

## Contents - Safety Switches



ID Switch



Heavy Duty Switch



Window Switch

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# Safety Switches

## Non-Fused Air Conditioning Disconnects

Selection						
		240V Non-Fused Disconnect cUL listed, Type 3R enclosure				
Catalogue Number	Ampere Rating	Maximum Horsepower	Disconnect Type	Std. Pkg.	Skid Qty.	
WN2060	60	10	Non-Fused Pullout	6	480	

3

SAFETY SWITCHES

### Features

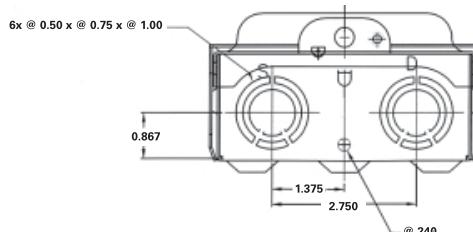
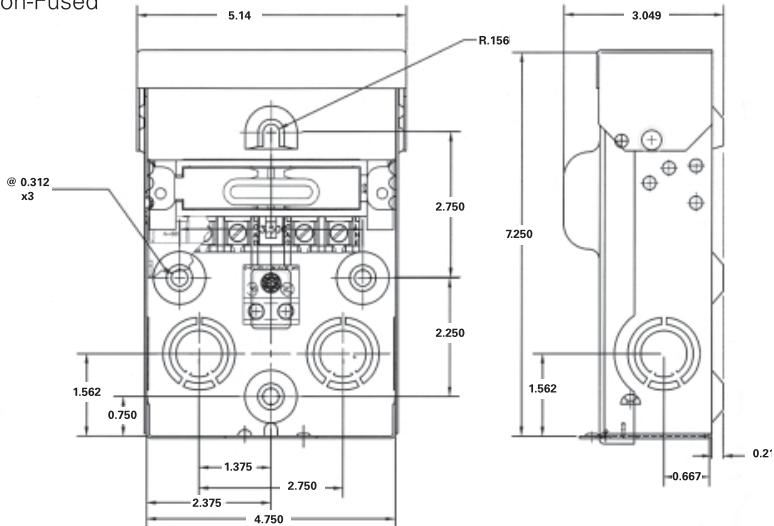
- Ample Wiring Space
- Rugged Design
- Numerous Knockouts
- Raised Mounting Embosses
- Copper Conductors
- Pullout Switch
- Removable Door

### Benefits

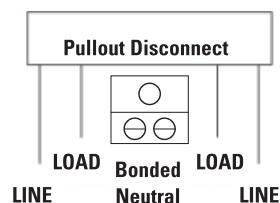
- The larger enclosure allows for ample wiring space.
- Manufactured with powder coated G90 galvanized steel for fade, scratch and corrosion resistance
- All (6) knockouts are easy to remove. The sidewall knockouts provide access from the sides of the device. Every knockout has 1/2", 3/4" and 1" provisions.
- (4) Raised mounting embosses keep the unit away from the wall, preventing dirt build-up. The upper mounting hole is shaped to be used as a hanger.
- Copper current carrying part allows for a cooler, longer lasting operation.
- The pullout switch design allows you to safely and easily de-energize the load terminals.
- The easily removable door makes it possible to wire the device with absolutely no interference.

### Dimensions - Inches\*

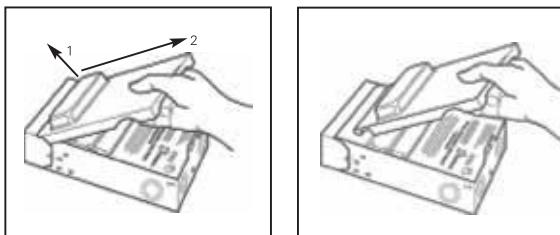
Non-Fused



### Wiring Diagram



Removable Door



### Wire Range Table

Connector	Copper		Aluminum	
	Solid	Standard	Solid	Standard
Line	#14-8	#14-3	#12-8	#12-3
Load	#14-8	#14-3	#12-8	#12-3
Neutral	#12-8	#12-2	#12-8	#12-2
Equip Grnd.	#12-8	#12-2	#12-8	#12-2

\* For inches/millimeters conversion, multiply inches by 25.4.

# Safety Switches

## Fused Air Conditioning Disconnects

Selection						
		240V Fused Disconnect cUL listed, Type 3R enclosure				
Catalogue Number	Ampere Rating	Maximum Horsepower	Fuse Class	Std. Pkg.	Skid Qty.	
WF2030	30	3	H	6	480	
WF2060	60	10	H	6	480	



### Features

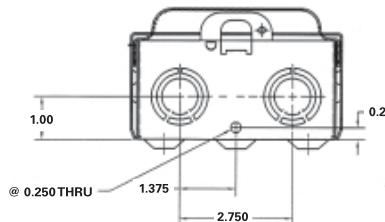
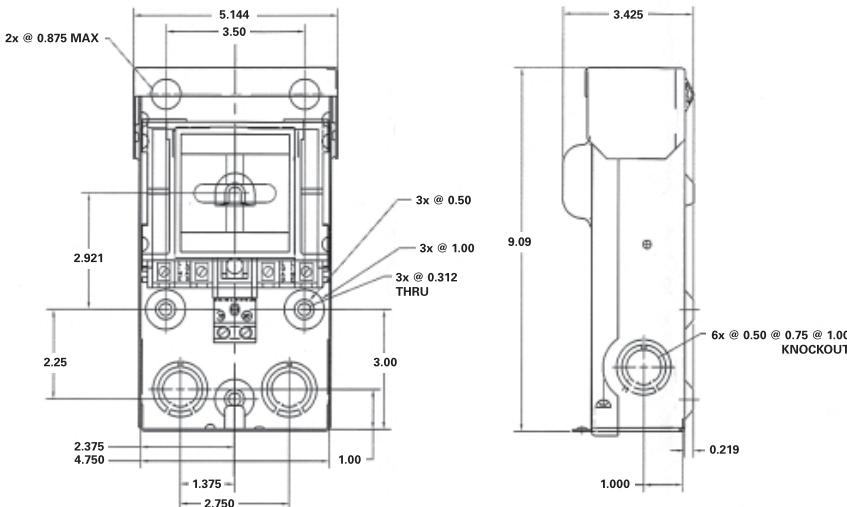
- Ample Wiring Space
- Rugged Design
- Numerous Knockouts
- Raised Mounting Embosses
- Copper Conductors
- Pullout Switch
- Removable Door

### Benefits

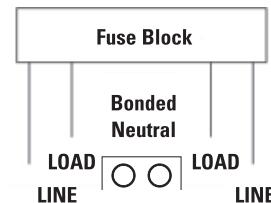
- The larger enclosure allows for ample wiring space.
- Manufactured with powder coated G90 galvanized steel for fade, scratch and corrosion resistance
- All (6) knockouts are easy to remove. The sidewall knockouts provide access from the sides of the device. Every knockout has 1/2", 3/4" and 1" provisions.
- (4) Raised mounting embosses keep the unit away from the wall, preventing dirt build-up. The upper mounting hole is shaped to be used as a hanger.
- Copper current carrying part allows for a cooler, longer lasting operation.
- The pullout switch design allows you to safely and easily de-energize the load terminals.
- The easily removable door makes it possible to wire the device with absolutely no interference.

### Dimensions - Inches\*

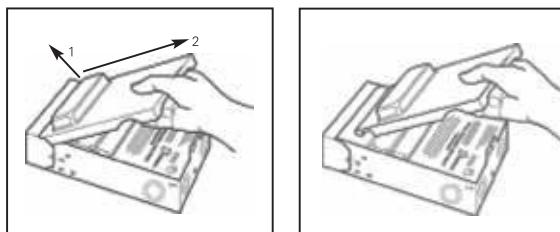
#### Fused



### Wiring Diagram



#### Removable Door



#### Wire Range Table

Connector	Copper		Aluminum	
	Solid	Standard	Solid	Standard
Line	#14-8	#14-3	#12-8	#12-3
Load	#14-8	#14-3	#12-8	#12-3
Neutral	#12-8	#12-2	#12-8	#12-2
Equip Grnd.	#12-8	#12-2	#12-8	#12-2

\* For inches/millimeters conversion, multiply inches by 25.4.

# Safety Switches

## Guide Form Specifications

## Product Overview

3

SAFETY SWITCHES

	SE Switches	ID Switches
<b>Application</b>	SE Switches are intended for applications where reliable performance and continuity of service are needed, but where duty requirements are not severe and usual service conditions prevail. Not suitable for Direct Current (DC) system.	ID Switches are intended for applications where reliable performance and continuity of service are needed, but where duty requirements are not severe and usual service conditions prevail. Not suitable for Direct Current (DC) system.
<b>Short Circuit Withstand Ratings</b>	This switch has a maximum short circuit current rating of 200 kA RMS symmetrical at 240V AC maximum.	Suitable for use on a circuit capable of delivering not more than: 200kA RMS symmetrical at 600V AC maximum for 30-200A, 100kA RMS symmetrical at 600V AC maximum for 400-600A.
<b>Fuses</b>	Fusible switches will accept the following CSA fuses: H.R.C. Form I Class J, R or H & H.R.C. Form II fuses if the accepted adaptor kits are provided.	Fusible switches will accept the following CSA class fuses: H.R.C. Form I Class J*, R or H & H.R.C. Form II fuses if the accepted adaptor kits are provided. If switch is used to its maximum Horse Power Rating, Time delay type fuses may be required for starting purposes. *Not applicable for switch ID321, use switch ID361.
<b>Cover Interlocks</b>	Voidable cover interlocks prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.	
<b>Specifications</b>	CSA certified under file #13076 as enclosed switches. Fusible switches suitable as service entrance. Meet CSA C22.2 No.4 Enclosed Switches	CSA Certified under file #13076 as enclosed switches. Fusible switches are suitable for service entrance when neutral is installed. Meets CSA C22.2 No.4 Enclosed Switches.
<b>Seismic Qualifications</b>	No Seismic qualification	
<b>Groundable Neutral</b>	SE switches have groundable neutral block factory installed.	All ID switches (both Fusible and Non-Fusible) are either supplied with factory installed neutrals or accept field addable neutrals.
<b>Padlocks</b>	Padlock cover latch. Off padlock provision on handle.	Padlock cover latch. Off padlock provision on handle.
<b>HP &amp; Load Break Ratings</b>	SE switches are load break switch only, no horsepower rating.	ID switches are both load break and horsepower rated.

# Safety Switches

## Guide Form Specifications

### Product Overview

	<b>VBII General Duty</b>	<b>VBII Heavy Duty</b>	<b>Double Throw</b>																																	
<b>Application</b>	General Duty GD Switches are intended for applications where reliable performance and continuity of service are needed, but where duty requirements are not severe and usual service conditions prevail. (These switches are intended for use primarily where the available fault current is less than 100,000A when used with Class R or T fuses or 10,000A max. when used with Class H fuses.)	Heavy Duty Switches are intended for use in applications where:  1. Rugged construction, reliable performance, continuity of service and ease of maintenance are emphasized, 2. Available fault currents higher than 10,000A are likely to be encountered, such as in manufacturing plants, mass production industries, and commercial, institutional and other large buildings served by network systems or transformers of higher capacities. 3. System voltage is 600V AC or DC Max. 4. A Type 12 or 4/4X enclosure is required.	Double throw switches are intended to transfer loads from one power source to another. All double throw switches are CSA certified. Switches are rated for use on systems with an available fault current of up to 10,000 AIC when protected with Class H fuses or 200,000 AIC when protected with Class R, J or Class T fuses.																																	
<b>Short Circuit Withstand Ratings</b>	Suitable for use on systems capable of delivering not more than 100,000 RMS symmetrical amperes of fault current as follows:  <table> <thead> <tr> <th>Sw. Rating</th> <th>AIC Rating</th> <th>Protective Device<sup>①</sup></th> </tr> </thead> <tbody> <tr> <td>30-200A</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-200A</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-200A</td> <td>100,000</td> <td>Class R Fuse</td> </tr> <tr> <td>100-200A</td> <td>100,000</td> <td>Class J or T Fuse</td> </tr> </tbody> </table>	Sw. Rating	AIC Rating	Protective Device <sup>①</sup>	30-200A	10,000	Circuit Breaker	30-200A	10,000	Class H Fuse	30-200A	100,000	Class R Fuse	100-200A	100,000	Class J or T Fuse	Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical amperes of fault current as follows:  <table> <thead> <tr> <th>Sw. Rating &amp; Type</th> <th>AIC Rating</th> <th>Protective Device<sup>①</sup></th> </tr> </thead> <tbody> <tr> <td>All Heavy Duty &amp; DT</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-600A HD &amp; DT</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-600A HD</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>30-600A DT</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>800 &amp; 1200A HD</td> <td>200,000</td> <td>Class L or T Fuse</td> </tr> </tbody> </table>	Sw. Rating & Type	AIC Rating	Protective Device <sup>①</sup>	All Heavy Duty & DT	10,000	Circuit Breaker	30-600A HD & DT	10,000	Class H Fuse	30-600A HD	200,000	Class R, J or T Fuse	30-600A DT	200,000	Class R, J or T Fuse	800 & 1200A HD	200,000	Class L or T Fuse	
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All Heavy Duty & DT	10,000	Circuit Breaker																																		
30-600A HD & DT	10,000	Class H Fuse																																		
30-600A HD	200,000	Class R, J or T Fuse																																		
30-600A DT	200,000	Class R, J or T Fuse																																		
800 & 1200A HD	200,000	Class L or T Fuse																																		
<b>Fuses</b>	Fusible switches will accept the following CSA class fuses:  30-200A "GD" Class H & K, Class R with kit 100-200A "GD" Class J-move base 100-200A "GD" Class T with kit	Fusible switches will accept the following CSA class fuses:  30-600A "HD" Class H & K, Class R with kit 30-600A, 600V "HD" Class J-move base 100-600A, 240V "HD" Class J-move base 100-200A "HD" Class T with kit 400-600A "HD" Class T-move bases 800-1200A "HD" Class L, Class T with kit <sup>②</sup>	Fusible switches will accept the following CSA class fuses:  30-200A "DT" - Class H & K, Class R with kit 30 & 60A 600V "DT" - Class J-move base 100-200A "DT" - Class J-move base, Class T with kit 400-600A "DT" - Class J-standard, Class T-move bases																																	
<b>Cover Interlocks</b>	Voidable – cover interlocks on switches prevent the switch door from being opened. No cover interlock on plug fuse type switches.	Voidable dual cover interlocks standard on all heavy duty switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.	Dual cover interlocks standard on all double throw switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.																																	
<b>Specifications</b>	CSA certified under file #24563 as enclosed switches. Fusible switches suitable as service entrance when neutral bonded to the enclosure is installed. Meet CSA C22.2 No.4 Enclosed Switches	CSA certified under file #24563 as enclosed switches. Fusible switches also suitable as service entrance when neutral bonded to the enclosure is installed. Meets CSA C22.2 No.4 Enclosed Switches.	CSA certified under file #24563 as enclosed switches. Meets CSA C22.2 No.4 Enclosed switches.																																	
<b>Seismic Qualifications</b>	All GD & HD switches and "DT" type double throw switches have been tested and comply with the 2010 California Building Code (CBC) and with the 2009 International Building Code (IBC) - Compliance Level SDS = 1.85 g																																			
<b>Groundable Neutral</b>	Fusible switches have groundable neutral blocks factory installed.	All switches (both Fusible and Non-Fusible) are either supplied with factory installed neutrals or accept field addable neutrals.	All will accept field addable neutrals.																																	
<b>Padlocks</b>	Padlockable cover latch. OFF padlock provisions on handle.	Padlockable cover latch and multiple OFF padlock provisions on handle.	Padlockable cover latch and multiple OFF padlock provisions on handle.																																	
<b>HP &amp; Load Break Ratings</b>	All General Duty, Heavy Duty and Double Throw Switches are both load break and horsepower rated.																																			

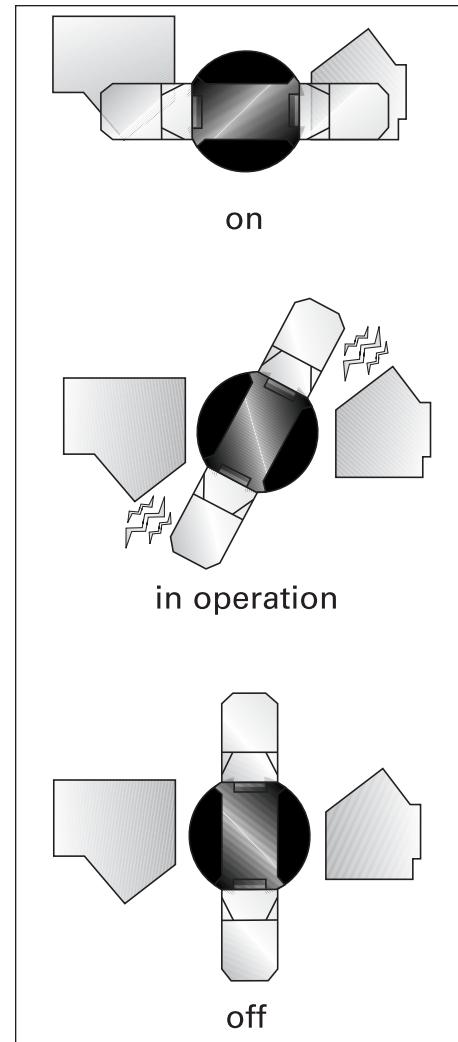
<sup>①</sup> The protective device can either be a fuse installed in a fusible switch or an upstream fuse or circuit breaker protecting a non-fusible switch. The ampere rating of the upstream protective device must not exceed the switch ampere rating.

<sup>②</sup> Class T kit available for 240V max. applications on 1200A switches.

