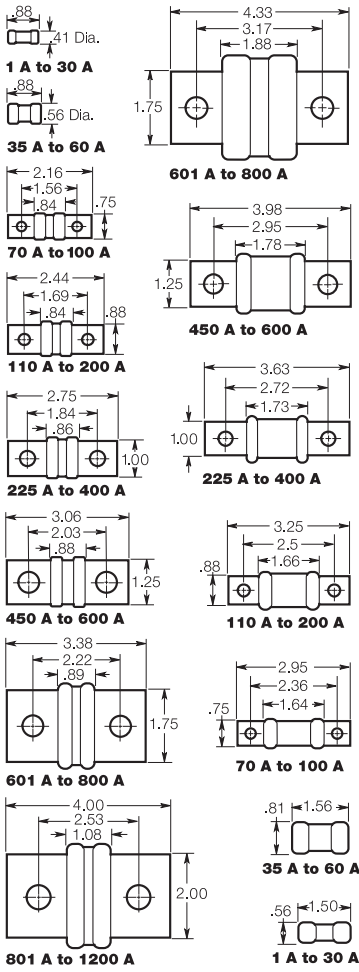
### Dimensions

#### Typical Fuse Dimensions in Inches

Note: For typical fuse dimensions in millimeters, see Page V2-T1-25.

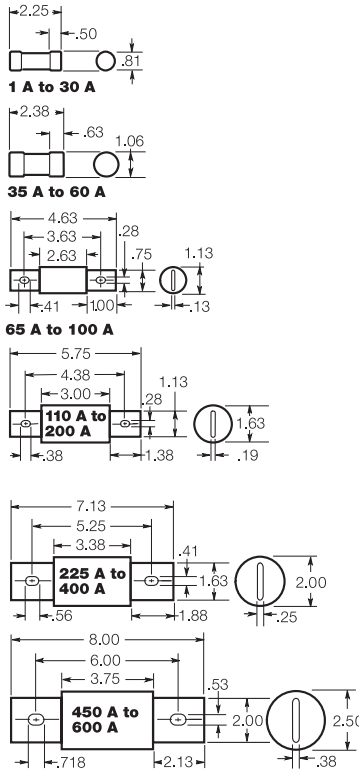
#### Class T

##### T-Tron™ Fuses JJN (300V) JJS (600V)



#### Class J

##### Low-Peak® and Limitron® Fuses LPJ & JKS (600V)



#### Class RK5 and RK1, Class H (Dimensions Apply)

##### Fusetron®, Low-Peak and Limitron Fuses (250 and 600V) FRN-R and FRS-R; LPN-RK and LPS-RK; KTN-R and KTS-R

Basic dimensions are same as Class H (formerly NEC ONE-TIME (NON and NOS) and SUPERLAG Renewable RES and REN fuses.

Note: These fuses can be used to replace existing Class H, RK1 and RK5 fuses relating to dimensional compatibility.

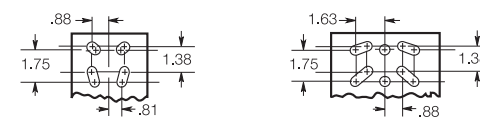
Ampere	250V		600V	
	A	B	A	B
1/10-30	2.00	0.56	5.00	0.81
35-60	3.00	0.81	5.50	1.06

Ampere	250V		600V	
	A	B	A	B
70-100	5.88	1.06	7.88	1.34
110-200	7.13	1.56	9.63	1.84
225-400	8.63	2.06	11.63	2.59
450-600	10.38	2.59	13.38	3.13

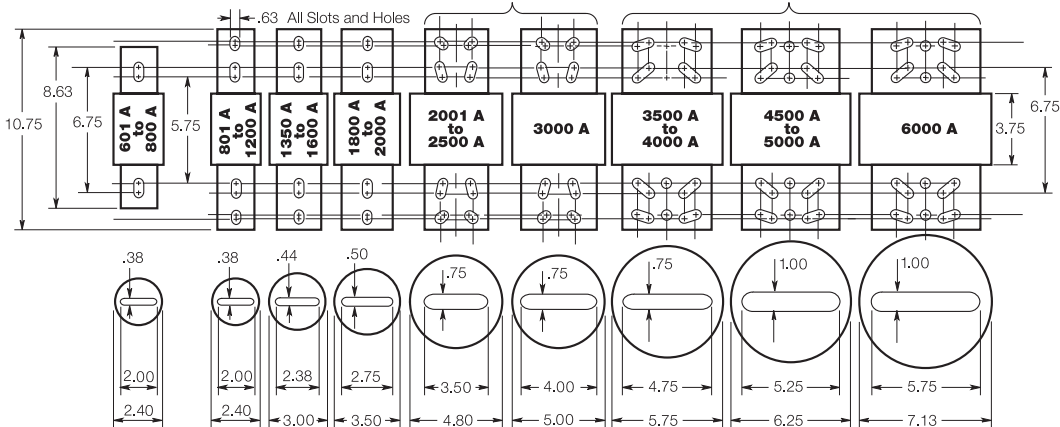
Ampere	250V		600V	
	A	B	A	B
70-100	5.88	1.16	7.88	1.16
110-200	7.13	1.66	9.63	1.66
225-400	8.63	2.38	11.63	2.38
450-600	10.38	2.88	13.38	2.88

#### Class L Low-Peak and Limitron Fuses

##### KRP-C, KTU & KLU (601-4000A) (600V)



Note: KRP-CL (150-600A) fuses have same dimensions as 601-800A case size. KTU (200-600A) have same dimensions, except tube 3-inch lgth. x 2-inch dia.; terminal 1.63-inch width x 1.25-inch thick.

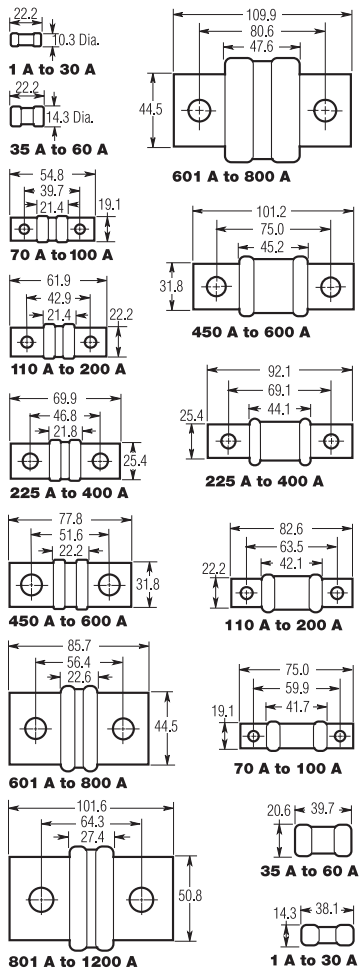




Typical Fuse Dimensions in Millimeters

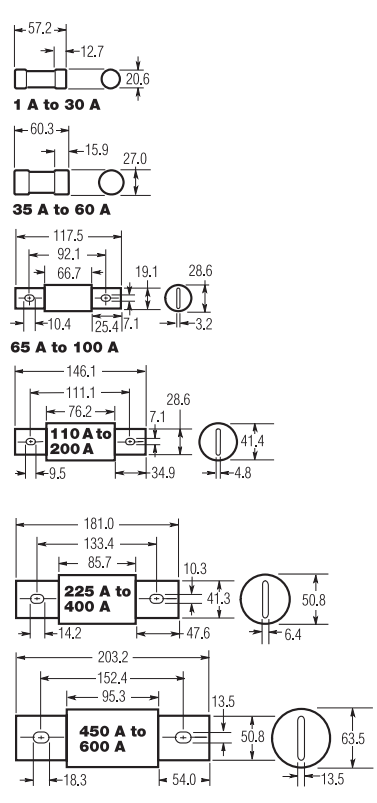
**Class T**

**T-Tron Fuses**  
JJN (300V)



**Class J**

**Low-Peak and Limitron Fuses**  
LPJ and JKS (600V)



**Fusetron, Low-Peak and Limitron Fuses (250 and 600V)**  
FRN-R and FRS-R; LPN-RK and LPS-RK; KTN-R and KTS-R

Basic dimensions are same as Class H (formerly NEC) ONE-TIME (NON and NOS) and SUPERLAG Renewable RES and REN fuses.

**Note:** These fuses can be used to replace existing Class H, RK1 and RK5 fuses relating to dimensional compatibility.

Ampere	250V		600V	
	A	B	A	B
1/10-30	50.8	14.3	127.0	20.6
35-60	76.2	20.6	139.7	27.0

**Fusetron and Limitron**

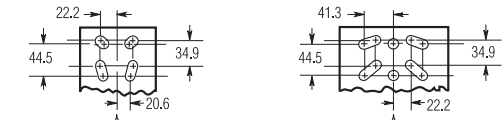
Ampere	250V		600V	
	A	B	A	B
70-100	149.2	26.9	200.0	34.0
110-200	181.0	39.6	244.5	46.7
225-400	219.1	52.3	295.3	65.8
450-600	263.5	65.8	339.7	79.5

**Low-Peak**

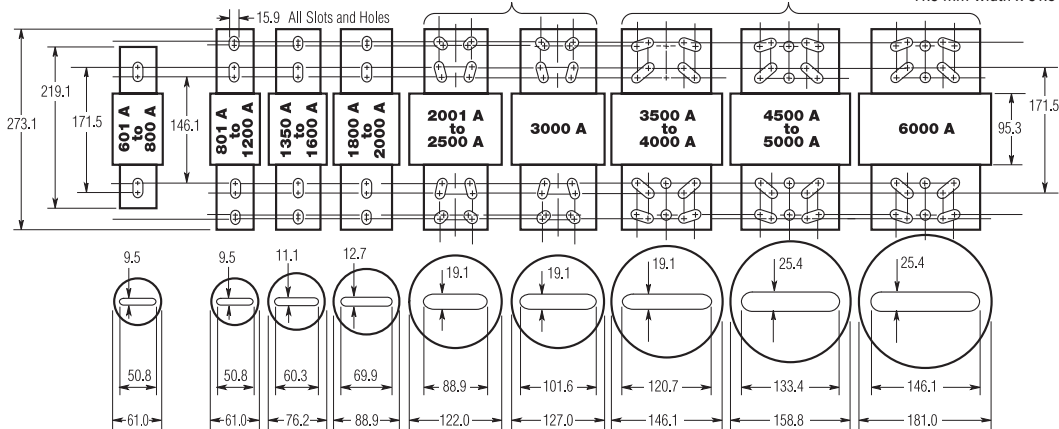
Ampere	250V		600V	
	A	B	A	B
70-100	149.2	29.5	200.0	29.5
110-200	181.0	42.2	244.5	42.2
225-400	219.1	60.5	295.3	60.5
450-600	263.5	73.2	339.7	73.2

**Class L Low-Peak and Limitron Fuses**

KRP-C, KTU and KLU (601-4000A) (600V)



**Note:** KRP-CL (150-600A) fuses have same dimensions as 601-800A case size. KTU (200-600A) have same dimensions, except tube 76.2 mm lgth. x 50.8 mm dia.; terminal 41.3 mm width x 31.8 mm thick.



# 1.1

## Switching Devices

### Safety Switches

1

Cartridge Fuse General-Duty Safety Switch



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200% Neutral Safety Switches . . . . .	V2-T1-87
Pringle Bolted Pressure Switch . . . . .	V2-T1-88
Type DS, Fusible and Non-Fusible . . . . .	V2-T1-91
Type Visi-Flex DE-ION . . . . .	V2-T1-94
Flange Mounted—Variable Depth . . . . .	V2-T1-98
Flange Mounted—Fixed Depth . . . . .	V2-T1-102

### General Duty

#### Product Description

- 30–600A
- Suitable for service entrance applications unless otherwise noted
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% fully rated
- 200–600A features K-Series design
- Horsepower rated
- Fusible and non-fusible switches. Single-pole S/N through four-wire; 120/240, and 240 Vac
- With Class R fuses, switches may be used on systems capable of delivering 100,000A rms symmetrical

**Note:** Plug fuse switches are not service entrance rated.

- Bolt-on hub provision. Provided for general-duty switches in a NEMA 3R enclosure. See **Page V2-T1-15** for selection

#### Application Description

For residential and commercial applications. Suitable for light-duty motor circuits and service entrance.

### Features, Benefits and Functions

#### General-Duty (Cartridge Fuse)

- Ample wire bending space provides for easier installation
- Visible double-break quick-make, quick-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 100,000A 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 door label on 30–100A
- Tri-lingual nameplates

**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 typically provided on general-duty switches, but available as a field kit or factory installed



**Clear Line Shield**

- Provide easy removal of fuses



**Built-In Fuse Pullers (NEMA 12 and 4X 30–200A Only)**



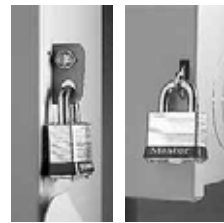
**Clearly Visible Handle**

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



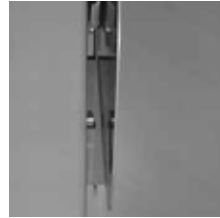
**Triple Padlocking Capability**

- 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



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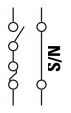
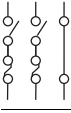
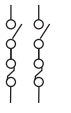
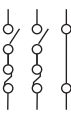
## Switching Devices

### Safety Switches

1

#### Product Selection

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

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings <sup>1</sup>			DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
			Single-Phase AC 120V	240V	Three-Phase AC 240V			
<b>DP221NGB</b>								
<b>Plug Type—Two-Wire (One Blade, One Fuse, S/N)—120 Vac <sup>2</sup></b>								
	30	Plug (Type S, T or W)	1/2-2	—	—	—	DP111NGB <sup>2</sup>	—
<b>Plug Type—Three-Wire (Two Blades, Two Fuses, S/N)—120/240 Vac</b>								
	30	Plug (Type S, T or W)	1/2-2	1-1/2-3	—	—	DP221NGB <sup>2</sup>	Use cartridge-type fuse catalog number DG221NRB <sup>2</sup>
<b>Cartridge Type—Two-Pole Two-Wire (Two Blades, Two Fuses)—240 Vac</b>								
	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 <sup>4,5</sup>	DG224FRK <sup>4,5</sup>
	400	H	—	—	50-125	—	DG225FGK <sup>4,5</sup>	DG225FRK <sup>4,5</sup>
	600	H	—	—	75-200	—	DG226FGK <sup>4,5</sup>	DG226FRK <sup>4,5</sup>
<b>Cartridge Type—Three-Wire (Two Blades, Two Fuses, S/N)—120/240 Vac</b>								
	30	H	—	1-1/2-3	3-7-1/2 <sup>6</sup>	—	DG221NGB <sup>2</sup>	DG221NRB <sup>2</sup>
	60	H	—	3-10	7-1/2-15 <sup>6</sup>	—	DG222NGB <sup>2</sup>	DG222NRB <sup>2</sup>
	100	H	—	7-1/2-15	15-30 <sup>6</sup>	—	DG223NGB <sup>2</sup>	DG223NRB <sup>2</sup>
	200	H	—	15	25-60 <sup>6</sup>	—	DG224NGK	DG224NRK
	400	H	—	—	50-125 <sup>6</sup>	50	DG225NGK	DG225NRK
	600	H	—	—	75-200 <sup>6</sup>	—	DG226NGK	DG226NRK

#### Notes

- <sup>1</sup> Maximum hp ratings apply only when dual element time delay fuses are used.
- <sup>2</sup> These switches do not have an interlock that prevents door from being opened when switch is in the ON position.
- <sup>3</sup> Use three-wire catalog numbers below.
- <sup>4</sup> Solid neutral bars are not included. Order separately from table on **Page V2-T1-14**.
- <sup>5</sup> **WARNING!** Switch is not approved for service entrance unless a neutral kit is installed.
- <sup>6</sup> 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-T1-14** 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.

### DG321NRB



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

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings <sup>1</sup>			DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
			Single-Phase AC 120V	240V	Three-Phase AC 240V			
<b>Cartridge Type— Three-Pole, Three-Wire (Three Blades, Three Fuses)— 240 Vac</b>								
	30	—	—	—	—	—	2	2
	60	—	—	—	—	—	2	2
	100	—	—	—	—	—	2	2
	200	H	—	15	25–60	—	DG324FGK <sup>3,4</sup>	2
	400	H	—	—	50–125	—	DG325FGK <sup>3,4</sup>	DG325FRK <sup>3,4</sup>
	600	H	—	—	75–200	—	DG326FGK <sup>3,4</sup>	DG326FRK <sup>3,4</sup>
<b>Cartridge Type— Four-Wire (Three Blades, Three Fuses, S/N)— 120/240 Vac</b>								
	30	H	—	1-1/2–3	3–7-1/2	—	DG321NGB <sup>5</sup>	DG321NRB <sup>5</sup>
	60	H	—	3–10	7-1/2–15	—	DG322NGB <sup>5</sup>	DG322NRB <sup>5</sup>
	100	H	—	7-1/2–15	15–30	—	DG323NGB <sup>5</sup>	DG323NRB <sup>5</sup>
	200	H	—	15	25–60	—	DG324NGK	DG324NRK
	400	H	—	—	50–125	—	DG325NGK	DG325NRK
	600	H	—	—	75–200	—	DG326NGK	DG326NRK

### DG322URB



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

System	Ampere Rating	Maximum Horsepower Ratings			DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
		Single-Phase AC 120V	240V	Three-Phase AC 240V			
<b>Two-Pole, Two-Wire (Two Blades)— 240 Vac</b>							
	30	2	3	—	—	DG221UGB <sup>4,5</sup>	DG221URB <sup>4,5</sup>
	60	3	10	—	—	DG222UGB <sup>4,5</sup>	DG222URB <sup>4,5</sup>
	100	—	15	—	—	DG223UGB <sup>4,5</sup>	DG223URB <sup>4,5</sup>
	200	—	15	—	—	<sup>4,6</sup>	DG224URK <sup>4</sup>
<b>Three-Pole, Three-Wire (Three Blades)— 240 Vac</b>							
	30	2	3	7-1/2	—	DG321UGB <sup>4,5</sup>	DG321URB <sup>4,5</sup>
	60	3	10	15	—	DG322UGB <sup>4,5</sup>	DG322URB <sup>4,5</sup>
	100	—	15	30	—	DG323UGB <sup>4,5</sup>	DG323URB <sup>4,5</sup>
	200	—	15	60	—	DG324UGK <sup>4</sup>	DG324URK <sup>4</sup>
	400	—	—	125	—	DG325UGK <sup>7</sup>	DG325URK <sup>7</sup>
	600	—	—	200	—	DG326UGK <sup>7</sup>	DG326URK <sup>7</sup>

#### Notes

- <sup>1</sup> Maximum hp ratings apply only when dual element time delay fuses are used.
- <sup>2</sup> Use four-wire catalog numbers below.
- <sup>3</sup> Solid neutral bars are not included. Order separately from table on **Page V2-T1-14**.
- <sup>4</sup> **WARNING!** Switch is not approved for service entrance unless a neutral kit is installed.
- <sup>5</sup> These switches do not have an interlock that prevents door from being opened when switch is in the ON position.
- <sup>6</sup> Use three-wire catalog numbers below.
- <sup>7</sup> Drilled to accept field installed neutral kits.

All general-duty safety switches are individually packaged.

Accessories are limited in scope on general-duty safety switches. See **Page V2-T1-14** 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.

# 1.1

## Switching Devices

### Safety Switches

1

#### 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)

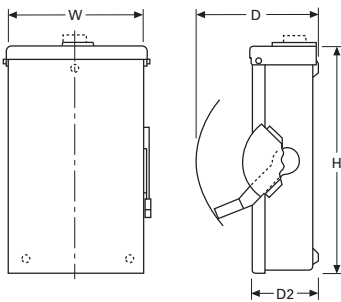
#### General-Duty, Non-Fusible, 240V, Three-Pole, Single-Throw <sup>1</sup>

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 1</b>					
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)
<b>NEMA 3R</b>					
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)

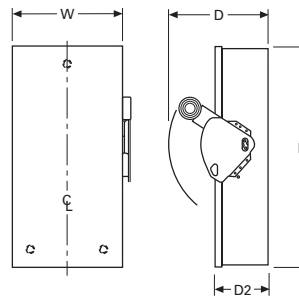
#### General-Duty, Fusible, 240V, Three-Pole Solid Neutral, Single-Throw <sup>1</sup>

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 1</b>					
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)
<b>NEMA 3R</b>					
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 30–100A General-Duty Non-Fusible and Fusible Single-Throw <sup>2</sup>



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



#### Notes

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

Heavy-Duty Safety Switch



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### Heavy-Duty

#### Product Description

- 30–1200A
- 600 Vac, 600 Vdc maximum
- Horsepower rated
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% fully rated
- Suitable for service entrance applications unless otherwise noted
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

#### Application Description

For heavy commercial and industrial applications where reliable performance and service continuity are critical.

For the toughest heavy commercial and industrial applications, refer to **Page V2-T1-76** for catalog information on our mill-duty safety switch

#### Features, Benefits and Functions

- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- Clearly visible palm fitting red handle
- Complete accessory and renewal parts data shown on inner door label.
- 30–800A NEMA 12 designs convertible to NEMA 3R by opening factory-installed drain hole
- 30–1200A switches are seismic qualified and exceed the requirements of the Uniform Building Code® (UBC) and California Code Title 24
- Tri-lingual nameplates

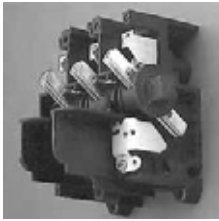


# 1.1

## Switching Devices

### Safety Switches

1



**Visible Double-Break Rotary Blade Mechanism**

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



**Clear Line Shield**

- 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 typically provided on general-duty switches, but available as a field kit or factory installed



**Built-In Fuse Pullers (NEMA 12 and 4X 30–200A Only)**

- Provide easy removal of fuses



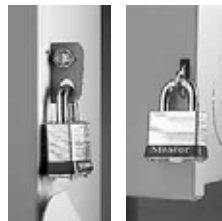
**Clearly Visible Handle**

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



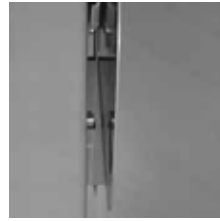
**Triple Padlocking Capability**

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



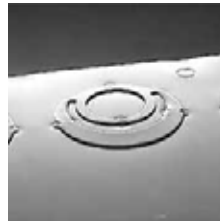
**Additional Locking Capability**

- 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







### Product Selection

DH221NRK



### 240 Vac Heavy-Duty, Fusible, Single-Throw, Fusible—NEMA 1, 3R

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings				DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
			AC		Time Delay				
			Standard Fuse Single-Phase	Three-Phase	Single-Phase	Three-Phase			
<b>Two-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	1-1/2	—	—	—	5	DH221FGK	2
	60	—	—	—	—	—	—	2	2
	100	—	—	—	—	—	—	2	2
	200	—	—	—	—	—	—	2	2
	400	H	—	50 <sup>1</sup>	—	125 <sup>1</sup>	50	DH225FGK	DH225FRK
	600	H	—	75 <sup>1</sup>	—	200 <sup>1</sup>	—	DH226FGK	DH226FRK
	800	L	—	100 <sup>1</sup>	—	—	—	DH227FGK	—
<b>Three-Wire (Two Blades, Two Fuses, S/N)—240 Vac, 250 Vdc</b>									
	30	H	1-1/2	3 <sup>3</sup>	3	7-1/2 <sup>3</sup>	5	DH221NGK	DH221NRK
	60	H	3	7-1/2 <sup>3</sup>	10	15 <sup>3</sup>	10	DH222NGK	DH222NRK
	100	H	7-1/2	15 <sup>3</sup>	15	30 <sup>3</sup>	20	DH223NGK	DH223NRK
	200	H	15	25 <sup>3</sup>	15	60 <sup>3</sup>	40	DH224NGK	DH224NRK
	400	H	—	50 <sup>3</sup>	—	125 <sup>3</sup>	50	DH225NGK	DH225NRK
	600	H	—	75 <sup>3</sup>	—	200 <sup>3</sup>	—	DH226NGK	DH226NRK
	800	L	—	100 <sup>3</sup>	—	—	—	DH227NGK	DH227NRK
<b>Three-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	1-1/2	3	3	7-1/2	5	DH321FGK	DH321FRK
	60	H	3	7-1/2	10	15	10	DH322FGK	DH322FRK
	100	H	7-1/2	15	15	30	20	DH323FGK	DH323FRK
	200	H	15	25	15	60	40	DH324FGK	DH324FRK
	400	H	—	50	—	125	50	DH325FGK	DH325FRK
	600	H	—	75	—	200	—	DH326FGK	DH326FRK
	800	L	—	100	—	—	—	DH327FGK	DH327FRK
	1200	L	—	—	—	—	—	DH328FGK	DH328FRK
<b>Four-Wire (Three Blades, Three Fuses, S/N)—240 Vac, 250 Vdc</b>									
	30	H	1-1/2	3	3	7-1/2	5	DH321NGK	DH321NRK
	60	H	3	7-1/2	10	15	10	DH322NGK	DH322NRK
	100	H	7-1/2	15	15	30	20	DH323NGK	DH323NRK
	200	H	15	25	15	60	40	DH324NGK	DH324NRK
	400	H	—	50	—	125	50	DH325NGK	DH325NRK
	600	H	—	75	—	200	—	DH326NGK	DH326NRK
	800	L	—	100	—	—	—	DH327NGK	DH327NRK
	1200	L	—	—	—	—	—	DH328NGK	DH328NRK
<b>Four-Pole—240 Vac, 250 Vdc</b>									
	30	H	3	3	10	7-1/2	5	DH421FGK	4
	60	H	7-1/2	7-1/2	20	15	10	DH422FGK	4
	100	H	15	15	30	30	20	DH423FGK	4
	200	H	30	25	50	60	40	DH424FGK	4
	400	H	50	50	—	125	50	DH425FGK	4 <sup>5</sup>
	600	H	—	75	—	200	—	DH426FGK	4 <sup>5</sup>

**Notes**

- Horsepower ratings apply only when neutral is field installed and switch is used on a grounded B phase system.
  - Use three-pole catalog numbers below.
  - Grounded B phase ratings, UL listed.
  - Use NEMA 12. NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
  - Contact the Safety Switch Flex Center (**1-888-329-9272** or [FlexSwitches@eaton.com](mailto:FlexSwitches@eaton.com)) for availability of this product.
- 30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.  
Suitable for service entrance use, except four-pole switches.

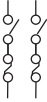


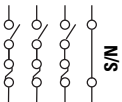
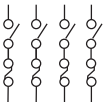
# 1.1

## Switching Devices

### Safety Switches

1

#### 240 Vac Heavy-Duty, Fusible, Single-Throw, Fusible—NEMA 12, 4

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings AC		Time Delay		DC 250V	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number
			Standard Fuse	Standard Fuse	Single-Phase	Three-Phase			
<b>Two-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	1-1/2	—	—	—	5	<sup>3</sup>	—
	60	—	—	—	—	—	—	3	—
	100	—	—	—	—	—	—	3	—
	200	—	—	—	—	—	—	3	—
	400	H	—	50 <sup>1</sup>	—	125 <sup>1</sup>	50	DH225FDK <sup>4</sup>	DH225FPK
	600	H	—	75 <sup>1</sup>	—	200 <sup>1</sup>	—	DH226FDK <sup>4</sup>	DH226FPK
	800	L	—	100 <sup>1</sup>	—	—	—	DH227FDK <sup>4</sup>	—
<b>Three-Wire (Two Blades, Two Fuses, S/N)—240 Vac, 250 Vdc</b>									
	30	H	1-1/2	3 <sup>2</sup>	3	7-1/2 <sup>2</sup>	5	DH221NDK <sup>4</sup>	—
	60	H	3	7-1/2 <sup>2</sup>	10	15 <sup>2</sup>	10	DH222NDK <sup>4</sup>	—
	100	H	7-1/2	15 <sup>2</sup>	15	30 <sup>2</sup>	20	DH223NDK <sup>4</sup>	—
	200	H	15	25 <sup>2</sup>	15	60 <sup>2</sup>	40	DH224NDK <sup>4</sup>	—
	400	H	—	50 <sup>2</sup>	—	125 <sup>2</sup>	50	DH225NDK <sup>4</sup>	DH225NPK
	600	H	—	75 <sup>2</sup>	—	200 <sup>2</sup>	—	DH226NDK <sup>4</sup>	DH226NPK
	800	L	—	100 <sup>2</sup>	—	—	—	DH227NDK <sup>4</sup>	DH227NPK
<b>Three-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	1-1/2	3	3	7-1/2	5	DH321FDK <sup>4</sup>	—
	60	H	3	7-1/2	10	15	10	DH322FDK <sup>4</sup>	—
	100	H	7-1/2	15	15	30	20	DH323FDK <sup>4</sup>	—
	200	H	15	25	15	60	40	DH324FDK <sup>4</sup>	—
	400	H	—	50	—	125	50	DH325FDK <sup>4</sup>	DH325FPK
	600	H	—	75	—	200	—	DH326FDK <sup>4</sup>	DH326FPK
	800	L	—	100	—	—	—	DH327FDK <sup>4</sup>	DH327FPK
1200	L	—	—	—	—	—	DH328FDK <sup>4</sup>	—	
<b>Four-Wire (Three Blades, Three Fuses, S/N)—240 Vac, 250 Vdc</b>									
	30	H	1-1/2	3	3	7-1/2	5	DH321NDK <sup>4</sup>	—
	60	H	3	7-1/2	10	15	10	DH322NDK <sup>4</sup>	—
	100	H	7-1/2	15	15	30	20	DH323NDK <sup>4</sup>	—
	200	H	15	25	15	60	40	DH324NDK <sup>4</sup>	—
	400	H	—	50	—	125	50	DH325NDK <sup>4</sup>	DH325NPK
	600	H	—	75	—	200	—	DH326NDK <sup>4</sup>	DH326NPK
	800	L	—	100	—	—	—	DH327NDK <sup>4,5</sup>	—
1200	L	—	—	—	—	—	DH328NDK <sup>4</sup>	—	
<b>Four-Pole—240 Vac, 250 Vdc</b>									
	30	H	3	3	10	7-1/2	5	DH421FDK <sup>4</sup>	—
	60	H	7-1/2	7-1/2	20	15	10	DH422FDK <sup>4</sup>	—
	100	H	15	15	30	30	20	DH423FDK <sup>4</sup>	—
	200	H	30	25	50	60	40	DH424FDK <sup>4</sup>	—
	400	H	50	50	—	125	50	<sup>4,5</sup>	—
600	H	—	75	—	200	—	<sup>4,5</sup>	—	

#### Notes

- Horsepower ratings apply only when neutral is field installed and switch is used on a grounded B phase system.
- Grounded B phase ratings, UL listed.
- Use three-pole catalog numbers below.
- NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.  
Suitable for service entrance use, except four-pole switches.

DH322FWK



### 240 Vac Heavy-Duty, Fusible, Single-Throw, Fusible—NEMA 4X

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings		Time Delay		DC 250V	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			AC Standard Fuse	AC Standard Fuse	Single-Phase	Three-Phase		
<b>Two-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>								
	30	H	1-1/2	—	—	—	5	3
	60	—	—	—	—	—	—	3 or 4
	100	—	—	—	—	—	—	4
	200	—	—	—	—	—	—	4
	400	H	—	50 <sup>1</sup>	—	125 <sup>1</sup>	50	4
	600	H	—	75 <sup>1</sup>	—	200 <sup>1</sup>	—	4
	800	L	—	100 <sup>1</sup>	—	—	—	4
<b>Three-Wire (Two Blades, Two Fuses, S/N)—240 Vac, 250 Vdc</b>								
	30	H	1-1/2	3 <sup>2</sup>	3	7-1/2 <sup>2</sup>	5	DH221NWK
	60	H	3	7-1/2 <sup>2</sup>	10	15 <sup>2</sup>	10	DH222NWK
	100	H	7-1/2	15 <sup>2</sup>	15	30 <sup>2</sup>	20	DH223NWK
	200	H	15	25 <sup>2</sup>	15	60 <sup>2</sup>	40	DH224NWK
	400	H	—	50 <sup>2</sup>	—	125 <sup>2</sup>	50	DH225NWK
	600	H	—	75 <sup>2</sup>	—	200 <sup>2</sup>	—	DH226NWK
	800	L	—	100 <sup>2</sup>	—	—	—	DH227NWK
<b>Three-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>								
	30	H	1-1/2	3	3	7-1/2	5	DH321FWK
	60	H	3	7-1/2	10	15	10	DH322FWK
	100	H	7-1/2	15	15	30	20	4
	200	H	15	25	15	60	40	DH324FWK
	400	H	—	50	—	125	50	DH325FWK
	600	H	—	75	—	200	—	DH326FWK
	800	L	—	100	—	—	—	DH327FWK
	1200	L	—	—	—	—	—	DH328FWK
<b>Four-Wire (Three Blades, Three Fuses, S/N)—240 Vac, 250 Vdc</b>								
	30	H	1-1/2	3	3	7-1/2	5	DH321NWK
	60	H	3	7-1/2	10	15	10	DH322NWK
	100	H	7-1/2	15	15	30	20	DH323NWK
	200	H	15	25	15	60	40	DH324NWK
	400	H	—	50	—	125	50	DH325NWK
	600	H	—	75	—	200	—	DH326NWK
	800	L	—	100	—	—	—	4
	1200	L	—	—	—	—	—	DH328NWK
<b>Four-Pole—240 Vac, 250 Vdc</b>								
	30	H	3	3	10	7-1/2	5	4
	60	H	7-1/2	7-1/2	20	15	10	4
	100	H	15	15	30	30	20	4
	200	H	30	25	50	60	40	4
	400	H	50	50	—	125	50	4
	600	H	—	75	—	200	—	4

**Notes**

- <sup>1</sup> Horsepower ratings apply only when neutral is field installed and switch is used on a grounded B phase system.
  - <sup>2</sup> Grounded B phase ratings, UL listed.
  - <sup>3</sup> Use three-pole catalog numbers below.
  - <sup>4</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.
- 30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.  
 Suitable for service entrance use, except four-pole switches.

