SIEMENS

Distribution Equipment

SPEEDFAX

Section 1
Safety Switches

1

Contents

A-Z

EEMAC Enclosure Types

Light Duty Switch (SE)

Industrial Duty Switch (ID)
EEMAC 1 Enclosure 30-200 Amp

Industrial Duty Switch (4ID)

Industrial Duty Switch (12IDW)

Heavy Duty (HFC, HNFC)

Selection and Application

Selection and Application					
EEMAC Enclosure Type	**Switch Type**	**Number of Poles**	**Voltage Rating**	**Ampere Rating**	**Fusible or Non-Fusible**
Light Duty					
1	SE[2]	2 or 3	240V	30 60 100 200	Fusible
Industrial Duty[1]					
1	ID[2]	3	240V or 600V	30 60 100 200 400[4] 600[4]	Fusible or Non-Fusible
4X	4ID	2 or 3			
12	12ID				
Heavy Duty					
1 3R 4X 12	HNFC HFC	2 or 3	240V or 600V	30 60 100 200 400 600 800 1200	Fusible or Non-Fusible

Selection and Application				
Provides a Degree of Protection Against	**Enclosure Type**			
	EEMAC 1	**EEMAC 3R**	**EEMAC 4X**	**EEMAC 12**
General Purpose Indoor	✔	✔	✔	✔
Rainproof and sleet (ice) resistant	-	✔	✔	-
Watertight	-	-	✔	-
Dust-tight[2]	-	-	✔	✔
Corrosives	-	-	✔	-

[1] 30-60 ampere switches 250V DC rated.

[2] Non-hazardous location

[3] Suitable as service entrance equipment

[4] Available in EEMAC 1, and EEMAC 12 enclosure only.

Technical Specifications for Siemens Switches

Application

Siemens Switches are intended for use in applications where:

1. Rugged construction, reliable performance, continuity of service and ease of maintenance are emphasized, or
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. An EEMAC type 1, 3R, 12 or 4/4X enclosure is required.

Voltage and ampere ratings

240 VOLT AC – 30 through 1200 Amperes
600 VOLT AC – 30 through 1200 Amperes
250 VOLT DC – 30 through 600 Amperes except SE Safety Switch

Enclosures / Types

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.

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.

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.

Type 12① 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.

Note: Type 1 & 3R 30-600A Heavy Duty switches have tangential knockouts which are UL approved for bonding to ground on circuits over (or under) 250 volts to ground.

Short circuit withstand ratings

Suitable for use on systems capable of delivering not more than 100,000 RMS symmetrical amperes of fault current when Class R fuses are installed. Also rated 100,000 AC max. In 200-600A ratings with Class J and T fuses.

Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical Amperes of fault current when Class - J, R or L fuses are installed.
100-1200A switches with Class T fuses and field adapter kit are also 200,000 RMS symmetrical rated.

Fuses

Light and Industrial Switches

Fusible switches will accept the following CSA/UL class fuses:

Class H

Class K

Class R - Class R fuse clip rejecter kits are required.

Class T

Heavy Duty Switches

Fusible switches will accept the following CSA/UL class fuses:

Class H

Class K

Class R - Class R fuse clip rejecter kits are required.

Class J - 240 and 600V switches. All switches are field convertible.

Class L - 800 and 1200A switches only.

Class T - 100-1200A switches (All but 400 & 600A require an adapter kit).

Door Interlocks

Heavy Duty Switches
Defeatable dual door interlocks standard on all Siemens switches, prevents door from being opened when switch is in the "on" position and prevents switch from being turned "on" when door is open.

Groundable Neutrals

240 volt light duty switches designed for use on systems requiring neutrals with groundable neutral blocks factory installed. Both 240V, 600V Industrial Duty and Heavy Duty switches are designed to accept field adaptable neutral assemblies.