# Feature Comparison

## Product Overview

Light Duty (Plug Fuse)	SE Switches	ID Switches	VBII General Duty	VBII Heavy Duty	Double Throw	Features/Ratings
—	—	▪	—	▪	▪	30 thru 600 Amps
—	—	—	—	▪	—	800 and 1200 Amps
▪	▪	▪	▪	▪	▪	240 Volt AC
—	—	▪	—	▪	▪	600 Volt AC
—	—	—	—	▪	▪	250 Volt DC
—	—	—	—	▪	—	600 Volt DC
—	—	—	—	▪	▪	Double-break visible blade design (30-200A)
▪	▪	▪	▪	▪	▪	Quick-make, quick-break switching action
▪	▪	▪	▪	▪	▪	Highly visible ON/OFF handle indication
—	—	—	—	▪	—	Handle design for hook stick operation
▪	▪	▪	▪	▪	▪	Padlockable cover latch
▪	—	▪	▪	▪	▪	Padlockable handle
—	▪	▪	▪	▪ <sup>③</sup>	▪	Single voidable cover interlock
—	▪	▪	▪	—	▪	Dual voidable cover interlock
▪	▪	▪	▪	▪	▪	Type 1 enclosure
▪	—	—	—	▪	▪	Type 3R enclosure
—	—	—	—	▪	—	Type 12 enclosure
—	—	—	—	▪	—	Type 4/4X enclosures
▪	▪	▪	▪	▪	▪	Generous wiring gutters that meet CSA and CEC wire-bending space requirements
▪	▪	▪	▪	▪	▪	Lugs suitable for copper or aluminum at 60° or 75°C
▪	▪	▪	▪	▪	▪	CU/AL wire lugs that meet CSA C22.2 No.65-03 requirements
—	—	—	—	▪	▪	Suitable for field-convertible — compression connectors
—	—	▪	▪ <sup>④</sup>	▪	▪	All plated copper current carrying parts(except lugs)
—	▪	▪	▪	▪	▪	Spring reinforced Fuse Clips(except 30A general duty) <sup>⑤</sup>
—	▪	▪	▪	▪	▪	Clear line terminal shield available
—	▪	▪	▪	▪	▪	Replacement parts
—	—	—	—	▪	—	Field addable 200% neutral
—	▪	▪	▪ <sup>⑥</sup>	▪ <sup>⑦</sup>	▪ <sup>⑦</sup>	Provisions for CSA Class T, R and H Fuses
—	—	▪ <sup>①</sup>	—	▪	▪ <sup>①</sup>	Provisions for CSA Class J and L Fuses
—	—	—	—	▪	▪	Metal nameplate
—	—	▪	—	▪	▪	Aux. switch kits
—	—	—	—	▪ <sup>⑧</sup>	—	Type 4X with stainless steel interior parts
—	▪	—	▪ <sup>⑨</sup>	▪	—	Rolled flange enclosure design



### Double Break Switching Action

Like the time-proven Vacu-Break Design, the Siemens VBII double break switching action breaks the arc in two places in 30-200A ratings. This reduces heat generation and increases switching speed by doubling the breaking distance. The result is enhanced performance and increased longevity. We also provide the most visible blade design available today. Unlike conventional knife blade switches, the blades are self-aligning to ensure positive contact. In addition, they have no wear and friction point since the "electrical hinge" has been eliminated. The result is a very fast, positive and reliable switching action for even the most severe applications.

<sup>①</sup> Only 800 & 1200A HD switches will accept Class L fuses.

<sup>②</sup> 30A general duty switches have fuse clips constructed of spring type copper.

<sup>③</sup> Not supplied on 30A outdoor & plug fuse switches.

<sup>④</sup> 30-200A Type VBII in stainless steel enclosures.

<sup>⑤</sup> 60-200A.

<sup>⑥</sup> 200A general duty switches have aluminum neutral assemblies.

<sup>⑦</sup> 100-200A GD, 100-200A DT and 100-1200A HD switches will accept Class T fuses.

# Safety Switches

## General Duty and Heavy Duty

### Enclosure Types

- [A] **Type 1** enclosures are intended for indoor use primarily to provide protection against contact with the enclosed equipment in locations where unusual service conditions do not exist.
- [B] **Type 3R** enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain and sleet and must remain undamaged by the formation of ice on the enclosure. They are not intended to provide protection against conditions such as dust, internal condensation, or internal icing.
- [C] **Type 4, 4X** enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing. Also meets 4X definition by providing a high degree of protection against corrosion. Siemens 30-200A stainless steel 4X switches are supplied stainless interior parts and hardware as standard.
- [D] **Type 4** enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing.
- [E] **Type 12<sup>①</sup>** enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping water. They are not intended to provide protection against conditions such as internal condensation.

**Type 7/9** enclosures for use in hazardous locations. Use with molded case switches listed in Section 5.

## Product Overview



A



B



C D



E

### Load Break Ratings

All Siemens safety switches are load break rated. The load break rating is assigned by UL/CSA after the switching unit has successfully performed the following tests:

Switch Ampere Rating	Number of ON/OFF Operations per Minute	Number of Operations		
		With Current	Without Current	Total
30-100	6	6000	4000	10000
200	5	6000	2000	8000
400	4	1000	5000	6000
600	3	1000	4000	5000
800	2	500	3000	3500
1200	1	500	2000	2500

### Horsepower Ratings

ID and VBII safety switches, where appropriate, are horsepower rated. Ratings are approved by CSA after the switching unit has undergone testing to determine its acceptability which includes repeated interruption of the locked rotor current of the motor for which it is to be rated as follows:

Max HP Rating	Number of ON/OFF Operations per minute	Number of Cycles of Operation
100	6	50
500	1	10

<sup>①</sup>VBII Type 12 switches are also rated 3R & 3S for outdoor use. Type 3R is defined in B above. 3S rated enclosures provide a degree of protection against windblown dust and allow operation when the enclosure is ice laden.

# Light Duty Enclosed Switches

## Plug Fuse and 60A Special Application Type

Selection

### Features

- CSA Certified under file #24563
- Compact size
- Horsepower rated
- Indoor and outdoor enclosures
- Quick make-quick break mechanism
- Visible "ON" - "OFF" indications
- Padlock-off handle feature
- Door padlock provision
- All fusible switches suitable for use as service entrance equipment
- Bondable neutral (where indicated)
- Lugs suitable for copper or aluminum wire
- Switches accept plug fuses only - fuses not included
- Hubs<sup>③</sup> — see page 3-26
- Ground Bar Kit: **GSGK60<sup>③</sup>**
- Knockout diagrams — see page 3-31 and 3-32

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Safety Switches

Dimensions - in. (mm)

Enclosure Type	Height	Width	Depth
1	8 $\frac{1}{4}$ (210)	5 $\frac{1}{8}$ (140)	3 (76)
3R	8 $\frac{1}{4}$ (210)	5 $\frac{1}{8}$ (137)	3 $\frac{1}{8}$ (79)



Wire Range Table

Switch Type	Wire Range
120/240 Volt Fusible 30 Amp	#14 AWG - #8 AWG Al/Cu <sup>④</sup>
120/240 Volt Non-Fusible 60 Amp	#14 AWG - #3 AWG Al/Cu

Ampere Rating	Indoor — Type 1		Outdoor — Type 3R		Horsepower Ratings <sup>①</sup>	
	Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.) Pkg. of 10	Standard	Maximum
120/240 Volt Fusible						
<b>1-Pole and Solid Neutral<sup>②</sup></b>						
30	LFC11N	3.6	—	—	1/2	2
<b>2-Pole and Solid Neutral<sup>②</sup></b>						
30	LFC21N	3.5	LFC21NR	35	1/2	2
240 Volt Non-Fused						
<b>2-Pole Special Application Switch</b>						
60	—	—	LNFC222R <sup>③</sup>	35	3	10
<b>120 Volt — 1-Phase, 2-Wire</b>						
<b>120/240 Volt — 2-Phase, 3-Wire</b>						

<sup>①</sup>Dual horsepower ratings:  
Std. — applies when non-time delay plug fuses  
are installed.  
Max — applies when time-delay plug fuses are installed.

<sup>②</sup>Has service entrance label. CSA certified as  
"Enclosed Switches" (suitable for use as service  
equipment where indicated).  
<sup>③</sup>Bottom cable entry and exit only. No hub provision  
supplied. **GSGK60** is included and factory installed.

<sup>④</sup>Line lugs are CSA approved for #14 to #6 Cu/Al cable.

# Catalogue Numbering System

## Type SE and ID Switches Catalogue Numbering System

### Product Overview

Enclosure Type \_\_\_\_\_

Omit = Type 1, Indoor

Switch Type \_\_\_\_\_

SE = SE switch  
ID = ID switch

Number of Poles \_\_\_\_\_

2 = 2  
3 = 3  
4 = 3 + neutral

Voltage \_\_\_\_\_

2 = 240V  
6 = 600V



Fused or Non-Fused

Omit = Fusible  
NF = Non-Fused

Amperes

1 = 30A	5 = 400A
2 = 60A	6 = 600A
3 = 100A	
4 = 200A	

# SE Switches

**Selection**

## Features

- CSA Certified under file #13076
- Construction grade switch
- Compact load break switch rated for service entrance applications at 240V
- Type 1 enclosure for indoor applications
- Solid neutral bonded to the enclosure
- Door padlock provision
- SE switches will accept the following CSA/UL class fuses: Class H, Class K, Class R (Adapter kits are required) and Class T (Adapter kits are required)
- Manufactured in Canada for quick delivery and easy access to replacement parts
- Dimensions and knockout diagrams — see page 3-14



**3**

**SAFETY SWITCHES**

System	Ampere Rating	Indoor – Type 1	Horsepower Ratings						Skid Qty	
			240V AC		1-Phase, 2-Wire		3-Phase, 3-Wire			
			Std.	Max.	Std.	Max.	Std.	Max.		
System	Ampere Rating	Catalogue Number	Unit Weight - lbs (kg)						250 Volt DC	

### 240V Fusible Service Entrance Type 1 enclosure

#### 2-Pole, 2-Fuse and Solid Neutral

	30	SE221	9.11 (4.13)	240V AC Max.					
				Std.	Max.	Std.	Max.	Std.	Max.
	30	SE221	9.11 (4.13)	—	—	—	—	—	102
	60	SE222	10.95 (4.97)	—	—	—	—	—	72
	100	SE223	15.18 (6.89)	—	—	—	—	—	48
	200	SE224	29.08 (13.19)	—	—	—	—	—	20

#### 3-Pole, 3-Fuse and Solid Neutral

	30	SE321	9.3 (4.22)	240V AC Max.					
				Std.	Max.	Std.	Max.	Std.	Max.
	30	SE321	9.3 (4.22)	—	—	—	—	—	102
	60	SE322	11.29 (5.12)	—	—	—	—	—	72
	100	SE323	15.73 (7.14)	—	—	—	—	—	48
	200	SE324	29.52 (13.39)	—	—	—	—	—	20

#### Fuse Puller Kits

Fuse Puller Kits are field installable in SE switches (one kit required per 3-pole switch)

Switch Ampere Rating	Fuse Puller Kit Catalogue Number
30	FP2
60	FP2
100	FP3
200	FP4

#### Class R Fuse Adaptor Kits

100-200A SE switches accept Class T fuses using the appropriate adaptor kit (One kit per pole required)

Switch Ampere Rating	R Fuse Adaptor Kit Catalogue Number
30	RFAK21
60	RFAK22
100	RFAK3
200	RFAK4

#### Class T Fuse Adaptor Kits

SE switches accept Class R fuses using the appropriate adaptor kit (One kit per pole required)

Switch Ampere Rating	T Fuse Adaptor Kit Catalogue Number
200V	600V
100	TFAK23
200	TFAK24
	TFAK63

#### Wire Ranges (Line, Load and Standard Neutral)

Switch Ampere Rating	Line, Load Lug Wire Range	Neutral Lug Wire Range
30	#14 - 2 AWG (Al/Cu)	#14 - 4 AWG (Al/Cu)
60	#14 - 2 AWG (Al/Cu)	#14 - 4 AWG (Al/Cu)
100	Line: # 6 - 120 AWG (Al/Cu) Load: #14 - 1/0 AWG (Al/Cu)	#14 - 2/0 AWG (Al/Cu)
200	#6 - 250 MCM (Al/Cu)	#6 - 300 MCM (Al/Cu)

#### Line Shield Kits

Switch Ampere Rating	Line shield kit
30	LSK1 (3 per kit)
60	LSK1 (3 per kit)
100	LSK3 (3 per kit)
200	LSK3 (3 per kit)

#### Replacement Parts

Catalogue Number	Description
CCSS1	Cover catch (20 per kit)

# ID Switches

**Selection**

## Features

- CSA Certified under file #13076
- General Duty switch designed for the Canadian construction market
- Compact size with integrated handle
- Horsepower rated
- Type 1 enclosure for indoor applications
- Quick make-break mechanism
- Visible "ON"-“OFF” indications
- Padlock-off handle feature
- Door padlock provision
- ID switches will accept the following CSA class fuses: Class H, Class K, Class R (Adapter kits are required) and Class T (Adapter kits are required)
- Fuse Puller included for 30-200A
- Manufactured in Canada for quick delivery and easy access to replacement parts
- Dimensions and knockout diagram — see page 3-14



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**SAFETY SWITCHES**

## 240V Fusible

### 2-Pole, 2-Fuse and Solid Neutral<sup>①</sup>

**240 Volt AC.**

System	Ampere Rating	Indoor — Type 1		Horsepower Ratings								Skid Qty.
		Catalogue Number	Unit Weight - lbs (kg)	240V AC	480V AC	600V AC	250 Volt DC	1-Phase	3-Phase	1-Phase	3-Phase	
	400	ID225	76 (34.47)	—	125	—	—	—	—	—	—	6
	600	ID226	88 (39.92)	—	200	—	—	—	—	—	—	6

## 3-Pole, 3-Fuse

**240 Volt AC.**

	30	ID321	12.61 (5.72)	3	7.5	—	—	—	—	—	—	55
												55
	60	ID322	12.61 (5.72)	10	15	—	—	—	—	—	—	30
	100	ID323	17.22 (7.81)	15	30	—	—	—	—	—	—	20
	200	ID324	31.52 (14.3)	15	60	—	—	—	—	—	—	20

## 3-Pole, 3-Fuse and Solid Neutral<sup>①</sup>

**240 Volt AC.**

	400	ID425	89 (40.36)	—	125	—	—	—	—	—	—	55
												6
	600	ID426	102 (46.27)	—	200	—	—	—	—	—	—	6

## 600V Fusible

### 3-Pole, 3-Fuse

**240 Volt AC / 480 Volt AC / 600 Volt AC.**

	30	ID361	12.61 (5.72)	3	7.5	—	15	10	20	—	55	55
												55
	60	ID362	12.61 (5.72)	10	15	—	30	25	50	—	—	30
	100	ID363	17.22 (7.81)	15	30	—	60	40	75	—	—	20
	200	ID364	31.52 (14.3)	15	60	—	125	50	150	—	—	6
	400	ID365	88 (39.62)	—	125	—	250	—	350	—	—	6
	600	ID366	101 (45.81)	—	200	—	400	—	600	—	—	6

## 600V Non-Fusible

### 3-Pole, 3-Fuse

**240 Volt AC / 480 Volt AC / 600 Volt AC.**

	30	ID361NF	12.18 (5.52)	3	7.5	—	15	10	20	—	55	55
												55
	60	ID362NF	12.18 (5.52)	10	15	—	30	25	50	—	—	30
	100	ID363NF	16.58 (7.52)	15	30	—	60	40	75	—	—	20
	200	ID364NF	29.64 (13.44)	15	60	—	125	50	150	—	—	6
	400	ID365NF	87 (39.46)	—	125	—	250	—	350	—	—	6
	600	ID366NF	97 (44)	—	200	—	400	—	600	—	—	6

<sup>①</sup> Suitable for use as service equipment when neutral is bonded to the enclosure.

# ID Switches

## Accessories

### Neutral Kits

#### Standard Neutral Kits

Switch Ampere Rating	Neutral Kit Catalogue Number
30	N60
60	N60
100	N100
200	N200
400	N400ID
600	N600ID

### Fuse Puller Kits

Fuse Puller are field replaceable in ID switches  
30-200A (one kit required per 3-pole switch)

Switch Ampere Rating	Fuse Puller Kit Catalogue Number
30	FP2
60	FP2
100	FP3
200	FP4

### Auxiliary Contacts

Switch Ampere Rating	Aux. Contact Catalogue Number
30-100	MSSAK116
200	MSSAK126

### With 1 NO & 1 NC

30-100	MSSAK116
200	MSSAK126

### With 2 NO & 2 NC

30-100	MSSAK216
200	MSSAK226

### Replacement Line Shield

Line shield can be field replaced/added for ID & SE Switches.