# 1.1

## Switching Devices



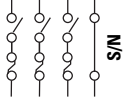
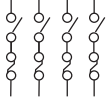
### Safety Switches

1

DH362NRK



#### 600 Vac Heavy-Duty, Fusible, Single-Throw, 277/480–600V – NEMA 1, 3R

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				NEMA 1 Enclosure Indoor Catalog Number		NEMA 3R Enclosure Rainproof Catalog Number	
			Single-Phase AC		Three-Phase AC		DC			
			480V	600V	480V	600V	250V	600V		
<b>Two-Pole—480 Vac—600 Vac or Vdc<sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	H	7-1/2	10	—	—	—	15	DH261FGK	DH261FRK
	60	H	20	25	—	—	—	25	DH262FGK	DH262FRK
	100	H	30	40	—	—	20	25	DH263FGK	DH263FRK
	200	H	50	50	—	—	40	50	DH264FGK	DH264FRK
	400	H	—	—	—	—	50	—	DH265FGK	DH265FRK
	600	H	—	—	—	—	50	—	DH266FGK	DH266FRK
	800	L	—	—	—	—	—	—	DH267FGK	DH267FRK
	1200	L	—	—	—	—	—	—	2	—
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	H	7-1/2	10	15	20	—	—	DH361FGK	DH361FRK
	60	H	20	25	30	50	—	—	DH362FGK	DH362FRK
	100	H	30	40	60	75	—	—	DH363FGK	DH363FRK
	200	H	50	50	125	150	—	—	DH364FGK	DH364FRK
	400	H	—	—	250	350	—	—	DH365FGK	DH365FRK
	600	H	—	—	400	500	—	—	DH366FGK	DH366FRK
	800	L	—	—	500	500	—	—	DH367FGK	DH367FRK
	1200	L	—	—	500	500	—	—	DH368FGK	DH368FRK
<b>Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc</b>										
	30	H	7-1/2	10	15	20	—	—	DH361NGK	DH361NRK
	60	H	20	25	30	50	—	—	DH362NGK	DH362NRK
	100	H	30	40	60	75	—	—	DH363NGK	DH363NRK
	200	H	50	50	125	150	—	—	DH364NGK	DH364NRK
	400	H	—	—	250	350	—	—	DH365NGK	DH365NRK
	600	H	—	—	400	500	—	—	DH366NGK	DH366NRK
	800	L	—	—	500	500	—	—	DH367NGK	DH367NRK
	1200	L	—	—	500	500	—	—	DH368NGK	DH368NRK
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>										
	30	H	20 <sup>3</sup>	25 <sup>3</sup>	15	20	—	—	DH461FGK	4
	60	H	40 <sup>3</sup>	50 <sup>3</sup>	30	50	—	—	DH462FGK	4
	100	H	50 <sup>3</sup>	50 <sup>3</sup>	60	75	—	—	DH463FGK	4
	200	H	—	—	125	150	40	—	DH464FGK	4
	400	H	—	—	250	350	50	—	DH465FGK	2 <sup>4</sup>
	600	H	—	—	400	500	—	—	DH466FGK	2 <sup>4</sup>
	800	L	—	—	—	—	—	—	2	2 <sup>4</sup>

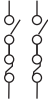
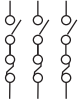
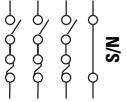
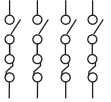
**Notes**

- <sup>1</sup> DC rating for 800A switches is 250V.
  - <sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.
  - <sup>3</sup> Ratings are for two-phase AC.
  - <sup>4</sup> Use NEMA 12. NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- 30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.
- Suitable for service entrance use, except 1200A on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215.10 and 230.95, and four-pole switches.

DH361NDK



### 600 Vac Heavy-Duty, Fusible, Single-Throw, 277/480–600V—NEMA 12, 4

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number
			Single-Phase AC		Three-Phase AC		DC			
			480V	600V	480V	600V	250V	600V		
<b>Two-Pole—480 Vac—600 Vac or Vdc <sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	H	7-1/2	10	—	—	—	15	DH261FDK <sup>2</sup>	—
	60	H	20	25	—	—	—	25	DH262FDK <sup>2</sup>	—
	100	H	30	40	—	—	20	—	DH263FDK <sup>2</sup>	—
	200	H	50	50	—	—	—	50	DH264FDK <sup>2</sup>	—
	400	H	—	—	—	—	50	—	DH265FDK <sup>2</sup>	4
	600	H	—	—	—	—	—	—	DH266FDK <sup>2</sup>	4
	800	L	—	—	—	—	—	—	DH267FDK <sup>2</sup>	4
	1200	L	—	—	—	—	—	—	3	—
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	H	7-1/2	10	15	20	—	—	DH361FDK <sup>2</sup>	—
	60	H	20	25	30	50	—	—	DH362FDK <sup>2</sup>	—
	100	H	30	40	60	75	—	—	DH363FDK <sup>2</sup>	—
	200	H	50	50	125	150	—	—	DH364FDK <sup>2</sup>	—
	400	H	—	—	250	350	—	—	DH365FDK <sup>2</sup>	DH365FPK
	600	H	—	—	400	500	—	—	DH366FDK <sup>2</sup>	DH366FPK
	800	L	—	—	500	500	—	—	DH367FDK <sup>2</sup>	DH367FPK
	1200	L	—	—	500	500	—	—	DH368FDK	—
<b>Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc</b>										
	30	H	7-1/2	10	15	20	—	—	DH361NDK <sup>2</sup>	—
	60	H	20	25	30	50	—	—	DH362NDK <sup>2</sup>	—
	100	H	30	40	60	75	—	—	DH363NDK <sup>2</sup>	—
	200	H	50	50	125	150	—	—	DH364NDK <sup>2</sup>	—
	400	H	—	—	250	350	—	—	DH365NDK <sup>2</sup>	DH365NPK
	600	H	—	—	400	500	—	—	DH366NDK <sup>2</sup>	DH366NPK
	800	L	—	—	500	500	—	—	2 3	—
	1200	L	—	—	500	500	—	—	DH368NDK	—
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>										
	30	H	20 <sup>5</sup>	25 <sup>5</sup>	15	20	—	—	2 3	—
	60	H	40 <sup>5</sup>	50 <sup>5</sup>	30	50	—	—	2 3	—
	100	H	50 <sup>5</sup>	50 <sup>5</sup>	60	75	—	—	DH463FDK <sup>2</sup>	—
	200	H	—	—	125	150	40	—	DH464FDK <sup>2</sup>	—
	400	H	—	—	250	350	50	—	2 3	—
	600	H	—	—	400	500	—	—	2 3	—
	800	L	—	—	—	—	—	—	2 3	—

**Notes**

- <sup>1</sup> DC rating for 800A switches is 250V.
- <sup>2</sup> Use NEMA 12. NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- <sup>3</sup> Contact the Safety Switch Flex Center (**1-888-329-9272** or FlexSwitches@eaton.com) for availability of this product.
- <sup>4</sup> Use three-pole catalog numbers below for 600 Vac, 250 Vdc maximum applications.
- <sup>5</sup> Ratings are for two-phase AC.

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers. Suitable for service entrance use, except 1200A on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215.10 and 230.95, and four-pole switches.

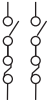

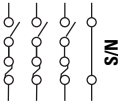
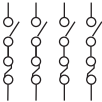
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## Switching Devices

### Safety Switches

1

#### 600 Vac Heavy-Duty, Fusible, Single-Throw, 277/480–600V—NEMA 4X

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC		NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC		250V	600V	
			480V	600V	480V	600V	250V	600V	
<b>Two-Pole—480 Vac—600 Vac or Vdc<sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	—	—	—	15	DH261FWK
	60	H	20	25	—	—	—	25	<sup>2</sup> or <sup>3</sup>
	100	H	30	40	—	—	20	—	<sup>2</sup> or <sup>3</sup>
	200	H	50	50	—	—	—	50	DH264FWK
	400	H	—	—	—	—	50	—	<sup>2</sup> or <sup>3</sup>
	600	H	—	—	—	—	—	—	<sup>2</sup> or <sup>3</sup>
	800	L	—	—	—	—	—	—	<sup>2</sup> or <sup>3</sup>
	1200	L	—	—	—	—	—	—	<sup>3</sup>
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	15	20	—	—	DH361FWK
	60	H	20	25	30	50	—	—	DH362FWK
	100	H	30	40	60	75	—	—	DH363FWK
	200	H	50	50	125	150	—	—	DH364FWK
	400	H	—	—	250	350	—	—	DH365FWK
	600	H	—	—	400	500	—	—	DH366FWK
	800	L	—	—	500	500	—	—	DH367FWK
	1200	L	—	—	500	500	—	—	DH368FWK
<b>Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc</b>									
	30	H	7-1/2	10	15	20	—	—	DH361NWK
	60	H	20	25	30	50	—	—	DH362NWK
	100	H	30	40	60	75	—	—	DH363NWK
	200	H	50	50	125	150	—	—	DH364NWK
	400	H	—	—	250	350	—	—	DH365NWK
	600	H	—	—	400	500	—	—	DH366NWK
	800	L	—	—	500	500	—	—	DH367NWK <sup>2</sup>
	1200	L	—	—	500	500	—	—	DH368NWK
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>									
	30	H	20 <sup>4</sup>	25 <sup>4</sup>	15	20	—	—	<sup>2</sup>
	60	H	40 <sup>4</sup>	50 <sup>4</sup>	30	50	—	—	<sup>2</sup>
	100	H	50 <sup>4</sup>	50 <sup>4</sup>	60	75	—	—	<sup>2</sup>
	200	H	—	—	125	150	40	—	<sup>2</sup>
	400	H	—	—	250	350	50	—	<sup>2</sup>
	600	H	—	—	400	500	—	—	<sup>2</sup>
	800	L	—	—	—	—	—	—	<sup>2</sup>

#### Notes

<sup>1</sup> DC rating for 800A switches is 250V.

<sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

<sup>3</sup> Use three-pole catalog numbers below for 600 Vac, 250 Vdc maximum applications.

<sup>4</sup> Ratings are for two-phase AC.




30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.

Suitable for service entrance use, except 1200A on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215.10 and 230.95, and four-pole switches.

DH362UGK



### 600 Vac Heavy-Duty, Non-Fusible, Single-Throw, 277/480–600V—NEMA 1, 3R

System	Ampere Rating	Maximum Horsepower Ratings						DC		NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
		Single-Phase AC			Three-Phase AC			250V	600V		
		240V	480V	600V	240V	480V	600V				
<b>Two-Pole—480 Vac—600 Vac or Vdc <sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>											
	30	3	7-1/2	10	—	—	—	—	15	DH261UGK	DH261URK
	60	10	20	25	—	—	—	—	25	DH262UGK	DH262URK
	100	20	30	40	—	—	—	20	25	DH263UGK	DH263URK
	200	15	50	50	—	—	—	—	50	DH264UGK	DH264URK
	400	—	—	—	—	—	—	50	50	DH265UGK	DH265URK
	600	—	—	—	—	—	—	—	50	DH266UGK	DH266URK
	800	—	—	—	—	—	—	—	—	DH267UGK	DH267URK
	1200	—	—	—	—	—	—	—	—	2	—
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>											
	30	3	7-1/2	10	10	20	30	5	—	DH361UGK	DH361URK
	60	10	20	25	20	50	60	10	—	DH362UGK	DH362URK
	100	20	40	50	40	75	100	20	—	DH363UGK	DH363URK
	200	15	50	50	60	125	150	40	—	DH364UGK	DH364URK
	400	—	—	—	125	250	350	50	—	DH365UGK	DH365URK
	600	—	—	—	200	400	500	—	—	DH366UGK	DH366URK
	800	—	—	—	—	500	500	—	—	DH367UGK	DH367URK
	1200	—	—	—	—	500	500	—	—	DH368UGK	DH368URK
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>											
	30	10 <sup>3</sup>	20 <sup>3</sup>	25 <sup>3</sup>	10	20	30	5	—	DH461UGK	4
	60	20 <sup>3</sup>	40 <sup>3</sup>	50 <sup>3</sup>	20	50	60	10	—	DH462UGK	4
	100	40 <sup>3</sup>	50 <sup>3</sup>	50 <sup>3</sup>	40	75	100	20	—	DH463UGK	4
	200	50 <sup>3</sup>	50 <sup>3</sup>	50 <sup>3</sup>	60	125	150	40	—	DH464UGK	4
	400	50 <sup>3</sup>	—	—	125	250	350	50	—	DH465UGK	2,4
	600	—	—	—	200	400	500	—	—	DH466UGK	2,4
	800	—	—	—	—	—	—	—	—	2	2,4

**Notes**

- <sup>1</sup> DC rating for 800A switches is 250V.
  - <sup>2</sup> Contact the Safety Switch Flex Center (**1-888-329-9272** or FlexSwitches@eaton.com) for availability of this product.
  - <sup>3</sup> Ratings are for two-phase AC.
  - <sup>4</sup> Use NEMA 12. NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- Suitable for service entrance use, except 1200A on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215.10 and 230.95, and four-pole switches.




# 1.1

## Switching Devices

### Safety Switches

1

#### 600 Vac Heavy-Duty, Non-Fusible, Single-Throw, 277/480–600V—NEMA 12, 4

System	Ampere Rating	Maximum Horsepower Ratings Single-Phase AC			Three-Phase AC			DC		NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number
		240V	480V	600V	240V	480V	600V	250V	600V		
<b>Two-Pole—480 Vac—600 Vac or Vdc<sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>											
	30	3	7-1/2	10	—	—	—	—	15	DH261UDK <sup>2</sup>	—
	60	10	20	25	—	—	—	—	25	DH262UDK <sup>2</sup>	—
	100	20	30	40	—	—	—	20	25	DH263UDK <sup>2</sup>	—
	200	15	50	50	—	—	—	—	50	DH264UDK <sup>2</sup>	—
	400	—	—	—	—	—	—	50	—	DH265UDK <sup>2</sup>	4
	600	—	—	—	—	—	—	—	—	DH266UDK <sup>2</sup>	4
	800	—	—	—	—	—	—	—	—	DH267UDK <sup>2</sup>	4
	1200	—	—	—	—	—	—	—	—	3	—
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>											
	30	3	7-1/2	10	10	20	30	5	—	DH361UDK <sup>2</sup>	—
	60	10	20	25	20	50	60	10	—	DH362UDK <sup>2</sup>	—
	100	20	40	50	40	75	100	20	—	DH363UDK <sup>2</sup>	—
	200	15	50	50	60	125	150	40	—	DH364UDK <sup>2</sup>	—
	400	—	—	—	125	250	350	50	—	DH365UDK <sup>2</sup>	DH365UPK
	600	—	—	—	200	400	500	—	—	DH366UDK <sup>2</sup>	DH366UPK
	800	—	—	—	—	500	500	—	—	DH367UDK <sup>2</sup>	DH367UPK
	1200	—	—	—	—	500	500	—	—	DH368UDK	—
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>											
	30	10 <sup>5</sup>	20 <sup>5</sup>	25 <sup>5</sup>	10	20	30	5	—	DH461UDK <sup>2</sup>	—
	60	20 <sup>5</sup>	40 <sup>5</sup>	50 <sup>5</sup>	20	50	60	10	—	DH462UDK <sup>2</sup>	—
	100	40 <sup>5</sup>	50 <sup>5</sup>	50 <sup>5</sup>	40	75	100	20	—	DH463UDK <sup>2</sup>	—
	200	50 <sup>5</sup>	50 <sup>5</sup>	50 <sup>5</sup>	60	125	150	40	—	DH464UDK <sup>2</sup>	—
	400	50 <sup>5</sup>	—	—	125	250	350	50	—	23	—
	600	—	—	—	200	400	500	—	—	23	—
	800	—	—	—	—	—	—	—	—	23	—

#### Notes

<sup>1</sup> DC rating for 800A switches is 250V.

<sup>2</sup> NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.

<sup>3</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

<sup>4</sup> Use three-pole catalog numbers below for 600 Vac, 250 Vdc maximum applications. For 600 Vdc, see note <sup>3</sup>.

<sup>5</sup> Ratings are for two-phase AC.




Suitable for service entrance use, except 1200A on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215.10 and 230.95, and four-pole switches.



DH361UWK



### 600 Vac Heavy-Duty, Non-Fusible, Single-Throw, 277/480–600V – NEMA 4X

System	Ampere Rating	Maximum Horsepower Ratings			Three-Phase AC			DC		NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		Single-Phase AC			240V	480V	600V	250V	600V	
<b>Two-Pole—480 Vac—600 Vac or Vdc <sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	3	7-1/2	10	—	—	—	—	15	<sup>2</sup> or <sup>3</sup>
	60	10	20	25	—	—	—	—	25	<sup>2</sup> or <sup>3</sup>
	100	20	30	40	—	—	—	20	25	<sup>2</sup> or <sup>3</sup>
	200	15	50	50	—	—	—	—	50	<sup>2</sup> or <sup>3</sup>
	400	—	—	—	—	—	—	50	—	<sup>2</sup> or <sup>3</sup>
	600	—	—	—	—	—	—	—	—	<sup>2</sup> or <sup>3</sup>
	800	—	—	—	—	—	—	—	—	<sup>2</sup> or <sup>3</sup>
	1200	—	—	—	—	—	—	—	—	<sup>2</sup>
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	3	7-1/2	10	10	20	30	5	—	DH361UWK
	60	10	20	25	20	50	60	10	—	DH362UWK
	100	20	40	50	40	75	100	20	—	DH363UWK
	200	15	50	50	60	125	150	40	—	DH364UWK
	400	—	—	—	125	250	350	50	—	DH365UWK
	600	—	—	—	200	400	500	—	—	DH366UWK
	800	—	—	—	—	500	500	—	—	DH367UWK
	1200	—	—	—	—	500	500	—	—	DH368UWK
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>										
	30	10 <sup>4</sup>	20 <sup>4</sup>	25 <sup>4</sup>	10	20	30	5	—	DH461UWK
	60	20 <sup>4</sup>	40 <sup>4</sup>	50 <sup>4</sup>	20	50	60	10	—	<sup>2</sup>
	100	40 <sup>4</sup>	50 <sup>4</sup>	50 <sup>4</sup>	40	75	100	20	—	<sup>2</sup>
	200	50 <sup>4</sup>	50 <sup>4</sup>	50 <sup>4</sup>	60	125	150	40	—	<sup>2</sup>
	400	50 <sup>4</sup>	—	—	125	250	350	50	—	<sup>2</sup>
	600	—	—	—	200	400	500	—	—	<sup>2</sup>
	800	—	—	—	—	—	—	—	—	<sup>2</sup>

**Notes**

- <sup>1</sup> DC rating for 800A switches is 250V.
  - <sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.
  - <sup>3</sup> Use three-pole catalog numbers below for 600 Vac, 250 Vdc maximum applications. For 600 Vdc, see note <sup>2</sup>.
  - <sup>4</sup> Ratings are for two-phase AC.
- Suitable for service entrance use, except 1200A on 480Y/277 or 600Y/347 grounded wye systems, per NEC 215.10 and 230.95, and four-pole switches.

# 1.1

## Switching Devices

### Safety Switches

1

#### Dimensions

Approximate Dimensions in Inches (mm)

**Note:** Dimensions are for estimating purposes only.

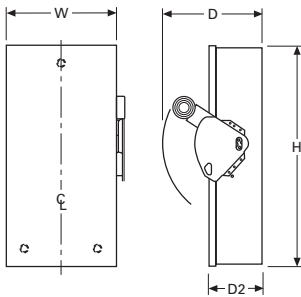
#### Heavy-Duty, Non-Fusible, 600V, Three-Pole, Single-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 1, 3R</b>					
30	8.13 (206.5)	15.88 (403.4)	10.00 (254.0)	5.25 (133.3)	16 (7.264)
60	8.13 (206.5)	15.88 (403.4)	10.00 (254.0)	5.25 (133.3)	16 (7.264)
100	11.13 (282.7)	21.69 (550.9)	10.00 (254.0)	5.25 (133.3)	22 (9.988)
200	16.00 (406.4)	27.63 (701.8)	11.25 (285.8)	6.14 (156.0)	46 (20.884)
400	23.00 (584.2)	45.19 (1147.8)	12.63 (320.8)	7.27 (184.7)	110 (49.94)
600	24.00 (609.6)	52.70 (1338.6)	14.25 (362.0)	8.95 (227.3)	135 (61.29)
800	25.38 (644.7)	56.69 (1439.9)	14.25 (362.0)	8.95 (227.3)	158 (71.732)
1200	41.47 (1053.3)	70.31 (1785.9)	19.94 (506.5)	12.44 (316.0)	430 (195.22)
<b>NEMA 12, 4X Stainless Steel, 4</b>					
30	8.13 (206.5)	12.13 (308.1)	10.00 (254.0)	5.50 (139.7)	17 (7.718)
60	8.13 (206.5)	12.13 (308.1)	10.00 (254.0)	5.50 (139.7)	17 (7.718)
100	11.13 (282.7)	24.00 (609.6)	10.25 (260.4)	5.50 (139.7)	28 (12.712)
200	16.00 (406.4)	34.38 (873.3)	11.50 (292.1)	6.44 (163.6)	55 (24.97)
400	23.00 (584.2)	57.63 (1463.8)	12.63 (320.8)	7.19 (182.6)	125 (56.75)
600	24.00 (609.6)	63.00 (1600.2)	14.25 (362.0)	8.88 (225.6)	167 (75.818)
800	25.38 (644.7)	71.75 (1822.5)	14.25 (362.0)	8.88 (225.6)	175 (79.45)
1200	41.47 (1053.3)	70.31 (1785.9)	19.94 (506.5)	13.51 (343.2)	475 (215.65)

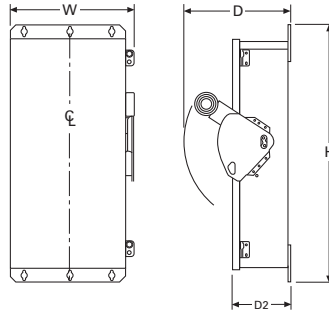
#### Heavy-Duty, Fusible, 240V and 600V, Three-Pole Solid Neutral, Single-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 1, 3R</b>					
30	8.13 (206.5)	15.88 (403.4)	10.00 (254.0)	5.25 (133.3)	20 (9.08)
60	8.13 (206.5)	15.88 (403.4)	10.00 (254.0)	5.25 (133.3)	20 (9.08)
100	11.13 (282.7)	21.69 (550.9)	10.00 (254.0)	5.25 (133.3)	27 (12.258)
200	16.00 (406.4)	27.63 (701.8)	11.25 (285.8)	6.14 (156.0)	52 (23.608)
400	23.00 (584.2)	45.19 (1147.8)	12.63 (320.8)	7.27 (184.7)	120 (54.48)
600	24.00 (609.6)	52.70 (1338.6)	14.25 (362.0)	8.95 (227.3)	153 (69.462)
800	25.38 (644.7)	56.69 (1439.9)	14.25 (362.0)	8.95 (227.3)	168 (76.272)
1200	41.47 (1053.3)	70.31 (1785.9)	19.94 (506.5)	12.44 (316.0)	465 (211.11)
<b>NEMA 12, 4X Stainless Steel, 4</b>					
30	8.13 (206.5)	17.88 (454.2)	10.00 (254.0)	5.50 (139.7)	22 (9.988)
60	8.13 (206.5)	17.88 (454.2)	10.00 (254.0)	5.50 (139.7)	22 (9.988)
100	11.13 (282.7)	24.00 (609.6)	10.25 (260.4)	5.50 (139.7)	30 (13.62)
200	16.00 (406.4)	34.38 (873.3)	11.50 (292.1)	6.44 (163.6)	61 (27.694)
400	23.00 (584.2)	57.63 (1463.8)	12.63 (320.8)	7.19 (182.6)	135 (61.29)
600	24.00 (609.6)	63.00 (1600.2)	14.25 (362.0)	8.88 (225.6)	203 (92.162)
800	25.38 (644.7)	71.75 (1822.5)	14.25 (362.0)	8.88 (225.6)	213 (96.702)
1200	41.47 (1053.3)	70.31 (1785.9)	19.94 (506.5)	13.51 (343.2)	510 (231.54)

#### NEMA 1-3R Heavy-Duty 30–1200A



#### NEMA 4, 4X and 12 Heavy-Duty 30–1200A



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

Six-Pole Motor Circuit



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### Six-Pole Switches

#### Product Description

- 600 Vac, 250 Vdc maximum
- 30–800A
- Fusible or non-fusible

#### Application Description

A compact safety switch that's ideal for use in heavy industry...when an "in sight" disconnecting means is required for two-speed motors that are remote from their motor control devices.

#### Features, Benefits and Functions

- Trunk-type latches keep the cover tightly closed and a neoprene gasket seals out moisture and dust from the switch assembly
- Visible double-break quick-make, quick-break rotary blade mechanism. Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life
- Clear line shield protection
- Built-in fuse pullers
- Clearly visible handle
- Triple padlocking capability; cabinet door can be further padlocked at the top and bottom

#### Standards and Certifications

- UL listed File No. E5239



- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

# 1.1





## Switching Devices

### Safety Switches

#### 1

#### Product Selection





#### 600 Vac Heavy-Duty, Fusible, Six-Pole, Single-Throw

System	Ampere Rating	Maximum Horsepower Ratings, Three-Phase AC (Higher Rating with Time Delay Fuses)			NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		240V	480V	600V		
<b>600 Vac with Fuse Clips—250 Vdc</b>						
	30	3-7-1/2	5-15	7-1/2-20	DH661FDK <sup>1</sup>	2
	60	7-1/2-15	15-30	15-50	DH662FDK <sup>1</sup>	2
	100	15-30	25-60	30-75	DH663FDK <sup>1</sup>	2
	200	25-60	50-125	60-150	DH664FDK <sup>1</sup>	2
	400	—	—	—	2	2
	600	—	—	—	2	2
	800	—	—	—	2	2

#### DH661UDK



#### 600 Vac Heavy-Duty, Non-Fusible, Six-Pole, Single-Throw

System	Ampere Rating	Maximum Horsepower Ratings Three-Phase AC		Three-Phase DC		NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number	
		240V	480V	250V	600V <sup>3</sup>			
<b>600 Vac—250 Vdc</b>								
	30	10	20	30	5	15	DH661UDK <sup>1</sup>	DH661UWK
	60	20	50	60	10	25	DH662UDK <sup>1</sup>	DH662UWK
	100	40	75	100	20	25	DH663UDK <sup>1</sup>	DH663UWK
	200	60	125	150	40	50	DH664UDK <sup>1</sup>	DH664UWK
	400	—	—	—	—	—	2	2
	600	—	—	—	—	—	2	2
	800	—	—	—	—	—	2	2

#### Notes

<sup>1</sup> NEMA 12 enclosures (30–800A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.

<sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

<sup>3</sup> 600 Vdc rating requires that the switch be wired per the wiring diagram on the device publication.

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.

Heavy-Duty Double-Throw



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## Double-Throw Switches

### Product Description

Used to transfer service from a normal power source to an alternate source...or to switch from one load circuit to another.

- 30–1200A
- Horsepower rated
- 600 Vac, 250 Vdc maximum
- 800–1200A fusible utilize common set of fuses; two Source 1 load applications
- Fusible or non-fusible
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- Suitable for service entrance applications unless otherwise noted
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100% fully rated
- Approved for service entrance with neutral or ground lug kit installed
- Wiring configuration from factory allows a single load to be supplied by a normal or alternate source. Can be field modified to allow two loads to be alternately supplied by a single power source

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

- 30–100A
- Suitable for service entrance use with neutral kit installed
- Non-fusible

### **240 Vac General-Duty, Non-Fusible, Double-Throw**

- 30–400A
- Horsepower rated
- Suitable for service entrance use with neutral kit installed
- Non-fusible
- Quick-make, quick-break operating mechanism

### **240 Vac Heavy-Duty, Fusible, Non-Fusible, Double-Throw**

- 30–800A
- Horsepower rated
- Suitable for service entrance use with neutral kit installed
- Fusible and non-fusible
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

# 1.1

## Switching Devices

### Safety Switches

1

#### Features, Benefits and Functions

- Ample wire bending space provides for easier installation
- Visible double-break quick-make, quick-break rotary blade mechanism. Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life
- Triple padlocking capability. Personnel safety feature since the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks. Clearly visible handle. The position (ON or OFF) can be clearly seen from a distance
- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- Additional locking capability; cabinet door can be further padlocked at the top and bottom
- Clear line shield (provided on fusible double-throw) protects against accidental contact with energized parts. Probe holes enable the user to test if the line side is energized without removing the shield
- 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

#### Standards and Certifications

- UL listed switching neutral capability is available on three-pole and four-pole non-fusible double-throw switches with the installation of the proper bonding kit shown on **Page V2-T1-14**
- Suitable for use as a manually operated switch per 2005 NEC Article 702
- UL listed File No. E5239



### Product Selection

**DT223URH-N**  
Compact Design



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

Ampere Rating Main and Standby	NEMA 3R Enclosure Rainproof Catalog Number
<b>Two-Pole—240 Vac</b>	
30	DT221URH
60	DT222URH
100	DT223URH
<b>Two-Pole, Three-Wire—240 Vac—Solid Neutral</b>	
30	DT221URH-N
60	DT222URH-N
100	DT223URH-N

**DT224URK-NPS**



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

Ampere Rating Main and Standby	Maximum Horsepower Ratings						DC 250V	NEMA 3R Enclosure Rainproof Catalog Number
	Single-Phase AC			Three-Phase AC				
	240V	480V	600V	240V	480V	600V		
<b>Two-Pole—240 Vac—250 Vdc</b>								
30	3	—	—	—	—	—	5	DT221URKPS
60	1	—	—	—	—	—	10	DT222URKPS
100	20	—	—	—	—	—	20	DT223URKPS
200	15	—	—	—	—	—	40	DT224URKPS
400	—	—	—	—	—	—	50	DT225URKPS
<b>Two-Pole, Three-Wire—240 Vac—250 Vdc, Solid Neutral</b>								
30	3	—	—	—	—	—	5	DT221URK-NPS
60	10	—	—	—	—	—	10	DT222URK-NPS
100	20	—	—	—	—	—	20	DT223URK-NPS
200	15	—	—	—	—	—	40	DT224URK-NPS
400	—	—	—	—	—	—	50	DT225URK-NPS

# 1.1

## Switching Devices

### Safety Switches

1

#### 240 Vac Heavy-Duty, Fusible, Double-Throw

Ampere Rating Main and Standby	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
		Single-Phase AC			Three-Phase AC					
		240V	480V	600V	240V	480V	600V			
<b>Two-Pole—240 Vac—250 Vdc</b>										
200	H	15	—	—	—	—	—	40	DT224FGK	DT224FRK
<b>Three-Pole—240 Vac—250 Vdc</b>										
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	J	—	—	—	50	—	—	50	DT326FGK	DT326FRK
800	L	—	—	—	—	—	—	—	DT327FGK	DT327FRK
1200	L	—	—	—	—	—	—	—	DT328FGK	DT328FRK

#### 240 Vac Heavy-Duty, Non-Fusible, Double-Throw

Ampere Rating Main and Standby	Maximum Horsepower Ratings						DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number
	Single-Phase AC			Three-Phase AC					
	240V	480V	600V	240V	480V	600V			
<b>Two-Pole—240 Vac—250 Vdc</b>									
30	3	—	—	—	—	—	5	DT221UGK	2
60	10	—	—	—	—	—	10	DT222UGK	2
100	20	—	—	—	—	—	20	DT223UGK	2
200	15	—	—	—	—	—	40	DT224UGK	DT224URK
400	—	—	—	—	—	—	50	DT225UGK	DT225URK
600	—	—	—	—	—	—	—	DT226UGK	2
800	—	—	—	—	—	—	—	DT227UGK	DT227URK
1200	—	—	—	—	—	—	—	DT228UGK	DT228URK
<b>Three-Pole—240 Vac—250 Vdc</b>									
30	3	—	—	10	—	—	5	DT321UGK	2
60	10	—	—	20	—	—	10	DT322UGK	2
100	20	—	—	40	—	—	20	DT323UGK	DT323URK
200	15	—	—	60	—	—	40	DT324UGK	DT324URK
400	—	—	—	125	—	—	50	DT325UGK	DT325URK
600	—	—	—	125	—	—	50	DT326UGK	2
800	—	—	—	125	—	—	50	DT327UGK <sup>1</sup>	DT327URK
800	—	—	—	125	—	—	50	DT327UGK-N	DT328URK
1200	—	—	—	125	—	—	50	DT328UGK	—

#### Notes

<sup>1</sup> Field-installable neutral kit is not available. If a neutral is required, order the catalog number shown in the table with "N" suffix.

<sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

UL listed switching neutral capability is available on three-pole and four-pole non-fusible double-throw switches with the installation of the proper bonding kit shown on **Page V2-T1-14**. See **Page V2-T1-18** for factory installation from the Flex Center.



**DT363FGK**

**600 Vac Heavy-Duty, Fusible, Double-Throw**



Ampere Rating Main and Standby	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		Single-Phase AC		Three-Phase AC						
<b>Three-Pole—600 Vac—250 Vdc</b>										
30	H	7-1/2	10	15	20	—	DT361FGK	1	1	DT361FWK
60	H	20	25	30	50	—	DT362FGK	1	1	DT362FWK
100	H	30	40	60	75	—	DT363FGK	DT363FRK	1	DT363FWK
200	H	50	50	125	150	40	DT364FGK	DT364FRK	1	DT364FWK
400	T	—	—	250	350	50	DT365FGK	DT365FRK	1	DT365FWK
600	J	—	—	—	—	—	DT366FGK	DT366FRK	1	1
800	L	—	—	—	—	—	DT367FGK	DT367FRK	1	1
1200	L	—	—	—	—	—	DT368FGK	DT368FRK	1	1

**DT363URK**

**600 Vac Heavy-Duty, Non-Fusible, Double-Throw**



Ampere Rating Main and Standby	Maximum Horsepower Ratings				DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
	Single-Phase AC		Three-Phase AC						
<b>Two-Pole—600 Vac—250 Vdc</b>									
30	7-1/2	10	—	—	5	DT261UGK	1	—	—
60	20	25	—	—	10	DT262UGK	1	—	—
100	40	50	—	—	20	DT263UGK	1	—	—
200	50	50	—	—	40	DT264UGK <sup>2</sup>	DT264URK <sup>2</sup>	—	—
400	—	—	—	—	50	DT265UGK	DT265URK	—	—
600	—	—	—	—	50	DT266UGK	DT266URK	—	—
800	—	—	—	—	50	DT267UGK	DT267URK	—	—
1200	—	—	—	—	50	DT268UGK	DT268URK	—	—
<b>Three-Pole—600 Vac—250 Vdc</b>									
30	7-1/2	10	20	30	5	DT361UGK	DT361URK	DT361UDK <sup>4</sup>	DT361UWK
60	20	25	50	60	10	DT362UGK	DT362URK	DT362UDK <sup>4</sup>	DT362UWK
100	40	50	75	100	20	DT363UGK	DT363URK	DT363UDK <sup>4</sup>	DT363UWK
200	50	50	125	150	40	DT364UGK	DT364URK	DT364UDK <sup>4</sup>	DT364UWK
400	—	—	250	350	50	DT365UGK	DT365URK	DT365UDK <sup>4,5</sup>	DT365UWK
600	—	—	250	350	50	DT366UGK	DT366URK	1 <sup>4</sup>	1
800	—	—	250	350	50	DT367UGK <sup>3</sup>	DT367URK <sup>3</sup>	1 <sup>4</sup>	1
800	—	—	250	350	50	DT367UGKN	DT367URKN	1 <sup>4</sup>	1
1200	—	—	250	350	50	DT368UGK	DT368URK	1 <sup>4</sup>	1

**Notes**

<sup>1</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

<sup>2</sup> Rated 600 Vdc, 50 hp in addition to ratings shown in table.