Padlocks

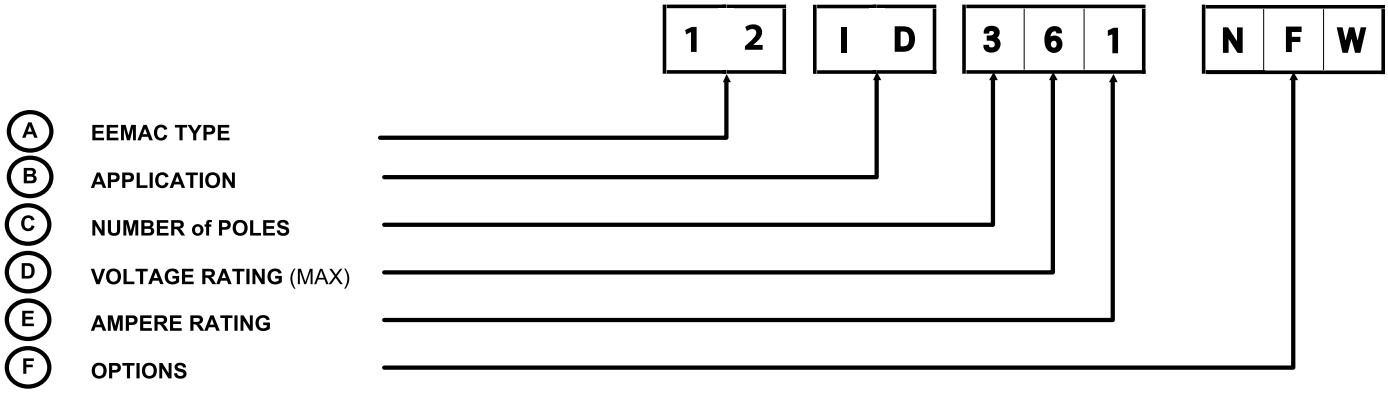
Padlockable cover latch and multiple padlock provisions on handle.

Handle Mechanism

All our safety switches have a Quick Make Quick Break handle mechanism.

NOTE:
All dimensions shown in the Selection Guide are subject to change.
Please refer to Siemens sales office where dimensional accuracy is of consequence.
①-VBII Type 12 switches are also rated 3R & 3S for outdoor use. Type 3R is defined above. 3S rated enclosures provide a degree of protection against windblown dust and allow operation when the enclosure is ice laden.

Catalog Numbering System



B Switch Application	A Enclosure	C Number of Poles	D Voltage Rating (max)	E Ampere Rating	F Options
Light and Industrial Duty Switches (30A to 600A)					
SE = Light Duty (Service Entrance)	**Blank** = EEMAC 1	**2** = 2 Poles **3** = 3 Poles	**2** =240V	**1** = 30A **2** = 60A **3** = 100A **4** = 200A	**Blank** = Fused **NF** = Non-Fused **V** = Viewing window
ID = Industrial Duty	**Blank** = EEMAC 1 **4** = EEMAC 4X **12** = EEMAC 12	**2** = 2 Poles + Solid Neutral **3** = 3 Poles **4** = 3 Poles + Solid Neutral	**2** = 240V **6** = 600V	**1** = 30A **2** = 60A **3** = 100A **4** = 200A **5** = 400A **6** = 600A	**Blank** = Fused **NF** = Non-Fused **V** = Viewing window **W** = Receptacle

Safety Switches

Non-Fused Air Conditioning Disconnects

Selection and Ordering Data

cUL Listed, NEMA Type 3R Enclosure — 240 Volts

Catalog Number	Ampere Rating	Maximum Horsepower	Disconnect Type	Std. kg.
WN2060	60	10	Non-Fusible Pullout	6

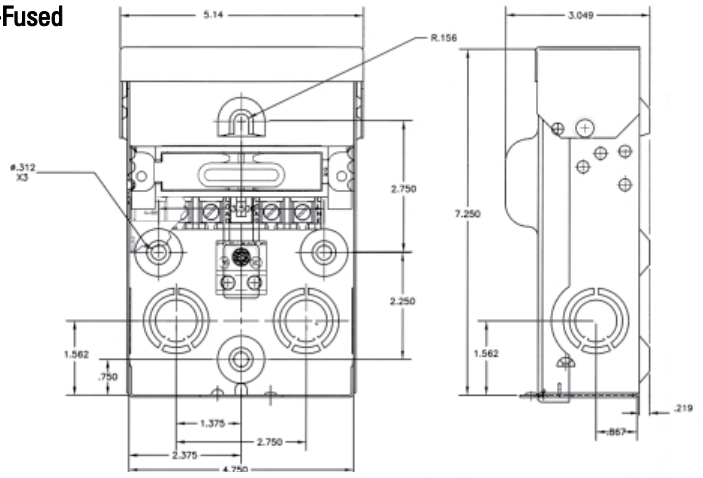
c UL

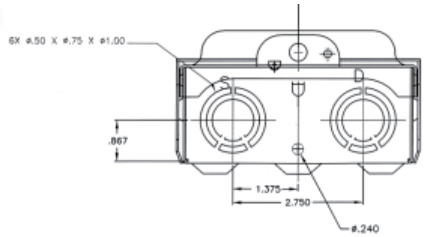
Features / Benefits

Features	Benefits
■ Ample Wiring Space	■ The larger enclosure allows for ample wiring space.
■ Rugged Design	■ Manufactured with powder coated G90 galvanized steel for fade, scratch and corrosion resistance.
■ Numerous Knockouts	■ 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.
■ Raised Mounting Embosses	■ (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 Conductors	■ Copper current carrying part allows for a cooler, longer lasting operation.
■ Pullout Switch	■ The pullout switch design allows you to safely and easily de-energize the load terminals.
■ Removable Door	■ The easily removable door makes it possible to wire the device with absolutely no interference.