Switch Ampere Rating	Line shield kit
30	LSK1 (3 per kit)
60	LSK1 (3 per kit)
100	LSK3 (3 per kit)
200	LSK3 (3 per kit)

## Selection

### Class R Fuse Adaptor Kits

30-600A ID switches accept Class R fuses using the appropriate adaptor kit (One kit per pole required)

Switch Ampere Rating	R Fuse Adaptor Kit Catalogue Number	
	240V	600V
30	RFAK21	RFAK61
60	RFAK22	RFAK62
100		RFAK3
200		RFAK4
400		RFAK6
600		RFAK6

### Class T Fuse Adaptor Kits

100-600A ID switches accept Class T fuses using the appropriate adaptor kit (One kit per pole required)

Switch Ampere Rating	T Fuse Adaptor Kit Catalogue Number	
	240V	600V
100	TFAK23	TFAK63
200	TFAK24	TFAK64
400	TFAK52	TFAK55
600	TFAK62	TFAK65

### Wire Ranges (Line, Load and Standard Neutral)

Switch Ampere Rating	Number of lugs per pole	Line, Load Lug Wire Range	Neutral Lug Wire Range
30	1	#14 - 2 AWG (Al/Cu)	#14 - 4 AWG (Al/Cu)
60	1	#14 - 2 AWG (Al/Cu)	#14 - 4 AWG (Al/Cu)
100	1	Line: # 6 - 120 AWG (Al/Cu) Load: #14 - 1/0 AWG (Al/Cu)	#14 - 2/0 AWG (Al/Cu)
200	1	#6 - 250 MCM (Al/Cu)	#6 - 300 MCM (Al/Cu)
400	1	(2) 250-1/0 or (1) 750-1/0	(2) 250-1/0 or (1) 750-1/0
600	2	(2) 250-1/0 or (1) 750-1/0	(2) 250-1/0 or (1) 750-1/0

### Contact Ratings (Continuous duty 10 Amps)

Volts (AC)	Inrush Amps	Break Amps	Volts (DC)	Inrush Amps	Break Amps
24-120	60	6	24-150	11	11
240	30	3	250	55	55
480	15	15	300	20	20
600	12	12	600	20	20

### Replacement Parts

Catalogue Number	Description
CCSS1	Cover catch (20 per kit)



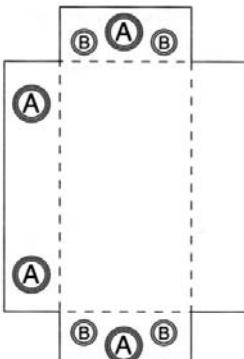
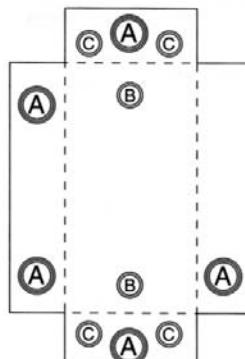
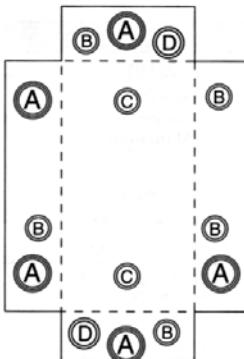
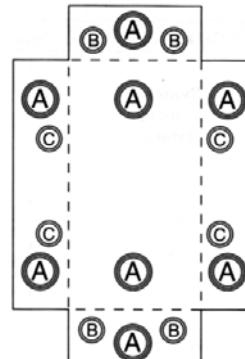
Replacement cover catch can be ordered using #CCSS1, which includes 20 cover catch per kit.  
(one kit required per 3-pole switch)

# SE and ID Switches

## Dimensions

Catalogue Number	Dimensions - inches (mm)			Knock-out Diagram	Shipping weight - lbs (kg)
	Height	Width Including Handle	Depth Including Handle		
ID225	40 (1016)	18 1/2 (470)	12 1/16 (306)	No KO	76 (34.47)
ID226	48 (1219)	18 1/2 (470)	12 1/16 (306)	No KO	88 (39.92)
ID321	15 3/8 (391)	9 3/16 (233)	7 1/4 (184)	S2	12.61 (5.72)
ID322	15 3/8 (391)	9 3/16 (233)	7 1/4 (184)	S2	12.61 (5.72)
ID323	20 3/8 (518)	10 11/16 (271)	7 1/4 (184)	S3	17.22 (7.81)
ID324	30 7/8 (784)	13 3/16 (335)	8 1/4 (210)	S4	31.52 (14.3)
ID361	15 3/8 (391)	9 3/16 (233)	7 1/4 (184)	S2	12.61 (5.72)
ID361NF	15 3/8 (391)	9 3/16 (233)	7 1/4 (184)	S2	12.18 (5.52)
ID362	15 3/8 (391)	9 3/16 (233)	7 1/4 (184)	S2	12.61 (5.72)
ID362NF	15 3/8 (391)	9 3/16 (233)	7 1/4 (184)	S2	12.18 (5.52)
ID363	20 3/8 (518)	10 11/16 (271)	7 1/4 (184)	S3	17.22 (7.81)
ID363NF	20 3/8 (518)	10 11/16 (271)	7 1/4 (184)	S3	16.58 (7.52)
ID364	30 7/8 (784)	13 3/16 (335)	8 1/4 (210)	S4	31.52 (14.3)
ID364NF	30 7/8 (784)	13 3/16 (335)	8 1/4 (210)	S4	29.64 (13.44)
ID365	40 (1016)	21 1/2 (546)	12 1/16 (306)	No KO	88 (39.62)
ID365NF	40 (1016)	21 1/2 (546)	12 1/16 (306)	No KO	87 (39.46)
ID366	48 (1219)	21 1/2 (546)	12 1/16 (306)	No KO	101 (45.81)
ID366NF	48 (1219)	21 1/2 (546)	12 1/16 (306)	No KO	97 (44)
ID425	40 (1016)	21 1/2 (546)	12 1/16 (306)	No KO	89 (40.36)
ID426	48 (1219)	21 1/2 (546)	12 1/16 (306)	No KO	102 (46.27)
SE221	11 1/4 (286)	7 7/8 (200)	6 5/16 (160)	S1	9.11 (4.13)
SE222	15 1/4 (387)	7 7/8 (200)	6 5/16 (160)	S2	10.95 (4.97)
SE223	20 1/4 (514)	9 3/8 (238)	6 5/16 (160)	S3	15.18 (6.89)
SE224	30 3/4 (781)	11 7/8 (302)	7 5/16 (186)	S4	29.08 (13.19)
SE321	11 1/4 (286)	7 7/8 (200)	6 5/16 (160)	S1	9.3 (4.22)
SE322	15 1/4 (387)	7 7/8 (200)	6 5/16 (160)	S2	11.29 (5.12)
SE323	20 1/4 (514)	9 3/8 (238)	6 5/16 (160)	S3	15.73 (7.14)
SE324	30 3/4 (781)	11 7/8 (302)	7 5/16 (186)	S4	29.52 (13.39)

### K.O. Data For EEMAC 1 Enclosure

<p><b>30 Amp Enclosure</b> Type SE</p>  <p><b>K.O.'s Trade Size</b> A = 3/4" - 1" - 1 1/4" - 1 1/2" B = 1/2" - 3/4"</p>	<p><b>30-60 Amp Enclosure</b> Type ID</p>  <p><b>60 Amp Enclosure</b> Type SE</p> <p><b>K.O.'s Trade Size</b> A = 3/4" - 1" - 1 1/4" - 1 1/2" B = 3/4" - 1" C = 1/2" - 3/4"</p>
<p><b>100 Amp Enclosure</b> Type SE ID</p>  <p><b>K.O.'s Trade Size</b> A = 1" - 1 1/4" - 1 1/2" - 2" B = 1/2" - 3/4" C = 3/4" - 1" D = 1" - 1 1/4"</p>	<p><b>200 Amp Enclosure</b> Type SE ID</p>  <p><b>K.O.'s Trade Size</b> A = 1 1/2" - 2" - 2 1/2" - 3" B = 1" - 1 1/4" C = 1/2" - 3/4"</p>

# Catalogue Numbering System

## Type VBII Safety Switch Catalogue Numbering System

### Product Overview

H	F	C	3	6	4	N	J	W	A
---	---	---	---	---	---	---	---	---	---

#### Switch Type

L = General Duty  
10k AIC Max.  
(Plug Fused &  
60A Max  
Non-Fused)  
G = Gen. Duty  
H = Heavy Duty  
DT = Double Throw

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SAFETY SWITCHES

#### Fused or Non-Fused

F = Fused  
NF = Non-Fused

#### C = CSA certified only

#### Number of Poles

1 = 1  
2 = 2  
3 = 3  
4 = 4  
6 = 6

#### Voltage

1 = 120V or 120/240V  
2 = 240V  
6 = 600V

#### Series Type

A = 400A, 600A  
Omit = 30A - 200A, 800A - 1200A

#### Special Applications With:

CH = Crouse-Hinds Receptacle  
W = Viewing Window

#### Enclosure Type

Omit = Type 1, Indoor  
R = Type 3R, Outdoor  
S = Type 4/4X, Stainless Steel  
J = Type 12, Industrial

#### With or Without Neutral

Omit = Less Neutral  
N = With Neutral - rated for service entrance

#### Amperes

1 = 30A	5 = 400A
2 = 60A	6 = 600A
3 = 100A	7 = 800A
4 = 200A	8 = 1200A

## Type VBII Accessories Catalogue Numbering System

H	R	6	4	A
---	---	---	---	---

#### Switch Type

H = Heavy Duty  
G = General Duty<sup>①</sup>

#### Series Type

A = 400A, 600A  
Omit = 30A - 200A, 800A - 1200A

#### Accessory Type

A1 = Auxiliary Switch 1/NO and 1/NC  
A2 = Auxiliary Switch 2/NO and 2/NC  
A3 = Auxiliary Switch Low Current  
CL = Compression Lug Barrier /  
Mounting Kit  
CU = Copper Lug<sup>②</sup>  
G = Ground Lug Kit  
G2 = Insulated Ground Lug Kit  
LC = Copper Lug Kit<sup>③</sup>  
NC = Neutral  
NC2 = 200% Neutral<sup>④</sup>  
NCM = Field Replacement Lug Kit<sup>⑤</sup>  
P = Fuse Puller Kit  
R = Class R - Fuse Clip Kit  
T = Class T - Fuse Kit

#### Amperes

1 = 30A
2 = 60A
12 = 30/60A
3 = 100A
23 = 60/100A
123 = 30/60/100A
1234 = 30/60/100/200A
4 = 200A
5 = 400A
6 = 600A
56 = 400/600A
5678 = 400/600/800/1200A
78 = 800/1200A

#### Maximum Voltage

2 = 240V Max<sup>⑥</sup>  
6 = 600V Max

<sup>①</sup>For 400A, 600A use 600V max accessories except for T fuse kit.

<sup>②</sup>Only offered for 400A, 600A.

<sup>③</sup>For 30A-200A, 800A-1200A.

# General Duty Safety Switches

## Features VBII (30-200A)

## Product Overview



### 3 SAFETY SWITCHES

1. Cover interlock
2. Tangential knockouts through 200A for easy conduit lineup
3. Quick-make, quick-break operating mechanism that ensures positive operation
4. Provisions for T, R, J, H, and K class fuses (T & J 100-200A)
5. Generous wiring gutters that meet or exceed CEC wire-bending space requirements
6. Visible blade, double-break switch action
7. Positive 2 or 3 point mounting
8. Highly visible red handle grip
9. Informative door labeling which includes replacement parts list
10. Handle and cover padlocking provisions
11. Side-hinged door that opens 180 degrees for easier wiring
12. A unique enclosure design that adds rigidity and strength. Its rolled edge prevents cuts and scrapes to conductors and to installer's hands

# General Duty Safety Switches

**Selection**

**3**  
**SAFETY SWITCHES**



System	Ampere Rating	Indoor - Type 1		Outdoor - Type 3R		Horsepower Ratings <sup>①</sup>						250 Volt DC
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	240V AC				250 Volt DC		
						1-Phase, 2-Wire	2-Phase, 4-Wire	3-Phase, 3-Wire	Std.			
						Std.	Max.	Std.	Max.	Std.	Max.	Std.

## 240 Volt Fusible

### 2-Pole, 2-Fuse, and Solid Neutral<sup>②③</sup>

### 240 Volt AC/250 Volt DC

	30 60 100 200	GFC221N GFC222N GFC223N GFC224N	35 <sup>⑤</sup> 14 23 47	— — — —	— — — —	1 1/2 3 7 1/2 15	3 10 15 —	— — — —	— — — —	3 7 1/2 15 25	7 1/2 15 30 60	5 10 20 40
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### 3-Pole, 3-Fuse, and Solid Neutral<sup>②④</sup>

### 240 Volt AC/250 Volt DC

	30 60 100 200	GFC321N GFC322N GFC323N GFC324N	24 <sup>⑤</sup> 15 25 49	GFC321NR — — —	24 <sup>⑤</sup> — — —	1 1/2 3 7 1/2 15	3 10 15 —	— — — —	— — — —	3 7 1/2 15 25	7 1/2 15 30 60	5 10 20 40
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<sup>①</sup> Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when timede-lay fuses are installed.

<sup>②</sup> Service entrance labeled.

<sup>③</sup> Suitable for use on 3-phase motor loads.

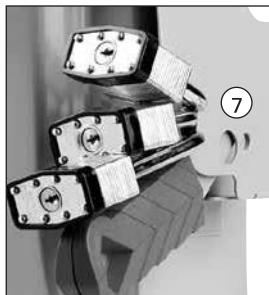
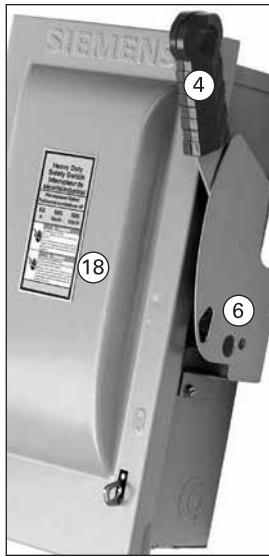
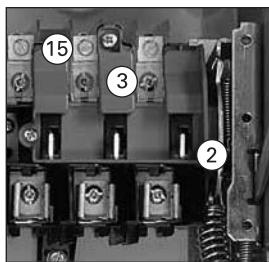
<sup>④</sup> 5 switches per standard package.

<sup>⑤</sup> 10 switches per standard package.

<sup>⑥</sup> Has provision for ECHA type hub.

# Heavy Duty Safety Switches

## Features



1. Quick-make, quick-break operating mechanism that ensures positive operation.
2. Visible blade, double-break switching action.
3. Arc chutes dissipate heat and prolong switch life.
4. Highly visible red handle grip. Designed for hook stick operation.
5. Defeatable dual cover interlock.
6. Center punch provided for field drilling to allow ON padlocking.
7. Handle can be padlocked in the OFF position with up to (3) padlocks with 5/16" hasps.
8. Generous top, bottom and side gutters that meet or exceed CEC wire-bending space requirements.
9. Informative door labeling which includes replacement parts list.
10. Tangential knockouts through 600A for easy conduit lineup.
11. Side-hinged door that opens past 180 degrees for easier wiring.
12. Unique enclosure design increases rigidity and prevents cuts and scrapes to conductors and installer's hands.
13. Spring reinforced fuse clips that assure reliable contact for cool operation.
14. Door latch securely holds door closed and allows cover padlocking.
15. Front removable mechanical lugs that are suitable for CU/AI 60 or 75° C conductors.
16. Lugs are field convertible to copper body and to a wide variety of compression connectors.
17. Hinged clear line terminal shield with probe holes for inspecting or testing line side terminals.
18. Embossed aluminum nameplate on Heavy Duty Switches.
19. Drawn cover for increased rigidity and resistance to abuse.
20. Top key hole and bottom mounting holes provide easy 2 or 3 point mounting.

# Heavy Duty Safety Switches

**Selection**

3

SAFETY SWITCHES



System	Ampere Rating	Indoor — Type 1		Outdoor — Type 3R			Horsepower Ratings <sup>①</sup>				250 Volt DC	
		240V AC		1-Phase, 2-Wire		3-Phase, 3-Wire						
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Hub Type <sup>②</sup>	Std.	Max.	Std.	Max.		

240 Volt Fusible<sup>③</sup>

2-Pole, 2-Fuse and Solid Neutral (Also used for 2-Pole, 2-Wire Applications)				240 Volt AC/250 Volt DC							
	30	HFC221N	12	HFC221NR	13		1½	3	3	7½	5
	60	HFC222N	18	HFC222NR	19	ECHS	3	10	7½	15	10
	100	HFC223N	23	HFC223NR	24		7½	15	15	30	20
	200	HFC224N	47	HFC224NR	48		15	—	25	60	40
	400	HFC225NA	91.1	HFC225NRA	91.1		15	—	50	125	50
	600	HFC226NA	95.6	HFC226NRA	95.6	ECHV	15	—	75	200	50
	800	HFC227N	365	HFC227NR	365		—	—	100	250	50
	1200	HFC228N■	385	HFC228NR■	385		—	—	100	250	50

3-Pole, 3-Fuse and Solid Neutral (Also used for 3-Pole, 3-Wire Applications)				240 Volt AC/250 Volt DC							
	30	HFC321N	14	HFC321NR	15		1½	3	3	7½	5
	60	HFC322N	19	HFC322NR	20	ECHS	3	10	7½	15	10
	100	HFC323N	25	HFC323NR	26		7½	15	15	30	20
	200	HFC324N	49	HFC324NR	50		15	—	25	60	40
	400	HFC325NA	94.6	HFC325NRA	94.6		15	—	50	125	50
	600	HFC326NA	99.6	HFC326NRA	99.6	ECHV	15	—	75	200	50
	800	HFC327N	375	HFC327NR	375		—	—	100	250	50
	1200	HFC328N	395	HFC328NR	388		—	—	100	250	50

240 Volt Fusible

2-Pole, 2-Fuse				240 Volt AC/250 Volt DC							
	30	Type 4/4X Stainless		Type 12 Industrial <sup>④</sup>		Hub Type <sup>⑤</sup>	1½	3	3	7½	5
	60	HFC221S	13	HFC221J	13	SSH	3	10	7½	15	10
	100	HFC222S	19	HFC222J	19		7½	15	15	30	20
	200	HFC223S	24	HFC223J	24		15	—	25	60	40
		HFC224S	48	HFC224J	48		—	—	25	60	40

3-Pole, 3-Fuse (Also used for 2-Pole, 2-Wire Applications in 400–800A Ratings)				240 Volt AC/250 Volt DC							
	30	HFC321S	14	HFC321J	14		1½	3	3	7½	5
	60	HFC322S	20	HFC322J	20	SSH	3	10	7½	15	10
	100	HFC323S	25	HFC323J	25		7½	15	15	30	20
	200	HFC324S	49	HFC324J	49		15	—	25	60	40
	400	HF325SA <sup>⑥</sup>	93	HF325JA <sup>⑥</sup>	93		15	—	50	125	50
	600	HF326SA <sup>⑥</sup>	98	HF326JA <sup>⑥</sup>	98	*	15	—	75	200	50
	800	HFC327S■	370	HFC327J■	365		—	—	100	250	50

■ Built to order.

① Suitable for use as service equipment when neutral is bonded to the enclosure.

② Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

③ Hub type SSH are suitable for type 4/4X and type 12 applications.

④ Hub catalogue numbers available p. 3-26

⑤ 304 grade stainless steel.

⑥ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑦ For equipment suitable as service entry, order HFC325NSA, HFC326NSA, HFC325NJA or HFC326NJA based on the amperage and enclosure type required.

\* Consult Siemens representative.