<sup>3</sup> **Field installable neutral kit is not available. If a neutral is required, order the catalog number shown in the table with "N" suffix.**

<sup>4</sup> NEMA 12 enclosures (30–1200A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.

<sup>5</sup> Also available in 240 Vac catalog number DT325UDK.

UL listed switching neutral capability is available on three-pole and four-pole non-fusible double-throw switches with the installation of the proper bonding kit shown on Page V2-T1-14. See Page V2-T1-18 for factory installation from the Flex Center.

# 1.1

## Switching Devices

### Safety Switches

1

DT363URK



#### 600 Vac Heavy-Duty, Non-Fusible, Double-Throw

Ampere Rating Main and Standby	Maximum Horsepower Ratings				DC 250V	NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
	Single-Phase AC 480V	Single-Phase AC 600V	Three-Phase AC 480V	Three-Phase AC 600V					
<b>Four-Pole—600 Vac—250 Vdc<sup>1</sup></b>									
30	7-1/2	10	20	30	5	2	DT461URK	2	2
60	20	25	50	60	10	2	DT462URK	2	2
100	40	50	75	100	20	2	DT463URK	2	2
200	—	50	125	150	40	DT464UGK	DT464URK	2	2
400	—	—	250	350	50	DT465UGK	DT465URK	2	2
600	—	—	250	350	50	DT466UGK	DT466URK	2	2
800	—	—	250	350	50	DT467UGK	DT467URK	2	2
<b>Six-Pole—600 Vac—250 Vdc<sup>1</sup></b>									
30	7-1/2	10	15	30	5	2	DT661URK	2	2
60	20	25	50	60	10	2	DT662URK	2	2
100	40	50	75	100	20	2	DT663URK	2	2

**Notes**

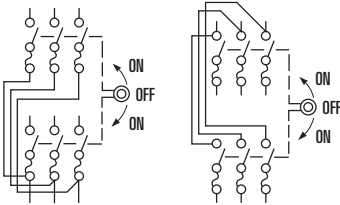
<sup>1</sup> Field installable neutral kit is not available. If a neutral is required, order the catalog number shown in the table with "N" suffix.

<sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

UL listed switching neutral capability is available on three-pole and four-pole non-fusible double-throw switches with the installation of the proper bonding kit shown on Page V2-T1-14. See Page V2-T1-18 for factory installation from the Flex Center.

### Technical Data and Specifications

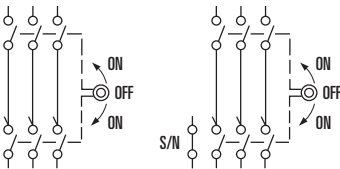
#### Typical Fusible, Double-Throw Schematic Diagram



Fusible Three-Pole Two Sources

Fusible Three-Pole Two Loads

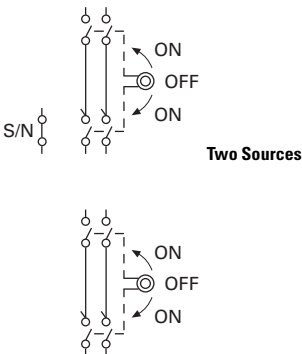
#### Typical Non-Fusible, Double-Throw Schematic Diagram



Non-Fusible Three-Pole Two Sources or Two Loads

Non-Fusible Three-Pole Two Sources or Two Loads

#### Typical General-Duty, Double-Throw Schematic Diagrams (with and without factory-installed neutral)



Two Sources

#### Short-Circuit Ratings Using Class "R", "J" or "T" Fusing Where Applicable

Ampere Rating	Voltage Ratings			
	Type 1	Type 3R	Type 12	Type 4 and 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	—	—
1200	100k at 600	100k at 600	—	—

### Dimensions

Approximate Dimensions in Inches (mm)

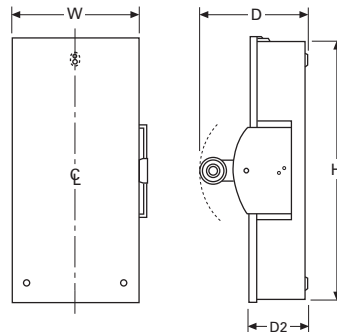
#### General-Duty, Non-Fusible, 240V, Two-Pole Solid Neutral, Double-Throw, Compact Design

Ampere Rating	Height (H)	Width (W)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 3R</b>					
30	14.69 (373.1)	9.63 (244.6)	10.81 (274.6)	5.23 (132.8)	12 (5.5)
60	14.69 (373.1)	9.63 (244.6)	10.81 (274.6)	5.23 (132.8)	12 (5.5)
100	14.69 (373.1)	9.63 (244.6)	10.81 (274.6)	5.23 (132.8)	12 (5.5)

#### General-Duty, Non-Fusible, 240V, Two-Pole Solid Neutral, Double-Throw, Quick-Make, Quick-Break Design

Ampere Rating	Height (H)	Width (W)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 3R</b>					
30	24.63 (625.6)	11.94 (303.3)	9.88 (251.0)	5.38 (136.7)	34 (15.4)
60	24.63 (625.6)	11.94 (303.3)	9.88 (251.0)	5.38 (136.7)	34 (15.4)
100	24.63 (625.6)	11.94 (303.3)	9.88 (251.0)	5.38 (136.7)	34 (15.4)
200	37.38 (949.5)	19.56 (496.8)	11.25 (285.8)	6.10 (154.9)	80 (36.3)
400	53.81 (1366.8)	23.13 (587.5)	12.50 (317.6)	8.88 (225.6)	140 (63.6)

#### NEMA 3R, 30–400A, General-Duty, Non-Fusible, Double-Throw



#### Notes

Class "H" fuse clips supplied as standard for 30–400A except Class "T" for 400A at 600V. Rated at 10,000 rms symmetrical when using Class "H" fuses.

Table is not applicable to the compact design shown on **Page V2-T1-47**. The compact design is suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amperes.

Class "R" fuse adapter kits are shown on **Page V2-T1-14**. Individual adapter kits are applicable as shown on **Page V2-T1-14** and yield the short-circuit ratings per the tables above when Class "R" fuses are installed. When installed, Class "R" fuse adapter kits reject all fuses except Class "R."

Class "J" fuse provisions can be obtained on most 60–400A safety switches by moving the fuse base to a new position as instructed by the device publication label. Class "J" fuse adapter kits, where needed, are shown on **Page V2-T1-14** and yield the short-circuit ratings per the tables above when Class "J" fuses are installed. Class "J" fuse provisions must be factory installed on 30A heavy-duty switches. Catalog numbers are shown in table on **Page V2-T1-18**. Class "J" fusing is not applicable on 30–200A general-duty switches, 30–100A double-throw switches, and any switch higher than 600A.

Class "T" fuse adapter kits are shown on **Page V2-T1-14**. Individual adapter kits are applicable to 200–800A switches as shown on **Page V2-T1-14** and yield the short-circuit ratings per the tables to the left when Class "T" fuses are installed. On 1200A switches, Class "T" fuse provisions can be obtained by moving the fuse base to a new position as instructed by the device publication label.

# 1.1

## Switching Devices

### Safety Switches

1

Approximate Dimensions in Inches (mm)

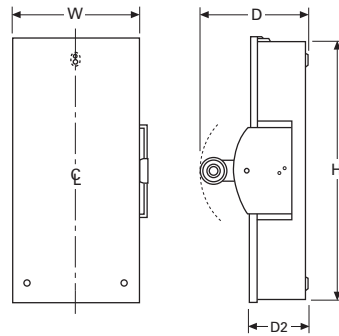
#### Heavy-Duty, Non-Fusible, 240V and 600V, Three-Pole, Double-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 1, 3R</b>					
30	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15.436)
60	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15.436)
100	11.94 (303.3)	24.63 (625.6)	9.88 (251.0)	5.38 (136.7)	34 (15.436)
200	19.56 (496.8)	37.38 (949.5)	11.25 (285.8)	6.10 (154.9)	80 (36.32)
400	23.13 (587.5)	53.81 (1366.8)	12.50 (317.5)	7.25 (184.2)	140 (63.56)
600	24.13 (612.9)	63.31 (1608.1)	14.13 (358.9)	8.88 (225.6)	175 (79.45)
800	24.13 (612.9)	63.31 (1608.1)	14.13 (358.9)	8.88 (225.6)	175 (79.45)
1200	42.62 (1082.5)	78.11 (1984.0)	25.62 (650.7)	20.47 (519.9)	—
<b>NEMA 12, 4X Stainless Steel</b>					
30	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27.24)
60	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27.24)
100	12.00 (304.8)	25.88 (657.4)	10.25 (260.4)	5.50 (139.7)	60 (27.24)
200	19.50 (495.3)	41.00 (1041.4)	11.63 (295.4)	6.48 (164.6)	105 (47.67)
400	23.00 (584.2)	57.50 (1460.5)	12.50 (317.5)	7.25 (184.2)	185 (83.99)
600	—	—	—	—	—
800	—	—	—	—	—
1200	—	—	—	—	—

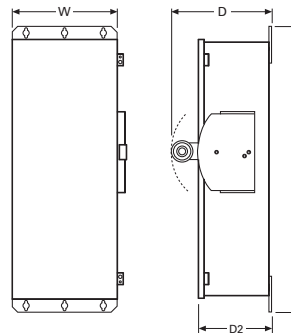
#### Heavy-Duty, Fusible, 240V and 600V, Three-Pole, Double-Throw

Ampere Rating	Width (W)	Height (H)	Depth (D)	Depth (D2)	Weight Lbs (kg)
<b>NEMA 1, 3R</b>					
30	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (19.976)
60	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (19.976)
100	11.94 (303.3)	36.63 (930.4)	9.88 (251.0)	5.38 (136.7)	44 (19.976)
200	19.56 (496.8)	50.88 (1292.4)	11.25 (285.8)	6.10 (154.9)	95 (43.13)
400	25.38 (644.7)	74.75 (1898.7)	14.13 (358.9)	8.88 (225.6)	230 (104.42)
600	28.12 (714.3)	58.86 (1495.0)	25.62 (650.7)	20.47 (520.0)	320 (145.28)
800	28.12 (714.2)	58.86 (1495.0)	25.62 (650.7)	20.47 (519.9)	—
1200	42.62 (1082.5)	78.11 (1984.0)	29.62 (752.3)	20.47 (519.9)	—
<b>NEMA 12, 4X Stainless Steel, 4</b>					
30	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20.43)
60	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20.43)
100	12.00 (304.8)	39.81 (1011.2)	10.25 (260.4)	5.50 (139.7)	45 (20.43)
200	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)	8.92 (226.6)	260 (118.04)
600	—	—	—	—	—
800	—	—	—	—	—
1200	—	—	—	—	—

#### NEMA 1-3R Double-Throw 30–800A



#### NEMA 12-4X Double-Throw 30–400A



EnviroLine/Stainless Steel Switch



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### EnviroLine—Stainless Steel Switch

#### Product Description

Primarily for use in the meat packing 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, backpan and springs are stainless steel. Ratings for these heavy-duty switches are 30–400A, 240–600 Vac, available as fusible and non-fusible switches.

#### Features

- Stainless steel enclosure (304 grade)
- Stainless steel mechanism (304 grade)
- 30–400A
- Horsepower rated
- Suitable for service entrance use

#### Standards and Certifications

- Upper and lower window UL listed and NEMA approved
- UL 98
- UL listed under Section 508
- UL listed File No. E165150 and E5239



# 1.1

## Switching Devices

### Safety Switches

1

#### Product Selection

DH321NWKX



#### 240 Vac Heavy-Duty, Fusible, Single-Throw Stainless Steel Enclosure and Operating Mechanism

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			AC Standard Fuse		Time Delay			
			Single-Phase	Three-Phase	Single-Phase	Three-Phase		
<b>Three-Wire (Two Blades, Two Fuses, S/N), 240 Vac—250 Vdc</b>								
	30	H	1-1/2	3	3	7-1/2	5	DH221NWKX
	60	H	3	7-1/2	10	15	10	DH222NWKX
	100	H	7-1/2	15	15	30	20	DH223NWKX
	200	H	15	25	15	60	40	DH224NWKX
	400	H	—	50	—	125	50	DH225NWKX
<b>Three-Pole, 240 Vac—250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>								
	30	H	1-1/2	3	—	7-1/2	—	DH321FWKX
	60	H	3	7-1/2	—	15	—	DH322FWKX
	100	H	—	—	—	—	—	1
	200	H	15	25	—	60	40	DH324FWKX
	400	H	—	50	—	125	50	DH325FWKX
<b>Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc</b>								
	30	H	—	3	—	7-1/2	—	DH321NWKX
	60	H	—	7-1/2	—	15	—	DH322NWKX
	100	H	—	15	—	30	20	DH323NWKX
	200	H	—	25	—	60	—	DH324NWKX
	400	H	—	50	—	125	50	DH325NWKX

**Notes**



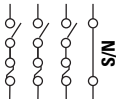
<sup>1</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.


DH31UWKX



### 600 Vac Heavy-Duty, Fusible 277/480V, Single-Throw Stainless Steel Enclosure and Operating Mechanism

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC		DC		
			480V	600V	480V	600V	250V	600V	
<b>Two-Pole, 480 Vac—600 Vac or Vdc<sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	—	—	—	15	DH261FWKX
	60	H	—	—	—	—	—	—	2
	100	H	—	—	—	—	—	—	2
	200	H	50	50	—	—	—	50	DH264FWKX
	400	H	—	—	—	—	—	—	2
	600	H	—	—	—	—	—	50	DH265FWKX
<b>Three-Pole, 480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	15	20	—	—	DH361FWKX
	60	H	20	25	30	50	—	—	DH362FWKX
	100	H	30	30	60	75	—	—	DH363FWKX
	200	H	50	50	125	150	—	—	DH364FWKX
	400	H	—	—	250	350	—	—	DH365FWKX
	600	H	—	—	250	350	—	—	DH366FWKX
<b>Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc</b>									
	30	H	7-1/2	10	20	30	—	—	DH361NWKX
	60	H	20	25	50	60	—	—	DH362NWKX
	100	H	40	50	75	100	—	—	DH363NWKX
	200	H	50	50	125	150	—	—	DH364NWKX
	400	H	—	—	250	350	—	—	DH365NWKX
	600	H	—	—	250	350	—	—	DH366NWKX

### 600 Vac Heavy-Duty, Non-Fusible 277/480V, Single-Throw Stainless Steel Enclosure and Operating Mechanism

System	Ampere Rating	Maximum Horsepower Ratings						NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		Single-Phase AC		Three-Phase AC		DC		
		480V	600V	480V	600V	250V	600V	
<b>Three-Pole, 480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>								
	30	7-1/2	10	20	30	5	—	DH361UWKX
	60	20	25	50	60	10	—	DH362UWKX
	100	40	50	75	100	20	—	DH363UWKX
	200	50	50	125	150	40	—	DH364UWKX
	400	—	—	250	350	50	—	DH365UWKX
	600	—	—	250	350	50	—	DH366UWKX

**Notes**

<sup>1</sup> DC rating for 400A switches is 250V.

<sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.

# 1.1

## Switching Devices

### Safety Switches

1

#### EnviroLine/Window Switch



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Pringle Bolted Pressure Switch	V2-T1-88
Type DS, Fusible and Non-Fusible	V2-T1-91
Type Visi-Flex DE-ION	V2-T1-94
Flange Mounted—Variable Depth	V2-T1-98
Flange Mounted—Fixed Depth	V2-T1-102

#### EnviroLine—Upper and Lower Window Switches

##### Product Description

The new enlarged window on 30–100A ratings allows visual blade position verification and blown fuse indication without opening the door. Higher ampere ratings continue to use the upper and lower window design. The upper window switch provides visual verification of ON/OFF status (blade position), while the lower window design shows fuse status on fuses with blown fuse indicators. Overall ratings are 30–800A, 240–600 Vac, fusible and non-fusible. Available in NEMA 12/3R, 4X stainless steel enclosures.

##### Features

###### Upper Window

- 30–800A
- Blade visibility when door closed
- 240V and 600V, fusible and non-fusible
- Suitable for service entrance use
- NEMA 12, 4 and 4X enclosures

###### Lower Window

- 30–600A
- Power plugs not supplied with the receptacle
- Lower viewing window over fuses to allow visual verification of blown fuse indicators for Littelfuse, Inc. fuses
- 240V and 600V, fusible
- Suitable for service entrance use
- NEMA 12, 4 and 4X enclosures

##### Standards and Certifications

- Upper and lower window UL listed and NEMA approved
- UL 98
- UL listed under Section 508
- UL listed File No. E165150 and E5239





### Product Selection

#### DH361UDKW



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

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			AC		Time Delay					
			Single-Phase	Three-Phase	Single-Phase	Three-Phase				
<b>Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc <sup>1</sup></b>										
	30	H	—	3	—	7-1/2	—	DH321NDKW <sup>2</sup>	—	DH321NWKW
	60	H	—	7-1/2	—	15	—	DH322NDKW <sup>2</sup>	—	DH322NWKW
	100	H	—	15	—	30	20	DH323NDKW <sup>2</sup>	—	DH323NWKW
	200	H	—	25	—	60	—	DH324NDKW <sup>2</sup>	—	DH324NWKW
	400	H	—	50	—	125	50	DH325NDKW <sup>2</sup>	DH325NPKW	DH325NWKW
	600	H	—	75	—	200	—	DH326NDKW <sup>2</sup>	DH326NPKW	DH326NWKW
	800	L	—	100	—	250	—	DH327NDKW <sup>2</sup>	DH327NPKW	DH327NWKW

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

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses				DC 250V 600V	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC					
			480V	600V	480V	600V				
<b>Four-Wire (Three Blades, Three Fuses, S/N), 600 Vac—250 Vdc <sup>1</sup></b>										
	30	H	7-1/2	10	15	20	—	DH361NDKW <sup>2</sup>	—	DH361NWKW
	60	H	20	25	30	50	—	DH362NDKW <sup>2</sup>	—	DH362NWKW
	100	H	30	40	60	75	—	DH363NDKW <sup>2</sup>	—	DH363NWKW
	200	H	50	50	125	150	—	DH364NDKW <sup>2</sup>	—	DH364NWKW
	400	H	—	—	250	350	—	DH365NDKW <sup>2</sup>	DH365NPKW	DH365NWKW
	600	H	—	—	400	500	—	DH366NDKW <sup>2</sup>	DH366NPKW	DH366NWKW
	800	L	—	—	500	500	—	DH367NDKW <sup>2</sup>	DH367NPKW	DH367NWKW

#### DH361UWKW



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

System	Ampere Rating	Maximum Horsepower Ratings						NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		Single-Phase AC		Three-Phase AC		DC				
		480V	600V	480V	600V	250V	600V			
<b>Three-Pole—600 Vac, 250 Vdc <sup>1</sup> (Suitable for Service Entrance Use with a Neutral or Ground Lug Kit Installed)</b>										
	30	7-1/2	10	20	30	5	—	DH361UDKW <sup>2</sup>	—	DH361UWKW
	60	20	25	50	60	10	—	DH362UDKW <sup>2</sup>	—	DH362UWKW
	100	40	50	75	100	20	—	DH363UDKW <sup>2</sup>	—	DH363UWKW
	200	50	50	125	150	40	—	DH364UDKW <sup>2</sup>	—	DH364UWKW
	400	—	—	250	350	50	—	DH365UDKW <sup>2</sup>	DH365UPKW	DH365UWKW
	600	—	—	400	500	—	—	DH366UDKW <sup>2</sup>	DH366UPKW	DH366UWKW
	800	—	—	500	500	—	—	DH367UDKW <sup>2</sup>	DH367UPKW	DH367UWKW

#### Notes

<sup>1</sup> For two-pole applications, use outside poles of three-pole switch.

<sup>2</sup> NEMA 12 enclosures (30–800A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.

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 replaceable. Higher ampere ratings will continue to be manufactured with a non-replaceable epoxy affixed design with visible blade verification only.

# 1.1

## Switching Devices

### Safety Switches

1

DH324NDKLW



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

Maximum Horsepower Ratings with Time Delay Fuses  
AC

System	Ampere Rating	Fuse Class Provision	Standard Fuse		Time Delay		DC 250V	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase	Three-Phase	Single-Phase	Three-Phase				
<b>Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc<sup>1</sup></b>										
	30	H	—	3	—	7-1/2	—	DH321NDKW <sup>2</sup>	—	DH321NWKW
	60	H	—	7-1/2	—	15	—	DH322NDKW <sup>2</sup>	—	DH322NWKW
	100	H	—	15	—	30	20	DH323NDKW <sup>2</sup>	—	DH323NWKW
	200	H	—	25	—	60	—	DH324NDKLW <sup>2</sup>	—	DH324NWKW
	400	H	—	50	—	125	50	DH325NDKLW <sup>2</sup>	DH325NPKLW	DH325NWKW
	600	H	—	75	—	200	—	DH326NDKLW <sup>2</sup>	DH326NPKLW	DH326NWKW

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

Maximum Horsepower Ratings with Time Delay Fuses

System	Ampere Rating	Fuse Class Provision	Single-Phase AC		Three-Phase AC		DC 250V	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4 Enclosure Watertight, Painted Steel Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			480V	600V	480V	600V				
<b>Four-Wire (Three Blades, Three Fuses, S/N), 600 Vac—250 Vdc<sup>1</sup></b>										
	30	H	7-1/2	10	15	20	—	DH361NDKW <sup>2</sup>	—	DH361NWKW
	60	H	20	25	30	50	—	DH362NDKW <sup>2</sup>	—	DH362NWKW
	100	H	30	40	60	75	—	DH363NDKW <sup>2</sup>	—	DH363NWKW
	200	H	50	50	125	150	—	DH364NDKLW <sup>2</sup>	—	DH364NWKW
	400	H	—	—	250	350	—	DH365NDKLW <sup>2</sup>	DH365NPKLW	DH365NWKW
	600	H	—	—	400	500	—	DH366NDKLW <sup>2</sup>	DH366NPKLW	DH366NWKW

**Notes**

<sup>1</sup> For two-pole applications, use outside poles of three-pole switch.

<sup>2</sup> NEMA 12 enclosures (30–600A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.

Effective August 2003, 30–100A window switches are replaced by a full view window that allows blade position verification and blown fuse indication. See table on **Page V2-T1-18** for catalog numbers.

EnviroLine/Receptacle Switch



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200% Neutral Safety Switches . . . . .	V2-T1-87
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### EnviroLine—Receptacle Switches

#### Product Description

These heavy-duty switches are pre-wired and interlocked to polarized receptacles for three-phase, three-wire, grounded type power plugs. 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 30–100A, 600 Vac, NEMA 12/3R, 4X stainless steel enclosures.

- 30–100A
- Power plugs not supplied with the receptacle

#### Application Description

These are used for portable power applications such as welders, infrared ovens, batch feeders, conveyors, truck and marine docks.

#### Standards and Certifications

- Upper and lower window UL listed and NEMA approved
- UL 98
- UL listed under Section 508
- UL listed File No. E165150 and E5239



# 1.1

## Switching Devices

### Safety Switches

1

#### Product Selection

600 Vac Heavy-Duty, Single-Throw with Receptacle, Fusible, Non-Fusible

DH362FDK2WR



#### Safety Switch with Receptacle K-Series, Three-Pole, 600 Volt Fuse Clips—Fusible

Ampere Rating		Power Plug	NEMA 12/3R Enclosure	NEMA 4X Enclosure
Switch	Receptacle		Catalog Number	Catalog Number
<b>Crouse-Hinds ARKTITE® Receptacle</b>				
		Accepts Crouse-Hinds®		
30	30	<b>APJ3485</b>	<b>DH361FDK2WR</b>	<b>DH361FWK2WR</b>
60	60	<b>APJ6485</b>	<b>DH362FDK2WR</b>	<b>DH362FWK2WR</b>
100	100	<b>APJ10487</b>	<b>DH363FDK2WR</b>	<b>DH363FWK2WR</b>
<b>M-R-S (Russellstoll) MAX-GARD® Receptacle</b>				
		Accepts Russellstoll		
30	30	<b>DS3404MP</b>	<b>DH361FD3WRK</b>	<b>DH361FW3WRK</b>
60	60	<b>DS6404MP</b>	<b>DH362FD3WRK</b>	<b>DH362FW3WRK</b>
100	100	<b>DS1404MP</b>	<b>DH363FD3WRK</b>	<b>DH363FW3WRK</b>
<b>Appleton POWERTITE® Receptacle</b>				
		Accepts Appleton		
30	30	<b>ACP3034BC</b>	<b>DH361FD5WRK</b>	<b>DH361FW5WRK</b>
60	60	<b>ACP6034BC</b>	<b>DH362FD5WRK</b>	<b>DH362FW5WRK</b>
100	100	<b>ACP1034CD</b>	<b>DH363FD5WRK</b>	<b>DH363FW5WRK</b>

#### Safety Switch with Receptacle K-Series, Three-Pole, 600 Volt Fuse Clips—Non-Fusible

Ampere Rating		Power Plug	NEMA 12/3R Enclosure	NEMA 4X Enclosure
Switch	Receptacle		Catalog Number	Catalog Number
<b>Crouse-Hinds ARKTITE Receptacle</b>				
		Accepts Crouse-Hinds		
60	60	<b>APJ6485</b>	<b>DH362UDK2WR</b>	<b>DH362UWK2WR</b>
<b>Appleton POWERTITE Receptacle</b>				
		Accepts Appleton		
30	30	<b>ACP3034BC</b>	<b>DH361UD5WRK</b>	—
60	60	<b>ACP6034BC</b>	<b>DH362UD5WRK</b>	<b>DH362UW5WRK</b>

#### Notes

Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for additional options including viewing windows and other receptacle manufacturers. Power plugs are not available through Eaton.

EnviroLine/Non-Metallic KRYDON Switch



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### EnviroLine—Non-Metallic KRYDON Switch

#### Product Description

This switch has a KRYDON™ enclosure. These are compression molded fiberglass reinforced polyester enclosure, which is capable of withstanding almost any corrosive environment. Ratings are 30–200A, 240–600 Vac, fusible and non-fusible. Enclosure is NEMA 4X rated.

#### Features

- 30–200A
- KRYDON high-impact strength fiberglass reinforced polyester material
- Horsepower rated
- Suitable for service entrance use
- Fusible and non-fusible

#### Standards and Certifications

- Upper and lower window UL listed and NEMA approved
- UL 98
- UL listed under Section 508
- UL listed File No. E165150 and E5239



# 1.1

## Switching Devices

### Safety Switches

1

#### Product Selection

DH361UCK



#### 240 Vac Heavy-Duty Non-Metallic Fusible

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings				DC 250V	NEMA 4X Enclosure Corrosion-Resistant, Non-Metallic Catalog Number
			AC Standard Fuse		Time Delay			
			Single-Phase	Three-Phase	Single-Phase	Three-Phase		
<b>Three-Pole, 240 Vac—250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>								
	30	H	1-1/2	3	—	7-1/2	—	DH321FCK
	60	H	3	7-1/2	—	15	—	DH322FCK
	100	H	7-1/2	15	—	30	20	DH323FCK
	200	H	15	25	—	60	40	DH324FCK
<b>Four-Wire (Three Blades, Three Fuses, S/N), 240 Vac—250 Vdc</b>								
	30	H	—	3	—	7-1/2	—	DH321NCK
	60	H	—	7-1/2	—	15	—	DH322NCK
	100	H	—	15	—	30	20	DH323NCK
	200	H	—	25	—	60	—	DH324NCK

#### 240 Vac Heavy-Duty Non-Metallic Fusible

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						NEMA 4X Enclosure Corrosion-Resistant, Non-Metallic Catalog Number
			Single-Phase AC		Three-Phase AC		DC		
			480V	600V	480V	600V	250V	600V	
<b>Three-Pole, 480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	15	20	—	—	DH361FCK
	60	H	20	25	30	50	—	—	DH362FCK
	100	H	30	30	60	75	—	—	DH363FCK
	200	H	50	50	125	150	—	—	DH364FCK
<b>Four-Wire (Three Blades, Three Fuses, S/N), 480 Vac—600 Vac, 250 Vdc</b>									
	30	H	7-1/2	10	15	20	—	—	DH361NCK
	60	H	20	25	30	50	—	—	DH362NCK
	100	H	30	30	60	75	—	—	DH363NCK
	200	H	50	50	125	150	—	—	DH364NCK

#### 240 Vac Heavy-Duty Non-Metallic Non-Fusible 277/480–600V

System	Ampere Rating	Maximum Horsepower Ratings with Time Delay Fuses						DC 250V	DC 600V	NEMA 4X Enclosure Corrosion-Resistant, Non-Metallic Catalog Number
		Single-Phase AC			Three-Phase AC					
		240V	480V	600V	240V	480V	600V			
<b>Three-Pole, 480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	3	7-1/2	10	10	20	30	5	—	DH361UCK
	60	10	20	25	20	50	60	10	—	DH362UCK
	100	20	40	50	40	75	100	20	—	DH363UCK
	200	15	50	50	60	125	150	40	—	DH364UCK

**Note**

30A heavy-duty switches with Type J fuse provisions are available from the factory only. See table on **Page V2-T1-18** for catalog numbers.

Shunt Trip Safety Switch



### Shunt Trip Safety Switch

#### Product Description

Eaton's tried and true heavy-duty safety switch line expands to include shunt trip capability—remote switching and visible means of disconnect for commercial and industrial applications.

The shunt trip technology enhances safety by providing a means to open a safety switch electronically. When using an emergency stop, safety interlock or similar means, the remote operation capability of the shunt trip switch no longer requires personnel to manually open the switch with the handle, enhancing safety and improving productivity.

The shunt trip safety switch builds on Eaton's extensive portfolio of safety switch solutions, incorporating a side-handle operation mechanism and visible blade indication that have decades of successful installation and operation.

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#### Application Description

The shunt trip safety switch can be configured to meet the needs of safety applications in industrial and commercial environments. The switches can be signaled to electronically operate the trip mechanism and interrupt the flow of power when a defined electrical condition is detected via protection relay (for example, ground fault, undervoltage, blown fuse shutdown).

#### Application Examples

- E-stop
- Safety interlocking
- Machinery OEM interlocking
- Remote opening (distant from switch)
- Cost-effective solution for high-interrupt applications
- Ground fault <sup>1</sup>
- Phase reversal / phase loss <sup>1</sup>
- Blown fuse shutdown <sup>1</sup>
- Undervoltage release <sup>1</sup>

#### Note

<sup>1</sup> Shunt trip switch provides solenoid/coil to facilitate shunt trip, specific relay and applicable power supply provided by others.

# 1.1

## Switching Devices

### Safety Switches

1

#### Features

- Variety of coil voltages available
- Visible means of disconnect
- Standard heavy-duty safety switch design with integrated shunt trip module
- Passes Class 1 ground fault testing (1200% opening)
- 30–800 A (240–600 Vac)<sup>1</sup>
- Horsepower ratings are the same as Eaton's standard heavy-duty safety switches
- Fusible devices have short-circuit ratings of up to 200 kAIC

#### Options

Flex Center modifications available, such as viewing windows, pilot lights and more.

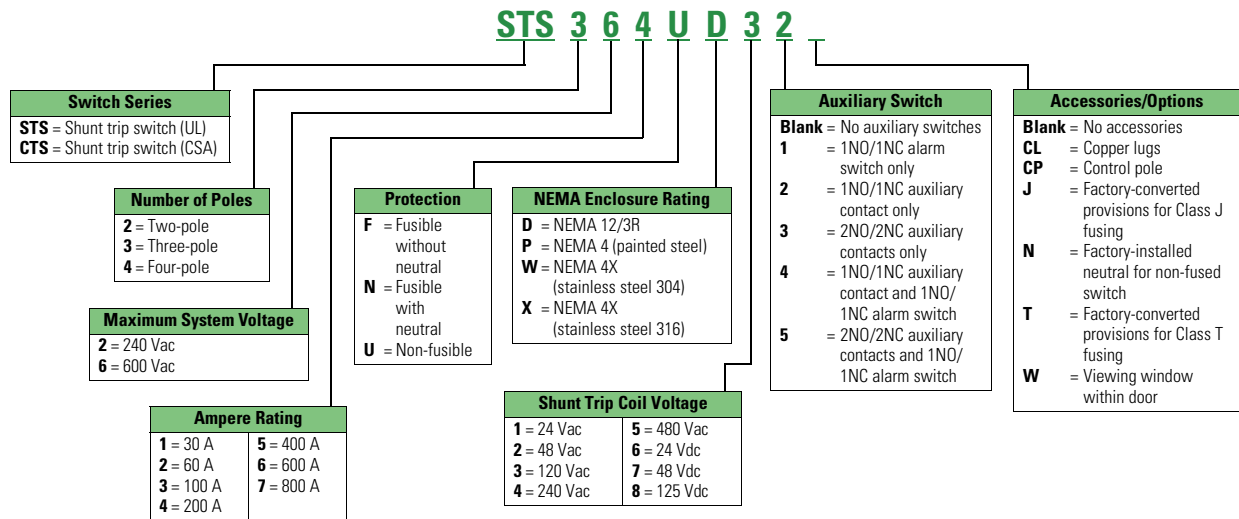
#### Standards and Certifications

- UL 98 file number E5239 (600 Vac maximum)
- CSA C22.2 No. 4, file number LL69743 (600 Vac maximum)
- Enclosure ratings: NEMA 12/3R, 4 (painted steel), 4X (stainless steel)



#### Catalog Number Selection

##### Shunt Trip Safety Switch



#### Note

<sup>1</sup> Contact factory for availability of 1200 A switch.



### Technical Data and Specifications

#### Shunt Trip Safety Switch—240 Vac and 600 Vac—Ratings

Ampere Rating	Fuse Class <sup>1</sup>	Number of Poles
<b>Fusible</b>		
30	H	2, 3 or 4 <sup>2</sup>
60	H	2, 3 or 4 <sup>2</sup>
100	H	2, 3 or 4 <sup>2</sup>
200	H	2, 3 or 4
400	H	2, 3 or 4
600	H	2, 3
800	L	2, 3
<b>Non-Fusible</b>		
30	—	2, 3 or 4 <sup>2</sup>
60	—	2, 3 or 4 <sup>2</sup>
100	—	2, 3 or 4 <sup>2</sup>
200	—	2, 3 or 4
400	—	2, 3 or 4
600	—	2, 3
800	—	2, 3

#### Terminal/Lug Wire Range

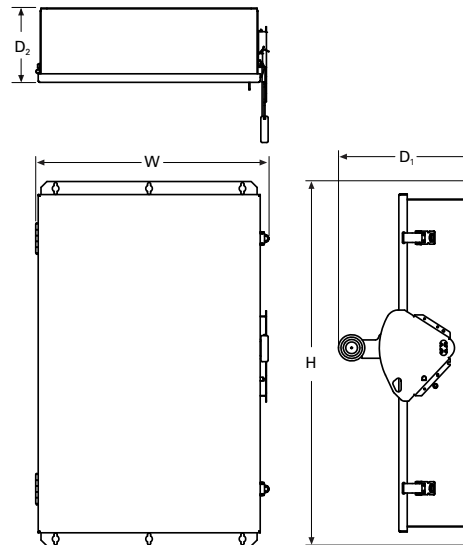
Ampere Rating	Minimum—Maximum	Wire Type
30	#14–#2	Cu/Al
60	#14–#2	Cu/Al
100	#14–1/0	Cu/Al
200	#6–300 kcmil	Cu/Al
400	(2) 1/0–300 kcmil or (1) 1/0–750 kcmil	Cu/Al
600	(1) #2–600 kcmil and (1) 1/0–750 kcmil	Cu/Al
800	(4) 1/0–750 kcmil	Cu/Al

### Dimensions

Approximate Dimensions in Inches (mm)

#### Shunt Trip Safety Switch—240 Vac and 600 Vac

Ampere Rating	Enclosure Dimensions <sup>3</sup> , Exterior			Depth (D <sub>2</sub> )
	Height (H)	Width (W)	Depth (D <sub>1</sub> )	
<b>Fusible</b>				
30	21.58 (548.1)	11.58 (294.1)	11.43 (290.3)	5.58 (141.7)
60	21.58 (548.1)	11.58 (294.1)	11.43 (290.3)	5.58 (141.7)
100	24.95 (633.7)	14.89 (378.2)	11.51 (282.4)	5.58 (141.7)
200	35.38 (898.7)	20.11 (510.8)	11.61 (294.9)	6.45 (163.8)
400	57.47 (1459.7)	27.29 (693.2)	12.43 (315.7)	7.42 (188.5)
600	62.97 (1599.4)	28.29 (718.6)	12.43 (315.7)	7.42 (188.5)
800	71.72 (1821.7)	29.54 (750.3)	12.43 (315.7)	7.42 (188.5)
<b>Non-Fusible</b>				
30	21.58 (548.1)	11.58 (294.1)	11.43 (290.3)	5.58 (141.7)
60	21.58 (548.1)	11.58 (294.1)	11.43 (290.3)	5.58 (141.7)
100	24.95 (633.7)	14.89 (378.2)	11.51 (282.4)	5.58 (141.7)
200	35.38 (898.7)	20.11 (510.8)	11.61 (294.9)	6.45 (163.8)
400	57.47 (1459.7)	27.29 (693.2)	12.43 (315.7)	7.42 (188.5)
600	62.97 (1599.4)	28.29 (718.6)	12.43 (315.7)	7.42 (188.5)
800	71.72 (1821.7)	29.54 (750.3)	12.43 (315.7)	7.42 (188.5)



#### Notes

- <sup>1</sup> Class H fuse clips supplied as standard on fusible devices 30–600 A, Class L for 800 A; Class R, J, T fuse clips available.
  - <sup>2</sup> Four-pole devices are wider than dimension for 30, 60 and 100 A devices. Consult factory for details.
  - <sup>3</sup> Accurate for all enclosure NEMA type ratings—12/3R, 4, 4X stainless steel.
- For additional technical information, please refer to Technical Data TD008003EN.

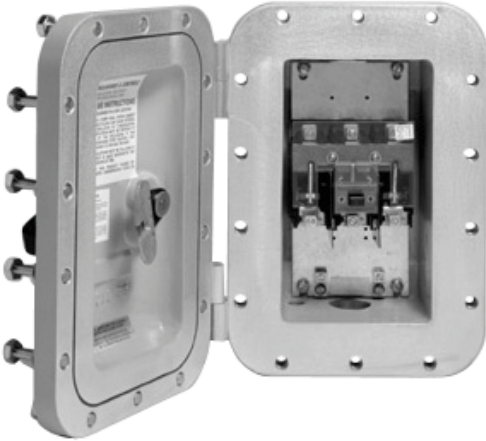
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## Switching Devices

### Safety Switches

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DS361UX



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### NEMA 7/9—Hazardous Location Disconnect Switch

#### Product Description

Eaton's Type DS switch is used as the switching device. Ratings are 30–100A, 600 Vac, fusible and non-fusible.

#### Application Description

The cast aluminum enclosure is ideally suited for harsh industrial applications including petrochemical facilities, mining operations, pharmaceutical plants and wastewater treatment facilities.

#### Features

- 30–100A
- 600 Vac fusible and non-fusible
- See **Page V2-T1-66** for information
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

#### Standards and Certifications

- Upper and lower window UL listed and NEMA approved
- UL 98
- UL listed under Section 508
- UL listed File No. E165150 and E5239

#### Compliances

<b>UL Classified— Standard 886 File No. E84577</b>	<b>CSA Certified— Standard C22.2 File No. LR 42131-6</b>
Class I, Division 1 and 2, Groups B, C and D	Class I, Division 1 and 2, Groups B, C and D
Class II, Division 1 and 2, Groups E, F and G	Class II, Division 1 and 2, Groups E, F and G
Class III, Division 1 and 2	Class III, Division 1 and 2
NEMA 7/9	NEMA 7/9
Zone 1, IIB + H <sub>2</sub>	Zone 1, IIB + H <sub>2</sub>



### Product Selection

#### DS361UX



#### NEMA 7/9 Enclosure Sizes—Fusible

Ampere Rating	Maximum Horsepower Ratings			Fuse Class Provision	Number of Poles	Voltage	Enclosure Number	Catalog Number
	Three-Phase AC 480V	600V	DC 250V					
30	15	20	5	J	3	600 Vac, 125/250 Vdc	1	DS361FX
60	30	50	10	J	3	600 Vac, 125/250 Vdc	2	DS362FX
100	60	75	20	J	3	600 Vac, 125/250 Vdc	3	DS363FX

#### NEMA 7/9 Enclosure Sizes—Non-Fusible

Ampere Rating	Maximum Horsepower Ratings			Fuse Class Provision	Number of Poles	Voltage	Enclosure Number	Catalog Number
	Three-Phase AC 480V	600V	DC 250V					
30	15	20	5	—	3	600 Vac, 125/250 Vdc	1	DS361UX
60	30	50	10	—	3	600 Vac, 125/250 Vdc	1	DS362UX
100	60	75	20	—	3	600 Vac, 125/250 Vdc	2	DS363UX

### Dimensions

Approximate Dimensions in Inches (mm)

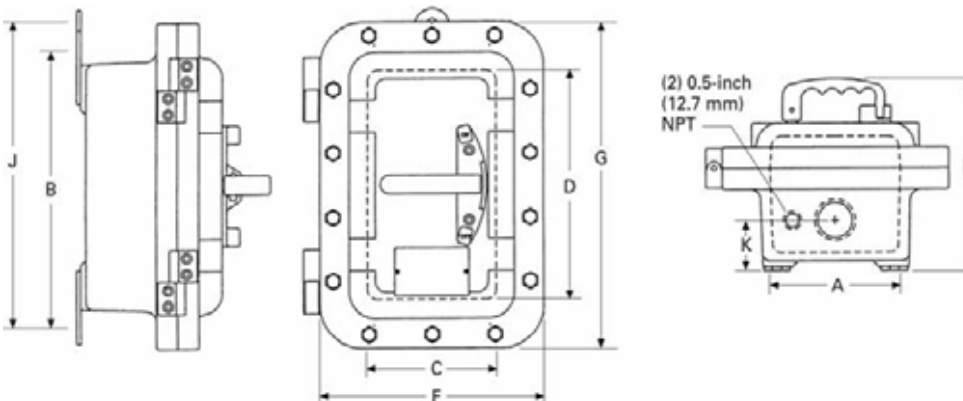
#### NEMA 7/9 Enclosure Sizes

Catalog Number	Standard Conduit Size
DS361FX	1.50 (38.1)
DS362FX	2.00 (50.8)
DS363FX	2.50 (63.5)
DS361UX	1.50 (38.1)
DS362UX	1.50 (38.1)
DS363UX	2.00 (50.8)

#### NEMA 7/9 <sup>1</sup>

Enclosure Number	Mounting Dimensions			Inside Dimensions			Outside Dimensions			Number of Outlets	Dimension K	Approximate Weight Lbs (kg)
	A	B	J	C	D	F	G	H				
1	5.50 (139.7)	13.13 (333.5)	14.13 (358.9)	5.94 (150.9)	10.75 (273.1)	10.63 (270.0)	15.25 (387.4)	8.84 (224.5)	2	2.00 (50.8)	38 (17)	
2	6.00 (152.4)	18.00 (457.2)	19.00 (482.6)	6.50 (165.1)	16.00 (406.4)	11.00 (279.4)	20.50 (520.7)	8.97 (227.8)	2	2.31 (58.6)	57 (26)	
3	10.25 (260.4)	22.63 (574.8)	—	11.75 (298.4)	20.00 (508.0)	16.38 (416.1)	25.13 (638.3)	9.59 (243.6)	2	3.50 (88.9)	104 (47)	

#### NEMA 7/9—30-100A <sup>2</sup>



#### Notes

<sup>1</sup> Accessories and modifications shown on Pages V2-T1-16 through V2-T1-19 are NOT applicable to NEMA 7/9 disconnect switches.

<sup>2</sup> Dual three- and four-point mounting available as standard on enclosures 1 and 2.

# 1.1

## Switching Devices

### Safety Switches

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DH3665NURKLP and Quick Connect Double Throw Switches



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Flange Mounted—Variable Depth . . . . .	V2-T1-98
Flange Mounted—Fixed Depth . . . . .	V2-T1-102

### Quick Connect Switches

#### Product Description

**240V, 600 Vac Heavy-Duty, Single-Throw with Cam-Lok or Posi-Lok Receptacles, Fusible, Non-Fusible**

- 30–800A
- NEMA 1 or 3R enclosures
- Provision for 200% neutral
- Non-magnetic metal mounting plate
- Crouse-Hinds “J” Power Series E1015, E1016, E1017 cam connectors
- Crouse-Hinds E200, E400 Posi-Lok panels
- Connector plugs are typically not provided, but may be special ordered

#### Features

Eaton’s individual cable connector receptacle switches provide a convenient and safe way to quickly connect and disconnect portable equipment. The load side terminals are factory wired to individual receptacles located behind an interlocked door for added safety. The switch cannot be turned to the ON position without first closing the receptacle compartment door.

A spring-loaded flap door in the receptacle compartment allows the cables to exit the compartment, but seals the compartment when the switch is not in use. For outdoor applications, this will reduce the possibility of insects building nests in the receptacle compartment.

- Available in double-throw and single-throw designs
- Single-throw receptacles can wire to line or load side
- Service entrance rated

An additional flap door on the main compartment allows for quick connection in the event that the appropriate plugs are not readily available.

#### Standards and Certifications

- UL listed File No. E5239
- UL listed short-circuit rating of 10,000A rms symmetrical

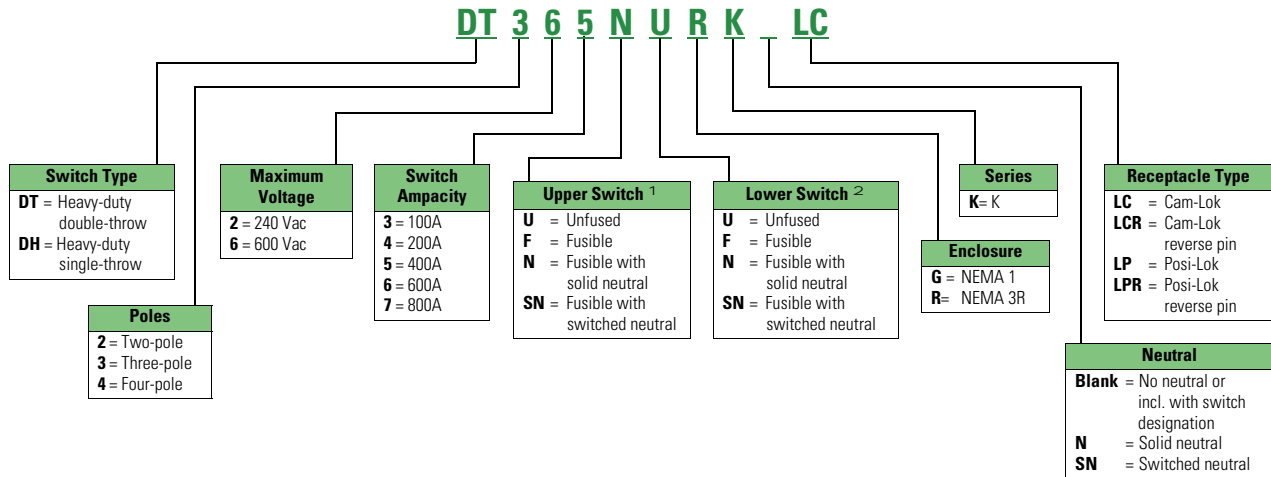


#### Product Selection

For price and availability, contact the Switching Device Flex Center at 1-888-329-9272 or FlexSwitches@eaton.com.

### Catalog Number Selection

#### Quick Connect Double-Throw



#### Notes

- <sup>1</sup> When upper and lower switches are the same, the switch configuration is consolidated in one letter (e.g., "U" not "UU"). Also, a switch with a neutral will have either a solid neutral or a switched neutral, not both. Lastly, a switched neutral pole is never fused.
- <sup>2</sup> This field is only used when a switch is completely non-fused.

**This table is intended for use in breaking down existing catalog numbers. It is not intended for building new catalog numbers.**

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## Switching Devices

### Safety Switches

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#### Solar Disconnect Switch



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#### Solar Disconnect Switch

##### Product Description

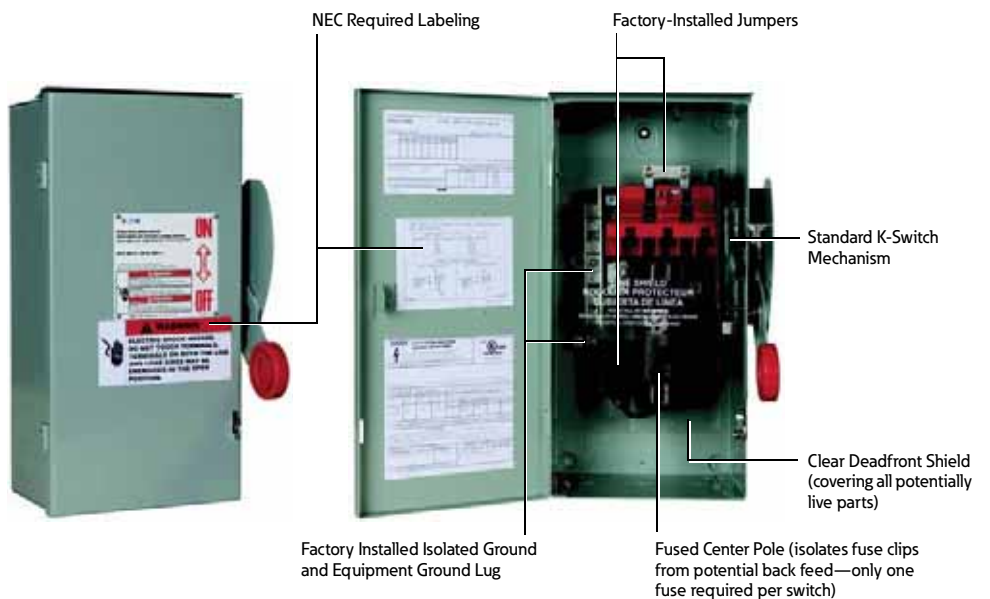
##### 600 Vdc Heavy-Duty Fusible and Non-Fusible

- 30–600A
- Single-pole switch capable of switching 1-600 Vdc circuit

##### Features

- Clear line-shield covering all live parts
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

##### 600 Vdc Heavy-Duty Fusible and Non-Fusible



### Standards and Certifications

- UL 98 listed, File No. E5239 and marked suitable for NEC Article 690 applications to UL 1741



### Product Selection

#### NEMA 3R

Ampere Rating	Catalog Number	Fuse Class
30	DH161NRK	R
30	DH161URKN	R
60	DH162NRK	R
60	DH162URKN	R
100	DH163NRK	R
100	DH163URKN	R
200	DH164NRK	R
200	DH164URKN	R
400	DH165NRK	R
400	DH165URKN	R
600	DH166NRK	R
600	DH166URKN	R

#### NEMA 4X

Ampere Rating	Catalog Number	Fuse Class
30	DH161NWK	R
30	DH161UWKN	R
60	DH162NWK	R
60	DH162UWKN	R
100	DH163NWK	R
100	DH163UWKN	R
200	DH164NWK	R
200	DH164UWKN	R
400	DH165NWK	R
400	DH165UWKN	R
600	DH166NWK	R
600	DH166UWKN	R

#### NEMA 12

Ampere Rating	Catalog Number	Fuse Class
30	DH161NDK	R
30	DH161UDKN	R
60	DH162NDK	R
60	DH162UDKN	R
100	DH163NDK	R
100	DH163UDKN	R
200	DH164NDK	R
200	DH164UDKN	R
400	DH165NDK	R
400	DH165UDKN	R
600	DH166NDK	R
600	DH166UDKN	R

# 1.1

## Switching Devices

### Safety Switches

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DH362NWK316



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### 316-Grade Stainless Steel Safety Switches

#### Product Description

Premium 316-Grade stainless steel enclosures are available through the Flex Center. In general, 316-Grade stainless steel offers better corrosion resistance in the presence of most chemicals, salts and acids, and is more resistant to marine atmospheres. Pitting corrosion is also reduced in environments where brines, halogen salts and chlorides are present. 316-Grade stainless steel is often a desirable choice for waste-water treatment plants and petrochemical facilities.

#### Features

- Stainless steel enclosure (316-Grade)
- 30–1200A
- Horsepower rated
- Suitable for service entrance use
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

#### Standards and Certifications

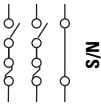
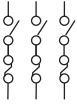
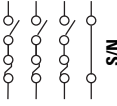
- UL listed File No. E5239





### Product Selection

#### 240 Vac Fusible—316 Grade Stainless Steel NEMA 4X

System	Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings		Time Delay Single-Phase	Three-Phase	DC 250V	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Standard Fuse Single-Phase	Three-Phase				
<b>Three-Wire (Two Blades, Two Fuses, S/N) – 240 Vac, 250 Vdc</b>								
	30	H	1-1/2	3 <sup>1</sup>	3	7-1/2 <sup>1</sup>	5	DH221NWK316
	60	H	3	7-1/2 <sup>1</sup>	10	15 <sup>1</sup>	10	DH222NWK316
	100	H	7-1/2	15 <sup>1</sup>	15	30 <sup>1</sup>	20	DH223NWK316
	200	H	15	25 <sup>1</sup>	15	60 <sup>1</sup>	40	DH224NWK316
	400	H	—	50 <sup>1</sup>	15	125 <sup>1</sup>	50	DH225NWK316
	600	H	—	75 <sup>1</sup>	—	200 <sup>1</sup>	—	DH226NWK316
	800	L	—	100 <sup>1</sup>	—	—	—	DH227NWK316
<b>Three-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>								
	30	H	1-1/2	3	—	7-1/2	—	DH321FWK316
	60	H	3	7-1/2	—	15	—	DH322FWK316
	100	H	7-1/2	15	—	30	20 <sup>2</sup>	DH323FWK316
	200	H	15	25	—	60	40	DH324FWK316
	400	H	—	50	—	125	50	DH325FWK316
	600	H	—	75	—	200	—	DH326FWK316
	800	L	—	100	—	250	—	DH327FWK316
1200	L	—	—	—	—	—	DH328FWK316	
<b>Four-Wire (Three Blades, Three Fuses, S/N) – 240 Vac, 250 Vdc</b>								
	30	H	—	3	—	7-1/2	—	DH321NWK316
	60	H	—	7-1/2	—	15	—	DH322NWK316
	100	H	—	15	—	30	20	DH323NWK316
	200	H	—	25	—	60	—	DH324NWK316
	400	H	—	50	—	125	50	DH325NWK316
	600	H	—	75	—	200	—	DH326NWK316
	800	L	—	100	—	250	—	DH327NWK316
1200	L	—	—	—	—	—	DH328NWK316	

#### Notes

<sup>1</sup> Grounded B phase ratings, UL listed.

<sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

Operating mechanism is standard plated steel. For type 304 stainless steel operating mechanism, contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com).

# 1.1

## Switching Devices



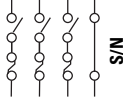
### Safety Switches

1

DH362NWK316




#### 600 Vac Fusible—316 Grade Stainless Steel NEMA 4X

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC		DC		
			480V	600V	480V	600V	250V	600V	
<b>Two-Pole—480 Vac—600 Vac or DC<sup>1</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	—	—	—	15	DH261FWK316
	60	H	20	25	—	—	—	25	<sup>2</sup> or <sup>3</sup>
	100	H	30	40	—	—	20	—	<sup>2</sup> or <sup>3</sup>
	200	H	50	50	—	—	—	50	DH264FWK316
	400	H	—	—	—	—	50	—	<sup>2</sup> or <sup>3</sup>
	600	H	—	—	—	—	—	—	<sup>2</sup> or <sup>3</sup>
	800	L	—	—	—	—	—	—	<sup>2</sup> or <sup>3</sup>
	1200	L	—	—	—	—	—	—	<sup>3</sup>
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>									
	30	H	7-1/2	10	15	20	—	—	DH361FWK316
	60	H	20	25	30	50	—	—	DH362FWK316
	100	H	30	40	60	75	—	—	DH363FWK316
	200	H	50	50	125	150	—	—	DH364FWK316
	400	H	—	—	250	350	—	—	DH365FWK316
	600	H	—	—	400	500	—	—	DH366FWK316
	800	L	—	—	500	500	—	—	DH367FWK316
	1200	L	—	—	—	—	—	—	DH368FWK316
<b>Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc</b>									
	30	H	7-1/2	10	15	20	—	—	DH361NWK316
	60	H	20	25	30	50	—	—	DH362NWK316
	100	H	30	40	60	75	—	—	DH363NWK316
	200	H	50	50	125	150	—	—	DH364NWK316
	400	H	—	—	250	350	—	—	DH365NWK316
	600	H	—	—	400	500	—	—	DH366NWK316
	800	L	—	—	500	500	—	—	<sup>3</sup>
	1200	L	—	—	—	—	—	—	DH368NWK316

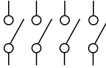
**Notes**

- <sup>1</sup> DC rating for 400–800A switches is 250V.
- <sup>2</sup> Use three-pole catalog numbers below for 600 Vac, 250 Vdc maximum applications. For 600 Vdc, see note <sup>3</sup>.
- <sup>3</sup> Contact the Safety Switch Flex Center (**1-888-329-9272** or FlexSwitches@eaton.com) for availability of this product.

### 600 Vac Non-Fusible Three-Pole—316 Grade Stainless Steel NEMA 4X

System	Ampere Rating	Maximum Horsepower Ratings						DC		NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		Single-Phase AC			Three-Phase AC			250V	600V	
		240V	480V	600V	240V	480V	600V			
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>										
	30	3	7-1/2	10	10	20	30	5	—	DH361UWK316
	60	10	20	25	20	50	60	10	—	DH362UWK316
	100	20	40	50	40	75	100	20	—	DH363UWK316
	200	15	50	50	60	125	150	40	—	DH364UWK316
	400	—	—	—	125	250	350	50	—	DH365UWK316
	600	—	—	—	200	400	500	—	—	DH366UWK316
	800	—	—	—	—	500	500	—	—	DH367UWK316
	1200	—	—	—	—	—	—	—	—	DH368UWK316

### 600 Vac Non-Fusible Four-Pole—316 Grade Stainless Steel NEMA 4X

System	Ampere Rating	Maximum Horsepower Ratings						DC		NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
		Two-Phase AC			Three-Phase AC			250V	600V	
		240V	480V	600V	240V	480V	600V			
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>										
	30	10	20	25	10	20	30	5	—	DH461UWK316
	60	20	40	50	20	50	60	10	—	1
	100	40	50	50	40	75	100	20	—	1
	200	50	50	50	60	125	150	40	—	1
	400	50	—	—	125	250	350	—	—	1
	600	—	—	—	200	400	500	—	—	1
	800	—	—	—	—	—	—	—	—	1

**Note**

<sup>1</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.

# 1.1

## Switching Devices

### Safety Switches

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DH361FWK-GCL



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EnviroLine—Upper and Lower Window Switches . . . . .	<b>V2-T1-56</b>
EnviroLine—Receptacle Switches . . . . .	<b>V2-T1-59</b>
EnviroLine—Non-Metallic KRYDON Switch . . . . .	<b>V2-T1-61</b>
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Flange Mounted—Fixed Depth . . . . .	<b>V2-T1-102</b>

### Mill-Duty Rated, Heavy-Duty, Fusible, Non-Fusible, Single-Throw

#### Product Description

**240V, 600 Vac Heavy-Duty, Fusible, Non-Fusible, Single-Throw**

- 30–600A
- Horsepower rated
- Suitable for service entrance use
- Factory-installed copper ground lug
- Copper terminal lugs
- Fuse pullers through 200A
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

#### Standards and Certifications

- UL listed File No. E5239



### Product Selection

DH361FWK-GCL

#### Fusible



System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings with Time Delay Fuses						NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			AC		DC					
			Standard Fuse Single-Phase	Standard Fuse Three-Phase	Time Delay Single-Phase	Time Delay Three-Phase	250V	600V		
<b>Three-Pole—240 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed) <sup>1</sup></b>										
	30	H	1-1/2	3	—	7-1/2	—	—	DH321FDK-GCL <sup>2</sup>	DH321FWK-GCL
	60	H	3	7-1/2	—	15	—	—	DH322FDK-GCL <sup>2</sup>	DH322FWK-GCL
	100	H	7-1/2	15	—	30	20	—	DH323FDK-GCL <sup>2</sup>	<sup>3</sup>
	200	H	15	25	—	60	40	—	DH324FDK-GCL <sup>2</sup>	DH324FWK-GCL
	400	H	—	50	—	125	50	—	DH325FDK-GCL <sup>2</sup>	DH325FWK-GCL
	600	H	—	75	—	200	—	—	DH326FDK-GCL <sup>2</sup>	DH326FWK-GCL
<b>Two-Pole—480 Vac—600 Vac or DC <sup>5</sup> (Suitable for Service Entrance Use with a Neutral Kit Installed) <sup>1</sup></b>										
	30	H	7-1/2	10	—	—	—	15	DH261FDK-GCL <sup>2</sup>	DH261FWK-GCL
	60	H	20	25	—	—	—	25	DH262FDK-GCL <sup>2</sup>	<sup>3</sup> or <sup>4</sup>
	100	H	30	40	—	—	—	25	DH263FDK-GCL <sup>2</sup>	<sup>3</sup> or <sup>4</sup>
	200	H	50	50	—	—	—	50	DH264FDK-GCL <sup>2</sup>	DH264FWK-GCL
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed) <sup>1</sup></b>										
	30	H	7-1/2	10	15	20	—	—	DH361FDK-GCL <sup>2</sup>	DH361FWK-GCL
	60	H	20	25	30	50	—	—	DH362FDK-GCL <sup>2</sup>	DH362FWK-GCL
	100	H	30	40	60	75	—	—	DH363FDK-GCL <sup>2</sup>	DH363FWK-GCL
	200	H	50	50	125	150	—	—	DH364FDK-GCL <sup>2</sup>	DH364FWK-GCL
	400	H	—	—	250	350	—	—	DH365FDK-GCL <sup>2</sup>	DH365FWK-GCL
	600	H	—	—	400	500	—	—	DH366FDK-GCL <sup>2</sup>	DH366FWK-GCL

#### Non-Fusible 277/480–600V

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings						NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			AC		DC					
			Standard Fuse Single-Phase	Standard Fuse Three-Phase	Time Delay Single-Phase	Time Delay Three-Phase	250V	600V		
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc <sup>6</sup> (Suitable for Service Entrance use with a Neutral Kit Installed) <sup>1</sup></b>										
	30	—	7-1/2	10	20	30	5	—	DH361UDK-GCL <sup>2</sup>	DH361UWK-GCL
	60	—	20	25	50	60	10	—	DH362UDK-GCL <sup>2</sup>	DH362UWK-GCL
	100	—	40	50	75	100	20	—	DH363UDK-GCL <sup>2</sup>	DH363UWK-GCL
	200	—	50	50	125	150	40	—	DH364UDK-GCL <sup>2</sup>	DH364UWK-GCL
	400	—	—	—	250	350	50	—	DH365UDK-GCL <sup>2</sup>	DH365UWK-GCL
	600	—	—	—	400	500	—	—	DH366UDK-GCL <sup>2</sup>	DH366UWK-GCL

#### Notes

- <sup>1</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for copper neutrals.
- <sup>2</sup> NEMA 12 enclosures (30–600A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- <sup>3</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.
- <sup>4</sup> Use three-pole catalog numbers below for 600 Vac, 250 Vdc maximum applications. For 600 Vdc, see note <sup>3</sup>.
- <sup>5</sup> DC rating for 400–600A switches is 250V.
- <sup>6</sup> For two-pole applications, use outside poles of three-pole switch.

# 1.1

## Switching Devices

### Safety Switches

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DH361FRKCB



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### Heavy-Duty Fusible Safety Switches Accepting Cube Fuses

#### Product Description

#### 600 Vac Heavy-Duty, Fusible, Single-Throw

Cube fuses installed in a safety switch provide finger-safe protection, Class J time delay electrical performance with a smaller footprint than Class J or CC fusing, and blown fuse indication.

- 30–100A
- Horsepower rated
- For factory modifications, refer to **Pages V2-T1-16** through **V2-T1-19**

#### Standards and Certifications

- UL listed File No. E5239



### Product Selection

DH361FRKCB

#### Fusible 277/480–600V



System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings						NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC		DC 250V					
			480V	600V	480V	600V						
<b>Three-Pole—480 Vac—600 Vac, 250 Vdc (Suitable for Service Entrance Use with a Neutral Kit Installed)</b>												
	30	Cube	7-1/2	10	15	20	—	DH361FGKCB	DH361FRKCB	DH361FDKCB <sup>1</sup>	DH361FWKCB	
	60	Cube	20	25	30	50	—	DH362FGKCB	DH362FRKCB	DH362FDKCB <sup>1</sup>	DH362FWKCB	
	100	Cube	30	40	60	75	—	DH363FGKCB	DH363FRKCB	DH363FDKCB <sup>1</sup>	DH363FWKCB	

#### Fusible 277/480–600V

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings						NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	Blades, 3-Fuses S/N 480 Vac—600 Vac NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC		DC 250V					
			480V	600V	480V	600V						
<b>Four-Wire (Three Blades, Three Fuses, S/N) 480 Vac—600 Vac, 250 Vdc</b>												
	30	Cube	7-1/2	10	15	20	—	DH361NGKCB	DH361NRKCB	DH361NDKCB <sup>1</sup>	DH361NWKCB	
	60	Cube	20	25	30	50	—	DH362NGKCB	DH362NRKCB	DH362NDKCB <sup>1</sup>	DH362NWKCB	
	100	Cube	30	40	60	75	—	DH363NGKCB	DH363NRKCB	DH363NDKCB <sup>1</sup>	DH363NWKCB	

#### Fusible 277/480–600V

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings						NEMA 1 Enclosure Indoor Catalog Number	NEMA 3R Enclosure Rainproof Catalog Number	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	Vac—600 Vac, 250 Vac NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Two-Phase AC		Three-Phase AC		DC 250V					
			480V	600V	480V	600V						
<b>Four-Pole—480 Vac—600 Vac, 250 Vdc</b>												
	30	Cube	20	25	15	20	—	DH461FGKCB	<sup>1</sup>	<sup>1 2</sup>	<sup>2</sup>	
	60	Cube	40	50	30	50	—	DH462FGKCB	<sup>1</sup>	<sup>1 2</sup>	<sup>2</sup>	
	100	Cube	50	50	60	75	—	DH463FGKCB	<sup>1</sup>	DH463FDKCB <sup>1</sup>	<sup>2</sup>	

**Notes**

- <sup>1</sup> NEMA 12 enclosures (30–100A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.
- <sup>2</sup> Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for availability of this product.


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## Switching Devices

### Safety Switches

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#### Fusible with Window 277/480–600V

System	Ampere Rating	Fuse Class Provision	Maximum Horsepower Ratings				DC 250V/600V	NEMA 12 Enclosure Industrial, Dust-Tight Catalog Number	NEMA 4X Enclosure Corrosion-Resistant, Stainless Steel Catalog Number
			Single-Phase AC		Three-Phase AC				
			480V	600V	480V	600V			
<b>Four-Wire (Three Blades, Three Fuses, S/N), 600 Vac—250 Vdc <sup>1</sup></b>									
	30	Cube	7-1/2	10	15	20	—	DH361NDKWCB <sup>1</sup>	DH361NWKWCB
	60	Cube	20	25	30	50	—	DH362NDKWCB <sup>1</sup>	DH362NWKWCB
	100	Cube	30	40	60	75	—	DH363NDKWCB <sup>1</sup>	DH363NWKWCB

#### Notes

<sup>1</sup> NEMA 12 enclosures (30–100A) can be field modified to meet NEMA 3R rainproof requirements when a factory provided drain hole is opened.

Fuses are supplied as separate items.