# Heavy Duty Safety Switches

**Selection**



System	Ampere Rating	Indoor – Type 1		Outdoor – Type 3R			Horsepower Ratings <sup>④</sup>													
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Hub Type <sup>⑤</sup>	480V AC		600V AC		1-Phase, 2-Wire		3-Phase, 3-Wire		1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC	600 Volt DC
							Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	Std.	Max.	250 Volt DC	600 Volt DC

600 Volt Fusible

## 2-Pole, 2-Fuse<sup>③</sup>

480 Volt AC/600 Volt AC/600 Volt DC																		
	30	HFC261	15	HFC261R	15	ECHS	3	7½	—	—	3	10	—	—	5	15		
	60	HFC262	20	HFC262R	20		10	20	—	—	10	25	—	—	10	30		
	100	HFC263	26	HFC263R	27		15	30	—	—	15	40	—	—	20	50		

## 3-Pole, 3-Fuse

480 Volt AC/600 Volt AC/250 Volt DC <sup>①</sup>																		
	30	HFC361	14	HFC361R	15	ECHS	3	7½	5	15	3	10	7½	20	5	—		
	60	HFC362	19	HFC362R	20		5	20	15	30	10	25	15	50	10	30 <sup>②</sup>		
	100	HFC363	24	HFC363R	25		5	20	25	60	15	40	30	75	20	50 <sup>②</sup>		
	200	HFC364	48	HFC364R	49		25	50	50	125	30	50	60	150	40	50		
	400	HFC365A <sup>①</sup>	93	HFC365RA <sup>①</sup>	93	ECHV	—	—	100	250	—	—	125	350	50	—		
	600	HFC366A <sup>①</sup>	98	HFC366RA <sup>①</sup>	98		—	—	150	400	—	—	200	500	50	—		
	800	HFC367	365	HFC367R	365		—	—	200	500	—	—	250	500	50	—		
	1200	HFC368	383	HFC368R	385		—	—	200	500	—	—	250	500	50	—		

## 3-Pole, 3-Fuse and Solid Neutral<sup>⑤</sup>

480 Volt AC/600 Volt AC/250 Volt DC <sup>①</sup>																		
	30	HFC361N	14	HFC361NR	15	ECHS	3	7½	5	15	3	10	7½	20	5	—		
	60	HFC362N	19	HFC362NR	20		5	20	15	30	10	25	15	50	10	30 <sup>②</sup>		
	100	HFC363N	25	HFC363NR	26		10	30	25	60	15	40	30	75	20	50 <sup>②</sup>		
	200	HFC364N	49	HFC364NR	50		25	50	50	125	30	50	60	150	40	50		
	400	HFC365NA	94.6	HFC365NRA	94.6	ECHV	—	—	100	250	—	—	125	350	50	—		
	600	HFC366NA	99.6	HFC366NRA	99.6		—	—	150	400	—	—	200	500	50	—		
	800	HFC367N	375	HFC367NR	375		—	—	250	500	—	—	250	500	50	—		
	1200	HFC368N	395	HFC368NR	388		—	—	250	500	—	—	250	500	50	—		

600 Volt Fusible<sup>⑦</sup> (For 2-Pole Applications use outside poles of 3-Pole Switches)

## 2-Pole, 2-Fuse<sup>③</sup>

480 Volt AC/600 Volt AC/600 Volt DC																		
	30	HFC261S	15	HFC261J■	15	SSH	3	7½	—	—	3	10	—	—	5	15		
	60	HFC262S	20	HFC262J■	20		5	20	—	—	10	25	—	—	10	30		
	100	HFC263S■	27	HFC263J■	27		10	30	—	—	15	40	—	—	20	50		

## 3-Pole, 3-Fuse

480 Volt AC/600 Volt AC/250 Volt DC <sup>①</sup>																		
	30	HFC361S	13	HFC361J	14	SSH	—	—	5	15	—	—	7½	20	5	—		
	60	HFC362S	20	HFC362J	20		—	—	15	30	—	—	15	50	10	30 <sup>②</sup>		
	100	HFC363S	25	HFC363J	25		—	—	25	60	—	—	30	75	20	50 <sup>②</sup>		
	200	HFC364S	49	HFC364J	49		—	—	50	125	—	—	60	150	40	50		
	400	HFC365SA <sup>①</sup>	93	HFC365JA <sup>①</sup>	93		—	—	100	250	—	—	125	350	50	—		
	600	HFC366SA <sup>①</sup>	98	HFC366JA <sup>①</sup>	98	*	—	—	150	400	—	—	200	500	50	—		
	800	HFC367S	370	HFC367J■	365		—	—	200	500	—	—	250	500	50	—		
	1200	HFC368S■	388	HFC368J■	388		—	—	250	500	—	—	250	500	50	—		

■ Built to order.

① 60-600A 3-Pole switches are also rated 600V DC.

② 600V DC & 600V DC horsepower rating shown requires (2) poles to be connected in series.

③ Use 3-Pole switch for 200A applications.

④ Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

⑤ Suitable for use as service equipment when neutral is bonded to the enclosure.

⑥ Hub catalogue number available p. 3-26

⑦ When a neutral is required use neutral kit displayed on p. 3-24

⑧ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑨ 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, consult Siemens representative.

⑩ Hub type SSH are suitable for type 4/4X and type 12 applications.

⑪ For equipment suitable as service entry, order HFC365NSA, HFC366NSA, HFC365NJA or HFC366NJA based on the amperage and enclosure type required.

\* Consult Siemens representative

# Heavy Duty Safety Switches

**Selection**

3

**SAFETY SWITCHES**



System	Ampere Rating	Indoor – Type 1		Outdoor – Type 3R			Horsepower Ratings							
		Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.)	Hub <sup>④</sup> Type	240 Volt		480 Volt		600 Volt		250V DC	600V DC
							1-Phase	3-Phase	1-Phase	3-Phase	1-Phase	3-Phase		

## 600 Volt Non-Fusible

### 2-Pole<sup>③</sup>

480 Volt AC / 600 Volt AC / 600 Volt DC														
	30	HNFC261	12	HNFC261R	13	ECHS	—	—	7 <sup>1/2</sup>	—	10	—	5	15
	60	HNFC262	19	HNFC262R	20		—	—	20	—	25	—	10	30
	100	HNFC263	24	HNFC263R	25		—	—	30	—	40	—	20	50

### 3-Pole

480 Volt AC / 600 Volt AC / 250 Volt DC														
	30	HNFC361	12	HNFC361R	13	ECHS	5	10	7 <sup>1/2</sup>	20	10	30	5	—
	60	HNFC362 <sup>①</sup>	18	HNFC362R <sup>①</sup>	19		10	20	20	50	25	60	10	30 <sup>②</sup>
	100	HNFC363 <sup>①</sup>	23	HNFC363R <sup>①</sup>	24		15	40	30	75	40	100	20	50 <sup>②</sup>
	200	HNFC364 <sup>①</sup>	46	HNFC364R <sup>①</sup>	47		15	60	50	125	50	150	40	50
	400	HNF365A	75	HNF365RA	75	ECHV	15	125	50	250	50	350	50	—
	600	HNF366A	77	HNF366RA	77		15	200	50	400	50	500	50	—
	800	HNFC367	295	HNFC367R	295		15	250	50	500	50	500	50	—
	1200	HNFC368	305	HNFC368R	307		15	250	50	500	50	500	50	—

## 600 Volt Non-Fusible<sup>②</sup>

### 2-Pole<sup>③</sup>

480 Volt AC / 600 Volt AC / 600 Volt DC														
	30	Type 4/4X Stainless <sup>⑦</sup>	13	Type 12 Industrial <sup>⑤</sup>	13	Hub Type <sup>④⑥</sup>	—	—	7 <sup>1/2</sup>	—	10	—	5	15
	60	HNFC261S	13	HNFC261J	13	SSH	—	—	20	—	25	—	10	30
	100	HNFC262S	20	HNFC262J	20		—	—	30	—	40	—	20	50
		HNFC263S■	25	HNFC263J■	25		—	—	30	—	40	—	20	50

### 3-Pole

480 Volt AC / 600 Volt AC / 250 Volt DC														
	30	HNFC361S	13	HNFC361J	13	SSH	5	10	7 <sup>1/2</sup>	20	10	30	5	—
	60	HNFC362S <sup>①</sup>	19	HNFC362J <sup>①</sup>	19		10	20	20	50	25	60	10	30 <sup>②</sup>
	100	HNFC363S <sup>①</sup>	24	HNFC363J <sup>①</sup>	24		15	40	30	75	40	100	20	50 <sup>②</sup>
	200	HNFC364S <sup>①</sup>	47	HNFC364J <sup>①</sup>	47		15	60	50	125	50	150	40	50
	400	HNF365SA	75	HNF365JA	75	*	15	125	50	250	50	350	50	—
	600	HNF366SA	77	HNF366JA	77		15	200	50	400	50	500	50	—
	800	HNFC367S	295	HNFC367J■	295		15	250	50	500	50	500	50	—
	1200	—	—	HNFC368J■	310		15	250	50	500	50	500	50	—

■ Built to order.

① Also rated 600V DC.

② When neutral is required, use neutral kit displayed on p. 3-24.

③ Use 3-Pole switch for 200A application.

④ Hub catalogue numbers available p. 3-26

⑤ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑥ 600V DC horsepower rating shown requires (2) poles to be connected in series.

⑦ 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, consult Siemens representative.

⑧ Hub type SSH are suitable for type 4/4X and type 12 applications.

\*Consult Siemens representative.

# Heavy Duty Safety Switches

## Type 4/4X & 12 with Viewing Window

**Selection**

### Description

30–600A, 3-pole 600V max. in fusible and non-fusible versions in Type 4/4X stainless steel and Type 12 enclosures.

All allow viewing of visible blade position. 30–200A also allow viewing of indicating type fuses.

### Features

- Rugged installer-friendly enclosure design features a gasket flange with continuously welded seams
- Tool-free cover latches
- Two, three and four point mounting

- Metal handle with large insulating grip features a positive stop in both ON and OFF position
- Ground lugs provided as standard
- Type 12 enclosures are fabricated from galvanized steel and are also rated for 3R/3S outdoor applications
- Type 4X stainless steel switches are 304 grade stainless steel and 30-200A are provided with stainless steel interior parts
- The widest range of accessories available including 200% neutrals, gold plated PLC auxiliary contacts and isolated ground kits



3

**SAFETY SWITCHES**

System	Ampere Rating	Catalogue Number	Hub Type	Ship. Wt. (lbs.)	Maximum Horsepower Ratings <sup>②</sup>					
					240V AC		480V AC		600V AC	
					1-Phase, 2-Wire	3-Phase, 3-Wire	3-Phase, 3-Wire	3-Phase, 3-Wire	250V DC	600V DC
					3	10	15	20	5	—

### 3-Pole, 3-Wire Fusible, Type 12<sup>③</sup>

(For 2-Pole Applications use outside poles of 3-Pole Switches)

### 600 Volt AC / 250 Volt DC<sup>①</sup>

	30	HFC361JW	SSH	17	3	7 1/2	15	20	5	—
	60	HFC362JW		22	10	15	30	50	10	30 <sup>④</sup>
	100	HFC363JW		26	15	30	60	75	20	30 <sup>④</sup>
	200	HFC364JW		53	—	60	125	150	40	50
	400	HF365JWA <sup>⑤</sup>		93	—	125	250	350	50	—
	600	HF366JWA <sup>⑤</sup>		98	—	200	400	500	50	—

### 3-Pole, 3-Wire Non-Fusible, Type 12<sup>③</sup>

### 600 Volt AC / 250 Volt DC<sup>①</sup>

	30	HNFC361JW	SSH	14	3	10	20	30	5	—
	60	HNFC362JW		21	10	20	50	60	10	30 <sup>④</sup>
	100	HNFC363JW		25	15	40	75	100	20	50 <sup>④</sup>
	200	HNFC364JW		51	15	60	125	150	40	50
	400	HNF365JWA		75	15	125	250	350	50	—

### 3-Pole, 3-Wire Fusible, Type 4X Stainless<sup>⑥</sup>

(For 2-Pole Applications use outside poles of 3-Pole Switches)

### 600 Volt AC / 250 Volt DC<sup>①</sup>

	30	HFC361SW	SSH	17	3	7 1/2	15	20	5	—
	60	HFC362SW		23	10	15	30	50	10	30 <sup>④</sup>
	100	HFC363SW		28	15	30	60	75	20	50 <sup>④</sup>
	200	HFC364SW		55	—	60	125	150	40	50
	400	HF365SWA <sup>⑤</sup>		75	15	125	250	350	50	—
	600	HF366SWA		98	—	200	400	500	50	—

### 3-Pole, 3-Wire Non-Fusible, Type 4X Stainless<sup>⑥</sup>

### 600 Volt AC / 250 Volt DC<sup>①</sup>

	30	HNFC361SW	SSH	15	3	10	20	30	5	—
	60	HNFC362SW		23	10	20	50	60	10	30 <sup>④</sup>
	100	HNFC363SW		27	15	40	75	100	20	50 <sup>④</sup>
	200	HNFC364SW		54	15	60	125	150	40	50
	400	HNF365SWA		75	15	125	250	350	50	—

<sup>①</sup> 200A switches are also rated 600V DC.

<sup>②</sup> Maximum HP ratings listed apply only when time delay fuses are used.

<sup>③</sup> Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

<sup>④</sup> For equipment suitable as service entry, order HFC365NJWA, HFC366NJWA or HFC365NSWA based on the amperage and enclosure type required.

<sup>⑤</sup> 600V DC horsepower rating shown requires (2) poles to be connected in series.

<sup>⑥</sup> 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, consult Siemens representative.

\* Consult Siemens representative.

# Heavy Duty Safety Switches

## Type VBII 4 & 6-Pole Heavy Duty Safety Switches

**Selection**

### Application

4 & 6-pole Switches are commonly used as a disconnecting means for two-speed, two-winding motors. Fused switches provide both over current and short circuit protection. Non-fusible switches normally provide a local disconnection means for two-speed motors which are remote from their motor controller. 4-pole switches are also used in 3-phase, 4-wire circuits when a switching neutral is required.

**3**

**SAFETY SWITCHES**

### Description

4 & 6-pole switches are available in 30-200A ratings and in both fusible and non-fusible versions. 4-pole switches are supplied with either Type 1 or Type 12/3R enclosures.

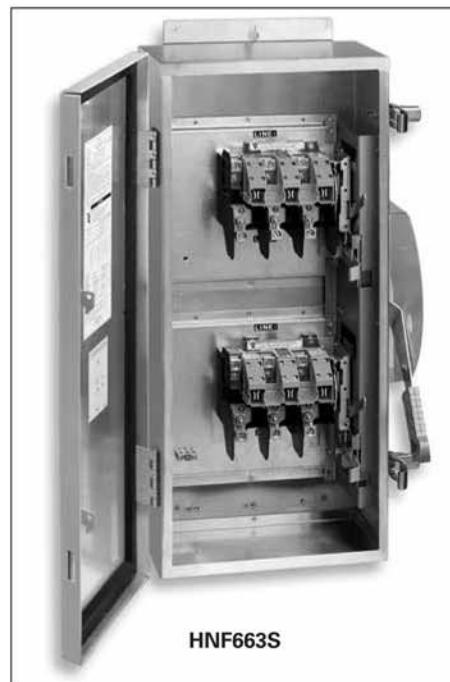
6-pole switches are available with either Type 12/3R or Type 4X stainless steel enclosures.

### Standards

- cUL & UL listed under file #E4776
- Meets UL98 for enclosed switches
- Meets NEMA Standard KS-1 for enclosed switches
- Meets CEC wire bending space requirements

### Features

- Visible blade, double break switching action
- Highly visible ON/OFF indication
- Defeatable dual cover interlock
- Padlock option in OFF position
- All copper current carrying parts<sup>①</sup>
- Tangential knockouts (Type 1, 4-pole switches)



### 4-Pole Type VBII Switches<sup>①</sup>

System	Ampere Rating	Indoor Type 1		Type 12/3R Industrial <sup>④</sup>			Horsepower Ratings <sup>②</sup>							
		Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.)	Hub Type <sup>⑤</sup>	240V, 20, 4W	240V 30	480V, 30	600V, 30	250V DC	Std.	Max.	
Std.	Max.	Std.	Max.	Std.	Max.	Std.	10	3	5	15	20	5	10	
Fusible 600 Volt AC, 250 Volt DC — 4-Pole, 4 Fuse <sup>③</sup>							3	7½	15	30	50	125	60	
	30	HF461	36	HF461J	36	SSH	—	10	—	20	—	—	30	
	60	HF462	40	HF462J	40		—	20	—	50	—	—	60	
	100	HF463	43	HF463J	43		—	30	—	75	—	—	100	
	200	HF464■	88	HF464J■	88		25	50	25	60	50	125	150	
Non-fusible 600 Volt AC, 250 Volt DC — 4-Pole							7½	15	25	60	125	60	40	
	30	HNF461	32	HNF461J	32	SSH	—	10	—	20	—	—	30	
	60	HNF462	34	HNF462J	34		—	20	—	50	—	—	60	
	100	HNF463■	36	HNF463J■	36		—	30	—	75	—	—	100	
	200	HNF464■	78	HNF464J■	78		—	50	—	125	—	—	150	

### 6-Pole Type VBII Switches<sup>①④</sup>

System	Ampere Rating	Type 12 Industrial		Type 4X Stainless Steel		Hub Type <sup>⑥</sup>	Horsepower Ratings <sup>③</sup>							
		Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.)		240V 30	480V, 30	600V, 30	250V DC	Std.	Max.	Std.	Max.
Std.	Max.	Std.	Max.	Std.	Max.	Std.	10	—	—	—	20	—	30	5
Fusible 600 Volt AC, 250 Volt DC — 6-Pole, 6 Fuse <sup>③</sup>						SSH	—	10	—	—	20	—	30	5
	30	HF661J	37	HF661S	37		3	7½	5	15	30	125	60	40
	60	HF662J	41	HF662S	41		7½	15	15	30	15	50	60	10
	100	HF663J■	44	HF663S	44		15	30	25	60	30	75	75	20
	200	HF664J■	90	HF664S■	90		25	60	50	125	60	150	150	40
Non-fusible 600 Volt AC, 250 Volt DC — 6-Pole							7½	15	25	60	125	60	40	
	30	HNF661J	33	HNF661S	33	SSH	—	10	—	20	—	—	30	5
	60	HNF662J	35	HNF662S	35		—	20	—	50	—	—	60	10
	100	HNF663J	37	HNF663S	37		—	40	—	75	—	—	100	20
	200	HNF664J	80	HNF664S■	80		—	60	—	125	—	—	150	40

■ Built to order.

① Lugs are aluminum alloy as standard. Optional copper body lugs are available.

② Dual horsepower ratings: Std. – applies when non-time-delay fuses are installed. Max. – applies when time delay fuses are installed.

③ Fusible switches accept Class H Fuses as the standard. Class R & J fuses can also be installed and increase the rating from 10,000 to 200,000 AIC. For Class J, the load base is moved upward. For Class R fuses, rejection kits are required.

④ Supplied with factory installed ground lugs.

⑤ Hub catalogue number available p. 3-26

⑥ Hub type SSH are suitable for type 4/4X and type 12 applications.

# Heavy Duty Safety Switches

## Special Application Switches / Interlocked Receptacle Switches

**Selection**

### Application

Receptacle Safety Switches provide cord connection protection of heavy-duty portable equipment (welders, infrared ovens, batch feeders, portable conveyors, assembly line fixtures and tools, refrigerator trucks, etc.) under load or fault conditions.

### Standards

All receptacle switches with a viewing window are CSA certified under file #24563 and UL listed under file #E4776.