**Elevator Control Switch**



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### Elevator Control Switch

#### Features, Benefits and Functions

##### Standard Features

- 30–400A, 600 Vac three-phase fused power switch
- 200,000A rms short-circuit current rating
- Shunt trip 120V
- Control power terminal block
- Ground lug per NEC
- Class J Fuse mounting only (Class J Fuses not included)
- Key to test switch 120V
- Mechanically interlocked auxiliary contact for hydraulic elevators with automatic recall (5A, 120 Vac rated) 1NO, 1NC

##### Optional Features

- Control power transformer with fuses and blocks
- Fire safety interface relay
- Pilot light—ON
- Isolated neutral lug (oversized 200% rated neutral option available where required by excessive nonlinear loads)
- Fire alarm voltage monitoring relay (to monitor shunt trip voltage)
- NEMA 3R, 4 and 12 enclosures available through 200A
- Phase failure and undervoltage relay available, consult factory
- For added protection, use Eaton fuse covers to improve maintenance personnel protection, through 200A (OSHA 1910.333, Paragraph C)

#### Standards and Certifications

- UL 98 Enclosed and Deadfront Switch Guide 96NK3917, File No. E182262
- NEMA 1, UL 50, listed enclosure
- cUL® per Canadian Standards C22.2, No. 0-M91-CAN/CSA® C22.2, No. 4-M89 Enclosed Switch



# 1.1

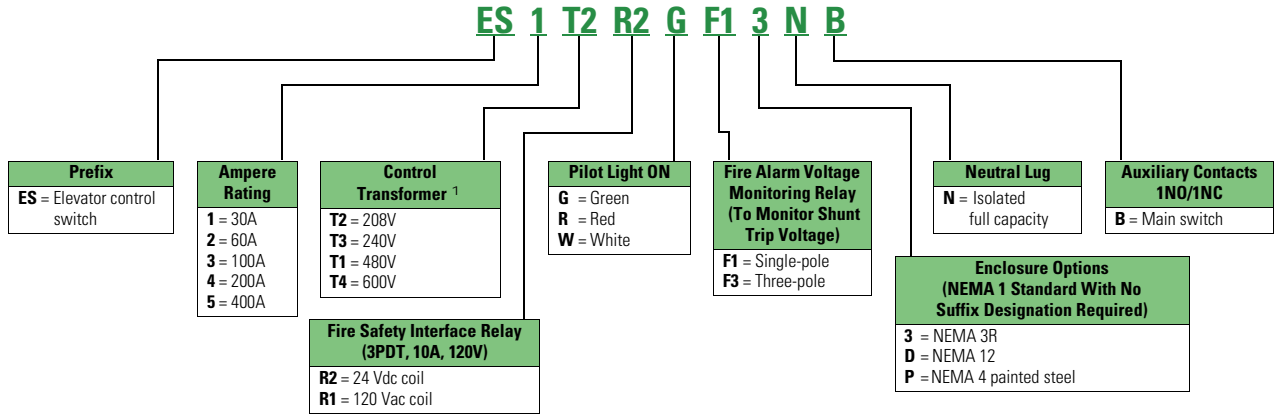
## Switching Devices

### Safety Switches

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#### Catalog Number Selection

#### Elevator Control Switch



#### Catalog Number Example: ES3T1R1GF3

- 100A S.T. switch 480V-3P—ES3
- 480–120V CPT—T1
- 120 Vac coil fire safety interface relay—R1
- Pilot light—ON (Green)—G
- Fire alarm voltage monitoring relay (three-pole)—F3

#### Technical Data and Specifications

#### Elevator Control Switch Maximum hp Rating—Sizing Based on Motor Type

Voltage Rating (Vac Three-Phase)	30A, ES1			60A, ES2			100A, ES3			200A, ES4			400A, ES5		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
208	5	5	3	10	10	10	20	15	15	40	40	30	—	—	—
240	5	5	5	10	10	10	20	20	15	50	40	30	—	—	—
280	10	10	10	30	25	20	50	40	30	100	75	75	—	—	—
600	15	15	10	30	30	25	60	50	40	125	100	100	—	—	—

#### Dimensions

Approximate Dimensions in Inches (mm)

#### Elevator Control Switch Dimensions and Lug Data

Ampere Rating	NEMA 1 <sup>1</sup>			NEMA 3R, 12 <sup>2</sup>			Lug Size <sup>3</sup>	Catalog Number
	Height	Width	Depth	Height	Width	Depth		
30	20.00 (508.0)	16.00 (406.4)	8.63 (219.2)	20.00 (508.0)	20.00 (508.0)	8.00 (203.2)	#14–#8 Al or Cu	ES1
60	20.00 (508.0)	16.00 (406.4)	8.63 (219.2)	20.00 (508.0)	20.00 (508.0)	8.00 (203.2)	#14–#2 Al or Cu	ES2
100	20.00 (508.0)	16.00 (406.4)	8.63 (219.2)	20.00 (508.0)	20.00 (508.0)	8.00 (203.2)	#8–1/0 Al or Cu	ES3
200	30.00 (762.0)	20.00 (508.0)	8.63 (219.2)	30.00 (762.0)	24.00 (609.6)	8.00 (203.2)	#6–250 kcmil Al or Cu	ES4
400	52.00 (320.8)	25.00 (635.0)	8.00 (203.2)	52.00 (1320.8)	25.00 (635.0)	8.00 (203.2)	(2) 1/0–(1) 750	ES5

#### Notes

- <sup>1</sup> Standard oversize enclosure to mount control power transformer fire safety interface relay and control terminal blocks.
- <sup>2</sup> Contact factory for dimensions for NEMA 4 enclosure.
- <sup>3</sup> Optional neutral lug size same as line and load.

DH323FRKA1240



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### Auxiliary Power Heavy-Duty Safety Switch

#### Product Description

NEC Article 210.63 requires that a 125V, single-phase, 15 or 20A rated receptacle outlet be installed at an accessible location for the servicing of heating, air-conditioning and refrigeration equipment. The receptacle must be located on the same level and within 25 ft (7.5m) of the heating, air-conditioning and refrigeration equipment. Eaton's heavy-duty safety switch is an ideal solution for these applications, including elimination of the need for running a separate 120V circuit to the rooftop.

#### Features

- 30–200A
- Horsepower rated
- NEMA 3R outdoor enclosure standard
- 15A ground fault receptacle standard
- For factory modifications, refer to **Pages V2-T1-16 through V2-T1-19**

#### Standards and Certifications

- UL listed File No. E5239



# 1.1

## Switching Devices

### Safety Switches

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#### Product Selection

#### Non-Fusible 208 Vac—240 Vac—480 Vac—600 Vac—Three-Pole

Ampere Rating	Maximum Horsepower Ratings						Catalog Number
	Single-Phase AC			Three-Phase AC			
	240V	480V	600V	240V	480V	600V	
<b>208 Vac</b>							
30	—	—	—	—	—	—	DH321URKA1208
60	—	—	—	—	—	—	DH322URKA1208
100	—	—	—	—	—	—	DH323URKA1208
200	—	—	—	—	—	—	DH324URKA1208
<b>240 Vac</b>							
30	3	—	—	10	—	—	DH321URKA1240
60	10	—	—	20	—	—	DH322URKA1240
100	20	—	—	40	—	—	DH323URKA1240
200	15	—	—	60	—	—	DH324URKA1240
<b>480 Vac</b>							
30	3	7-1/2	10	10	20	30	DH361URKA1480
60	10	20	25	20	50	60	DH362URKA1480
100	20	40	50	40	75	100	DH363URKA1480
200	15	50	50	60	125	150	DH364URKA1480
<b>600 Vac</b>							
30	3	7-1/2	10	10	20	30	DH361URKA1600
60	10	20	25	20	50	60	DH362URKA1600
100	20	40	50	40	75	100	DH363URKA1600
200	15	50	50	60	125	150	DH364URKA1600

DH323FRKA1240



#### Fusible 208 Vac—240 Vac—Three-Pole

Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings				Catalog Number
		AC		Time Delay		
		Standard Fuse Single-Phase	Three-Phase	Single-Phase	Three-Phase	
<b>208 Vac</b>						
30	H	—	—	—	—	DH321FRKA1208
60	H	—	—	—	—	DH322FRKA1208
100	H	—	—	—	—	DH323FRKA1208
200	H	—	—	—	—	DH324FRKA1208
<b>240 Vac</b>						
30	H	1-1/2	3	—	7-1/2	DH321FRKA1240
60	H	3	7-1/2	—	15	DH322FRKA1240
100	H	7-1/2	15	—	30	DH323FRKA1240
200	H	15	25	—	60	DH324FRKA1240

**Note**

Contact the Safety Switch Flex Center (1-888-329-9272 or FlexSwitches@eaton.com) for additional options, including 20A GFI receptacles.

**Fusible 480 Vac—600 Vac—Three-Pole**

Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings with Time Delay Fuses				Catalog Number
		Single-Phase AC		Three-Phase AC		
		480V	600V	480V	600V	
<b>480 Vac</b>						
30	H	7-1/2	10	15	20	DH361FRKA1480
60	H	20	25	30	50	DH362FRKA1480
100	H	30	40	60	75	DH363FRKA1480
200	H	50	50	125	150	DH364FRKA1480
<b>600 Vac</b>						
30	H	7-1/2	10	15	20	DH361FRKA1600
60	H	20	25	30	50	DH362FRKA1600
100	H	30	40	60	75	DH363FRKA1600
200	H	50	50	125	150	DH364FRKA1600

**Fusible 208 Vac—240 Vac—Three-Pole**

Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings				Catalog Number
		AC		Time Delay		
		Standard Fuse Single-Phase	Three-Phase	Single-Phase	Three-Phase	
<b>208 Vac</b>						
30	H	—	—	—	—	DH321NRKA1208
60	H	—	—	—	—	DH322NRKA1208
100	H	—	—	—	—	DH323NRKA1208
200	H	—	—	—	—	DH324NRKA1208
<b>240 Vac</b>						
30	H	1-1/2	3	—	7-1/2	DH321NRKA1240
60	H	3	7-1/2	—	15	DH322NRKA1240
100	H	7-1/2	15	—	30	DH323NRKA1240
200	H	15	25	—	60	DH324NRKA1240

**Fusible 480 Vac—600 Vac—Three-Pole**

Ampere Rating	Fuse Type Provision	Maximum Horsepower Ratings with Time Delay Fuses				Catalog Number
		Single-Phase AC		Three-Phase AC		
		480V	600V	480V	600V	
<b>480 Vac</b>						
30	H	7-1/2	10	15	20	DH361NRKA1480
60	H	20	25	30	50	DH362NRKA1480
100	H	30	40	60	75	DH363NRKA1480
200	H	50	50	125	150	DH364NRKA1480
<b>600 Vac</b>						
30	H	7-1/2	10	15	20	DH361NRKA1600
60	H	20	25	30	50	DH362NRKA1600
100	H	30	40	60	75	DH363NRKA1600
200	H	50	50	125	150	DH364NRKA1600

**Note**

Contact the Safety Switch Flex Center (**1-888-329-9272** or [FlexSwitches@eaton.com](mailto:FlexSwitches@eaton.com)) for additional options, including 20A GFI receptacles.

# 1.1

## Switching Devices

### Safety Switches

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#### Left-Handed Safety Switch



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#### Left-Handed Safety Switch

##### Product Selection

##### Ordering Information

*Step One:* Left-handed safety switches are available from 30–200A for applications requiring an operating handle on the left side of the enclosure. Select the standard safety switch from the catalog and **add Suffix LH** to the catalog number.

*Step Two:* Contact the Safety Switch Flex Center for complete pricing and delivery information. The Flex Center will provide a list price. An authorized negotiation (TSP) number will be provided to track your order.

Safety Switch Flex Center  
Phone: **1-888-329-9272** or  
FlexSwitches@eaton.com  
Fax: **1-423-478-0270**

*Step Three:* Enter the order on VISTALINE by description (with catalog number as applicable) and reference the authorized negotiation (TSP) number.

Vista suffix will be "ETS."  
Product code will be "BE90."

For order entry assistance, contact CSC at:  
Phone: **1-800-356-1243**  
Fax: **1-800-752-8602**

**Note:** Left-handed safety switches are supplied with a C361H1 handle.

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**200% Neutral Safety Switches****Product Selection****Ordering Information**

*Step One:* Safety switches with 200% neutrals are available from 30–600A. Select the standard safety switch from the catalog and **add Suffix 200** to the catalog number.

*Step Two:* Contact the Safety Switch Flex Center for complete pricing and delivery information. The Flex Center will provide a list price and specifications for the 200% neutral. An authorized negotiation (TSP) number will be provided to track your order.

Safety Switch Flex Center  
Phone: **1-888-329-9272** or  
FlexSwitches@eaton.com  
Fax: **1-423-478-0270**

*Step Three:* Enter the order on VISTALINE by description (with catalog number as applicable) and reference the authorized negotiation (TSP) number.

Vista suffix will be "ETS."  
Product code will be "BE90."

For order entry assistance, contact CSC at:  
Phone: **1-800-356-1243**  
Fax: **1-800-752-8602**

# 1.1

## Switching Devices

### Safety Switches

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#### Pringle Bolted Pressure Switches



CBC Type Switch



QA Type Switch

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### Pringle Bolted Pressure Switch

#### Product Description

Eaton Pringle® switches have helped pioneer development of high-quality electrical products for commercial and industrial applications since 1891. Eaton's commitment to engineering excellence and reputation for quality have made us a recolonized leader in the electrical industry, and today you'll find our electrical products in use throughout the U.S., Canada and most of the world's major markets. Eaton Pringle bolted contact switches were the first in the industry and are a worldwide standard in high-current switching applications. They are custom-built and used in many heavy-duty applications, and are suitable for use in UL 891 switchboards.

#### Bolted Pressure Contacts

All Pringle switches feature bolted pressure contacts. The result: blade contact surfaces are bolted closed at a pressure of 600 PSI—at both the hinge and jaw ends. The benefit: current conducting efficiency is the equivalent of a bolted bus bar connection.

#### Features

- 480V UL
- 600V CSA
- 800–4000 Amperes
- 5000–6000 Amperes (not UL listed)
- 200 kAIC and 100% rated with Class "L" fuses
- Top or bottom feed
- Two, three- or four-pole
- Optional blown fuse detection and protection

- Quick-positive switching action
- Manual or electrically operated mechanism
- 6X Make/12X Break contact rating
- Pringle Flex Center can offer custom assemblies; for quotes, call 1-888-329-9272 option 2
- Many options available, see following page

#### Spring Mechanism

All quick action switches use a unique spring mechanism for improved reliability over traditional coil springs. The unique spring design is created by a series of concave-convex washers. The paired-washer spring design provides a higher force/distance ratio, making it easier to operate the mechanism.

Should any pair of washers become inoperable for any reason, the entire spring assembly will still be operable by means of the remaining pairs. This is unlike the situation if a coil spring were to fracture or fatigue.



Sample Spring Configuration

#### Standards and Certifications

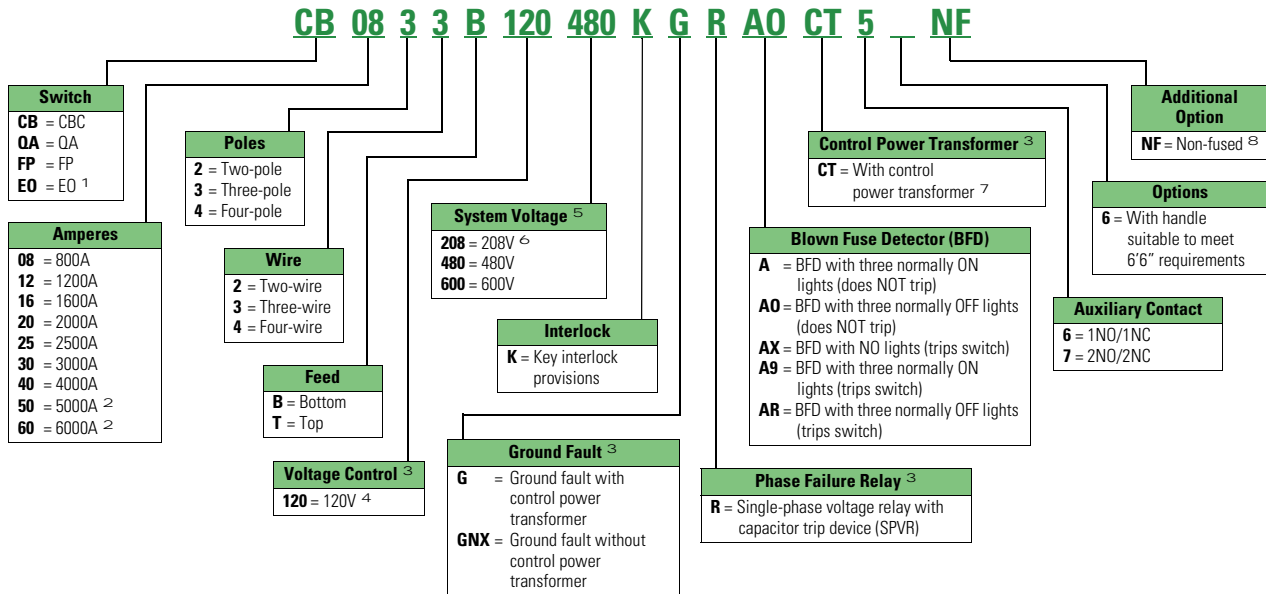
- 480V UL
- 600V CSA





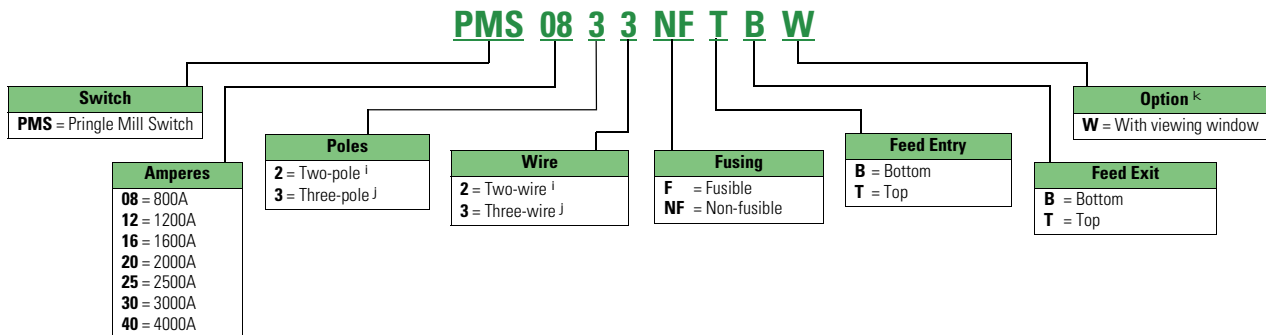
### Catalog Number Selection

#### Pringle Bolted Pressure Switch



#### Pringle Mill Switch <sup>2</sup>

(NEMA 1/3R/12 Enclosed)



#### Notes

- <sup>1</sup> Not UL listed. A separate control box may be required when adding accessories.
- <sup>2</sup> Does not carry UL listing.
- <sup>3</sup> Not an option with QA type switches. GF option includes control power transformer.
- <sup>4</sup> 110 Vdc and 125 Vdc also available. Please contact the Cleveland, TN plant.
- <sup>5</sup> For different system voltage requirements, please contact the Cleveland, TN plant.
- <sup>6</sup> For QA switches, use 480V system catalog number when referencing a 208V system.
- <sup>7</sup> Only applicable if ordering a CPT only, without ground fault.
- <sup>8</sup> Only available with QA switches and in a top-feed configuration.
- <sup>i</sup> 250 Vdc.
- <sup>j</sup> 480 Vac.
- <sup>k</sup> Additional available accessories/options—door interlock, special nameplates, custom dimensions, special paint and auxiliary contacts. Please inquire with the Cleveland, TN plant.

# 1.1

## Switching Devices

### Safety Switches

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#### Product Selection

##### **Manually Operated (QA)— UL Listed**

Manually operated contact switch with quick positive switching action. Can be top or bottom fed.

##### **Electrical Trip (CBC)—UL Listed**

Contact switch with charge-before-close mechanism. Can be manually or electrically tripped. Optional blown fuse detector and phase failure relay with capacitor trip available.

##### **Fault Protector Electrical Trip (FP)—UL Listed**

The FP combines the features of a CBC switch but includes an integrated zero-sequence sensor and ground fault.

##### **Electrically Operated Electric Trip (EO)—Not UL Listed**

The EO combines the features of a CBC switch, but includes an operator with a linear motor that electrically closes the switch while charging the stored energy mechanism for stored energy trip.

##### **Pringle Mill Switch (PMS)— Not UL Listed**

Manually operated contact switch with quick-positive switching action. Comes in a NEMA 1/3R/12 enclosure with a side-operated mechanism. Can be fusible or non-fusible, two- or three-pole configurations.



#### Service

Eaton's Pringle switches have always been manufactured with precision-made parts, and, like any mechanical device, they do require routine maintenance in order to operate at the optimal level. Over time, contact surfaces may be exposed to dirt and other contaminants, which could result in improper mechanical and/or electrical operation of the switch.

Eaton maintains a dedicated service team that has over 100 years of combined experience in the exclusive service and repair of Pringle switches. A service call performed by a certified technician ensures that your equipment is cleaned, lubed, adjusted and repaired, and a one-year extended warranty is granted. General maintenance, repair/ refurbishment and troubleshooting are just some of the services provided.

#### In-House Service

Eaton also offers in-house inspection, service and repair at our manufacturing facility in Cleveland, TN.

#### Aftermarket Parts

Eaton has a full line of factory-specified aftermarket parts for Pringle switches, as well as complete, form, fit, function, drop-in replacement switches. Aftermarket part information can be found in publication TD00808001E.

#### 'Flex' Custom Capabilities

Custom solutions are standard throughout Eaton's switching device product line and bolted pressure contact switches are no exception. When a standard product will not meet the customer's need, Eaton's engineering and marketing teams can develop and offer solutions built to the customer's expectation.

Engineered-to-Order, or 'Flex', Non-Load-Break switch solutions with bolted pressure contact technology vary as noted below.

- Motor operated: 800 to 6000A
- High current: 6000 to 35,000A+
- Medium voltage: 5 kV, 15 kV+
- DC voltages: 250 Vdc to 3000 Vdc+
- Transit applications: single-, two- or three-pole DC rated
- Manual transfer switches
- Live front switches

#### Reference Information

For service questions, or to schedule service: 1.888.329.9272, option 2 pringle@eaton.com

For aftermarket replacement parts: 1.877.ETN.CARE, option 2, option 1, 1.877.386.2273, option 2, option 1, TRC@eaton.com for existing in the field.

Product brochures available via Eaton.com

- Pringle Product Brochure—BR00808001E
- Pringle Mill Switch—PA00808001E
- Pringle Replacement Parts Guide—TD00808001E
- Pringle Service—DM00808002E

#### Technical Data and Specifications

- 800–4000A
- 5000 and 6000A available (not UL listed)
- 200 kAIC and 100% rated with Class L fuses

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### Type DS, Fusible and Non-Fusible

#### Product Description

Type DS disconnect is a compact load break switch using the DE-ION arc-quenching principle and quick make/quick break over center toggle mechanism. It has visible contacts, is UL listed and is available either as a fusible or non-fusible switch.

**Note:** Switches through 200A are UL listed as miscellaneous switches; 400 and 600A switches are recognized under the component program of Underwriters Laboratories.

#### Application Description

Maximum switch-fuse application based on short-circuit current withstand (symmetrical amperes).

#### Short-Circuit Ratings

Switch Rating Amperes	Maximum Application at 240, 480 or 600 Vac	
	Class R Fuses	Current Limiting Fuse Class J
30	200,000	200,000
60	200,000	200,000
100	200,000	200,000
400	100,000 <sup>1</sup>	200,000
600	100,000 <sup>1</sup>	200,000

#### Standards and Certifications

- UL 98
- CSA (see table on Page V2-T1-92)



#### Reference Information

- Technical data: 29-420
- Dimensions and drilling plans: DS 29-470
- 30, 60, 100A instruction leaflet: I.L. 14857C
- 30, 60, 100A auxiliary switch instruction leaflet: I.L. 14471C
- 200A instruction leaflet: I.L. 15014A
- 200A auxiliary switch instruction leaflet: I.L. 14486A
- Handle mechanisms: TD 29-520

**Note**

<sup>1</sup> 480V maximum.

# 1.1

## Switching Devices

### Safety Switches

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#### Product Selection

##### DS Type Switch

##### Switch Ordering Information

Switch Rating	Fuse Clip Rating Ampere	Type Volts <sup>1</sup>	Catalog Number <sup>2,3</sup>
30	No fuse <sup>4</sup>	—	<b>DS16U</b>
30	30	NEC 250	<b>DS121R</b>
30	30	NEC 600	<b>DS161R</b>
30	60	NEC 250	<b>DS122</b>
30	60	NEC 600	<b>DS162</b>
60	No fuse <sup>4</sup>	—	<b>DS26U</b>
60	60	NEC 250	<b>DS222R</b>
60	60	NEC 600	<b>DS262R</b>
60	100	NEC 250/600	<b>DS263</b>
100	No fuse <sup>4</sup>	—	<b>DS36U</b>
100	100	NEC 250/600	<b>DS363R</b>
100 <sup>5</sup>	200	NEC 250/600	<b>DS364</b>
400	No fuse <sup>4</sup>	—	<b>DS56U</b>
400	400	NEC 250/600	<b>DS565R</b>
600	No fuse <sup>4</sup>	—	<b>DS66U</b>
600	600	NEC 250/600	<b>DS666R</b>

#### Options and Accessories

##### Base Mounting Hardware

**Note:** Order separately when required. No charge when ordered with switch.

##### Base Mounting Hardware

Description	Catalog Number
30, 60, 100A non-fusible	<b>624B375G17</b>
30, 60, 100A fusible	<b>624B375G17</b>
400 or 600A non-fusible	<b>673B125G04</b>
400 or 600A Fusible	<b>673B125G05</b>

##### Auxiliary Switch Kits

**Note:** Permits field mounting of an auxiliary switch for separate control circuit applications. Each switch includes three soldered, identified leads. Rated 250V maximum.

##### Auxiliary Switch Kits

Switch Used With	Contact Arrangement	Kit Catalog Number
30, 60, 100A	1A-1B	<b>178C265G05</b>
30, 60, 100A	2As-2Bs	<b>178C265G06</b>

##### Class R Fuse Clip Conversion Kits for Type DS Switches

Switch Rating Amperes	Volts	Kit Catalog Number
30	250	<b>RFK121</b>
30	600	<b>RFK161</b>
60	250	<b>RFK222</b>
60	600	<b>RFK262</b>
100	250/600	<b>RFK464</b>
400	250/600	<b>RFK666</b>
600	250/600	<b>RFK666</b>

##### Notes

- <sup>1</sup> 600V ratings are suitable for Class J fuses.
- <sup>2</sup> Switches with Catalog Number Suffix **R** are UL listed for use with Class R fuses when fuse clip conversion kits shown on this page are used.
- <sup>3</sup> Switches with Catalog Number Suffix **R** or **U** are CSA listed.
- <sup>4</sup> Rated 600V.
- <sup>5</sup> Supplied as unfused switch with separate fuse blocks.

## Technical Data and Specifications

### Maximum Horsepower

Type Switch	Maximum Horsepower Ratings								
	120 Vac		240 Vac		480 Vac		600 Vac		250 Vdc
	Standard	Time Delay	Standard	Time Delay	Standard	Time Delay	Standard	Time Delay	
DS16U	5	—	10	—	20	—	25	—	7-1/2
DS121R	1-1/2	3	3	7-1/2	—	—	—	—	5
DS122	3	—	7-1/2	—	—	—	—	—	5
DS161R	—	—	—	—	5	15	7-1/2	20	5
DS162	—	—	—	—	15	—	15	—	5
DS26U	10	—	20	—	40	—	60	—	15
DS222R	3	7-1/2	7-1/2	15	—	—	—	—	10
DS262R	—	—	—	—	15	30	15	50	10
DS263	—	—	15	—	25	—	30	—	10
DS36U	15	—	30	—	75	—	75	—	25
DS363R	—	—	15	30	25	60	30	75	20
DS364	—	—	25	—	50	—	60	—	20
DS56U	—	—	100	—	250	—	350	—	—
DS565R	—	—	50	100	100	250	125	350	—
DS66U	—	—	100	—	400	—	500	—	—
DS666R	—	—	75	100	150	400	200	500	—

### Terminal Data

Switch Rating	Wire Range	
	Copper	Aluminum
30	#14–#2	#12–#2
60	#14–#2	#12–#2
100	#14–1/0	#12–1/0
400	(1) #4–600 kcmil or (2) 1/0–3/0	(1) #4–600 kcmil or (2) 1/0–250 kcmil
600	Same as 400A except two terminals per pole	—

#### Note

Terminals are suitable for either copper or aluminum cable.

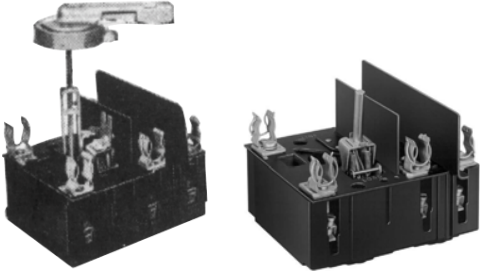
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## Switching Devices

### Safety Switches

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#### Type Visi-Flex DE-ION



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#### Type Visi-Flex DE-ION

##### Product Description

Complete Model A switch styles with fuse or non-fuse kits mounted are UL listed. Refer to “Electrical Construction Materials List,” miscellaneous switches. Switches only, no fuse, fuse clip kit and all Model T switches are recognized under the component program of Underwriters Laboratories. The external operating handle of Model A can be padlocked in the OFF position with up to three padlocks.

##### Terminal Data

- 30, Spec. 60A switches: #14–#4 Cu cable only
- 60, 100A switches #14–1/0 Cu cable only

##### Standards and Certifications

- UL 98



##### Reference Information

- Technical data: 29-420
- Dimension sheet: 29-470
- 30, Special 60A Model A drilling instructions: I.L. 15051
- 60, 100A Model A drilling instructions: I.L. 15052A
- 30, Special 60, 100A Model A and T auxiliary switch: I.L. 12641C
- 60, 100A Model A and T fuse kit: I.S. 12565C
- No fuse kit cover mounting: I.S. 12942B
- Fuse clip kits for Class R (1226C94G01-G05): I.L. 15491
- Fuse clip kits for Class R (1226C94G06-G11): I.L. 15492
- 200 ampere instruction leaflet: I.L. 12505

### Product Selection

Model A



### Switch Ordering Information

Model T



Continuous Ampere Rating	Fuse or No-Fuse Kit (see photos on Page V2-T1-96)	Model A, Adjustable Depth		Model T, Toggle Operated Switch Only <sup>3</sup> Catalog Number (see fuse kit at right)	Fuse Clip Kits for Model A or T NEC and Standard Time Delay <sup>4,5</sup> (No-Fuse Kit—See Below)	
		Complete Unit Catalog Number <sup>1</sup>	Switch Only <sup>2</sup> Catalog Number (see handle and shaft below, fuse kit at right)		Clips for Class K or H Fuses Catalog Number	Clips for Class R Fuses Only Catalog Number
30	No fuse <sup>7</sup>	2607D89G01	2607D63G02	371D392G02	—	—
	30A/250V	2607D89G02	2607D63G01	371D392G01	313C590G08	1226C94G01
	60A/250V	2607D89G03	2607D63G01	371D392G01	313C590G09	1226C94G03
	100A/250V	2607D89G04	2607D63G01	371D392G01	313C590G13	1226C94G05
	30A/600V	2607D89G05	2607D63G01	371D392G01	313C590G10	1226C94G02
	60A/600V	2607D89G06	2607D63G01	371D392G01	313C590G11	1226C94G04
Special 60 <sup>6</sup>	No fuse <sup>7</sup>	2607D89G07	2607D63G06	371D392G06	—	—
	30A/250V	2607D89G08	2607D63G05	371D392G05	313C590G08	1226C94G01
	60A/250V	2607D89G09	2607D63G05	371D392G05	313C590G09	1226C94G03
	100A/250V	2607D89G10	2607D63G05	371D392G05	313C590G13	1226C94G05
	30A/600V	2607D89G11	2607D63G05	371D392G05	313C590G10	1226C94G02
	60A/600V	2607D89G12	2607D63G05	371D392G05	313C590G11	1226C94G04
60 <sup>6</sup>	No fuse <sup>7</sup>	2607D90G01	2607D66G14	657D780G12	—	—
	30A/250V	2607D90G02	2607D66G13	657D780G11	177C880G23	1226C94G06
	60A/250V	2607D90G03	2607D66G13	657D780G11	177C880G12	1226C94G08
	100A/250V	2607D90G04	2607D66G13	657D780G11	177C880G13	1226C94G10
	200A/250V	2607D90G05	2607D66G13	657D780G11	177C880G14	—
	30A/600V	2607D90G06	2607D66G13	657D780G11	177C880G24	1226C94G07
	60A/600V	2607D90G07	2607D66G13	657D780G11	177C880G15	1226C94G09
	100A/600V	2607D90G08	2607D66G13	657D780G11	177C880G16	1226C94G11
100	No fuse <sup>7</sup>	2607D91G07	2607D66G18	657D780G16	—	—
	60A/250V	2607D91G08	2607D66G17	—	177C880G12	1226C94G08
	100A/250V	2607D91G09	2607D66G17	657D780G15	177C880G13	1226C94G10
	20A/250V	2607D91G10	2607D66G17	657D780G15	177C880G14	—
	60A/600V	2607D91G11	2607D66G17	—	177C880G15	1226C94G09
	100A/600V	2607D91G12	2607D66G17	657D780G15	177C880G16	1226C94G11
	200A/600V	2607D91G13	2607D66G17	657D780G15	177C880G18	—

#### Notes

- Model A shipped as basic switch, operating handle, shaft and fuse or no-fuse kit. Model T shipped as basic switch and fuse or no-fuse kit.
- External operating handle, shaft and fuse or no-fuse kit required.
- Fuse or no-fuse kit required.
- Includes fuse clips and Micarta barriers.
- Will also accept non-rejection type current limiting fuses:  
Bussmann: 15–60A type KTN and KTS (ferrule type), 65–200A type KTN and KTS (blade type)  
Chase Shawmut: 15–60A type 1 (ferrule type), 65–200A type 3 (blade type)  
Federal Pacific Electric®: 15–200A types NCL and SCL
- Special 60A switch has same dimension as 30A Visi-Flex switch. Standard 60A switch has same dimension as 100A Visi-Flex switch.
- Rated 600V.

# 1.1

## Switching Devices

### Safety Switches

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#### Special Switches and Fuse Clips

##### Visi-Flex Switches with Auxiliary Switch Internally Mounted

**Note:** Basic switch only. Also order no-fuse kit, fuse kit, operating handle and shaft as required.

Ampere Rating	Catalog Number (for use without fuses)	Catalog Number (for use with fuses)
<b>Model A</b>		
30	2607D63G04	2607D63G03
Special 60	2607D63G08	2607D63G07
60	2607D66G16	2607D66G15
100	2607D66G20	2607D66G19
<b>Model T</b>		
30	371D392G04	371D392G03
Special 60	371D392G08	371D392G07
60	657D780G14	657D780G13
100	657D780G18	657D780G17

#### Options and Accessories

##### Fuse Kits and Shaft

Description	Catalog Number
<b>No fuse kits (for Models A or T)</b>	
30, special 60A switches	313C590G14
60, 100A switches	313C363G11
Model A external operating handle	504C323G07
<b>Model A Standard Shaft</b>	
30, special 60A switches	2607D64G01 <sup>1</sup>
60, 100A switches	2607D65G01 <sup>2</sup>

##### Auxiliary Switch Kits for Model A and T Switches

**Note:** Permits field mounting of an auxiliary switch for separate control circuit applications. Provides an SPDT switch with 1A and/or 1B contacts. Includes three identified 18-inch soldered leads.

For Use With	Complete Kit Catalog Number
30 and special 60A switch	315C293G01 <sup>3</sup>
60 and 100A switch	315C293G01 <sup>3</sup>

#### Special Fuse Kits

##### Fuse Clip Kit



##### No Fuse Kit



##### Current Limiting, Class J

**Note:** For Model A and/or T switches. Order in place of standard fuse clips.

Switch Type, Rating	Fuse Kit Rating	Catalog Number
<b>Model A</b>		
30	30A/600V	503C690G01
Special 60	60A/600V	503C690G02
	100A/600V	503C690G03
60	30A/600V	503C690G15
	60A/600V	503C690G16
	100A/600V	503C690G17
100	200A/600V	503C690G18
	<b>Model T</b>	
	30	30A/600V
Special 60	60A/600V	503C690G05
	100A/600V	503C690G06
	60	30A/600V
100	60A/600V	503C690G20
	100A/600V	503C690G21
	200A/600V	503C690G22

##### Extra Long Vari-Depth Shaft for Model A Switches

**Note:** Order in place of standard shaft when required.

Switch Ampere Rating	Panel Depth in Inches (mm) Long Shaft	Catalog Number
30	8.19–13.06 (208.0–331.7) <sup>4</sup>	2607D65G02
Special 60	8.19–13.06 (208.0–331.7) <sup>4</sup>	2607D65G02
60	9.41–14.3 (239.0–358.9)	2607D65G02
100	9.41–14.3 (239.0–358.9)	2607D65G02

##### Notes

- <sup>1</sup> For use with panels 5.06–8.19 inches (128.5–208.0 mm) deep.
- <sup>2</sup> For use with panels 5.19–9.97 inches (131.8–253.2 mm) deep.
- <sup>3</sup> Order Instruction Sheet 12641.
- <sup>4</sup> For panel depth of 8.19–9.94 inches (208.0–252.5 mm), a minimum of 1.75 inch must be cut from bottom of shaft.



## Technical Data and Specifications

### Maximum Horsepower Ratings

Fuse Clip Ratings	Maximum Horsepower Ratings								
	120 Vac		240 Vac		480 Vac		600 Vac		250 Vdc
	Standard	Time Delay	Standard	Time Delay	Standard	Time Delay	Standard	Time Delay	
<b>30A Switch</b>									
Unfused	3	—	7-1/2	—	20	—	25	—	5
30A/250V	1-1/2	3	3	7-1/2	—	—	—	—	5
60A/250V	3	—	5	—	—	—	—	—	5
100A/250V	3	—	5	—	—	—	—	—	5
30A/600V	—	—	—	—	5	15	7-1/2	20	5
60A/600V	—	—	—	—	15	—	20	—	5
<b>60A Switch (and Special 60 Ampere Switch)</b>									
Unfused	7-1/2	—	20	—	40	—	50	—	10
30A/250V	1-1/2	3	3	7-1/2	—	—	—	—	5
60A/250V	3	7-1/2	7-1/2	15	—	—	—	—	10
100A/250V	—	—	15	—	—	—	—	—	10
200A/250V <sup>1</sup>	—	—	15	—	—	—	—	—	—
30A/600V	—	—	—	—	5	15	7-1/2	20	5
60A/600V	—	—	—	—	15	30	15	50	10
100A/600V <sup>1</sup>	—	—	15	—	25	30	30	50	10
<b>100A Switch</b>									
Unfused	15	—	30	—	60	—	75	—	20
30A/250V	1-1/2	3	3	7-1/2	—	—	—	—	5
60A/250V	3	7-1/2	7-1/2	15	—	—	—	—	10
100A/250V	15	15	15	30	—	—	—	—	20
200A/250V	15	15	15	30	—	—	—	—	20
30A/600V	—	—	—	—	5	15	7-1/2	20	—
60A/600V	—	—	—	—	15	30	15	50	—
100A/600V	—	—	—	—	25	60	30	75	—
200A/600V	—	—	—	—	25	60	30	75	—

**Note**

<sup>1</sup> Does not apply to special 60A switch since these fuse clips cannot be added.

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## Switching Devices

### Safety Switches

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#### Complete Operating Mechanism—C361NE1



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#### Flange Mounted—Variable Depth

##### Product Description

Type C361 disconnect switches are suitable for installation in control enclosures having a right-hand flange. Fusible disconnect switches will accept R fuses as standard. Field installable rejection kits are supplied as standard on 100 and 200A clips. For 30 and 60A rejection clips, see footnote 4 on next page. The switch is UL component recognized for use on systems with up to 200,000 rms symmetrical amperes available fault current when Class R clips are supplied.

##### Standards and Certifications

- UL—Component File E55492
- CSA—LR353-439



### Product Selection

#### C361NE1



#### Operating Mechanism Variable Depth with Disconnect Switch—Right-Hand Mounting

Disconnect Switch Size (Amperes)	Variable Depth Mtg. Range (Inches) <sup>1</sup>	Maximum Horsepower Ratings <sup>2</sup>						Fuse Clip Rating (Amperes) Non-Interchangeable Type for Class H, J, K or R Type Fuses Only		Switch and Operating Mechanism Only DOES NOT Include Handle Catalog Number	Switch and Operating Mechanism with 4-Inch Handle <sup>3</sup>	
		AC System Volts (Motor Volts)		DC Using Two Poles 250V Max.		250V	600V	For NEMA 1 or 12 Enclosure Catalog Number	For NEMA 4 Enclosure Catalog Number			
		208 (200)	240 (230)	480 (460)	600 (575)							
30	7 to 16	7-1/2	7-1/2	15	20	5	Non-fusible	<b>C361NC</b>	<b>C361NC1</b>	<b>C361NC2</b>		
				30	—	<b>C361SC21</b>	<b>C361SC121</b> <sup>4</sup>	<b>C361SC221</b> <sup>4</sup>				
				60	30	<b>C361SC61</b>	<b>C361SC161</b> <sup>4</sup>	<b>C361SC261</b> <sup>4</sup>				
60	7 to 16	15	15	30	50	10	Non-fusible	<b>C361ND</b>	<b>C361ND1</b>	<b>C361ND2</b>		
				60	30	<b>C361SD22</b>	<b>C361SD122</b> <sup>4</sup>	<b>C361SD222</b> <sup>4</sup>				
				—	60	<b>C361SD62</b>	<b>C361SD162</b> <sup>4</sup>	<b>C361SD262</b> <sup>4</sup>				
100	7 to 16	25	30	60	75	20	Non-fusible	<b>C361NE</b>	<b>C361NE1</b>	<b>C361NE2</b>		
				100	100	<b>C361SE263</b>	<b>C361SE1263</b>	<b>C361SE2263</b>				
200	7 to 16	40	60	125	150	40	Non-fusible	<b>C361NF1</b>	<b>C361NF1</b>	<b>C361NF2</b>		
				200	200	<b>C361SF264</b>	<b>C361SF1264</b>	<b>C361SF2264</b>				

#### C361H1



#### Handle Only

Application	Operating Handle Length in Inches (mm)	NEMA Type Enclosure	Catalog Number
For use with 30, 60, 100 and 200A disconnect switches	4.00 (101.6)	1-12	<b>C361H1</b>
	4.00 (101.6)	4	<b>C361H2</b>
	6.00 (152.4)	1-12	<b>C361H3</b>
	6.00 (152.4)	4	<b>C361H4</b>

#### Notes

- <sup>1</sup> Dimension shown is from panel to flange surface.
- <sup>2</sup> Refers to rating of switch only.
- <sup>3</sup> Components individually boxed and shipped in overpack carton.
- <sup>4</sup> For rejection clips, add Suffix Letter **R** to listed Catalog Number. Example: C361SC121**R**.

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## Switching Devices

### Safety Switches

#### 1

#### Accessories

##### Type C361 NEMA 12 Safety Door Hardware

Type C361 door hardware kits are designed to function with all C361 and C371 disconnect switches and circuit breaker operating mechanisms.

These kits are designed for use with small enclosures up to 40 inches (1016 mm), intermediate 40–60 inches (1016–1524 mm) or larger floor cases over 60 inches (1524 mm) to provide enclosure sealing and protection against

unauthorized entry.

These kits can be used on enclosure flanges with material thickness ranging from 16 gauge through 3/16 inches with flanges on the right side only. Door hardware kits are to be installed in a commercially available enclosure. Consult the enclosure manufacturer application data for proper kit selection.

##### NEMA 12 Safety Door Hardware



##### Type C361 NEMA 12 Safety Door Hardware

Handle Length (Inches)	Catalog Number <sup>1</sup>
4	C361KJ4
6	C361KJ6
Roller Latch <sup>2</sup>	C361KR

##### Interlocks and Connecting Rod

##### Electrical Interlocks

Circuit	Catalog Number
1NO-1NC	DS200EK1
2NO-2NC	DS200EK2

##### Connecting Rods—Increase Maximum Allowable Depth by 5 Inches

Application	Catalog Number
Disconnect switches 30, 60, 100 and 200A Circuit breakers 150, 250 and 400A	C371CS1
Circuit breakers 600, 800 and 1200A	C371CS2

##### Notes

- <sup>1</sup> The 1/4-inch x 1/2-inch standard mill rectangular locking bar is not supplied with these kits.
- <sup>2</sup> Third roller latch for use with 4 or 6-inch handle when three-point latching is required.

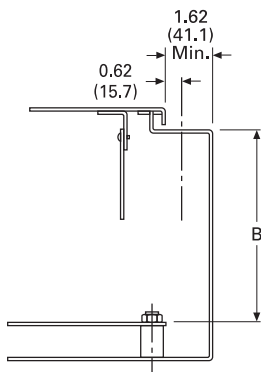
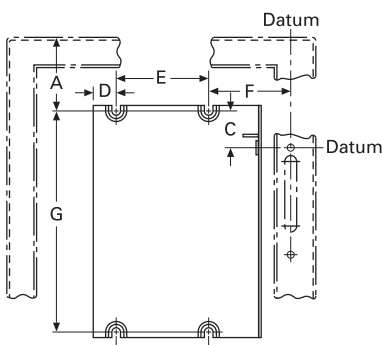
### Dimensions

Approximate Dimensions in Inches (mm)

#### Mounting Dimension Requirements in Inches (mm)

Disconnect Switch Type	A	B	C	D	E	F	G
30A and 60A non-fusible	See dimensions below	See dimensions below	1.56 (39.6)	0.96 (24.4)	4.00 (101.6)	3.50 (88.9)	7.12 (180.8)
30A and 60A fusible			1.56 (39.6)	0.96 (24.4)	4.00 (101.6)	3.50 (88.9)	9.75 (247.7)
100A non-fusible			1.75 (44.5)	1.10 (27.9)	5.50 (139.7)	3.38 (85.9)	7.12 (180.8)
100A fusible			1.75 (44.5)	1.10 (27.9)	5.50 (139.7)	3.38 (85.9)	11.88 (301.8)
200A non-fusible and fusible			3.34 (84.8)	0.63 (16.0)	8.50 (215.9)	1.84 (46.7)	15.50 (393.7)

#### Mounting Dimension Requirements



#### Line Lug Data

Disconnect Switch Size	Wire Size
30A	#2-14 Cu/Al
60A	#2-14 Cu/Al
100A	1/0-14 Cu/Al
200A	250 kcmil-#6 Cu/Al

**Dimension A** = The required wire bending spacing selected from Article 430.10 of the National Electrical Code.

**Dimension B** = Minimum or maximum depth from inside of flange holding operating handle to panel where disconnect switch is mounted (variable 7 to 16 inches).

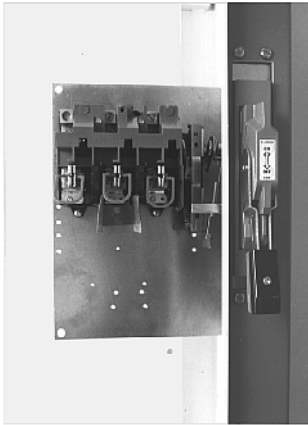
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## Switching Devices

### Safety Switches

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#### Fixed Depth Application



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Solar Disconnect Switch . . . . .	<b>V2-T1-70</b>
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### Flange Mounted—Fixed Depth

#### Product Description

Type C361 disconnect switches are suitable for installation in control enclosures having a right-hand flange. Fusible disconnect switches will

accept R fuses as standard. Field installable rejection kits are supplied as standard on 100 and 200A clips. For 30 and 60A rejection clips, see **Page V2-T1-99**. The switch is

UL component recognized for use on systems for use on systems with up to 200,000 rms symmetrical amperes available fault current when Class R clips are supplied.

- Minimum depth—flange to panel
  - 30–60A: 6.50 inches
  - 100A: 7 inches

#### Product Selection

##### Fixed Depth Application



#### Operating Mechanism Fixed Depth with Disconnect Switch—Right-Hand Mounting

Maximum Horsepower Ratings <sup>1</sup>

Disconnect Switch Size (Amperes)	AC System Volts (Motor Volts)				DC Using Two Poles 250V Maximum	Fuse Clip Rating (Amperes) Non-Interchangeable Type for Class H, J, K or R Type Fuses Only		Switch and Operating Mechanism with 4-Inch Handle For NEMA 1 or 12 Enclosure Catalog Number
	208 (200)	240 (230)	480 (460)	600 (575)		250V	600V	
30	7-1/2	7-1/2	15	20	5	Non-fusible		<b>C361FNC1</b>
						30	—	<b>C361FSC121</b> <sup>2</sup>
						60	30	<b>C361FSC161</b> <sup>2</sup>
60	15	15	30	50	10	Non-fusible		<b>C361FND1</b>
						60	30	<b>C361FSD122</b> <sup>2</sup>
						—	60	<b>C361FSD162</b> <sup>2</sup>
100	25	30	60	75	20	Non-fusible		<b>C361FNE1</b>
						100	100	<b>C361FSE1263</b>

#### Notes

<sup>1</sup> Refers to rating of switch only.

<sup>2</sup> For Rejection Clips, add Suffix Letter **R** to listed Catalog Number. Example: C361FSC121**R**.

### Accessories

#### Electrical Interlocks

Circuit	Catalog Number
1NO-1NC	DS200EK1
2NO-2NC	DS200EK2

### Technical Data and Specifications

#### Line Lug Data

Disconnect Switch Size	Wire Size
30A	#2-14 Cu/Al
60A	#2-14 Cu/Al
100A	1/0-14 Cu/Al
200A	250 kcmil-#6 Cu/Al

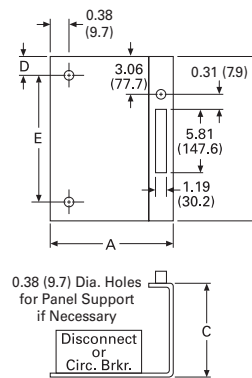
### Dimensions

Approximate Dimensions in Inches (mm)

#### Frame Size

Description	A	B	C	D	E
30-60A disconnect switch	8.63 (219.2)	11.38 (289.1)	6.50 (165.1)	1.50 (38.1)	9.50 (241.3)
150A circuit breaker	8.63 (219.2)	11.38 (289.1)	6.50 (165.1)	1.50 (38.1)	9.50 (241.3)
100A disconnect switch	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)
250A circuit breaker	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)
400A circuit breaker	9.88 (251.0)	13.38 (339.9)	7.00 (177.8)	1.25 (31.8)	11.75 (298.5)

#### Approximate Dimensions



# 1.2

## Switching Devices

### Enclosed Circuit Breakers

1

#### Enclosed Circuit Breakers



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#### Product Description

- 15–1200A
- Enclosed device used to open and close a circuit

#### Application Description

##### NEMA 1 General Purpose

##### *Surface or Flush Mounting 15–1200A, 600 Vac, 500 Vdc*

NEMA 1 enclosed breakers are designed for indoor use in commercial buildings, apartment buildings and other areas where a general purpose enclosure is applicable. The breaker is front operable and is capable of being padlocked in the OFF position. Ratings through 1200A are listed with Underwriters Laboratories as suitable for service entrance application. Both surface and flush mounted enclosures are available.



**NEMA 1 General Purpose**

##### NEMA 3R Rainproof Surface Mounting <sup>1</sup>

##### *Interchangeable Hubs (through 400A) 15–1200A, 600 Vac, 500 Vdc*

This general purpose outdoor service center employs a circuit breaker inside a weatherproof sheet steel enclosure to serve as a main disconnect and protective device for feeder circuits. The breaker is front operable and is capable of being padlocked in the OFF position. Ratings through 1200A are listed by Underwriters Laboratories as suitable for service entrance application.



**NEMA 3R Rainproof Surface Mounting**

##### NEMA 4/4X, 5 Water and Dustproof

##### *Stainless Steel—Type 304 Surface Mounting 15–1200A, 600 Vac, 500 Vdc*

This enclosure meets NEMA 4/4X and 5 requirements for water and dustproof applications and has no knockouts or other openings. It is particularly well suited for use in dairies, borax mines, breweries, paper mills and other process industries. The operating handle can be padlocked in the OFF position, and is interlocked to prevent the door from opening when the breaker is ON. Ratings through 1200A are Underwriters Laboratories listed as suitable for service entrance application.



**NEMA 4/4X Water and Dustproof**

#### Note

<sup>1</sup> SFDN enclosed breakers do not have a door interlock to prevent door from being opened when breaker is "ON."



**NEMA 12 Dustproof Surface Mounting****No Knockouts or Other Openings  
15–1200A, 600 Vac,  
500 Vdc**

The Type 12 enclosure is designed in line with specifications for special industry application where unusually severe conditions involving oil, coolant, dust and other foreign materials exist in the operating atmosphere. The handle padlocks in the OFF position and the cover is interlocked with the handle mechanism to prevent opening the cover with the circuit breaker in the ON position. Ratings through 1200A are UL listed as suitable for service entrance application. A NEMA 12 semi-dust-tight design that includes knockouts is available. These units are rated 15–400A, 600 Vac, 500 Vdc.

**NEMA 12 Dustproof Surface Mounting****NEMA 7/9 Hazardous Location****Cast Aluminum, Explosion-proof  
Surface Mounting 15–1200A,  
600 Vac, 250 Vdc**

Hazardous location, Type 7: Class I, Groups B, C, D; Type 9: Class II, Groups E, F, G. This special service cast aluminum enclosure is supplied with a wide, machined flanged cover to prevent igniting outside atmospheres by arcing from inside the enclosure. Front operable, the handle padlocks in the OFF position. Enclosures rated 600A and above have lift-off hinges for ease of assembly.

**Note:** XFDN050B is not Group B compliant.

**NEMA 7/9 Hazardous Location****Features, Benefits and Functions**

- Side-opening door on NEMA 3R enclosures
- Padlockable in the OFF position
- Surface or flush mounted enclosures available through 400A on NEMA 1 enclosures
- Interlocked handle on NEMA 3R, 4/4X, 5 and 12 enclosures to prevent opening when the breaker is in the ON position
- Interchangeable hubs
- Numerous factory options

**Standards and Certifications**

- UL 489
- CSA 22.2
- NEMA 250

**NEMA 1 General Purpose**

- UL File No. E7819
- CSA File No. LR84319

**NEMA 3R Rainproof Surface Mounting**

- UL File No. E7819
- CSA File No. LR84319

**NEMA 4/4X, 5 Water and Dustproof**

- UL File No. E7819
- CSA File No. LR84319

**NEMA 12 Dustproof Surface Mounting**

- UL File No. E7819
- CSA File No. LR84319

**NEMA 7/9 Hazardous Location**

- UL File No. E84577
- CSA File No. LR42131-6



# 1.2

## Switching Devices

### Enclosed Circuit Breakers

1

#### Cross-Reference

##### Enclosed Circuit Breaker Competitive Catalog Numbers

NEMA Rating	Catalog Number		Square D		Siemens		General Electric	
	Eaton Enclosure	Breaker	Enclosure	Breaker	Enclosure	Breaker	Enclosure	Breaker
1 surface	<b>SGDN100</b>	<b>GHC3100</b>	EHB125NS	EHB34100	—	—	—	—
1 flush	—	—	EHB125NF	EHB34100	—	—	—	—
3R	<b>RGDN100</b>	<b>GHC3100</b>	EHB125NRB	EHB34100	—	—	—	—
12	<b>JGDN100</b>	<b>GHC3100</b>	—	—	—	—	—	—
4/4X	<b>WGDN100</b>	<b>GHC3100</b>	—	—	—	—	—	—
1 surface	<b>SFDN100</b>	<b>EHD3100L</b>	FA100S	FAL34100	E2N1S	ED43B100	TE100S	TED134100WL
1 flush	<b>FFDN100</b>	<b>EHD3100L</b>	FA100F	FAL34100	E2N1F	ED43B100	TE100F	TED134100WL
3R	<b>RFDN100</b>	<b>EHD3100L</b>	FA100RB	FAL34100	E2N3R	ED43B100	TE100R	TED134100WL
12/3R	—	—	FA100AWK	FAL34100	—	—	—	—
12	<b>JFDN100</b>	<b>EHD3100L</b>	—	—	E2N12	ED43B100	TE100J/SE100J	TED134100WL
4/4X	<b>WFDN100</b>	<b>EHD3100L</b>	FA100DS	FAL34100	ED6SS4	ED43B100	TE100CS/SE100CS	TED134100WL
7/9	<b>XFDN050</b>	<b>EHD3050L</b>	FA060X	FAL34060	EA	ED43B100	—	—
9	—	—	FA060Y	FAL34060	—	—	—	—
7/9	<b>XFDN225B</b> <sup>1</sup>	<b>FD3225L</b>	FA100X	FAL34100	EB	ED43B100	—	—
9	—	—	FA100Y	FAL34100	—	—	—	—
1 surface	<b>SFDN225</b> <sup>1</sup>	<b>FDB3150L</b>	—	—	E2N1S	ED43B125	TE150S	TED134150WL
1 flush	<b>FFDN225</b> <sup>1</sup>	<b>FDB3150L</b>	—	—	E2N1F	ED43B125	TE150F	TED134150WL
3R	<b>RFDN225</b> <sup>1</sup>	<b>FDB3150L</b>	—	—	E2N3R	ED43B125	TE150R	TED134150WL
12	<b>JFDN225</b> <sup>1</sup>	<b>FDB3150L</b>	—	—	E2N12	ED43B125	—	—
4/4X	<b>WFDN225</b> <sup>1</sup>	<b>FDB3150L</b>	—	—	ED6SS4	ED43B125	—	—
7/9	<b>XFDN225B</b> <sup>1</sup>	<b>FDB3150L</b>	—	—	—	—	—	—
1 surface	<b>SFDN225</b> <sup>1</sup>	<b>FD3225L</b>	—	—	—	—	—	—
1 flush	<b>FFDN225</b> <sup>1</sup>	<b>FD3225L</b>	—	—	—	—	—	—
3R	<b>RFDN225</b> <sup>1</sup>	<b>FD3225L</b>	—	—	—	—	—	—
12	<b>JFDN225</b> <sup>1</sup>	<b>FD3225L</b>	—	—	—	—	—	—
4/4X	<b>WFDN225</b> <sup>1</sup>	<b>FD3225L</b>	—	—	—	—	—	—
7/9	<b>XFDN225B</b> <sup>1</sup>	<b>FD3225L</b>	—	—	—	—	—	—
1 surface	<b>SJDN250</b>	<b>JDB3250</b>	KA225S	KAL36250	F6N1S	FXD63B250	TF225S	TFJ236225WL
1 flush	<b>FJDN250</b>	<b>JDB3250</b>	KA225F	KAL36250	F6N1F	FXD63B250	TF225F	TFJ236225WL
3R	<b>RJDN250</b>	<b>JDB3250</b>	KA225RB	KAL36250	F6N3R	FXD63B250	TF225R	TFJ236225WL
12/3R	—	<b>JDB3250</b>	KA225AWK	KAL36250	—	—	—	—
12	<b>JJDN250</b>	<b>JDB3250</b>	—	—	F6N12	FXD63B250	TF225J/SF250J	TFJ236225WL
4/4X	<b>WJDN250</b>	<b>JDB3250</b>	KA225DS	KAL36250	FD6SS4	FXD63B250	TF225CS/SF250CS	TFJ236225WL
7/9	<b>XJDN250B</b>	—	KA225X	KAL36250	EC2	FXD63B250	—	—
9	—	—	KA225Y	KAL36250	—	—	—	—

**Note**

<sup>1</sup> Maximum wire size 4/0.

## Enclosed Circuit Breaker Competitive Catalog Numbers, continued

NEMA Rating	Catalog Number		Square D Enclosure	Breaker	Siemens Enclosure	Breaker	General Electric Enclosure	Breaker
	Eaton Enclosure	Breaker						
1 surface	<b>SKDN400</b> <sup>1</sup>	<b>KDB3400</b>	LA400S	LAL36400	J6N1	JXD63B400	TJ400S/SG400S	TJK436400WL
1 flush	<b>FKDN400</b> <sup>1</sup>	<b>KDB3400</b>	LA400F	LAL36400	—	—	TJ400F/SG400F	TJK436400WL
3R	<b>RKDN400</b> <sup>1</sup>	<b>KDB3400</b>	LA400R	LAL36400	J6N3R	JXD63B400	TJ400R/SG400R	TJK436400WL
12/3R	—	—	LA400AWK	LAL36400	—	—	—	—
12	<b>JKDN400</b> <sup>1</sup>	<b>KDB3400</b>	—	—	J6N12	JXD63B400	TJ400J/SG400J	TJK436400WL
4/4X	<b>WKDN400</b> <sup>1</sup>	<b>KDB3400</b>	LA400DS	LAL36400	—	—	TJ400CS/SG400CS	TJK436400WL
7/9	<b>XKDN400B</b> <sup>1 2</sup>	<b>KDB3400</b>	—	—	EE	JXD63B400	—	—
1 surface	<b>SLDN600</b>	<b>LDB3600</b>	MA1000S	MAL36600	LD6N1	LXD63B600	TJ600S/SG600S	TJK636600WL
1 flush	—	—	MA1000F	MAL36600	—	—	TJ600F/SG600F	TJK636600WL
3R	<b>RLDN600</b>	<b>LDB3600</b>	—	—	LD6N3R	LXD63B600	TJ600R/SG600R	TJK636600WL
12/3R	—	—	MA1000AWK	MAL36600	—	—	—	—
12	<b>JLDN600</b>	<b>LDB3600</b>	—	—	LD6N12	LXD63B600	TJ600J/SG600J	TJK636600WL
4/4X	<b>WLDN600</b>	<b>LDB3600</b>	MA1000DS	MAL36600	LD6SS4	LXD63B600	TJ600CS	TJK636600WL
7/9	<b>XMCN800B</b>	<b>LDB3600</b>	—	—	ED6	LXD63B600	—	—
1 surface	<b>SNDN1200</b>	<b>MDL3800</b>	MA1000S	MAL36800	LMD1	MXD63B800	TK4V1200S	TKMA836800WL
1 flush	—	—	MA1000F	MAL36800	—	—	TK4V1200F	TKMA836800WL
3R	<b>RNDN1200</b>	<b>MDL3800</b>	—	—	LMD3R	MXD63B800	TKV41200R	TKMA836800WL
12/3R	—	—	MA1000AWK	MAL36800	—	—	—	—
12	<b>JNDN1200</b>	<b>MDL3800</b>	—	—	LMD12	MXD63B800	TK4V1200J/SK1200	TKMA836800WL
4/4X	<b>WNDN1200</b>	<b>MDL3800</b>	MA1000DS	MAL36800	—	—	—	—
7/9	<b>XMCN800B</b>	<b>MDL3800</b>	—	—	—	—	—	—
1 surface	<b>SNDN1200</b>	<b>ND312T33W</b>	MA1000S	MAL361000	—	—	—	—
1 flush	—	—	MA1000F	MAL361000	—	—	—	—
3R	<b>RNDN1200</b>	<b>ND312T33W</b>	—	—	—	—	—	—
12/3R	—	—	MA1000AWK	MAL361000	—	—	—	—
12	<b>JNDN1200</b>	<b>ND312T33W</b>	—	—	—	—	—	—
4/4X	<b>WNDN1200</b>	<b>ND312T33W</b>	MA1000DS	MAL361000	—	—	—	—
1 surface	<b>SNDN1200</b>	<b>ND312T33W</b>	—	—	MND61	NXD63B120	TK4V1200S	TKMA31200WL
12	—	—	—	—	—	—	TK4V1200F	TKMA31200WL
3R	<b>RNDN1200</b>	<b>ND312T33W</b>	—	—	MND63	NXD63B120	TKV41200R	TKMA31200WL
1 surface	—	—	NA1200AWK	NAL361200	—	—	—	—
12	<b>JNDN1200</b>	<b>ND312T33W</b>	—	—	MND612	NXD63B120	TK4V1200J/SK1200	TKMA31200WL
4/4X	<b>WNDN1200</b>	<b>ND312T33W</b>	—	—	—	—	—	—
7/9	<b>XNDN1200B</b> <sup>2</sup>	<b>ND312T33W</b>	—	—	—	—	—	—

**Notes**<sup>1</sup> Maximum wire size 500 kcmil.<sup>2</sup> Through-feed only.

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

1

#### Product Selection

1. Use the data on **Page V2-T1-119** to determine type of enclosure required.
2. Use the data on **Page V2-T1-113** and **V2-T1-114** to determine circuit breaker required.
3. **Pages V2-T1-115** through **V2-T1-121** include rough-in dimensional information.

#### Enclosure Only—Series C Breakers

Breaker Frame	Breaker Ampere Range	Enclosure NEMA Class	Catalog Number
<b>Series C Breakers</b>			
GHC, GD (two- and three-pole only) GHCGFEP (single-pole only)	15–100	1 surface	<b>SGDN100</b> <sup>1</sup>
		3R	<b>RGDN100</b>
		12	<b>JGDN100</b>
		4/4X, 5 stainless steel	<b>WGDN100</b>
EHD, FD, FDB, HFD, ED, EDH, EDB, EDS, FDC, FDE, HFDE, HFDDC	15–100	1 surface	<b>SFDN100</b>
		1 flush	<b>FFDN100</b>
		3R	<b>RFDN100</b>
		12	<b>JFDN100</b>
	4/4X, 5 stainless steel	<b>WFDN100</b>	
EHD, FD, FDB	15–50	7/9 cast aluminum	<b>XFDN050B</b>
HFD, FDC	60–225 <sup>2</sup>	7/9 cast aluminum	<b>XFDN225B</b>
FD, FDB, HFD, ED, EDH, EDC, FDC (15–225 A) EDB, EDS, FDE, HFDE, FDCE, HFDDC	125–225	1 surface	<b>SFDN225</b>
		1 flush	<b>FFDN225</b>
		3R	<b>RFDN225</b>
		12	<b>JFDN225</b>
	4/4X, 5 stainless steel	<b>WFDN225</b>	
JD, JDB, HJD, JDC	125–250	1 surface	<b>SJDN250</b>
		1 flush	<b>FJDN250</b>
		3R	<b>RJDN250</b>
		12	<b>JJDN250</b>
	4/4X, 5 stainless steel	<b>WJDN250</b>	
JD, JDB, HJD, JDC	125–250	7/9 cast aluminum	<b>XJDN250B</b>
		1 surface	<b>SKDN400</b>
		1 flush	<b>FKDN400</b>
		3R	<b>RKDN400</b>
KD, KDB, HKD, KDC, DK HKDB <sup>3</sup> , CKD, CHKD, KDB, HKDDC	125–400	12	<b>JKDN400</b>
		4/4X, 5 stainless steel	<b>WKDN400</b>

#### Enclosure Only—Series C Breakers, continued

Breaker Frame	Breaker Ampere Range	Enclosure NEMA Class	Catalog Number
<b>Series C Breakers, continued</b>			
KD, KDB, HKD, KDC, DK	125–400	7/9 cast aluminum	<b>XKDN400B</b>
LGE, LGS, LGH	250–600	1 surface	<b>SLG630</b>
		3R	<b>RLG630</b>
		12	<b>JLG630</b> <sup>5</sup>
		4/4X, 5 stainless steel	<b>WLG630</b>
LD, LDB, HLD <sup>4</sup> , HLDB, LDCB	300–600	1 surface	<b>SLDN600</b>
		3R	<b>RLDN600</b>
		12	<b>JLDN600</b>
		4/4X, 5 stainless steel	<b>WLDN600</b>
	7/9 cast aluminum	<b>XLDN600B</b>	
LD, LDB, HLD	300–600	7/9 cast aluminum	<b>XMCN800B</b>
MDL, HMDL	400–800		
MDL, HMDL, ND, HND <sup>4</sup> MPS, MPH, HMDL, MDLB, HMDLDC, HMDLB, MDLPV Molded Case Switches (w/ WK suffix)— MDL, MDLB, HMDL, HLDLC, ND, HND, HMDLDC Molded Case Switches (w/ K suffix)— MPS Molded Case Switches (w/ SE suffix)— NGK	400–1200	1 surface	<b>SNDN1200</b>
		3R	<b>RNDN1200</b>
		12	<b>JNDN1200</b>
		4/4X, 5 stainless steel	<b>WNDN1200</b>
ND, HND	—	7/9 cast aluminum	<b>XNDN1200B</b>

#### Notes

- <sup>1</sup> Suitable for use with single-pole breaker. Base mounting plate kit. QCCBP required.
- <sup>2</sup> Maximum wire size: 4/0.
- <sup>3</sup> Not applicable for XKDN400B.
- <sup>4</sup> Short-circuit ratings are limited for high interrupting rated breakers. Refer to **Page V2-T1-113**.
- <sup>5</sup> Can be field converted to NEMA Type 3R.