### Description<sup>①②</sup>

Type 12 and 4/4X Receptacle Safety Switches are available with 3-phase, 4-wire grounded type Crouse-Hinds Arkite™, pre-wired and mounted with interlock linkage to the switch mechanism. Insertion or removal of the plug is prevented by the interlock linkage while the switch is in the "ON" position. Receptacle prevents operation of switch if incorrect plug is inserted.



### Crouse-Hinds Interlocked Receptacle Switches

Ampere Rating <sup>③</sup>	Type 12 <sup>②</sup>		Type 4/4X <sup>③</sup>		Hub Type <sup>④</sup>	Shipping Wt. (lbs.) Std. Pkg.	Accepts Crouse-Hinds Arkite <sup>⑤</sup> Plug Catalogue Number
	Catalogue Number	Catalogue Number					
30	HF361JCHW	HF361SCHW			SSH	24	APJ3485 & NPJ3485
60	HF362JCHW	HF362SCHW				30	APJ6485 & NPJ6485
100	HF363JCHW	HF363SCHW				36	APJ10487 & NPJ10487

#### 600V Fusible, 3-Pole, 3-Wire with Viewing Window

30	HF361JCHW	HF361SCHW		24	APJ3485 & NPJ3485
60	HF362JCHW	HF362SCHW		30	APJ6485 & NPJ6485
100	HF363JCHW	HF363SCHW		36	APJ10487 & NPJ10487

#### 600V Non-Fusible, 3-Pole, 3-Wire with Viewing Window

30	HNF361JCHW	HNF361SCHW		22	APJ3485 & NPJ3485
60	HNF362JCHW	HNF362SCHW		29	APJ6485 & NPJ6485
100	HNF363JCHW	HNF363SCHW		35	APJ10487 & NPJ10487

### Receptacle switches dimensions

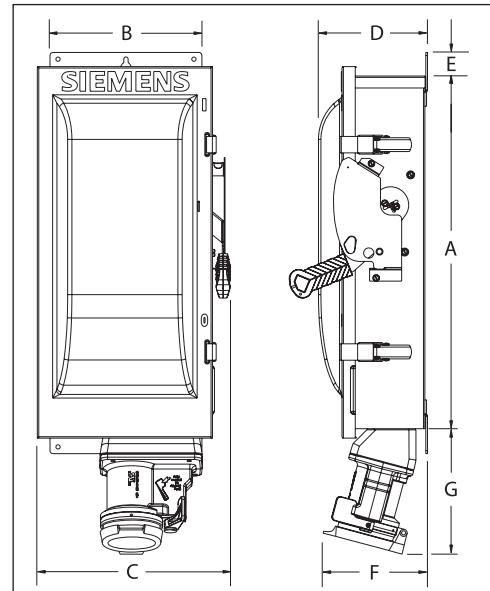
Ampere Rating	Dimensions - Inches (mm)						
	A	B	C	D	E	F	G
Cr-H Type Fusible (240 & 600V)							

#### Cr-H Type Fusible (240 & 600V)

30	14.27 (363)	7.42 (188)	9.02 (229)	6.22 (158)	1.52 (39)	6.1 (155)	6.0 (152)
60	16.27 (413)	9.17 (233)	11.47 (291)	6.34 (161)	1.52 (39)	6.4 (163)	7.4 (188)
100	21.96 (558)	9.65 (245)	12.02 (305)	6.80 (172)	1.52 (39)	6.5 (165)	7.6 (193)

#### Cr-H Type Non-Fused (600V max.)

30	14.27 (363)	7.42 (188)	9.02 (229)	6.22 (158)	1.52 (39)	6.1 (155)	6.0 (152)
60	16.27 (413)	9.17 (233)	11.47 (291)	6.34 (161)	1.52 (39)	6.4 (163)	7.4 (188)
100	21.96 (558)	9.65 (245)	12.02 (305)	6.80 (172)	1.52 (39)	6.5 (165)	7.6 (193)



<sup>①</sup> Arkite™ is a registered trademark of the Crouse-Hinds Company. Plugs are not sold or supplied by Siemens.

<sup>②</sup> Also rated Type 3R/3S.

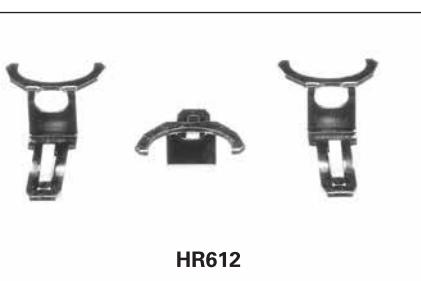
<sup>③</sup> Enclosure is constructed of Type 304 stainless steel.

<sup>④</sup> Hub catalogue available p. 3-26

# General and Heavy Duty Safety Switches

## Accessories

**Selection**



HR612



HT63



HN264

### Class R Fuse Clip Kits

All General Duty and Heavy Duty Switches are field convertible to accept Class R Fuse Clip Kits. The kits prevent the installation of Class H and K fuses (one kit required per 3-pole switch).

### Class R Fuse Clip Kits

Catalogue Number	Description
<b>GSRK321</b>	30A, 240V Kit (GD only)
<b>HR21</b>	30A, 240V Kit (HD only)
<b>HR612</b>	30A, 600V Kit/60A, 240V Kit
<b>HR62</b>	60A, 600V Kit
<b>HR63</b>	100A Kit
<b>HR64</b>	200A Kit
<b>HR65A</b>	400A Kit
<b>HR66A</b>	600A Kit

### Class J Fusing

All 30-600A, 600V and 100-600A, 240V fusible Heavy Duty Switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position. All 100-600A, 240V fusible General Duty switches can also be field converted to accept Class J fuses. In addition, 600A Heavy Duty switches require Class J fuse clip kit HJ66A to accept class J fuses. (one kit required per 3-pole switch).

### Class J Fuse Kits

Catalogue Number	Description
<b>HJ66A</b>	600A, 240V/600V Kit

### Internal Shield Kits (for fusible switches)

Kits provide a clear plastic inner door to prevent accidental contact with live parts. Test probe holes are provided and fuses can be replaced without removal of kit.

### NEW Internal Shield Kits<sup>②</sup>

Switch Ampere Rating	Kit Catalogue Number
30A HD	<b>HSK61SSW</b>
60A HD	<b>HSK62SSW</b>
100A HD	<b>HSK63SSW</b>
200A HD	<b>HSK64SSW</b>

<sup>①</sup> Built to order. Allow 6-8 weeks for delivery.

<sup>②</sup> One kit per pole required.

### Class T Fuse Adapter Kits

All 100-600A, General Duty and 100-200Amp and 1200Amp Heavy Duty Switches are field convertible to accept Class T fuses. 800A switches are field convertible to accept Class T fuses by moving the load base to a pre-drilled T fuse position.

### Class T Fuse Adapter Kits<sup>①</sup>

Catalogue Number	Description
<b>HT23</b>	100A, 240V Kit
<b>HT63</b>	100A, 600V Kit
<b>HT24</b>	200A, 240V Kit
<b>HT64▲</b>	200A, 600V Kit
<b>HT25A</b>	400A, 240V Kit
<b>HT65A</b>	400A, 600V Kit
<b>HT26A</b>	600A, 240V Kit
<b>HT66A</b>	600A, 600V Kit
<b>TFAK82</b>	1200A, 240V Kit



HNC623

### 200% Neutral Kits

CSA certified 200% Neutrals are available on 100-600A Heavy Duty Switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

### 200% Neutral Kits

Switch Ampere Rating	Kit Catalogue Number	Wire Range Line & Load Lugs (Cu/Al)
100	<b>HNC263</b>	(2) #14-1/0 AWG
200	<b>HNC264</b>	(2) #6 AWG-300 Kcmil
400	<b>HNC656A</b>	(2) 1/0 AWG-600 Kcmil (2) #6 AWG-300 Kcmil
600	<b>HNC678A</b>	(2) 1/0 AWG-600 Kcmil (2) #6 AWG-300 Kcmil



HP61

### Neutral Kits

Standard Neutral Kits can be field installed in General and Heavy Duty Switches.

### Neutral Kits

Switch Ampere Rating	Kit Catalogue Number
30 HD, 60 GD	<b>HNC612</b>
60, 100 HD, 100 GD	<b>HNC623</b>
200	<b>HNC64</b>
400 & 600	<b>HNC656A</b>
800 & 1200	<b>HNC678</b>

### Fuse Puller Kits

Fuse Puller Kits are field installable in 30-100A Type VBII Heavy Duty Switches (one kit required per 3-pole switch).

### Fuse Puller Kits

Switch Ampere Rating	Fuse Puller Kit Catalogue Number
30	<b>HP61</b>
60	<b>HP62▲</b>
100	<b>HP63▲</b>

# General and Heavy Duty Safety Switches

## Accessories

**Selection**



HA261234



HA261234



HLC612



HG261234

### Auxiliary Contacts

Auxiliary Contacts are available only for Heavy Duty Switches. The auxiliary contacts are available in 1 normally open and 1 normally closed or 2 normally open and 2 normally closed configurations. Siemens offers a PLC Auxiliary Switch (30-200A) that has very low resistance for low voltage and current typical in PLC circuits. All auxiliary contacts make after and break before main switch contacts.

### Auxiliary Contacts

Switch Ampere	Aux. Switch Catalogue Number	Kit Ampere Rating			Horsepower Rating	
		125V AC Max.	250V AC Max.	28V DC Max.	125V AC Max.	250V AC Max.
30-600	HA161234	10	10	7	1/2	3/4
800-1200	HA165678	10	10	—	1/2	3/4

### With 1 NO & 1 NC Isolated Contacts

30-600	HA161234	10	10	7	1/2	3/4
800-1200	HA165678	10	10	—	1/2	3/4

### With 2 NO & 2 NC Isolated Contacts

30-600	HA261234	10	10	7	1/2	3/4
800-1200	HA265678	10	10	7	1/2	3/4

### Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts

30-600	HA361234	10	10	7	1/2	3/4
800-1200	HA365678	10	10	—	1/2	3/4

### Copper Lug Kits

Heavy duty switches are CSA certified to accept field installed copper lug kits.

### Copper Lug Kits

Switch Ampere Rating	Copper Lug Catalogue Number	Description
30-60	HLC612	(9) Lugs/Kit #14-4 AWG Cu
100	HLC63▲	(9) Lugs/Kit #14-1/0 AWG Cu
200	HLC64▲	(9) Lugs/Kit #6 AWG-300 Kcmil Cu
400-600	HCU656A■	(1) Lugs/Kit #1/0 AWG-600 Kcmil Cu
800-1200	HLC65678	(1) Lugs/Kit #1/0 AWG-600 Kcmil Cu

▲ Built to order. Allow 6-8 weeks for delivery.

■ Purchase field replacement kit along with lugs.

### NEW Quick Connects

They provide two point control power take-off capability and are normally used on two poles on the line side when it is required to have control power available when the switch is in the OFF position. They provide a mounting provision for standard 1/4" quick connect terminal. Installed in the line or load side. 30A VBII switches have lugs CSA certified to accept (2) wires per pole as standard so a 30A kit is not required.

### Quick Connects

Catalogue Number	Description
HCQ62	60A 2 wire quick connect kit
HCQ63	100A 2 wire quick connect kit
HCQ64	200A 2 wire quick connect kit

### Isolated Ground Kits

Isolated Ground Kits are available on 30-600A Heavy Duty Switches. They are normally used on circuits with a high content of computer or other electronic loading which require a ground which is isolated from the building ground and neutral circuits. The kit includes both isolated and grounded terminals as listed below.

### Isolated Ground Kits

Switch Ampere Rating	Catalogue Number	Number of Terminals		Wire Range Per Terminal (Cu/Al)
		Isolated	Grounded	
30-200	HG261234	2	2	#14-4 AWG
400-600	HG2656A	4	4	2/0-14 AWG 2/0-6 AWG

### Equipment Ground Kits

Equipment Ground Lug Kits are available for all General and Heavy Duty Switches. They are field installable in Type 1 and Type 3R Switches and are factory installed as standard in Type 4 / 4X and Type 12 and also in all VBII 4&6-pole Switches.

### Equipment Ground Kits

Switch Ampere Rating	Catalogue Number	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30A GD	GSGK60	2	#14-8 AWG
60-200 GD	HG61234	2	#14-4 AWG
30-200 HD	HG61234	2	#14-4 AWG
400 & 600	HG656A	4	2/0-6 AWG
800-1200	HG678	8	#6 AWG-250 Kcmil

# General and Heavy Duty

**Selection**

## Hub and Lug Data

### Interchangeable Hubs

Conduit hubs are available for Type 3R, 12 and 4 / 4X applications. 30-200A Type 3R Switches are provided with a conduit hub provision and a removable hub plate on their top rainshed.

Conduit Size (inches)	Catalogue Number	Used On
-----------------------	------------------	---------

### Type 3R<sup>①</sup>

Cover	ECHA000	
3/4	ECHA075	
1	ECHA100	
1 1/4	ECHA125	30A GD Only
Cover	ECHS000	
3/4	ECHS075	
1	ECHS100	
1 1/4	ECHS125	60-200A GD
1 1/2	ECHS150	30-200A HD
2	ECHS200	
2 1/2	ECHS250	
2 1/2	ECHV250	
3	ECHV300	
3 1/2	ECHV350	400-1200A
4	ECHV400	

### Type 4/4X<sup>②</sup>

3/4	SSH075	
1	SSH100	
1 1/4	SSH125	30-200A
1 1/2	SSH150	
2	SSH200	
2 1/2	SSH250	
3	SSH300	
3 1/2	SSH350	
4	SSH400	400-600A

**Note:** 30 thru 200A. Type 3R Switches have removable hub plates on rainshed. 400A and larger Type 3R Switches have no provisions for mounting hubs. Drill or punch hole in the field to accommodate hub size desired.

### Wire Ranges (Line, Load and Standard Neutral)

Switch Ampere Rating	Wire Range with Wire Bending Space Per NEC Requirements	Lug Wire Range
30GD	#14-8 AWG (Cu/Al) <sup>④</sup>	#14-6 AWG (Cu/Al)
30HD	#14-6 AWG (Cu/Al)	#14-2 AWG (Cu/Al)
60 <sup>⑤⑥</sup>	#14-3 AWG (Cu/Al)	#14-2 AWG (Cu/Al)
100 <sup>⑦</sup>	#14-1/0 AWG (Cu/Al)	#14-1/0 AWG (Cu/Al)
200 <sup>⑧</sup>	#6 AWG-250 Kcmil (Cu/Al)	#6 AWG-300 Kcmil (Cu/Al)
400 <sup>⑨</sup>	(1) 1/0 AWG-600 Kcmil (Cu/Al) (2) 1/0 AWG-500 Kcmil (Cu/Al)	(2) 1/0 AWG-600 Kcmil (Cu/Al)
600 <sup>⑩</sup>	(1) 1/0 AWG-600 Kcmil (Cu/Al) (2) 1/0 AWG-500 Kcmil (Cu/Al)	(2) 1/0 AWG-600 Kcmil (Cu/Al)
800	(3) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral	(3) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral
1200	(4) 3/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral	(4) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral

### Field Replacement Kits and Neutral Barrier Kits

All Heavy Duty Switches are field convertible for (Crimp) type lugs. When compression lugs are required for 30-100A switches, a neutral barrier kit is required for 1-Phase, 3W or 3-Phase, 4W applications. When compression lugs are required on 400-1200A switches, lug mounting kits are required.

### Field Replacement Kits and Neutral Barrier Kits

Switch Ampere Rating	Catalogue Number	Kit Description
30	HCL612	Neutral Barrier Kit
60 & 100	HCL623	Neutral Barrier Kit
400	HCM65A	240V/600V Fusible Kit
400	HNCM65A	240/600V Non-Fusible Kit
600	HCM66A	240V/600V Fusible Kit
600	HNCM66A	240V/600V Non-Fusible Kit
800 & 1200 <sup>⑪</sup>	HCL65678■	1 Pole, Compression Lug Mounting Kit



SSH125



ECHV300



ECHS200



SL0420

■ Built to order. Allow 3-4 weeks for delivery.

① Hubs suitable for 3R Switches.

② Also suitable for Type 12 applications.

③ Neutral Barrier kits are required on 30-100A switches only and only with 1-Phase / 3W or 3-Phase / 4W loads. Compression Lugs mounting kits are required on 400-1200A switches only.

④ Provides mounting for a single line or load lug.

⑤ Provides mounting for (2) compression lugs per phase on line or load.

⑥ Line base lugs (only) are CSA certified to accept #14-6 CU/Al cable.

⑦ Max. wire size for height reduced switches is 500 kcmil (Cu/Al).

⑧ All but 60A GD & Compact HD NF switches are also CSA certified for #2 Cu/Al conductors.

⑨ All 200A Heavy Duty Switches have a wire range & wire bending space for (1) #6-300 Kcmil (Cu/Al).

⑩ Also for 30A oversized heavy duty switches.

⑪ Also for 60A oversized heavy duty switches.