### Enclosure Only—Series G Breakers

Breaker Frame	Breaker Ampere Range	Enclosure NEMA Class	Catalog Number
<b>Series G Breakers</b>			
LGE, LGS, LGH	250–600	1 surface	<b>SLG630</b> <sup>1</sup>
		3R	<b>RLG630</b> <sup>1</sup>
		12	<b>JLG630</b> <sup>1</sup>
		4/4X, 5 st. steel	<b>WLG630</b> <sup>1</sup>
NG, NGS, NGH	320–1200	1 surface	<b>SNDN1200</b>
		3R	<b>RNDN1200</b>
		12	<b>JNDN1200</b>
		4/4X, 5 st. steel	<b>WNDN1200</b>

### Enclosure Only—Earth Leakage Breakers

Breaker Frame	Breaker Ampere Range	Enclosure NEMA Class	Catalog Number
<b>Earth Leakage Breakers</b>			
ELFD, ELHFD and ELFDC (three-pole only)	15–100	1 surface	<b>SFD100E</b>
		1 flush	<b>FFD100E</b>
		3R	<b>RFDN100E</b>
		12	<b>JFDN100E</b>
		4/4X	<b>WFDN100E</b>
LGE, LGS, LGH used with ELLBN	250–600	1 surface	<b>SLG630E</b>
		3R	<b>RLG630</b>
		12	<b>JLG630</b> <sup>2</sup>
		4/4X, 5 st. steel	<b>WLG630</b>

### Enclosure Only Catalog Numbers for 100% Rated Circuit Breakers

Breaker Frame <sup>3</sup>	Breaker Ampere Range	Enclosure NEMA Class	Catalog Number
CKD, CHKD	125–400	1 surface	<b>SKDN400</b>
		1 flush	<b>FKDN400</b>
		3R	<b>RKDN400</b>
		12	<b>JKDN400</b>
		12K	<b>DKDN400</b>
		4/4X, 5 st. steel	<b>WKDN400</b>
		7/9 cast alum.	<b>XKDN400B</b>
LGE...C <sup>4</sup> LGS...C <sup>4</sup> LGH...C <sup>4</sup>	250–600	1 surface	<b>SLG630</b>
		3R	<b>RLG630</b>
		12	<b>JLG630</b>
		4/4X, 5 st. steel	<b>WLG630</b>
CMDL, CHMDL	400–800	1 surface	<b>SCNDN1200</b>
		3R	<b>RCNDN1200</b>
CND <sup>5</sup> , CHND <sup>5</sup> , CND <sup>5</sup> , NGH...C <sup>5,6</sup>	1200	1 surface	<b>SCNDN1200</b>
		3R	<b>RCNDN1200</b>

#### Notes

- <sup>1</sup> Three- or four-pole.
- <sup>2</sup> Can be field converted to NEMA Type 3R.
- <sup>3</sup> Breaker frames include both thermal magnetic and electronic trip versions.
- <sup>4</sup> Cu conductors only.
- <sup>5</sup> Cu conductors only, 90 °C wire sized at 75 °C ampacity. Conductor extensions and barriers required.
- <sup>6</sup> Maximum interruption ratings as follows, 100 kAIC at 240 Vac, 65 kAIC at 480 Vac, 35 kAIC at 600 Vac, 30 kAIC at 250 Vdc, 30 kAIC at 500 Vdc.

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

1

#### Accessories

##### Nameplates Applied

Customer must provide nameplate legend at the time of order.

##### Key Interlock Systems

Interlocks are used to prevent an authorized operation. Before system construction can begin, the following information must be known:

1. User—name, address and telephone number.
2. Complete lock scheme required.

##### Neutral Assemblies Installed

Ampere ratings: 100, 250, 400, 600, 800 and 1200.

##### Separate Ground Lug Installed

Ampere ratings: 100, 250, 400, 600 and 1200.

##### Special Paint Finish

Contact the Safety Switch Flex Center (1-888-329-9272) or FlexSwitches@eaton.com.

##### Pilot Light On NEMA 1 Enclosure

Pilot light

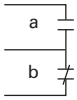


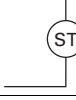
##### Stainless Steel Flush Covers

Frames: P, J and K.

#### Electronic Trip Options

Frame Type	Number of Poles	Description
KD, HKD	3	RMS 310 LS
		RMS 310 LSI
		RMS 310 LSG <sup>1</sup>
		RMS 310 LSIG <sup>1</sup>
LD, HLD	3	RMS 310 LS
		RMS 310 LSI
		RMS 310 LSG <sup>1</sup>
		RMS 310 LSIG <sup>1</sup>
MDL, HMDL	3	RMS 310 LS
		RMS 310 LSI
		RMS 310 LSG <sup>1</sup>
		RMS 310 LSIG <sup>1</sup>
ND	3	RMS 310 LS
		RMS 310 LSI
		RMS 310 LSG <sup>1</sup>
		RMS 310 LSIG <sup>1</sup>
RD	3	RMS 310 LS
		RMS 310 LSI
		RMS 310 LSG
		RMS 310 LSIG
		RMS 510 LS <sup>2</sup>
		RMS 610 LS <sup>2</sup>
		RMS 810 LS <sup>2</sup>
		RMS 910 LS <sup>2</sup>

#### Assembled Enclosed Circuit Breakers

Accessories	Modifications	Breaker Frame	Description
Auxiliary switches (specify voltage and Hz)		G, F, J, K, L, M, N	1A, 1B
		G, F, J, K, L, M, N	2A, 2B
		K, L, M, N	3A, 3B
		R	1A, 1B
Shunt trips (specify voltage and Hz)		G, F, J, K, L, M, N, R	—
Alarm switches (specify voltage and Hz)		G, F, J, K, L, M, N	1 Make, 1 Break
		F, K, L, M, N	2 Make, 2 Break
Undervoltage release (specify voltage and Hz)		G, F, J, K, L, M, N, R	—

#### Notes

<sup>1</sup> Ground fault application not available with NEMA 7/9. Contact Eaton's Customer Support Center.

<sup>2</sup> Add to the appropriate RD RMS 310 adder.

**Raintight Hubs**

All rainproof enclosures 30–400A are shipped with plate over cutout. Hubs are not supplied with screws on 30–400A enclosures. Use screws from plate.

**Raintight Hubs****Raintight Tubs**

Hubs	Hub Diameter		Catalog Number
	Inches	mm	
<b>Small</b>			
For use with RGDN and RFDN	0.75	19.1	<b>DS075H1</b>
	1.00	25.4	<b>DS100H1</b>
	1.25	31.8	<b>DS125H1</b>
	1.50	38.1	<b>DS150H1</b>
	2.00	50.8	<b>DS200H1</b>
<b>Large</b>			
For use with RJDN. RKDN has two cutouts	2.00	50.8	<b>DS200H2</b>
	2.50	63.5	<b>DS250H2</b>
	3.00	76.2	<b>DS300H2</b>
Required if using small DS hubs on RJDN and RKDN enclosures.			<b>DS900AP</b>

**Breather and Drain, Hazardous Enclosures**

A Universal Breather/Drain Fitting is installed in the top of an enclosure to provide ventilation to minimize condensation and in the bottom to allow drainage of accumulated condensation while maintaining explosion-proof integrity.

Type	Compliance		Conduit Opening	Catalog Number
	NEMA 7	NEMA 9		
BD	Class I, Groups C, D; Class I, Zone 1, Group IIB	Class II, Groups F, G	1/2	<b>XPBD2</b>
DBB	Class I, Groups B, C, D; Class I, Zone 1, Group IIB + Hydrogen	Class II, Groups E, F, G	1/2	<b>XPDBB50</b>

**Neutral Kits, Insulated and Groundable**

Maximum Enclosure Rating (A)	Main Lug Size Cu/Al	Catalog Number
100 SFDN100 RFDN100	(1) 14–1/0	<b>DH100NK</b>
100 (all others)	(1) 14–1/0	<b>INK100</b>
250	(1) 4–350 kcmil	<b>INK250</b>
400	(1) 4–600 kcmil or (2) 1/0–250 kcmil	<b>INK400</b>
600	(2) 250–500 kcmil	<b>INK600</b>
1200	(4) 3/0–750 kcmil	<b>DS800NK</b> <sup>1</sup>

**Note**

<sup>1</sup> For use with 800 A and 1200 A M and N frame, and 100% rated.

**Modifications**

Allowable accessory combinations can be reviewed in Eaton's Circuit Breaker Product Guide: PG.74.A.01.T.E. Verify final application with the Customer Support Center.

**Special RD Modifications and Accessories****Description**

1600A neutral assembly (aluminum)
2000A neutral assembly (aluminum)
2500A neutral assembly (aluminum)
1600A neutral assembly (copper)
2000A neutral assembly (copper)
2500A neutral assembly (copper)
Adjustable rating plug
Lockoff, padlockable
Key interlock
Phase failure protection (includes shunt trip)
Zero sequence gfp (including shunt trip and test panel)
NEMA 3R flat roof
Heater package (includes cpt, heater, thermostat and disconnect)
Special sized enclosures Standard is 90-inch H x 30-inch W x 30-inch D (2286 x 762 x 762 mm)
IQ metering
Non-standard terminations

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

1

#### Flex Center

##### Introduction

The Safety Switch Flex Center is a special facility at the site of our Cleveland, Tennessee, plant that is dedicated to providing customized enclosed circuit breakers that meet customers' challenging applications.

The Flex Center is a solutions center that provides real value:

- A dedicated and knowledgeable engineering/manufacturing/customer service team to meet your needs
- A production facility stocked with a full arsenal of equipment to get the job done
- The industry's shortest lead-time
- Easy ordering through our distributors
- Factory-installed modifications include (but are not limited to) the following:
  - Special size enclosure
  - Special nameplates
  - Stainless steel flush cover
  - Special paint
  - Lock-on provisions
  - Neutral assemblies—factory installed
  - Equipment ground lugs—factory installed
  - Cover control (pilot lights, pushbuttons, selector switches, etc.)
- Factory-installed G-Frame breakers
- For application, availability or pricing questions, contact the Safety Switch Flex Center at **1-888-329-9272** or [FlexSwitches@eaton.com](mailto:FlexSwitches@eaton.com)

##### Satellite Plants

###### Atlanta

7000 Highlands Parkway SE #102  
Smyrna, GA 30082  
Fax (770) 433-1863  
Phone (678) 309-4260

###### Baltimore

6671 Santa Barbara Court Suite A  
Elk Ridge, MD 21075  
Fax (410) 796-7755  
Phone (410) 796-7777

###### Chicago

959 AEC Drive  
Wood Dale, IL 60191  
Fax (630) 860-3569  
Phone (630) 860-3500

###### Cleveland

5565 Venture Drive Unit B  
Parma, OH 44130  
Fax (216) 433-0545  
Phone (216) 433-0616

###### Dallas

631 Westport Pkwy Suite 100  
Grapevine, TX 76051  
Fax (817) 251-6249  
Phone (817) 251-6797

###### Denver

14101 East 33rd Place Suite F  
Aurora, CO 80011  
Fax (303) 371-4175  
Phone (303) 371-7844

###### Hartford

625 Day Hill Road  
Windsor, CT 06095  
Fax (860) 688-4982  
Phone (860) 688-5330

###### Houston

10810 West Little York Suite 100  
Houston, TX 77041  
Fax (713) 688-3764  
Phone (713) 688-8430

###### Los Angeles

5590 Jurupa Street  
Ontario, CA 91761  
Fax (909) 390-8884  
Phone (909) 390-8853

###### New Jersey

96 Stemmers Lane  
Westampton, NJ 08060  
Fax (609) 835-4777  
Phone (609) 835-4230

###### Orlando

3827 St. Valentine Way  
Orlando, FL 32811  
Fax (407) 841-9135  
Phone (407) 843-3863

###### Phoenix

921 South Park Lane Suite 1  
Tempe, AZ 85281-5119  
Fax (480) 449-4223  
Phone (480) 449-4222

###### Raleigh

2933 S. Miami Blvd. Suite 111  
Durham, NC 27703  
Fax (919) 572-9751  
Phone (919) 544-7074

###### St. Louis

12947 Gravois Road  
St. Louis, MO 63127  
Fax (314) 842-2552  
Phone (314) 842-7797

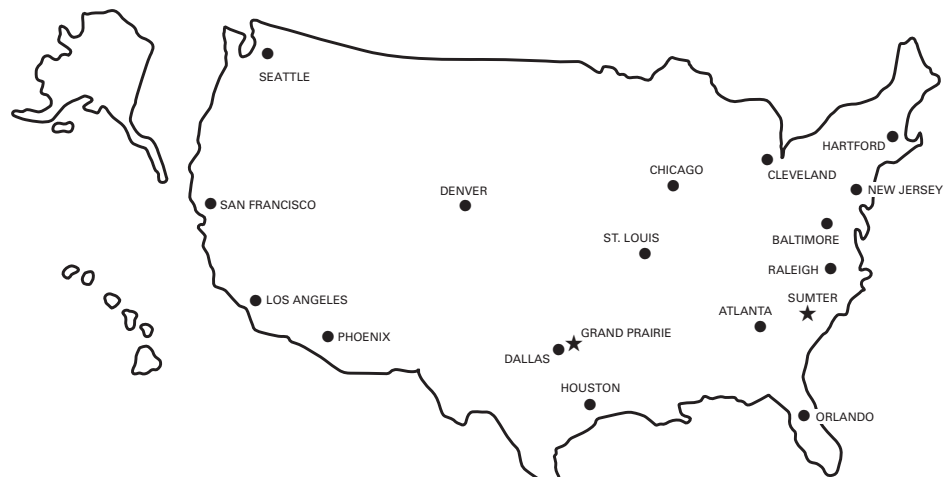
###### San Francisco

20923 Cabot Boulevard  
Hayward, CA 94545  
Fax (510) 784-8980  
Phone (510) 784-8981

###### Seattle

18657 72nd Avenue S.  
Kent, WA 98032  
Fax (425) 251-0079  
Phone (425) 251-9081

#### Satellite Service Locations





## Technical Data and Specifications

## Industrial Circuit Breaker Selection

Circuit Breaker Type	Continuous Ampere Rating at 40°C	Number of Poles	Vac	Vdc	Type of Trip <sup>1</sup>	Federal Spec. W-C-375b	UL Listed Interrupting Rating rms Symmetrical Amperes						Vdc Ratings <sup>2</sup>			
							Vac Ratings			277			600			125
<b>G-Frame</b>																
GHC	15–100	1	120	125	N.I.T.U.	12c, 13a	65,000	—	—	—	—	—	—	14,000	—	—
GHC	15–100	2, 3	240	125/250	N.I.T.U.	13b	—	—	65,000	—	—	—	—	—	—	14,000
GHC	15–100	1	277	125	N.I.T.U.	12c, 13a	—	—	—	14,000	—	—	—	14,000	—	—
GHC	15–100	2, 3	277/480	215/250	N.I.T.U.	13b	—	—	—	14,000	14,000	—	—	—	—	14,000
GD	15–100	3	480	250	N.I.T.U.	13b	—	—	65,000	—	22,000	—	—	—	10,000	—
<b>F-Frame</b>																
ED	100–225	2, 3	240	125	N.I.T.U.	12b	—	—	65,000	—	—	—	—	10,000	—	—
EDH	100–225	2, 3	240	125	N.I.T.U.	14b	—	—	100,000	—	—	—	—	10,000	—	—
EDC	100–225	2, 3	240	125	N.I.T.U.	1	—	—	200,000	—	—	—	—	10,000	—	—
EHD	15–100	1	277	125	N.I.T.U.	13a	—	—	—	14,000	—	—	—	10,000	—	—
EHD	15–100	2, 3	480	250	N.I.T.U.	13b	—	—	18,000	—	14,000	—	—	—	10,000	—
FDB	15–150	2, 3	600	250	N.I.T.U.	18a	—	—	18,000	—	14,000	14,000	—	—	10,000	—
FDB	15–150	4	600	250	N.I.T.U.	<sup>3</sup>	—	—	18,000	—	14,000	14,000	—	—	10,000	—
FD	15–225	1	277	125	N.I.T.U.	13a	—	—	—	25,000	—	—	—	10,000	—	—
FD	15–225	2, 3	600	250	N.I.T.U.	22a	—	—	65,000	—	25,000	18,000	—	—	10,000	—
FD	15–225	4	600	250	N.I.T.U.	<sup>3</sup>	—	—	65,000	—	25,000	18,000	—	—	10,000	—
HFD	15–225	1	277	125	N.I.T.U.	13a	—	—	—	65,000	—	—	—	10,000	—	—
HFD	15–225	2, 3	600	250	N.I.T.U.	22a	—	—	100,000	—	65,000	25,000	—	—	20,000	—
HFD	15–225	4	600	250	N.I.T.U.	<sup>3</sup>	—	—	100,000	—	65,000	25,000	—	—	20,000	—
FDC	15–225 <sup>4</sup>	2, 3	600	250	N.I.T.U.	24a	—	—	200,000	—	100,000	35,000	—	—	20,000	—
FDC	15–225	4	600	250	N.I.T.U.	<sup>3</sup>	—	—	200,000	—	100,000	35,000	—	—	20,000	—
<b>J-Frame</b>																
JDB	70–250	2, 3	600	250	N.I.T.U.	22a	—	—	65,000	—	35,000	18,000	—	—	10,000	—
JD	70–250	2, 3, 4	600	250	I.T.U.	22a	—	—	65,000	—	35,000	18,000	—	—	10,000	—
HJD	70–250	2, 3, 4	600	250	I.T.U.	22a	—	—	100,000	—	65,000	25,000	—	—	22,000	—
JDC	70–250	2, 3, 4	600	250	I.T.U.	22a	—	—	200,000	—	100,000	35,000	—	—	22,000	—
<b>K-Frame</b>																
DK	250–400	2, 3	240	250	N.I.T.U.	14b	—	—	65,000	—	—	—	—	—	10,000	—
KDB	100–400	2, 3	600	250	N.I.T.U.	23a	—	—	65,000	—	35,000	25,000	—	—	10,000	—
KD	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	65,000	—	35,000	25,000	—	—	10,000	—
HKD	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	100,000	—	65,000	35,000	—	—	22,000	—
KDC	100–400	2, 3, 4	600	250	I.T.U.	23a	—	—	200,000	—	100,000	50,000	—	—	22,000	—
<b>LG-Frame</b>																
LGE	250–600	3, 4	600	250	I.T.U.	23a	—	—	65,000	—	35,000	18,000	—	—	22,000	—
LGS	250–600	3, 4	600	250	I.T.U.	23a	—	—	85,000	—	50,000	25,000	—	—	22,000	—
LGH	250–600	3, 4	600	250	I.T.U.	23a	—	—	100,000	—	65,000	35,000	—	—	42,000	—

## Notes

<sup>1</sup> N.I.T.U. is non-interchangeable trip unit and I.T.U. is interchangeable trip unit.

<sup>2</sup> Two-pole circuit breaker, or two poles of three-pole circuit breaker at 250 Vdc.

<sup>3</sup> Not defined in W-C-375b.

<sup>4</sup> Not suitable for use with 100A enclosures.

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

1

#### Industrial Circuit Breaker Selection, continued

Circuit Breaker Type	Continuous Ampere Rating at 40°C	Number of Poles	Vac	Vdc	Type of Trip <sup>1</sup>	Federal Spec. W-C-375b	UL Listed Interrupting Rating rms Symmetrical Amperes						Vdc Ratings <sup>2</sup>		
							Vac Ratings						120	250	125/250
							120	120/240	240	277	480	600	125	250	125/250
<b>L-Frame</b>															
LDB	300–600	2, 3	600	250	N.I.T.U.	23a	—	—	65,000	—	35,000	25,000	—	22,000	—
LD	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	65,000	—	35,000	25,000	—	22,000	—
HLD <sup>3</sup>	300–600	2, 3, 4	600	250	I.T.U.	23a	—	—	100,000	—	65,000	35,000	—	25,000	—
<b>M-Frame</b>															
MDL	300–800	2, 3	600	250	I.T.U.	23a	—	—	65,000	—	50,000	25,000	—	22,000	—
HMDL <sup>4</sup>	300–800	2, 3	600	250	I.T.U.	23a	—	—	100,000	—	65,000	35,000	—	25,000	—
<b>N-Frame</b>															
ND	600–1200	3, 4	600	—	N.I.T.U.	23a	—	—	65,000	—	50,000	25,000	—	—	—
HND <sup>4</sup>	600–1200	3, 4	600	—	N.I.T.U.	23a	—	—	100,000	—	65,000	35,000	—	—	—
<b>R-Frame</b>															
RD	800–2500	3, 4	600	—	N.I.T.U.	24a	—	—	125,000	—	65,000	35,000	—	—	—

**Notes**

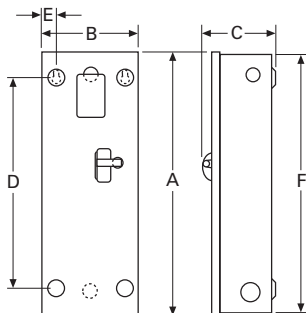
- <sup>1</sup> N.I.T.U. is non-interchangeable trip unit and I.T.U. is interchangeable trip unit.
- <sup>2</sup> Two-pole circuit breaker, or two poles of three-pole circuit breaker at 250 Vdc.
- <sup>3</sup> HLD: NEMA 1 enclosed: 240 Vac = 100 kA, 480 Vac = 65 kA, 600 Vac = 35 kA, 250 Vdc = 20 kA, 500 Vdc = 25 kA.  
NEMA 3R enclosed: 240 Vac = 65 kA, 480 Vac = 50 kA, 600 Vac = 25 kA, 250 Vdc = 20 kA, 500 Vdc = 25 kA.
- <sup>4</sup> HMDL and HND: NEMA 1 and 3R enclosed: 240 Vac = 100 kA, 480 Vac = 65 kA, 600 Vac = 35 kA, 250 Vdc = 30 kA, 500 Vdc = 30 kA.

**Dimensions**

Approximate Dimensions in Inches (mm)

**NEMA 1, 12, 3R****Note:** Not to be used for construction purposes unless approved.**NEMA 1 Surface Mounted**

Frame	Maximum Amperes	A	B	C	D	E	F	Approximate Weight in Lbs (kg)
G	100	17.50 (444.5)	8.56 (217.4)	6.28 (159.5)	13.03 (331.0)	1.20 (30.5)	17.19 (436.6)	12 (5)
F <sup>1</sup>	100	19.13 (485.9)	9.13 (231.9) <sup>3</sup>	5.20 (132.1)	17.00 (431.8)	N/A <sup>4</sup>	18.81 (477.8)	13 (6)
Earth leakage	100	23.25 (590.6)	8.56 (217.4)	6.28 (159.5)	18.75 (476.3)	1.20 (30.5)	22.94 (582.7)	15 (7)
F <sup>2</sup>	225	23.25 (590.6)	8.56 (217.4)	6.28 (159.5)	18.75 (476.3)	1.20 (30.5)	22.94 (582.7)	15 (7)
J	250	34.70 (881.4)	10.92 (277.4)	7.20 (182.9)	30.00 (762.0)	1.88 (47.8)	34.39 (873.5)	31 (14)
K <sup>5</sup>	400	38.81 (985.8)	11.06 (280.9)	10.94 (277.9)	34.00 (863.6)	1.25 (31.8)	38.50 (977.9)	53 (24)
LG	600	51.06 (1296.9)	21.87 (555.5)	9.96 (253.0)	51.63 (1311.5)	1.94 (49.3)	50.13 (1273.3)	90 (41)
Earth leakage	600	51.06 (1296.9)	21.87 (555.5)	9.96 (253.0)	51.63 (1311.5)	1.94 (49.3)	50.13 (1273.3)	90 (41)
L	600	45.88 (1165.4)	14.31 (363.5)	12.38 (314.5)	46.56 (1182.6)	1.91 (48.5)	45.56 (1157.2)	81 (37)
M, N	1200	61.22 (1555.0)	21.44 (544.6)	15.41 (391.4)	61.84 (1570.7)	1.97 (50.0)	60.91 (1547.1)	178 (81)
M, N <sup>6</sup>	400–1200	67.82 (1722.6)	21.41 (543.8)	15.53 (394.5)	69.32 (1760.7)	1.97 (50.0)	68.69 (1744.7)	128 (58)

**NEMA 1 Surface Mounted****Notes**

- <sup>1</sup> SFDN100 Series "B" released 9/15/01.
- <sup>2</sup> Maximum wire size: 4/0.
- <sup>3</sup> Total width, including door clip is 9.95 inches (253 mm).
- <sup>4</sup> Single centered mounting hole provided.
- <sup>5</sup> Maximum wire size: 500 kcmil.
- <sup>6</sup> 100% rated breakers.

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

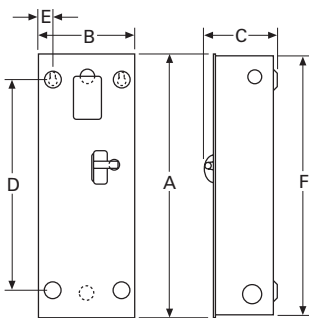
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Approximate Dimensions in Inches (mm)

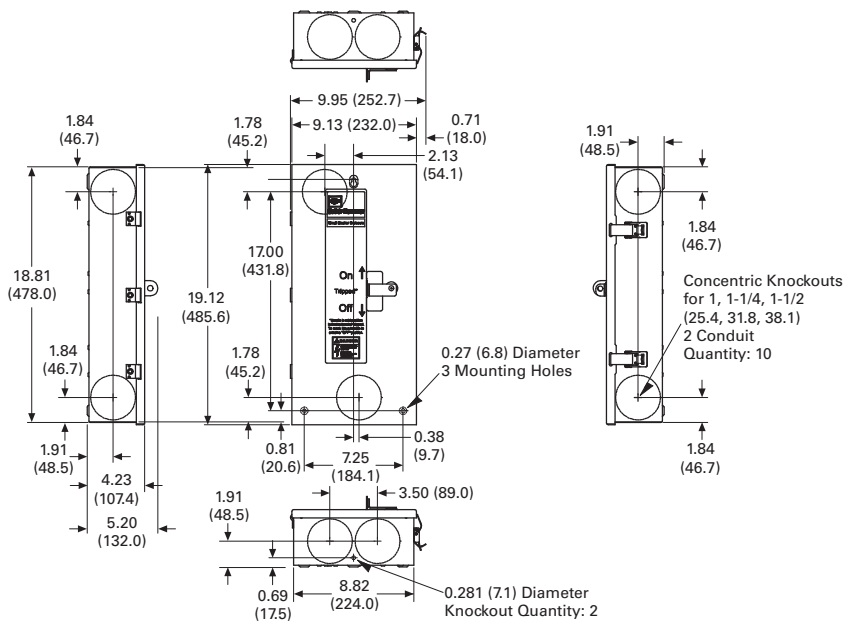
#### NEMA 1 Flush Mounted

Frame	Maximum Amperes	A	B	C	D	E	F	Approximate Weight in Lbs (kg)
F	100	18.81 (477.8)	9.72 (246.9)	6.28 (159.5)	13.03 (331.0)	1.86 (47.2)	18.50 (469.9)	12 (5)
Earth leakage	100	24.56 (623.8)	9.72 (246.9)	6.28 (159.5)	18.75 (476.3)	1.86 (47.2)	24.25 (616.0)	15 (7)
F <sup>1</sup>	225	24.56 (623.8)	9.72 (246.9)	6.28 (159.5)	18.75 (476.3)	1.86 (47.2)	24.25 (616.0)	15 (7)
J	250	36.02 (914.9)	12.23 (310.6)	7.20 (182.9)	30.00 (762.0)	1.88 (47.8)	35.70 (906.8)	32 (15)
K <sup>2</sup>	400	40.13 (1019.3)	12.38 (314.5)	10.94 (277.9)	34.00 (863.6)	2.94 (74.7)	39.81 (1011.2)	53 (24)

#### NEMA 1 Flush Mounted



#### NEMA 1 Surface Mounted SFDN100 Series "B"



#### Notes

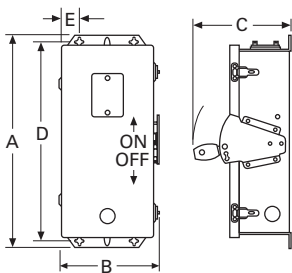
- 1 Maximum wire size: 4/0.
- 2 Maximum wire size: 500 kcmil.

Approximate Dimensions in Inches (mm)

### NEMA 12 Dustproof

Frame	Maximum Amperes	A	B	C	D	E	Approximate Weight in Lbs (kg)
G, F	100	19.91 (505.7)	9.16 (232.7)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	16 (7)
Earth leakage	100	19.91 (505.7)	9.16 (232.7)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	19 (9)
FBP, FCL	100	25.66 (651.8)	9.16 (232.7)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	19 (9)
F <sup>1</sup>	225	25.66 (651.8)	9.16 (232.7)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	19 (9)
J	250	37.53 (953.3)	11.88 (301.8)	10.22 (259.6)	35.77 (908.6)	1.94 (49.3)	37 (17)
K <sup>2</sup>	400	41.69 (1058.9)	12.31 (312.7)	14.06 (357.1)	39.94 (1014.5)	1.97 (50.0)	58 (26)
LG	600	53.37 (1355.6)	23.06 (585.7)	14.10 (358.1)	51.63 (1311.4)	1.94 (49.3)	94 (43)
Earth leakage	600	53.37 (1355.6)	23.06 (585.7)	14.10 (358.1)	51.63 (1311.4)	1.94 (49.3)	94 (43)
L	600	48.31 (1227.1)	15.56 (395.2)	15.50 (393.7)	46.56 (1182.6)	1.92 (48.8)	84 (38)
NBP	800	63.59 (1615.2)	22.63 (574.8)	17.63 (447.8)	—	—	110 (50)
M, N	1200	63.59 (1615.2)	22.63 (574.8)	17.63 (447.8)	61.84 (1570.7)	1.97 (50.0)	175 (80)
G, F	100	19.91 (505.7)	9.16 (232.7)	9.31 (236.5)	—	—	16 (7)
Earth leakage	100	19.91 (505.7)	9.16 (232.7)	9.31 (236.5)	—	—	19 (9)
FBP, FCL	100	25.66 (651.8)	9.16 (232.7)	9.31 (236.5)	—	—	19 (9)
F <sup>1</sup>	225	25.66 (651.8)	9.16 (232.7)	9.31 (236.5)	—	—	19 (9)
J	250	37.53 (953.3)	11.88 (301.8)	10.22 (259.6)	—	—	37 (17)
K <sup>2</sup>	400	41.69 (1058.9)	12.31 (312.7)	14.06 (357.1)	—	—	58 (26)

### NEMA 12 Dustproof



#### Notes

- 1 Maximum wire size: 4/0.
- 2 Maximum wire size: 500 kcmil.

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

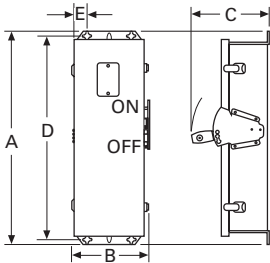
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Approximate Dimensions in Inches (mm)

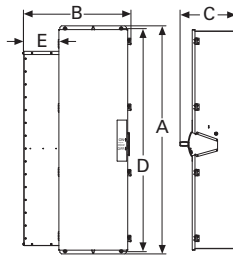
#### NEMA 3R Rainproof

Frame	Maximum Amperes	A	B	C	D	E	Approximate Weight in Lbs (kg)
G, F <sup>1</sup>	100	19.91 (505.7)	9.16 (232.7)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2) <sup>2</sup>	16 (7)
Earth leakage	100	19.91 (505.7)	9.19 (232.7)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	19 (9)
FBP, FCL	100	25.66 (651.8)	9.16 (232.7)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	19 (9)
F <sup>3</sup>	225	25.66 (651.8)	9.16 (232.7)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	19 (9)
J	250	37.50 (952.5)	11.88 (301.8)	10.22 (259.6)	35.77 (908.6)	1.94 (49.3)	37 (17)
K <sup>4</sup>	400	41.69 (1058.9)	12.31 (312.7)	14.06 (357.1)	39.94 (1014.5)	1.97 (50.0)	58 (26)
LG	600	53.37 (1355.6)	23.06 (585.7)	14.10 (358.1)	51.63 (1311.4)	1.94 (49.3)	94 (43)
Earth leakage	600	53.37 (1355.6)	23.06 (585.7)	14.10 (358.1)	51.63 (1311.4)	1.94 (49.3)	94 (43)
L	600	48.31 (1227.1)	15.56 (395.2)	15.50 (393.7)	46.56 (1182.6)	1.92 (48.8)	84 (38)
M, N	1200	63.59 (1615.2)	22.63 (574.8)	17.63 (447.8)	61.84 (1570.7)	1.97 (50.0)	175 (80)
M, N <sup>5</sup>	400-1200	71.06 (1804.9)	32.40 (823.0)	17.65 (448.3)	69.32 (1760.7)	8.04 (204.2)	214 (97)

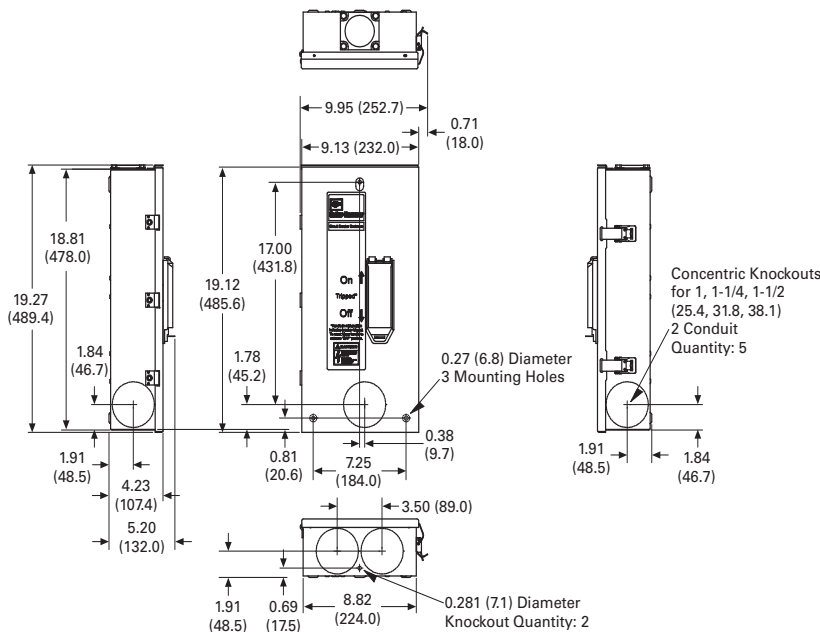
#### NEMA 3R Rainproof <sup>6</sup>



#### Catalog Number RCNDN1200



#### NEMA 3R Rainproof RFDN100 Series "B"



#### Notes

- <sup>1</sup> RFDN100 Series "B" released 9/15/01.
- <sup>2</sup> Single centered mounting hole provided on RFDN100, Series "B."
- <sup>3</sup> Maximum wire size: 4/0.
- <sup>4</sup> Maximum wire size: 500 kcmil.
- <sup>5</sup> 100% rated breakers.
- <sup>6</sup> All NEMA 3R except RFDN100.

Approximate Dimensions in Inches (mm)

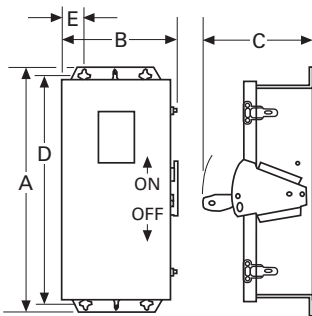
### NEMA 4/4X, 5, 7/9

**Note:** Not to be used for construction purposes unless approved.

#### NEMA 4/4X, 5 Stainless Steel

Frame	Maximum Amperes	A	B	C	D	E	Approximate Weight in Lbs (kg)
G, F	100	19.91 (505.7)	8.84 (224.5)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	16 (7)
Earth leakage	100	19.91 (505.7)	8.84 (224.5)	9.31 (236.5)	18.53 (470.7)	1.70 (43.2)	20 (9)
FBP, FCL	100	25.66 (651.8)	8.84 (224.5)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	20 (9)
F <sup>1</sup>	225	25.66 (651.8)	8.84 (224.5)	9.31 (236.5)	24.28 (616.7)	1.70 (43.2)	20 (9)
J	250	37.50 (952.5)	11.56 (293.6)	10.22 (259.6)	35.77 (908.6)	1.94 (49.3)	39 (18)
K <sup>2</sup>	400	41.69 (1058.9)	11.75 (298.5)	14.06 (357.1)	39.94 (1014.5)	1.97 (50.0)	60 (27)
LG	600	53.38 (1355.9)	23.06 (585.7)	14.11 (358.4)	51.64 (1311.7)	1.94 (49.3)	96 (44)
Earth leakage	600	53.38 (1355.9)	23.06 (585.7)	14.11 (358.4)	51.64 (1311.7)	1.94 (49.3)	96 (44)
L	600	48.31 (1227.1)	14.91 (378.7)	15.50 (393.7)	46.56 (1182.6)	1.92 (48.8)	88 (40)
M, N	1200	63.59 (1615.2)	22.00 (558.8)	17.63 (447.8)	61.84 (1570.7)	1.97 (50.0)	185 (84)

#### NEMA 4/4X, 5 Stainless Steel



#### Notes

- <sup>1</sup> Maximum wire size: 4/0.
- <sup>2</sup> Maximum wire size: 500 kcmil.

# 1.2

## Switching Devices

### Enclosed Circuit Breakers

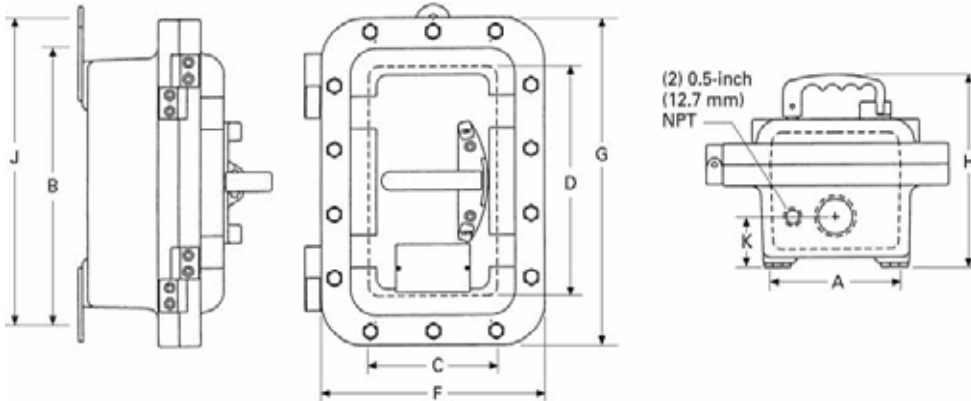
1

Approximate Dimensions in Inches (mm)

#### NEMA 7/9 Cast Aluminum with Weather-Resistant Seals—15–250A

Breaker Frame	Breaker Size Amperes	Number of Outlets	Mounting <sup>1</sup>			Inside <sup>1</sup>			Outside <sup>1</sup>			K <sup>1</sup> Dim	Standard Conduit Size <sup>1</sup>	Approximate Weight in Lbs (kg)
			A	B	J	C	D	E	F	G	H			
F XFDN050B	15–50	4	5.50 (139.7)	13.13 (333.5)	14.13 (358.9)	6.13 (155.7)	10.75 (273.1)	5.25 (133.4)	10.63 (270.0)	15.25 (387.4)	8.88 (225.6)	2.00 (50.8)	1.50 (38.1)	38 (17)
F <sup>1</sup> XFDN100B	60–100	4	6.00 (152.4)	18.00 (457.2)	19.00 (482.6)	6.50 (165.1)	16.00 (406.4)	5.50 (139.7)	11.00 (279.4)	20.50 (520.7)	9.00 (228.6)	2.31 (58.7)	2.00 (50.8)	57 (26)
F <sup>1</sup> XFDN225B	125–225	4	10.25 (260.4)	22.63 (574.8)	—	11.38 (289.1)	20.00 (508.0)	6.38 (162.1)	16.38 (416.1)	25.13 (638.3)	9.63 (244.6)	3.50 (88.9)	2.50 (63.5)	104 (47)
J XJDN225B	70–225	4	8.50 (215.9)	27.13 (689.1)	—	11.25 (285.8)	29.88 (759.0)	7.38 (187.5)	16.00 (406.4)	29.50 (749.3)	12.31 (312.7)	4.00 (101.6)	3.00 (76.2)	145 (66)
J XJDN250B	250	4	9.50 (241.3)	27.25 (692.2)	—	11.25 (285.8)	29.88 (759.0)	8.06 (204.7)	16.38 (416.1)	35.00 (889.0)	12.38 (314.5)	4.19 (106.4)	4.00 (101.6)	170 (77)

#### NEMA 7/9 Cast Aluminum with Weather-Resistant Seals—Dual Three- and Four-Point Mounting Available as Standard on F-Frame 100A and Below



**Note**

<sup>1</sup> Maximum wire size: 4/0.

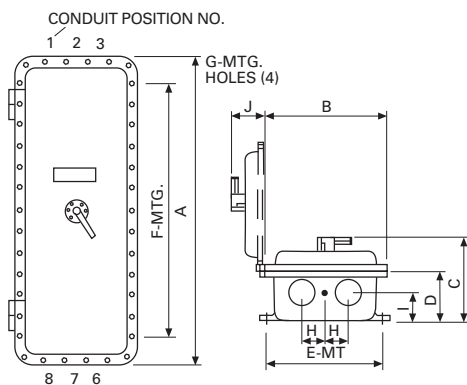


Approximate Dimensions in Inches (mm)

### 7/9 Cast Aluminum with Weather-Resistant Seals—400–1200A

Breaker Frame	Breaker Size Amperes	Overall Enclosure				Enclosure Mounting			Conduit		Hinged Cover	Standard Conduit		Weight Lbs (kg)
		A	B	C	D	E	F	G	H	I	J	Size	Location	
K <sup>1</sup> XKDN400B	400	35.00 (889.0)	16.38 (416.1)	12.63 (320.8)	7.13 (181.1)	9.50 (241.3)	27.25 (692.2)	.50 (12.7)	3.00 (76.2)	4.19 (106.4)	5.50 (139.7)	4.00 (101.6)	1, 3 and 6, 8	170 (77)
L XLDN600B	600	37.88 (962.2)	23.88 (606.6)	14.25 (362.0)	8.25 (209.6)	16.00 (406.4)	45.38 (1152.7)	.50 (12.7)	4.00 (101.6)	5.00 (127.0)	6.00 (152.4)	4.00 (101.6)	1, 3 and 6, 8	419 (190)
M XMCN800B	800	47.88 (1216.2)	13.63 (346.2)	12.81 (325.4)	6.81 (173.0)	16.13 (409.7)	40.75 (1035.1)	.50 (12.7)	4.00 (101.6)	4.00 (101.6)	6.00 (152.4)	4.00 (101.6)	1, 3 and 6, 8	228 (104)
N <sup>2</sup> XNDN1200B	1200	64.00 (1625.6)	26.00 (660.4)	21.38 (543.1)	14.38 (365.3)	27.56 (700.0)	38.63 (981.2)	.50 (12.7)	6.50 (165.1)	4.38 (111.3)	7.00 (177.8)	4.00 (101.6)	1, 3 and 6, 8	567 (257)

### NEMA 7/9 Cast Aluminum with Weather-Resistant Seals



### Conduit Openings

Refer to outline dimensions for size and location of standard conduit openings. In addition, 1/2-inch (12.7 mm) openings are drilled and tapped for breather and drain. Unless ordered with breather and drain, these openings are plugged. Refer to Eaton for price of breather and drain.

#### Notes

- <sup>1</sup> Maximum wire size: 500 kcmil.
- <sup>2</sup> Power cables must enter and leave from opposite ends (through-feed).

# 1.3

## Switching Devices

### Enclosed Rotary Disconnects

1

#### Enclosed Rotary Disconnects



#### Product Overview

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

Enclosed rotary disconnect switches allow safe control and safe disconnect of any motor application.

#### Features, Benefits and Functions

- Padlockable in the OFF position (up to three padlocks) to meet OSHA lockout requirements
- Available in 16–80A ratings
- 600 Vac, 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
- Possibility of adding one power pole and one auxiliary contact
- NEMA® Type 1, 3R, 12, 4, 4X

Open rotary disconnects can be found in Volume 5, Tab 3 titled: NEMA Manual Starters.

#### Contents

##### Description

	<i>Page</i>
Product Overview . . . . .	<b>V2-T1-122</b>
Features, Benefits and Functions . . . . .	<b>V2-T1-122</b>
Standards and Certifications . . . . .	<b>V2-T1-123</b>
Product Selection . . . . .	<b>V2-T1-123</b>
Dimensions . . . . .	<b>V2-T1-124</b>

#### Standards and Certifications

- Meets NEC® Article 430 requirements for a separate disconnect means within sight of all motor loads
- UL® listed under Section 508
- UL listed File No. E165150
- CSA® listed under 22.2 No. 14, File 162136



## Product Selection

## Enclosed Rotary Non-Fusible

Ampere Rating	Maximum Horsepower Ratings				NEMA 1 <sup>1</sup> Enclosure Indoor Catalog Number	NEMA 12 <sup>1 2</sup> Enclosure Dust-Tight/ Rainproof Catalog Number	NEMA 4X <sup>1</sup> Enclosure Corrosion-Resistant, Stainless Steel Catalog Number	NEMA 4X <sup>1</sup> Enclosure Corrosion-Resistant, Non-Metallic Catalog Number	NEMA 4X Enclosure Polycarbonate- Non-Metallic Catalog Number
	Three-Phase AC		480V	600V					
	208V	240V							
<b>Three-Pole, 600 Vac</b>									
16	3	5	10	10	ER53016UG	ER53016UD	ER53016UW	ER53016UX	—
25	7-1/2	7-1/2	15	20	ER53025UG	ER53025UD	ER53025UW	ER53025UX	—
30	7-1/2	7-1/2	15	20	ER53030UG	ER53030UD	ER53030UW	ER53030UX	ER53030UPGB <sup>3 4</sup>
40	7-1/2	7-1/2	20	25	ER53040UG	ER53040UD	ER53040UW	ER53040UX	—
60	15	15	30	30	ER53060UG	ER53060UD	ER53060UW	ER53060UX	ER53060UPGB <sup>3 4</sup>
80	15	20	40	40	ER53080UG	ER53080UD	ER53080UW	ER53080UX	—
<b>Four-Pole, 600 Vac</b>									
16	3	5	10	10	ER54016UG	ER54016UD	ER54016UW	ER54016UX	—
25	7-1/2	7-1/2	15	20	ER54025UG	ER54025UD	ER54025UW	ER54025UX	—
30	7-1/2	7-1/2	20	25	ER54030UG	ER54030UD	ER54030UW	ER54030UX	—
40	7-1/2	7-1/2	20	25	ER54040UG	ER54040UD	ER54040UW	ER54040UX	—

Accessories for Enclosed Rotary Disconnects<sup>5 6</sup>

Disconnect Ampere Rating	Switched Fourth Pole	Unswitched Neutral Pole	Auxiliary Contacts (Choose one)	Terminal Shrouds
16	S4PR516	UNMR5A	1NO + 1NC AC1NONC	Single-pole TS1R5A
25	S4PR525		2NC AC2NC	Three-pole TS3R5A
30	S4PR530			
40	S4PR540			
60	S4PR560	UNMR5B		Single-pole TS1R5B
80	S4PR580			Three-pole TS3R5B

## Notes

- <sup>1</sup> For CSA listed switches, add prefix letter "C" to the front of the catalog number.
  - <sup>2</sup> NEMA Type 12 enclosures (16–80A) can be field modified to meet NEMA Type 3R rainproof requirements when a factory-provided drain hole is opened.
  - <sup>3</sup> GB suffix = **G**ray cover, **B**lack handle. GR suffix = **G**ray cover, **R**ed handle. YR suffix = **Y**ellow cover, **R**ed handle.
  - <sup>4</sup> cULus only.
  - <sup>5</sup> Ordered and shipped as separate components—not integral to enclosed device.
  - <sup>6</sup> Enclosed disconnects can accept one power pole, neutral or up to two auxiliary contacts (one mounted on either side of switch).
- Contact the Safety Switch Flex Center (**1-888-329-9272** or FlexSwitches@eaton.com) for factory-installed accessories or other special modifications.

# 1.3

## Switching Devices

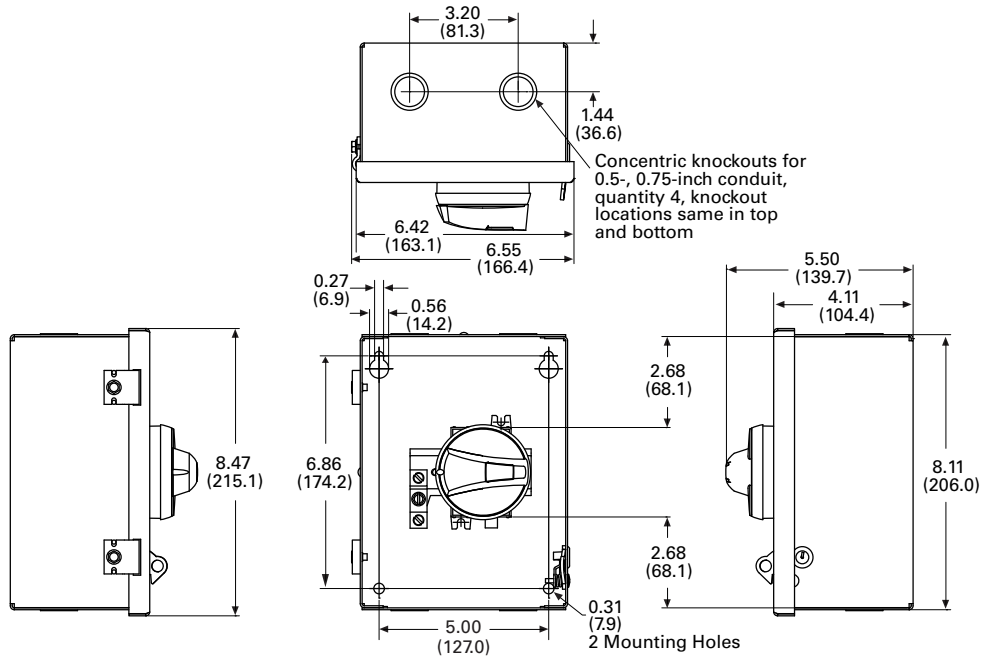
### Enclosed Rotary Disconnects

#### 1

#### Dimensions

Approximate Dimensions in Inches (mm)

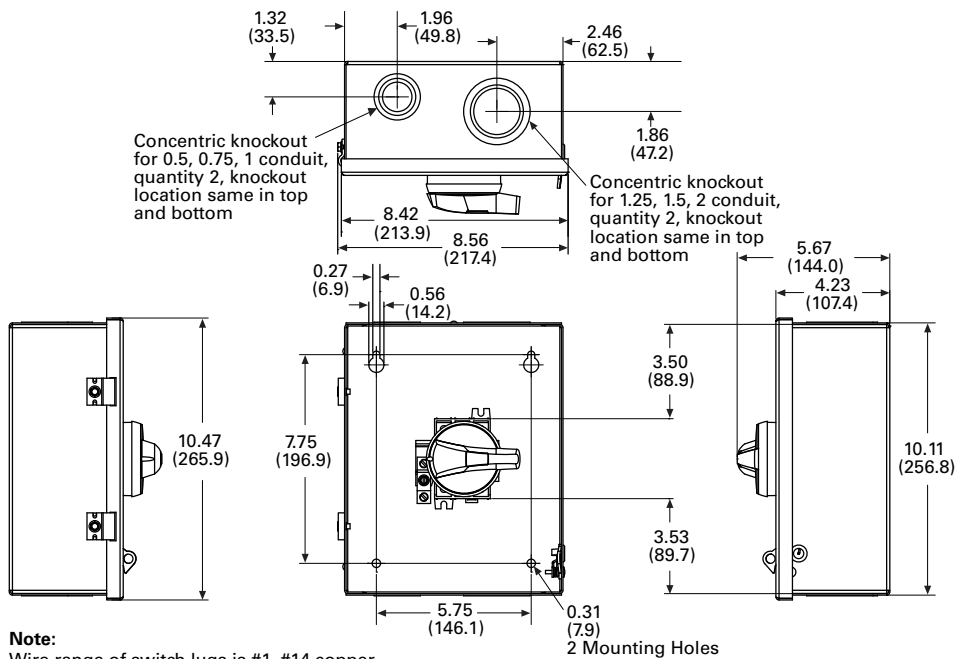
#### NEMA Type 1 (16–40A)



**Note:**

Wire range of switch lugs for 16–25A is #6–#10 copper, and for 30–40A is #8–#14. Wire range of ground lugs is #2–#14 copper or aluminum.

#### NEMA Type 1 (60–80A)

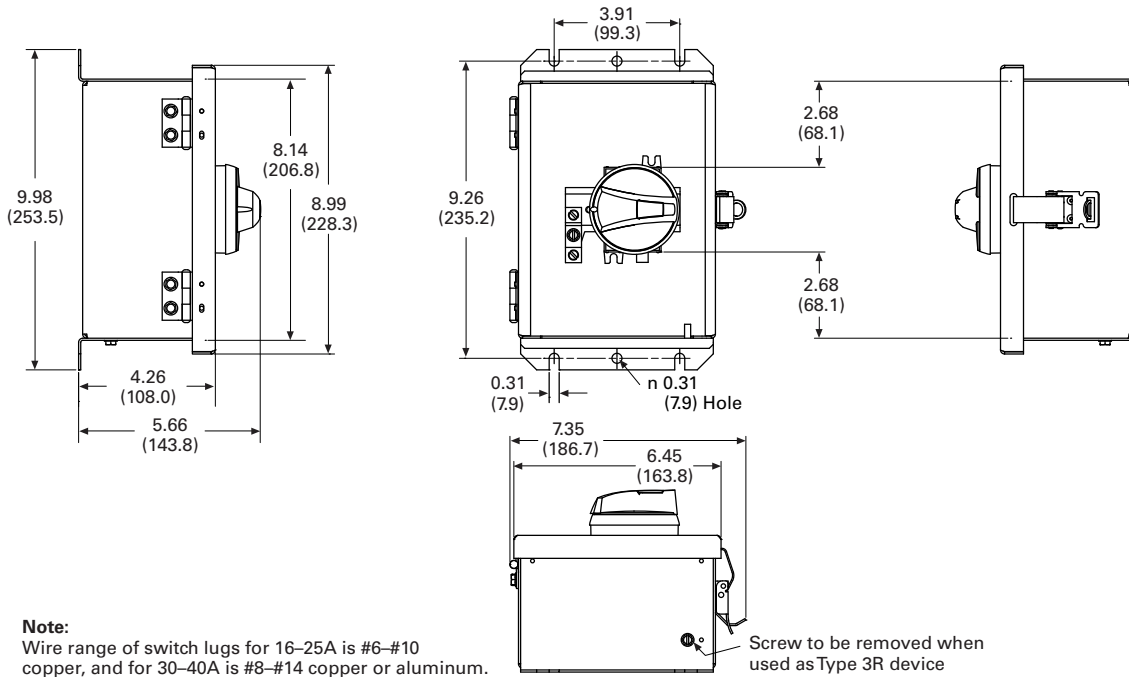


**Note:**

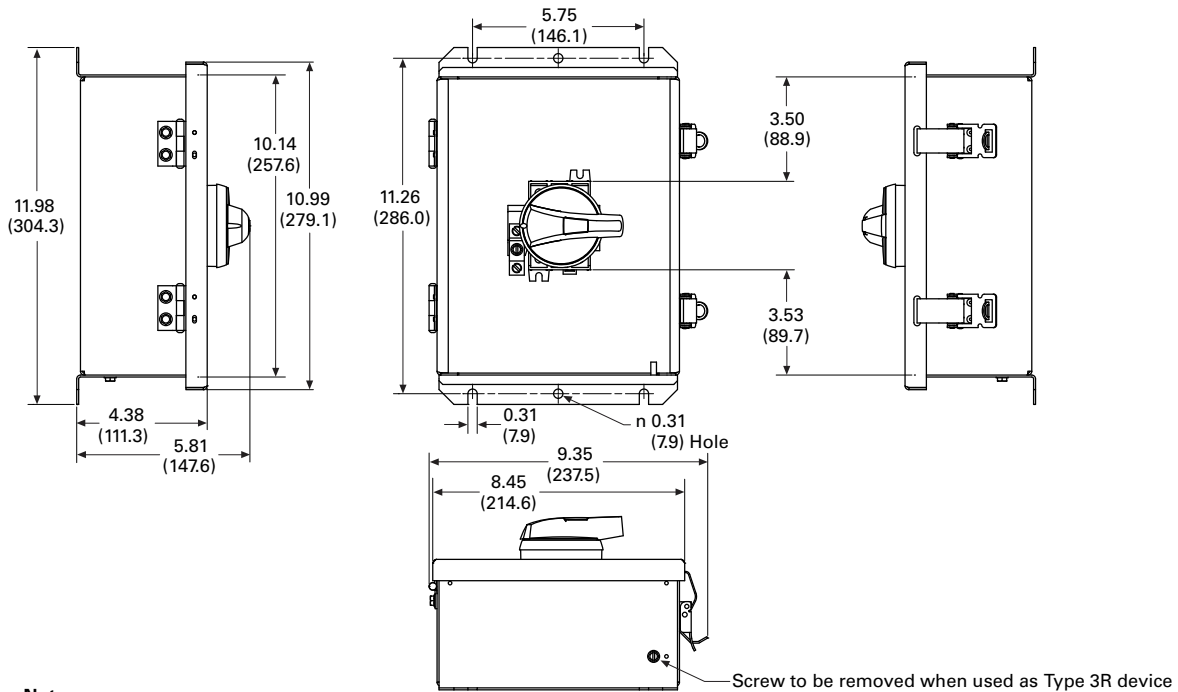
Wire range of switch lugs is #1–#14 copper. Wire range of ground lugs is #2–#14 copper or aluminum.

Approximate Dimensions in Inches (mm)

### NEMA Type 12/3R (16–40A)



### NEMA Type 12/3R (60–80A)



# 1.3

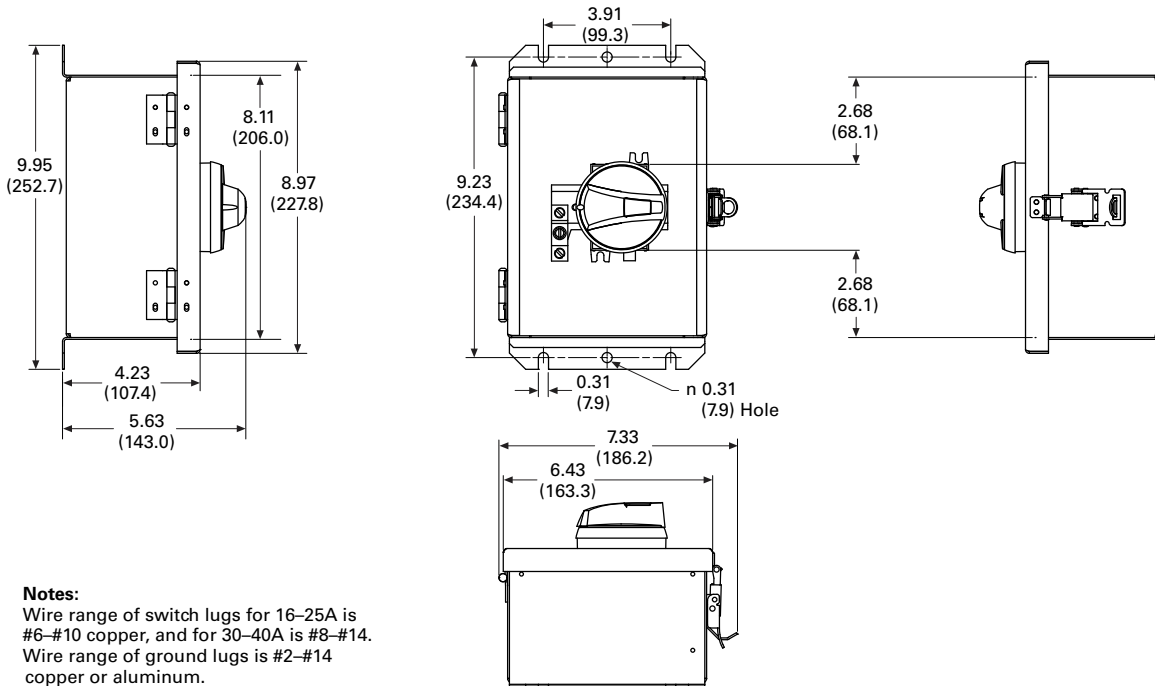
## Switching Devices

### Enclosed Rotary Disconnects

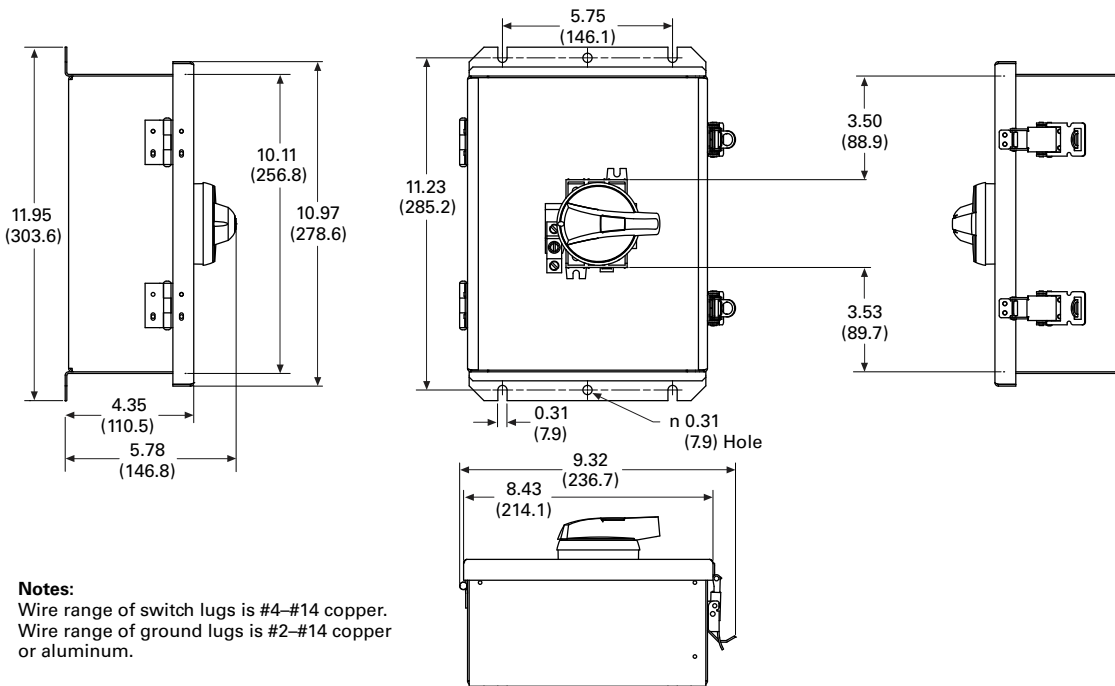
1

Approximate Dimensions in Inches (mm)

#### NEMA Type 4X Stainless (16–40A)

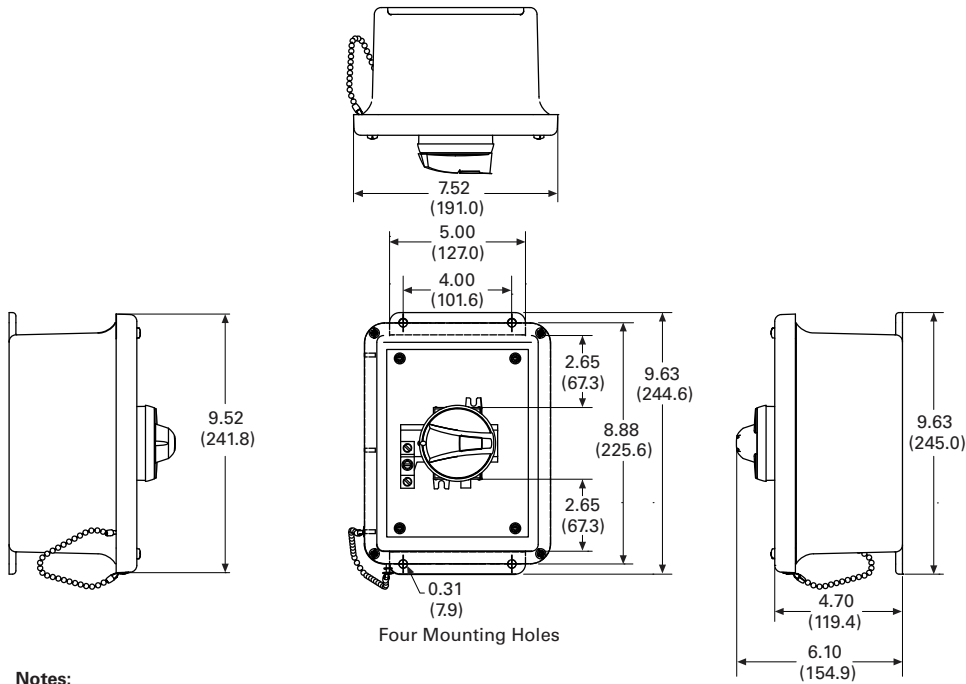


#### NEMA Type 4X Stainless (60–80A)



Approximate Dimensions in Inches (mm)

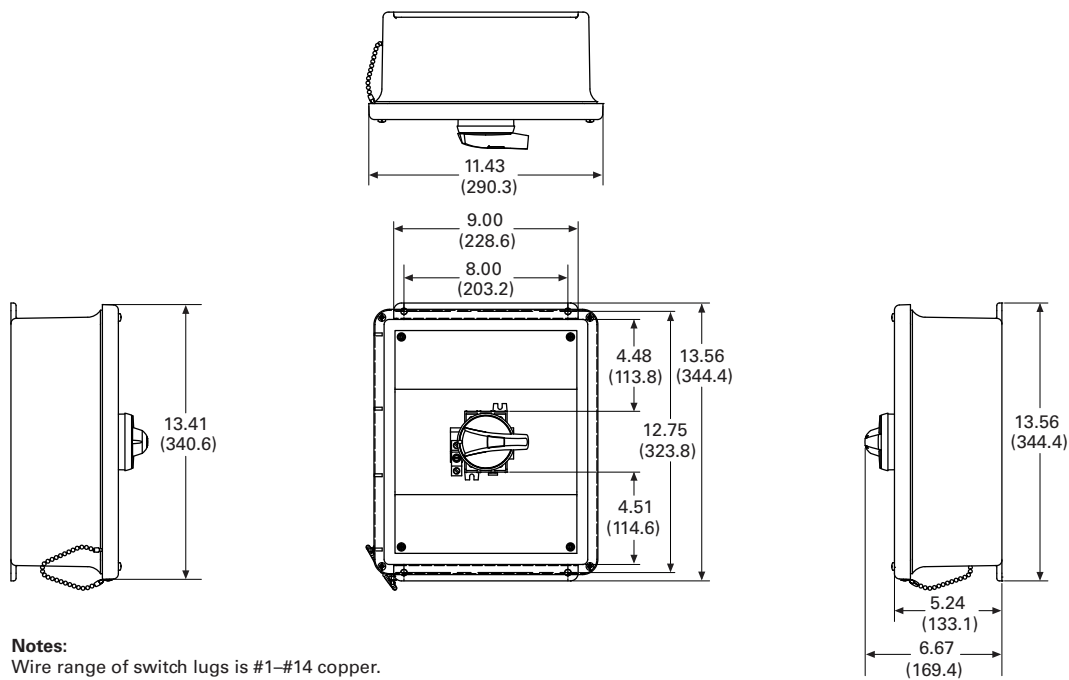
### NEMA Type 4X Thermoset Polyester (16–40A)



**Notes:**

Wire range of switch lugs for 16–25A is #6–#10 copper, and for 30–40A is #8–#14.  
Wire range of ground lugs is #2–#14 copper or aluminum.

### NEMA Type 4X Thermoset Polyester (60–80A)



**Notes:**

Wire range of switch lugs is #1–#14 copper.  
Wire range of ground lugs is #2–#14 copper or aluminum.

# 1.3

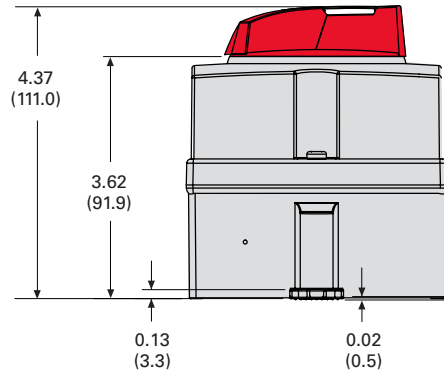
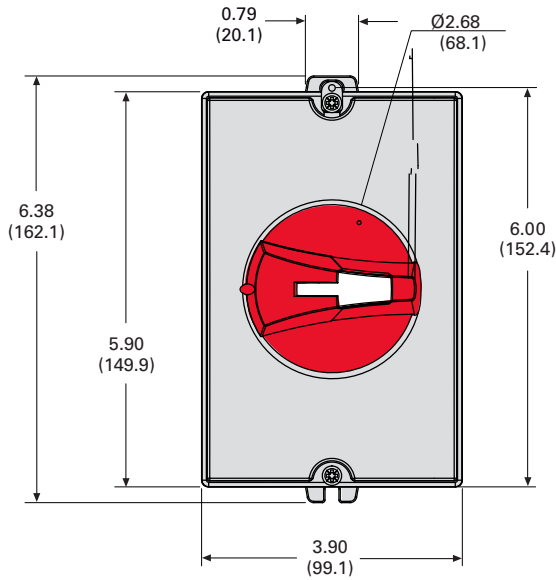
## Switching Devices

### Enclosed Rotary Disconnects

1

Approximate Dimensions in Inches (mm)

#### NEMA Type 4X—Polycarbonate (30A)



#### NEMA Type 4X—Polycarbonate (60A)