# General and Heavy Duty

## VBII Safety Switch Replacement Parts

Selection

### VBII Safety Switch Replacement Parts

Ampere Rating	Line Base Catalogue Number	Load Base Catalogue Number	Handle / Handle Guard	
			General Duty	Heavy Duty
			Catalogue Number	Catalogue Number

#### Fusible 2- and 3-Pole 60-400A General Duty & 30-1200A Heavy Duty<sup>⑤⑥</sup>

30 HD 240V	HFB21 <sup>②</sup>	HBB21 <sup>②</sup>	—	HH6123 <sup>⑦</sup>
60 GD	HFB612 <sup>②</sup>	HBB612 <sup>②</sup>	GH223	—
60 HD 240V	HFB22 <sup>②</sup>	HBB22 <sup>②</sup>	—	HH6123 <sup>⑦</sup>
30 600V	HFB612 <sup>②</sup>	HBB612 <sup>②</sup>	—	HH6123 <sup>⑦</sup>
60 600V	HFB62 <sup>②</sup>	HBB62 <sup>②</sup>	—	HH6123 <sup>⑦</sup>
100	HFB63 <sup>②</sup>	HBB63 <sup>②</sup>	GH223	HH6123 <sup>⑦</sup>
200	HFB64 <sup>②</sup>	HBB64 <sup>②</sup>	GH24	HH64 <sup>⑦</sup>
400	HFB65 <sup>③⑥</sup>	HBB65 <sup>③⑥</sup>	HH65678	HH65678 <sup>⑦</sup>
600	HFB66 <sup>③⑥</sup>	HBB66 <sup>③⑥</sup>	HH65678	HH65678 <sup>⑦</sup>
800	HFB67A <sup>②⑥</sup>	HBB67A <sup>②⑥</sup>	—	HH65678 <sup>⑦</sup>
1200	HFB68 <sup>②⑥</sup>	HBB68 <sup>②⑥</sup>	—	HH68 <sup>⑦</sup>



SAFETY SWITCHES

#### Non-Fusible 3-Pole 60-400A General Duty & 30-1200A Heavy Duty<sup>⑤⑥</sup>

30 HD	HNB612 <sup>②</sup>	—	—	HH6123 <sup>⑦</sup>
60 GD	HNB612 <sup>②</sup>	—	GH223	—
60 HD	HNB623 <sup>②</sup>	—	—	HH6123 <sup>⑦</sup>
100	HNB623 <sup>②</sup>	—	GH223	HH6123 <sup>⑦</sup>
200	HNB64 <sup>②</sup>	—	GH24	HH64 <sup>⑦</sup>
400	HNB65 <sup>③⑥</sup>	—	HH65678	HH65678 <sup>⑦</sup>
600	HNB66 <sup>③⑥</sup>	—	HH65678	HH65678 <sup>⑦</sup>
800	HNB67A <sup>②⑥</sup>	—	—	HH65678 <sup>⑦</sup>
1200	HNB678 <sup>②</sup>	—	—	HH68 <sup>⑦</sup>



Ampere Rating	Mechanism Assembly	Line & Load Lugs
	Catalogue Number	Catalogue Number

#### Fusible 2- and 3-Pole 60-400A General Duty & 30-1200A Heavy Duty<sup>⑤⑥</sup>

30 HD 240V	HM6123 <sup>②</sup>	HL612 <sup>①</sup>
60 GD	HM6123	HL612 <sup>①</sup>
60 HD 240V	HM6123 <sup>②</sup>	HL612 <sup>①</sup>
30 600V	HM6123 <sup>②</sup>	HL612 <sup>①</sup>
60 600V	HM6123 <sup>②</sup>	HL612 <sup>①</sup>
100	HM6123 <sup>②</sup>	HL63 <sup>①</sup>
200	HM64 <sup>②</sup>	HL64 <sup>①</sup>
400	HM65	HL65678 <sup>④</sup>
600	HM66	HL65678 <sup>④</sup>
800	HM67A	HL67A <sup>⑥⑨</sup>
1200	HM678	⑨

#### Internal Shield Kits

These kits provide an inner door on safety switches to prevent accidental contact with live parts. All kits are constructed from clear plastic, provide test probe holes and allow replacement of fuses without the removal of the kit.

Catalogue Number	Switch Ampere Rating	UPC Code
		040892 _____

#### For use with Fusible Type 1, 3R, 12 and 4X Stainless Steel Enclosed Safety Switches

HSK61SSW	30	79020
HSK62SSW	60	79021
HSK63SSW	100	79002
HSK64SSW	200	79023



HFC362 with HSK62SSW installed

#### For use with Fusible Type VBII Disconnect Switches

HSK61	30	79024
HSK62	60 & 100	79025
HSK64	200	79026



VBFS361F with HSK61 Installed

#### Non-Fusible 3-Pole, 30-1200A Heavy Duty<sup>⑤⑥</sup>

30 HD	HM6123 <sup>②</sup>	HL612 <sup>①</sup>
60 HD	HM6123 <sup>②</sup>	HL612 <sup>①</sup>
100	HM6123 <sup>②</sup>	HL63 <sup>①</sup>
200	HM64 <sup>②</sup>	HL64 <sup>①</sup>
400	HM65	HL65678 <sup>④</sup>
600	HM66	HL65678 <sup>④</sup>
800	HM67A	HL67A <sup>⑥⑨</sup>
1200	HM678	⑨

#### For use with Fusible Type VBII

#### Disconnect Switches

HSK61	30	79024
HSK62	60 & 100	79025
HSK64	200	79026



HM6123



HFB656



HFB612



HH6123

- ① Three lugs included in kit.
- ② Includes lugs.
- ③ Lugs not included.
- ④ One lug per kit.

- ⑤ One per switch required unless otherwise noted.
- ⑥ One required per pole.
- ⑦ For type 4/4X stainless steel switches add "S" to end of catalogue number.

- ⑧ For replacement door for heavy duty switches add "DOOR" to end of switch catalogue number.
- ⑨ Lugs included with line and load bases.

# General and Heavy Duty Safety Switches

## Dimensions

### Safety Switch Dimensions & Shipping Weights

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram <sup>①</sup>	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
GFC221N	7.97 (204)	8.13 (208)	—	5.5 (140)	5.94 (152)	3 (78)	5.88 (150)	S1	35 <sup>②</sup>
GFC222N	14.26 (364)	15.45 (394)	—	6.64 (170)	8.7 (222)	5.05 (130)	8.63 (220)	S6	14
GFC223N	21.95 (558)	23.15 (590)	—	9.64 (246)	11.7 (298)	5.05 (130)	8.63 (220)	S10	23
GFC224N	29.9 (760)	31.07 (790)	—	14.62 (372)	16.68 (424)	6.36 (162)	10.92 (278)	S12	47
GFC321N	7.97 (204)	8.19 (210)	—	7.19 (184)	7.69 (196)	3 (78)	5.88 (150)	S2	24 <sup>③</sup>
GFC322N	14.26 (364)	15.45 (394)	—	6.64 (170)	8.7 (222)	5.05 (130)	8.63 (220)	S6	15
GFC323N	21.95 (558)	23.15 (590)	—	9.64 (246)	11.7 (298)	5.05 (130)	8.63 (220)	S10	25
GFC324N	29.9 (760)	31.07 (790)	—	14.62 (372)	16.68 (424)	6.36 (162)	10.92 (278)	S12	49
HFC221J also HFC261J	14.27 (364)	17.33 (442)	—	6.65 (170)	9.02 (230)	5.32 (136)	10.46 (266)	—	13
HFC221N also HFC261	14.26 (364)	15.45 (394)	—	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S6	12
HFC221NR also HFC261R	14.39 (366)	—	15.77 (402)	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S8	13
HFC221S also HFC261S	14.27 (364)	17.33 (442)	—	6.65 (170)	9.02 (230)	5.32 (136)	10.46 (266)	—	13
HFC222J also HFC262J	16.22 (412)	19.31 (492)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	19
HFC222N also HFC262	16.26 (414)	17.46 (444)	—	9.15 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S16	18
HFC222NR also HFC262R	16.26 (414)	—	17.77 (452)	9.16 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S17	19
HFC222S also HFC262S	16.22 (412)	19.31 (492)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	19
HFC223J also HFC263J	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	24
HFC223N also HFC263	21.95 (558)	23.15 (590)	—	9.64 (246)	12.01 (306)	5.05 (130)	10.17 (260)	S10	23
HFC223NR also HFC263R	21.95 (558)	—	23.46 (596)	9.64 (246)	11.97 (306)	5.05 (130)	10.17 (260)	S11	24
HFC223S also HFC263S	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	24

<sup>①</sup> Knocks not provided on Type 4 / 4X and 12 or on 800 & 1200A switches.

# General and Heavy Duty Safety Switches

## Dimensions

### Safety Switch Dimensions & Shipping Weights

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram®	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HFC224J	29.96 (762)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	48
HFC224N	29.9 (760)	31.07 (790)	—	14.62 (372)	16.98 (432)	6.36 (162)	12.33 (314)	S12	47
HFC224NR	29.9 (760)	—	31.42 (800)	14.61 (372)	16.99 (432)	6.36 (162)	12.33 (314)	S13	48
HFC224S	29.96 (762)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	48
HFC225NRA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	91.1
HFC225NA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	91.1
HFC226NA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	95.6
HFC226NRA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	95.6
HFC227N	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	360
HFC227NR	66.67 (1694)	—	67.74 (1722)	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	362
HFC228N	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	362
HFC228NR	66.67 (1694)	—	67.74 (1722)	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	364
HFC321J	14.27 (364)	17.33 (442)	—	6.65 (170)	9.02 (230)	5.32 (136)	10.46 (266)	—	14
HFC321N	14.26 (364)	15.45 (394)	—	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S6	14
HFC321NR	14.39 (366)	—	15.77 (402)	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S8	15
HFC321S	14.27 (364)	17.33 (442)	—	6.65 (170)	9.02 (230)	5.32 (136)	10.46 (266)	—	14
HFC322J	16.27 (414)	19.31 (492)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	20
HFC322N	16.26 (414)	17.46 (444)	—	9.15 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S16	19
HFC322NR	16.26 (414)	—	17.77 (452)	9.16 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S17	20
HFC322S	16.27 (414)	19.31 (492)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	20
HFC323J	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	25
HFC323N	21.95 (558)	23.15 (590)	—	9.64 (246)	12.01 (306)	5.05 (130)	10.17 (260)	S10	25
HFC323NR	21.95 (558)	—	23.46 (596)	9.64 (246)	11.97 (306)	5.05 (130)	10.17 (260)	S11	26
HFC323S	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	25
HFC324J	29.96 (762)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	49
HFC324N	29.9 (760)	31.07 (790)	—	14.62 (372)	16.98 (432)	6.36 (162)	12.33 (314)	S12	49
HFC324NR	29.9 (760)	—	31.42 (800)	14.61 (372)	16.99 (432)	6.36 (162)	12.33 (314)	S13	50
HFC324S	21.96 (558)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	49
HFC325JA also HFC325NJA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	93
HFC325NA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	94.6
HFC325NRA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	94.6
HF325SA also HFC325NSA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	93
HF326JA also HFC326NJA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	98
HFC326NA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	99.6
HFC326NRA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	99.6
HFC326SA also HFC326NSA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	98
HFC327J	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	367
HFC327N	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	380
HFC327NR	66.67 (1694)	—	67.74 (1722)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	383
HFC327S	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	367
HFC328N	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	382
HFC328NR	66.67 (1694)	—	67.74 (1722)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	385
HFC361	14.26 (364)	15.45 (394)	—	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S6	14
HFC361J, JW	14.27 (364)	17.33 (442)	—	6.65 (170)	9.02 (230)	5.32 (136)	10.46 (266)	—	14
HFC361N	14.26 (364)	15.45 (394)	—	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S6	14
HFC361NR	14.39 (366)	—	15.77 (402)	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S8	15
HFC361R	14.39 (366)	—	15.77 (402)	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S8	15
HFC361S, SW	14.27 (364)	17.33 (442)	—	6.65 (170)	9.02 (230)	5.32 (136)	10.46 (266)	—	15

SAFETY SWITCHES

① Knocks not provided on Type 4/4X and 12 or on 800 & 1200A switches.

# General and Heavy Duty Safety Switches

**Dimensions**

## Safety Switch Dimensions & Shipping Weights

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram <sup>①</sup>	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HFC362	16.26 (414)	17.46 (444)	—	9.15 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S16	19
HFC362J, JW	16.27 (414)	19.31 (492)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	20
HFC362N	16.26 (414)	17.46 (444)	—	9.15 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S16	19
HFC362NR	16.26 (414)	—	17.77 (452)	9.16 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S17	20
HFC362R	16.26 (414)	—	17.77 (452)	9.16 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S17	20
HFC362S, SW	16.27 (414)	19.31 (492)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	20
HFC363	21.95 (558)	23.15 (590)	—	9.64 (246)	12.01 (306)	5.05 (130)	10.17 (260)	S10	24
HFC363J, JW	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	25
HFC363N	21.95 (558)	23.15 (590)	—	9.64 (246)	12.01 (306)	5.05 (130)	10.17 (260)	S10	25
HFC363NR	21.95 (558)	—	23.46 (596)	9.64 (246)	11.97 (306)	5.05 (130)	10.17 (260)	S11	26
HFC363R	21.95 (558)	—	23.46 (596)	9.64 (246)	11.97 (306)	5.05 (130)	10.17 (260)	S11	25
HFC363S, SW	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	25
HFC364	29.9 (760)	31.07 (790)	—	14.62 (372)	16.98 (432)	6.36 (162)	12.33 (314)	S12	48
HFC364J, JW	29.96 (762)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	49
HFC364N	29.9 (760)	31.07 (790)	—	14.62 (372)	16.98 (432)	6.36 (162)	12.33 (314)	S12	49
HFC364NR	29.9 (760)	—	31.42 (800)	14.61 (372)	16.99 (432)	6.36 (162)	12.33 (314)	S13	48
HFC364R	29.9 (760)	—	31.42 (800)	14.61 (372)	16.99 (432)	6.36 (162)	12.33 (314)	S13	49
HFC364S, SW	29.96 (762)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	49
HF365A	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	93
HF365JA, HF365JWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	93
HFC365NJA, HFC365NJWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	94.6
HFC365NA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	94.6
HFC365NRA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	94.6
HF365RA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	93
HF365SA, HF365SWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	93
HFC365NSA, HFC365NSWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	94.6
HF366A	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	98
HF366JA, HF366JWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	98
HFC366NJA, HFC366NJWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	99.6
HFC366NA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S18	99.6
HFC366NRA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	99.6
HF366RA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	98
HF366SA, HF366SWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	98
HFC366NSA	45.32 (1152)	45.81 (1164)	—	38.4 (976)	23.404 (596)	7.34 (188)	10.347 (264)	—	99.6
HFC367	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	380
HFC367J	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	380
HFC367N	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	382
HFC367NR	66.67 (1694)	—	67.74 (1722)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	386
HFC367R	66.67 (1694)	—	67.74 (1722)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	382
HFC367S	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	380
HFC368, J, S	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	383
HFC368N	66.67 (1694)	67.16 (1706)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	385
HFC368NR	66.67 (1694)	—	67.74 (1722)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	388
HFC368R	66.67 (1694)	—	67.74 (1722)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	385
HNFC361 also HNFC261	11.11 (284)	12.31 (314)	—	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S7	12
HNFC361J, JW also HNFC261J	11.12 (284)	14.14 (360)	—	6.65 (170)	9.02 (230)	5.56 (142)	10.46 (266)	—	13
HNFC361R also HNFC261R	11.11 (284)	—	12.63 (322)	6.64 (170)	9.01 (230)	5.05 (130)	10.17 (260)	S9	13
HNFC361S, SW also HNFC261S	11.12 (284)	14.14 (360)	—	6.65 (170)	9.02 (230)	5.56 (142)	10.46 (266)	—	13
HNFC362 also HNFC262	16.26 (414)	17.46 (444)	—	9.15 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S16	18
HNFC362J, JW also HNFC262J	16.27 (414)	17.46 (444)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	19
HNFC362R also HNFC262R	16.26 (414)	—	17.77 (452)	9.16 (234)	11.53 (294)	5.05 (130)	10.17 (260)	S17	19
HNFC362S, SW also HNFC262S	16.27 (414)	17.46 (444)	—	9.17 (234)	11.47 (292)	5.33 (136)	10.46 (266)	—	19
HNFC363 also HNFC263	21.95 (558)	23.15 (590)	—	9.64 (246)	12.01 (306)	5.05 (130)	10.17 (260)	S10	23
HNFC363J, JW also HNFC263J	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	24
HNFC363R also HNFC263R	21.95 (558)	—	23.46 (596)	9.64 (246)	11.97 (306)	5.05 (130)	10.17 (260)	S11	24
HNFC363S, SW also HNFC263S	21.96 (558)	23.16 (590)	—	9.65 (246)	12.02 (306)	5.34 (136)	10.46 (266)	—	24
HNFC364	29.9 (760)	31.07 (790)	—	14.62 (372)	16.98 (432)	6.36 (162)	12.33 (314)	S12	46
HNFC364J, JW	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	47	—
HNFC364R	29.9 (760)	—	31.42 (800)	14.61 (372)	16.99 (432)	6.36 (162)	12.33 (314)	S13	47
HNFC364S, SW	29.96 (762)	31.07 (790)	—	14.62 (372)	16.95 (432)	6.63 (170)	12.58 (320)	—	47

<sup>①</sup> Knocks not provided on Type 4 / 4X and 12 or on 800 & 1200A switches.

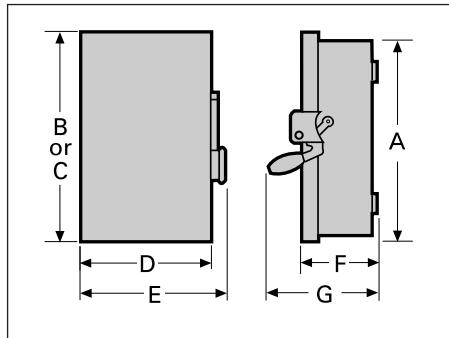
# General and Heavy Duty Safety Switches

## Dimensions

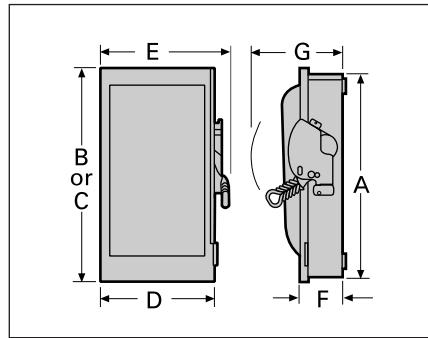
### Safety Switch Dimensions & Shipping Weights

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram <sup>①</sup>	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HNF365A, JA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	75
HNF365JWA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	75
HNF365RA	33.47 (852)	33.96 (864)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	75
HNF365SA, HNF365SWA	33.47 (852)	33.96 (864)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	75
HNF366A, JA	45.32 (1152)	45.81 (1164)	—	22.4 (570)	23.404 (596)	6.97 (178)	10.05 (256)	—	77
HNF366RA	33.47 (852)	33.96 (864)	—	22.4 (570)	23.404 (596)	6.94 (178)	9.93 (254)	S19	77
HNF366SA	33.47 (852)	33.96 (864)	—	22.4 (570)	23.404 (596)	7.34 (188)	10.347 (264)	—	77
HNFC367, J	54.67 (1390)	55.16 (1402)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	302
HNFC367R	54.67 (1390)	55.16 (1402)	55.7 (1416)	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	304
HNFC367S	54.67 (1390)	55.16 (1402)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	302
HNFC368, J, S	54.67 (1390)	55.16 (1402)	—	38.4 (976)	39.96 (1016)	9.24 (236)	14.68 (374)	—	305
HNFC368R	54.67 (1390)	55.16 (1402)	—	38.4 (976)	40.25 (1024)	9.24 (236)	14.68 (374)	—	307
LFC111N	7.97 (204)	8.13 (208)	—	5.5 (140)	5.94 (152)	3 (78)	5.38 (138)	S2	35 (10)
LFC111NR	8.07 (206)	—	8.13 (208)	5.16 (132)	5.94 (152)	3.13 (80)	5.38 (138)	S3	35 (10)
LFC211N	7.97 (204)	—	—	5.5 (140)	5.94 (152)	3 (78)	5.38 (138)	S1	35 (10)
LFC211NR	8.07 (206)	—	8.16 (208)	5.16 (132)	5.94 (152)	3.13 (80)	5.38 (138)	S3	35 (10)
LNFC222R	8.07 (206)	—	8.16 (208)	5.16 (132)	5.94 (152)	3.13 (80)	5.38 (138)	S5	35 (10)

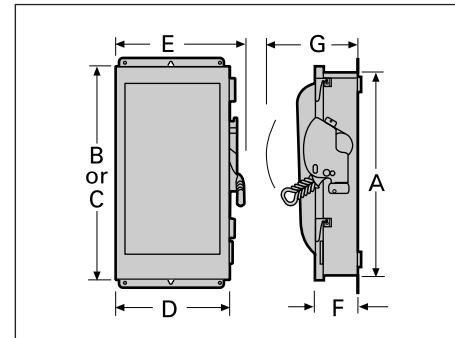
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30A GD



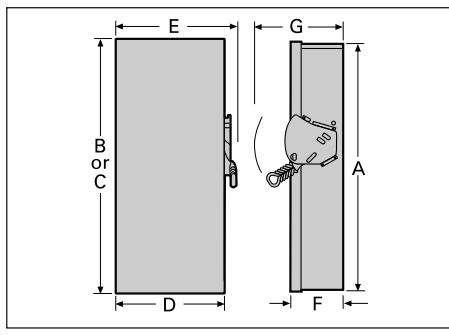
Type 1 or 3R  
60-200A GD, 30-200A HD Type VBII



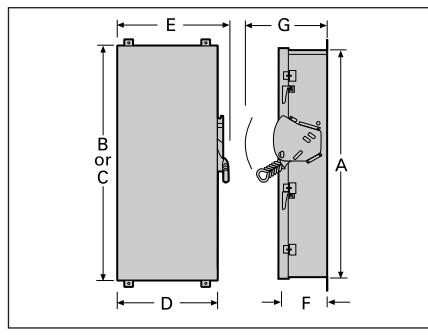
Type 4/4X or 12  
30-200A HD Type VBII



Type 1 or 3R  
400-1200A Type VBII HD



Type 4/4X or 12  
400-1200A Type VBII HD

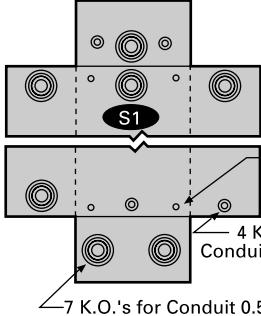
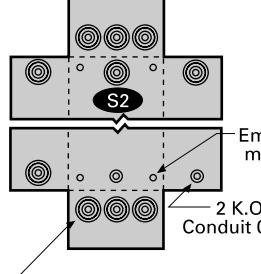
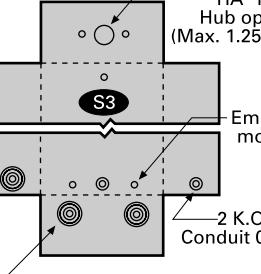
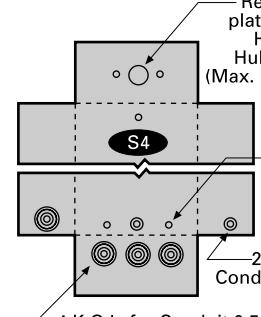
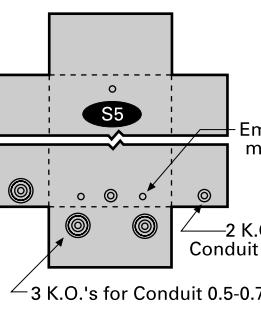
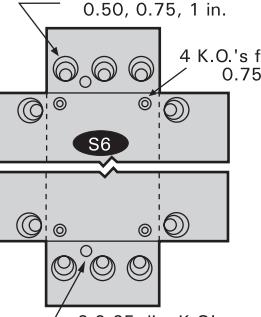
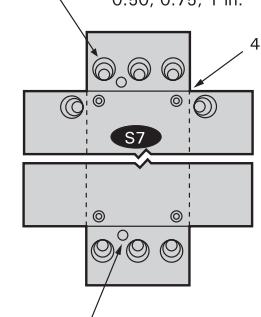
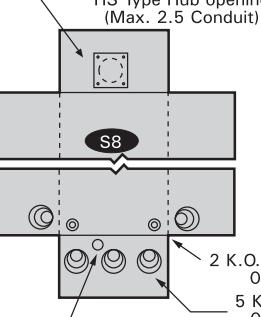
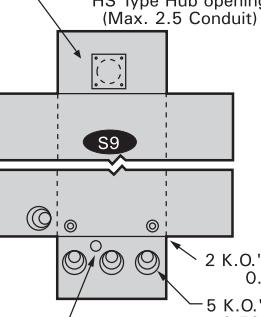
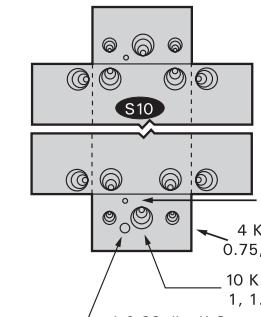
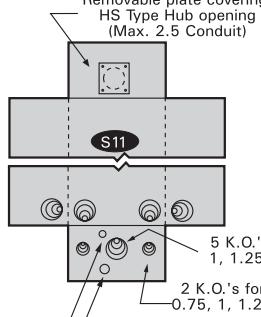
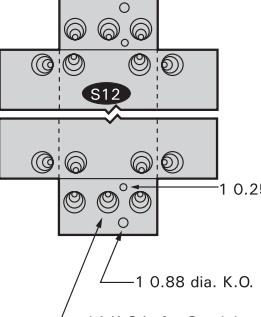


<sup>①</sup> Knocks not provided on Type 4 / 4X and 12 or on 800 & 1200A switches.

# General and Heavy Duty Safety Switches

## Knockout Diagrams

### Type 1 & 3R Enclosures

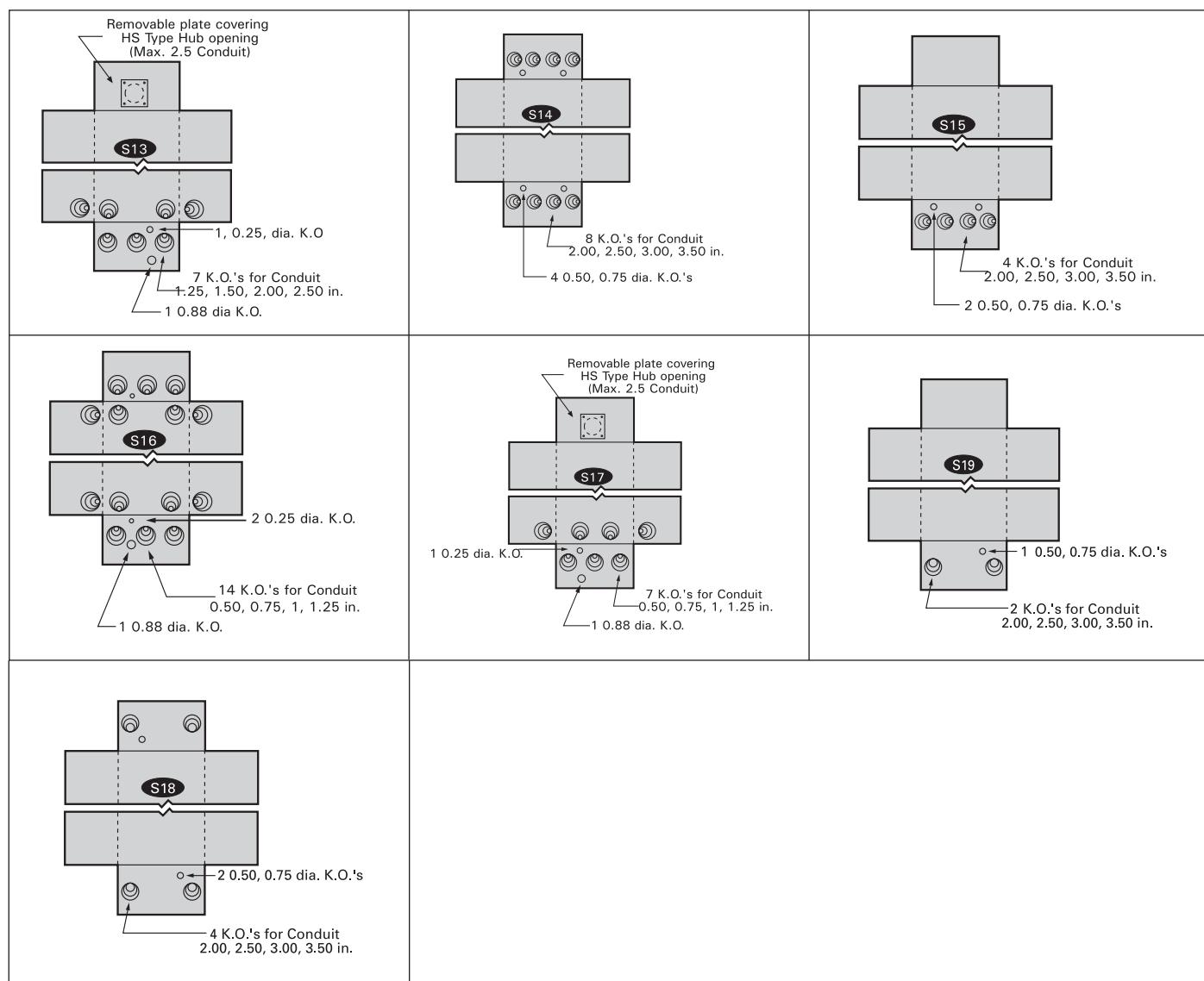
 <p><b>S1</b></p> <p>Embossed .25 in. mounting holes (4 places)</p> <p>7 K.O.'s for Conduit 0.5-0.75-1 in.</p>	 <p><b>S2</b></p> <p>Embossed .25 in. mounting holes (4 places)</p> <p>2 K.O.'s for Conduit 0.5-0.75 in.</p> <p>10 K.O.'s for Conduit 0.5-0.75-1 in.</p>	 <p><b>S3</b></p> <p>Removable plate covering HA Type Hub opening (Max. 1.25 Conduit)</p> <p>Embossed .25 in. mounting holes (3 places)</p> <p>3 K.O.'s for Conduit 0.5-0.75-1 in.</p>
 <p><b>S4</b></p> <p>Removable plate covering HA Type Hub opening (Max. 1.25 Conduit)</p> <p>Embossed .25 in. mounting holes (3 places)</p> <p>4 K.O.'s for Conduit 0.5-0.75-1 in.</p>	 <p><b>S5</b></p> <p>Embossed .25 in. mounting holes (3 places)</p> <p>2 K.O.'s for Conduit 0.5-0.75 in.</p> <p>3 K.O.'s for Conduit 0.5-0.75-1 in.</p>	 <p><b>S6</b></p> <p>10 K.O.'s For Conduit 0.50, 0.75, 1 in.</p> <p>4 K.O.'s for Conduit 0.75, 1 in.</p> <p>2 0.25 dia. K.O's</p>
 <p><b>S7</b></p> <p>8 K.O.'s for Conduit 0.50, 0.75, 1 in.</p> <p>4 K.O.'s for Conduit 0.75, 1 in.</p> <p>2 0.25 dia. K.O's</p>	 <p><b>S8</b></p> <p>Removable plate covering HS Type Hub opening (Max. 2.5 Conduit)</p> <p>2 K.O.'s for Conduit 0.75, 1 in.</p> <p>5 K.O.'s for Conduit 0.50, 0.75, 1 in.</p> <p>1 0.25 dia. K.O.</p>	 <p><b>S9</b></p> <p>Removable plate covering HS Type Hub opening (Max. 2.5 Conduit)</p> <p>2 K.O.'s for Conduit 0.75, 1 in.</p> <p>5 K.O.'s for Conduit 0.50, 0.75, 1 in.</p> <p>1 0.25 dia. K.O.</p>
 <p><b>S10</b></p> <p>2 0.25 dia. K.O.</p> <p>4 K.O.'s for Conduit 0.75, 1, 1.25, 1.50 in.</p> <p>10 K.O.'s for Conduit 1, 1.25, 1.50, 2 in.</p> <p>1 0.88 dia. K.O.</p>	 <p><b>S11</b></p> <p>Removable plate covering HS Type Hub opening (Max. 2.5 Conduit)</p> <p>5 K.O.'s for Conduit 1, 1.25, 1.50, 2 in.</p> <p>2 K.O.'s for Conduit 0.75, 1, 1.25, 1.50 in.</p> <p>1 0.88 dia. K.O.</p> <p>1 0.25 dia. K.O.</p>	 <p><b>S12</b></p> <p>1 0.25 dia. K.O.</p> <p>1 0.88 dia. K.O.</p> <p>14 K.O.'s for Conduit 1.25, 1.50, 2.00, 2.50 in.</p>

\*For inches / millimeters conversion, multiply inches by 25.4.

# General and Heavy Duty Safety Switches

## Knockout Diagrams

### Type 1 & 3R Enclosures



\*For inches / millimeters conversion, multiply inches by 25.4.

# Special Application Safety Switches Dimension Drawings

## 4-Pole & 6-Pole

**Dimensions**

### 4 & 6-Pole Safety Switch Dimensions

Catalogue Number	Enclosure - Inches (mm)			Mounting - Inches (mm)		
	A	B	C	D	E	F

**Figure 1, 4-Pole Fusible and Non-fusible, Type 1**

HNF461	24.50 (622)	9.53 (242)	6.09 (155)	19.00 (483)	6.75 (171)	0.268 (7)
HF461	29.12 (740)	9.53 (242)	6.09 (155)	23.50 (597)	6.75 (171)	0.268 (7)
HNF462	24.88 (632)	11.50 (292)	6.09 (155)	19.00 (483)	9.38 (238)	0.268 (7)
HF462	33.53 (852)	11.50 (292)	6.09 (155)	27.50 (699)	9.38 (238)	0.268 (7)
HNF463	27.62 (702)	12.18 (309)	6.09 (155)	19.36 (492)	8.00 (203)	0.268 (7)
HF463	36.44 (926)	12.18 (309)	6.09 (155)	28.11 (714)	8.00 (203)	0.268 (7)
HNF464	36.00 (914)	19.12 (486)	6.42 (163)	30.88 (784)	15.00 (381)	0.44 (11)
HF464	49.48 (1257)	19.12 (486)	6.42 (163)	45.50 (1130)	15.00 (381)	0.44 (11)

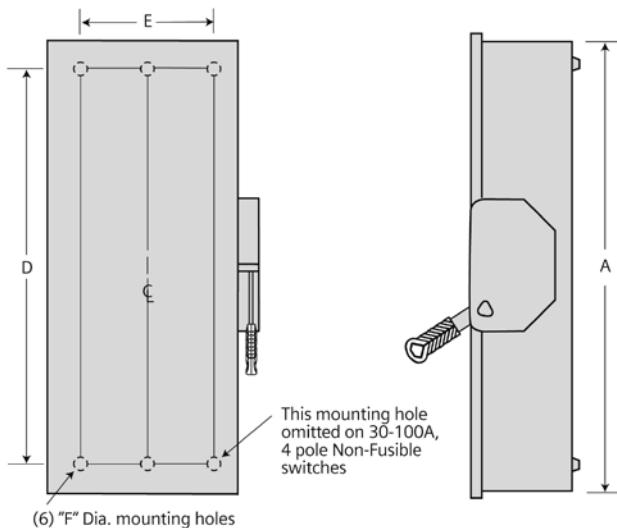
**Figure 2, 4 & 6-Pole Fusible Type 12/3R and 4X**

HF461J, HF661J, HF661S	29.50 (622)	9.53 (242)	6.48 (165)	31.65 (804)	5.47 (139)	0.27 (7)
HF462J, HF662J, HF662S	33.53 (852)	11.50 (292)	6.48 (165)	35.69 (907)	8.00 (203)	0.27 (7)
HF463J, HF663J, HF663S	36.44 (926)	12.18 (309)	6.48 (165)	38.67 (982)	8.47 (215)	0.27 (7)
HF464J, HF664J, HF664S	49.48 (1257)	19.12 (486)	6.78 (172)	51.64 (1312)	13.44 (341)	0.33 (8)

**Figure 2, 4 & 6-Pole Non-fusible Type 12/3R and 4X**

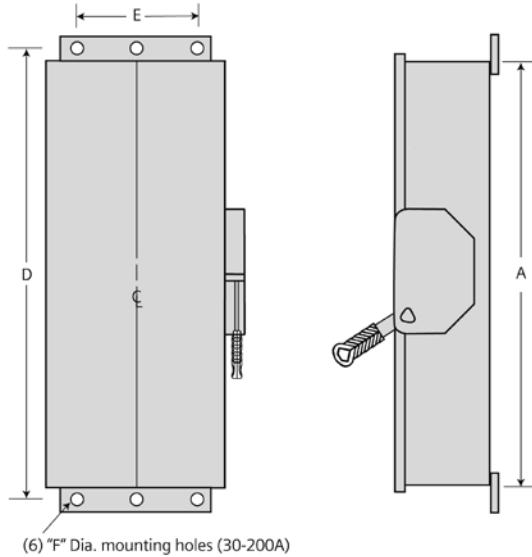
HNF461J, HNF661J, HNF661S	24.50 (622)	9.53 (242)	6.48 (165)	26.65 (667)	5.47 (139)	0.27 (7)
HNF462J, HNF662J, HNF662S	24.88 (632)	11.50 (292)	6.48 (165)	27.03 (687)	8.00 (203)	0.27 (7)
HNF463J, HNF663J, HNF663S	27.54 (700)	12.18 (309)	6.48 (165)	29.77 (756)	8.47 (215)	0.27 (7)
HNF464J, HNF664J, HNF664S	36.00 (914)	19.12 (486)	6.78 (172)	38.16 (969)	13.44 (341)	0.33 (8)

**Figure 1: Type 1**



(6) "F" Dia. mounting holes

**Figure 2 : Type 12/3R and 4X**



(6) "F" Dia. mounting holes (30-200A)

# Special Application Safety Switches Dimension Drawings

## Double Throw

### Description

Double throw switches are intended to transfer loads from one power source to another. All 2 & 3-pole double throw switches are CSA certified and both horsepower and load break rated. Switches are rated for use on systems up to 10,000A when protected with Class H fuses or 200,000A when protected with Class R or Class T fuses<sup>②</sup>. They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible switches so that the fuses are on the load side of the switching mechanism.

## Selection

A cover interlock is provided on all ampere ratings. The operating handle may be padlocked in the off position.

### Fuse Capabilities of Fusible DT Switches

Amp Rating	Fuse Type			
	H	R	T	J
30 & 60A, 240V	Std	Yes (kit)	No	No
30 & 60A, 600V	Std	Yes (kit)	No	Yes <sup>③</sup>
100 & 200A	Std	Yes (kit)	Yes (kit)	Yes <sup>③</sup>



### Double Throw Switches

System	Voltage	Number of Poles	Amps	Type 1 — Indoor
				Catalogue Number

#### Heavy Duty Fusible (30-200A) with Class H fuse spacings — Less Neutral<sup>②</sup>

	240 Volt AC or 250 Volt DC	3	30	DTFC321		
			60	DTFC322		
			100	DTFC323		
			200	DTFC324		
	600 Volt AC, 250 Volt DC	3	30	DTFC361		
			60	DTFC362		
			100	DTFC363		
			200	DTFC364		
			400	DTFC365		
			600	DTFC366		

#### Heavy Duty Non-Fusible —Less Neutral<sup>②</sup>

	240 Volt AC or 250 Volt DC	2	30	DTNFC221	ECHS
			60	DTNFC222	
			100	DTNFC323	
			200	DTNFC224	
			400	DTNFC225	
	600 Volt AC, 250 Volt DC	3	30	DTNFC321	ECHS
			60	DTNFC322	
			100	DTNFC323	
			200	DTNFC324	
			400	DTNFC325	
			600	DTNFC326	
	600 Volt AC, 250 Volt DC	3	30	DTNFC361	ECHS
			60	DTNFC362	
			100	DTNFC363	
			200	DTNFC364	
			400	DTNFC365	
			600	DTNFC366	

<sup>①</sup> Hub catalogue number available p. 3-36

<sup>②</sup> All Heavy Duty double throw switches with a catalogue number starting with "DT" are rated 200,000 AIC max. when protected by Class R, J or T fuses. Fuse ampere rating must not exceed switch ampere rating.

<sup>③</sup> Move load base.

\* Consult Siemens representative, 400A and larger Switches do not have hub provisions.

# Safety Switches

## Double Throw

Accessories, Lug Data and Horsepower Ratings

### Accessories – 2 and 3-Pole Switches Type “DT” Only<sup>①</sup>

Description		Catalogue Number
Neutral Kits	30 60 & 100A 200A 400 & 600A	HNC612 HNC263 HNC264 HNC678
Equipment Ground Kit	30-200A (2) #14-4 AWG 400 & 600A (4) #14-2/0	HG61234 HG656
Auxiliary Contacts (HD Only) (two required per switch) <sup>②</sup>	30-200A with (1) NO & (1) NC contact 30-200A with (2) NO & (2) NC contact 400-600A with (1) NO & (1) NC contact 400-600A with (2) NO & (2) NC contact	HA161234 HA261234 HA165678 HA265678
Class R Fuse Clip Kits (two required per switch)	30A, 240V Kit 30A, 600V Kit and 60A, 240V Kit 60A, 600V Kit 100A Kit 200A Kit	HR21 HR612 HR62 HR63 HR64
Class T Fuse Adapter Kits (two required per pole)	100A, 240V Kit 100A, 600V Kit 200A, 240V Kit 200A, 600V Kit	HT23 HT63 HT24 HT64
Type 3R Hubs (20-200A)	For 3/4" Conduit For 1" Conduit For 1 1/4" Conduit For 1 1/2" Conduit For 2" Conduit For 2 1/2" Conduit	ECHS075 ECHS100 ECHS125 ECHS150 ECHS200 ECHS250

### Maximum Horsepower Ratings

#### Fused

Ampere Rating	1-Phase AC		3-Phase AC		250V DC
	240V	240V	480V	600V	
30	3	7 1/2	15	20	5
60	10	15	30	50	10
100	15	30	60	75	20
200	15	60	125	150	40
400-600	—	125	250	350	50

#### Non-Fused

30	5	10	20	30	5
60	10	20	50	60	10
100	15	40	75	100	20
200	15	60	125	150	40
400-600	—	125	250	350	50

## Selection

### Wire Ranges (Line, Load and Neutral) per CEC Requirements

#### 30-200A – 2 & 3-Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) DT VBII Design Line, Load and Neutral
30	(1) #14-6
60	(1) #14-2
100	(1) #14-1/0 AWG
200	(1) #6-250 kcmil

#### 400-600A – 2 & 3-Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) DT VBII Design Line, Load and Neutral
400	(1) 1/0 AWG-750 kcmil or (2) 1/0 AWG-250 kcmil
600	(2) 1/0 AWG-500 kcmil

<sup>①</sup> For “DT” VBII Type switches only.

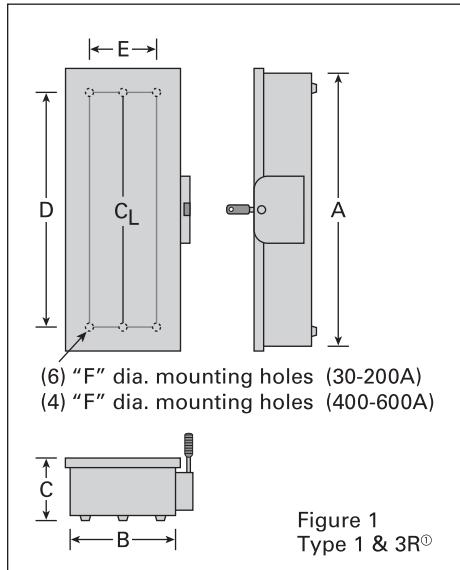
<sup>②</sup> One aux. required for normal and one required for emergency switch line base.

# Safety Switches

## Dimensions

VBII Design Double Throw Dimensions

Catalogue Number	Enclosure dimensions - Inches (mm)					
	A	B	C	D	E	F
<b>Figure 1 (30-600A Type 1 &amp; 3R)</b>						
DTNFC221, DTNFC321, DTNFC361, DTNFC361R	24.50 (622)	9.53 (242)	6.09 (155)	19.00 (483)	6.75 (171)	0.268 (7)
DTFC321, DTFC321R, DTFC361	29.12 (740)	9.53 (242)	6.09 (155)	23.50 (597)	6.75 (171)	0.268 (7)
DTNFC222, DTNFC322, DTNFC362, DTNFC362R	24.88 (632)	11.50 (292)	6.09 (155)	19.00 (483)	9.38 (238)	0.268 (7)
DTFC322, DTFC362	33.45 (852)	11.50 (292)	6.09 (155)	27.50 (699)	9.38 (238)	0.268 (7)
DTNFC223, DTNFC323, DTNFC323R, DTNFC363, DTNFC363R	27.62 (702)	12.18 (309)	6.09 (155)	19.36 (492)	8.00 (203)	0.268 (7)
DTFC323, DTFC363	36.44 (926)	12.18 (309)	6.09 (155)	28.11 (714)	8.00 (203)	0.268 (7)
DTNFC224, DTNFC224R, DTNFC324, DTNFC324R, DTNFC364, DTNFC364R	36.00 (914)	19.12 (486)	6.42 (163)	31.00 (787)	15.00 (381)	0.44 (11)
DTFC324, DTFC364	49.44 (1256)	19.12 (486)	6.42 (163)	44.50 (1130)	15.00 (381)	0.44 (11)
DTNFC225, DTNFC225R, DTNFC325, DTNFC365, DTNFC365R	57.71 (1466)	28.22 (717)	9.44 (240)	49.75 (1264)	16.00 (406)	0.56 (14)
DTNFC326, DTNFC366, DTNFC366R	57.71 (1466)	28.22 (717)	9.44 (240)	49.75 (1264)	16.00 (406)	0.56 (14)



<sup>®</sup> Drip hood not shown but provided on Type 3R enclosures.

# Enclosed Switches

## Rotary Disconnect Switches in Non-Metallic Enclosures<sup>(5)</sup>

**Selection**

### Description

16–125A non-fusible switches are available in fiberglass reinforced polycarbonate enclosures which are CSA certified as Type 12 & 4X and for either indoor or outdoor use. All are horsepower and load break rated. All are panel mounted and are either supplied with factory installed aux. contacts or will accept contact kits. All are compact in size while providing ample wiring space for copper line & load conductors.



### Siemens Enclosed Rotary Disconnect Switches

- 16–125A, Non-Fusible
- 600VAC max. rated
- Available in both Type 12 and 4X non-metallic enclosures
- Both screw and hinged cover designs available
- Listed and marked "suitable for use as motor disconnect" per NEC Section 430-109
- Screw cover switches are UL listed under File No. E47705 and are CSA certified under File No. 203576
- IEC 60947-3 rated and CE marked (enclosures are IP65 rated)
- HP rated
- Hinged door switches are UL & cUL listed for multiple line and load conductors per phase in 30–100A ratings. They are UL & cUL listed under File No. E191706
- Rotary handles are available in black, red, and yellow and in pistol grip designs
- 16–63A screw cover switches have factory installed ground bars. All hinge cover switches accept ground lug kits
- Screw cover switches are provided with knockouts
- Padlockable in OFF position with up to (3) padlocks

3

SAFETY SWITCHES

Ampere Rating	Catalog Number	3 Pole, 3 Wire with (1) NO & (1) NC Aux. Contact <sup>(8)(9)</sup>	Shipping Weight <sup>(1)</sup>	Horsepower Ratings			
				240V AC 1 Phase	240V AC 3 Phase	480V AC 3 Phase	600V AC 3 Phase

### Non-Fusible, Type 1, 4X & 12K<sup>(2)</sup> with Screw Cover and Black Rotary Handle 600V AC Max.<sup>(5)</sup>

16	3LD2064-0TB51-0US2	3LD2064-1GP51-0US2	1	1½	3	7½	10
25	3LD2164-0TB51-0US2	3LD2164-1GP51-0US2	1	3	7½	10	15
30	3LD2264-0TB51-0US2	3LD2264-1GP51-0US2	1	3	7½	15	20
30	—	3LD2264-1TS51-0US2 <sup>(6)</sup> ▲	1	3	7½	15	20
30	—	3LD2264-2TW51-0US2 <sup>(7)</sup> ▲	1	3	7½	15	20
63	3LD2565-0TB51-0US2	3LD2565-1GP51-0US2▲	3	10	15	40	50
100	3LD2766-0TB51-0US2	3LD2766-1GP51-0US2▲	6	—	30	60	75
125	3LD2866-0TB51-0US2	3LD2866-1GP51-0US2▲	6	—	40	75	100

### Non-Fusible, Type 1, 4X & 12K<sup>(2)</sup> with Screw Cover and Red and Yellow Rotary Handle 600V AC Max.<sup>(5)</sup>

16	3LD2064-0TB53-0US2	3LD2064-1GP53-0US2	1	1½	3	7½	10
25	3LD2164-0TB53-0US2	3LD2164-1GP53-0US2	1	3	7½	10	15
30	3LD2264-0TB53-0US2	3LD2264-1GP53-0US2	1	3	7½	15	20
30	—	3LD2264-1TS53-0US2 <sup>(6)</sup> ▲	1	3	7½	15	20
30	—	3LD2264-2TW53-0US2 <sup>(7)</sup> ▲	1	3	7½	15	20
63	3LD2565-0TB53-0US2	3LD2565-1GP53-0US2▲	3	10	15	40	50
100	3LD2766-0TB53-0US2▲	3LD2766-1GP53-0US2▲	6	—	30	60	75
125	3LD2866-0TB53-0US2▲	3LD2866-1GP53-0US2▲	6	—	40	75	100

▲ Built to order. Allow 6–8 weeks for delivery.

① Carton quantity of (1). Shipping weight in pounds (lbs.).

② Approved for indoor/outdoor use. No cover interlock provided.

③ 30 and 60A switches are also rated 600V AC.

④ Also rated as Type 12 and CSA certified for both indoor and outdoor use. Defeatable cover interlock provided.

⑤ Screw cover enclosures are constructed from Makrolon 9425.

Hinged cover enclosures are constructed from fiberglass reinforced polycarbonate.

⑥ Switch is supplied with (2) NO and no NC aux. contacts.

⑦ Switch is supplied with (4) NO and no NC aux. contacts.

Ground bar is not provided or available.

⑧ Aux. contacts break about 3 Ms before and make about 3 Ms after main switch contacts.

⑨ 6P, 25A, switch with 1 NO & 1 NC aux. contacts and a black operating handle is also available. Order catalog number 3LD2165-4VD51 (Discount Code: Pilot Devices).

# Enclosed Switches

## Rotary Disconnect Switches

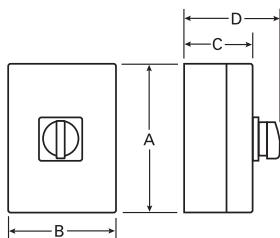
**Selection**

### Enclosed Disconnect Switch Dimensions (Inches)\*

Catalog Number	Ampere Rating	Fig. No.	Dimensions			
			A	B	C	D
3LD2064-	16		5.52 <sup>④</sup>	3.94	3.19	4.57
3LD2164-	25		5.52 <sup>④</sup>	3.94	3.19	4.57
3LD2264-	30	1	5.52 <sup>④</sup>	3.94	3.19	4.57
3LD2565-	63		6.93 <sup>⑤</sup>	5.75	4.10	5.87
3LD2766-	100		11.90	8.35	5.36	7.13
3LD2866-	125		11.90	8.35	5.36	7.13

Note: 3LD2 Type switches only have top and bottom end KO's as follows:  
16-30A - 1 1/2" & 3/4", 63A - 3/4" & 1", 100 & 25A - 1" & 1 1/4"

Figure 1



### UL and cUL Short Circuit Withstand Ratings

Ampere Rating	Short Circuit Withstand Rating and Fuse Class				
	With Line Side Fusing		With Load Side Fusing <sup>①</sup>		
5 kA at 600V Max	10 kA at 600V Max	18 kA at 480V Max	5 kA at 480V Max	18 kA at 480V Max	

### 3LD2 Type Switches<sup>②</sup>

16	RK5 (50A Max)	—	—	—	—
25 & 30	RK5 (80A Max)	—	—	—	—
63	RK5 (175A Max)	—	—	—	—
100 & 125	—	RK5 (200A Max)	—	—	—

### HNF Type Switches

30	—	H, K & RK5 (100A Max)	J, T & CC (100A Max)	H, K & RK5 (30A Max)	Ferraz Shawmut A50P or lower let-through semiconductor fuses (60A Max)
60		H, K & RK5 (150A Max)			Ferraz Shawmut A50P or lower let-through semiconductor fuses (100A Max)
100	⑥	⑥		H, K & RK5 (60A Max)	

<sup>④</sup>For use as supplemental protection on the load side of the branch circuit over current protective device.

<sup>⑤</sup>Ground lug kit has two lugs for #14-4 Cu/Al wire.

<sup>⑥</sup>Factory installed ground lugs supplied as follows: 16-30A #14-10 Cu, 63A #14-8 Cu. Ground lug not provided and is not available on catalog numbers 3LD2264-2TW51-0US2 and 3LD2264-2TW53-0US2.

<sup>⑦</sup>6.38 inches high including mounting feet.

<sup>⑧</sup>7.85 inches high including mounting feet.

<sup>⑨</sup>60 & 100A HNF switches are rated 10kA at 480V max. with line side Class H, K & RK5 150A max. fuses.

<sup>⑩</sup>Wire range (1) #14-2 AWG 60/75 °C Cu only.

<sup>⑪</sup>16-63A 3LD switches are also rated 5kA at 600VAC max when protected by a 3RV type MSP of the same or lesser ampere rating.

\*For inches / millimeters conversion, multiply inches by 25.4.

Wire ranges 60/75°C Cu Only

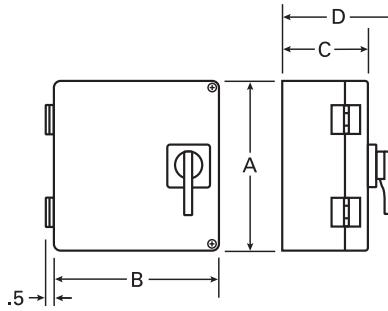
### 3LD2 Type Switches<sup>③</sup>

16 Amps 25-30 Amps 63 Amps 100-125 Amps	(1) #18-10 AWG (1) #14-10 AWG (1) #14-6 AWG (1) #12-1 AWG
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### HNF Type Switches

30 Amps	(1) #14-#10 AWG Solid (1) #14-#4 AWG Stranded Up to (4) #12 AWG Solid Up to (3) #12 AWG Stranded Up to (6) #14 AWG Stranded Up to (4) #14 AWG Stranded with (1) #10 AWG Stranded
60 & 100 Amps	(1) #14-#10 AWG Solid (1) #14-#1 AWG Stranded (2) #6 AWG Stranded Up to (3) #8 AWG Stranded Up to (6) #10 AWG Stranded Up to (6) #12 AWG Solid

Figure 2



### IEC Fuse and Withstand Ratings

Ampere Rating	gG Fuse Size	Short Circuit Rating
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### 3LD2 Screw Cover Switches

16	20A	5k Arms
25	25A	10k Arms
32	50A	10k Arms
63	63A	15k Arms
100	100A	20k Arms
125	125A	20k Arms

### HNF Hinged Cover Switches

30	63A	10k Arms
60	100A	10k Arms
100	100A	10k Arms

### Accessories

Switch Ampere Rating	Catalog Number	Description
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### 3LD2 Type Switches<sup>③</sup>

16-30A	3LD9220-2C	Neutral Kit
63A	3LD9250-2CA	Neutral Kit
100-125A	3LD9280-2C	Neutral Kit

### HNF Type Switches

30-100A	GSGK60	Ground Lug Kit <sup>⑫</sup>
30A	LBRA1	Auxiliary Contact Kit (1 NO-1 NC)
60-100A	LBRA2	Auxiliary Contact Kit (1 NO-1 NC)
30-100A	HF63CX <sup>⑬</sup>	Neutral Kit

# Notes

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