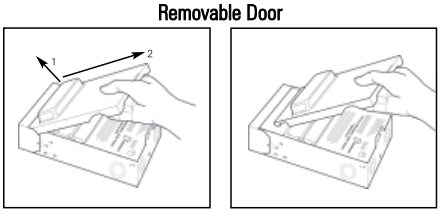
Dimensions (inches)

Non-Fused

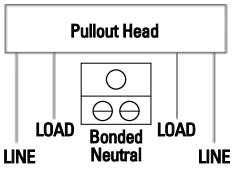




Removable Door



Wiring Diagram



Connector	Copper		Aluminum	
	Sol.	Str.	Sol.	Str.
Line	14-8	14-7	12-8	12-3
Load	14-8	14-7	12-8	12-3
Bonded Neutral	14-8	14-3	12-8	12-3

Safety Switches

Fused Air Conditioning Disconnects

Selection and Ordering Data

cUL Listed, NEMA Type 3R Enclosure — 240 Volts

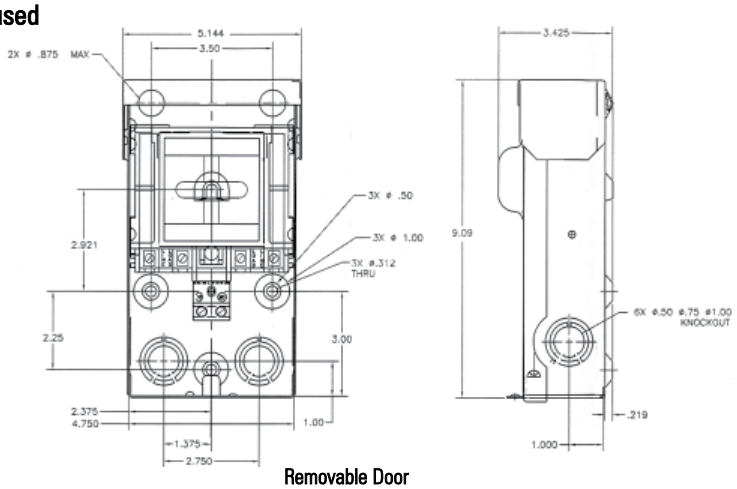
Catalog Number	Ampere Rating	Maximum Horsepower	Fuse① Class	Std. Pkg.
WF2030	30	3	H	6
WF2060	60	10	H	6

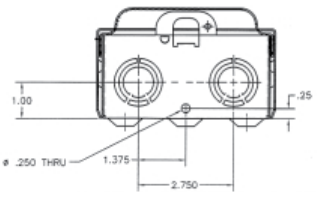
c UL

Features	Benefits
■ Ample Wiring Space	■ The larger enclosure allows for ample wiring space.
■ Rugged Design	■ Manufactured with powder coated G90 galvanized steel for fade, scratch and corrosion resistance.
■ Numerous Knockouts	■ 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.
■ Raised Mounting Embosses	■ (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 Conductors	■ Copper current carrying part allows for a cooler, longer lasting operation.
■ Pullout Switch	■ The pullout switch design allows you to safely and easily de-energize the load terminals.
■ Removable Door	■ The easily removable door makes it possible to wire the device with absolutely no interference.

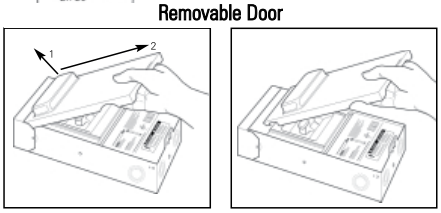
Dimensions (inches)

Fused

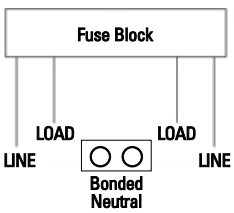




Removable Door



Wiring Diagram

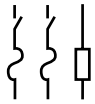
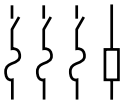


Connector	Copper		Aluminum	
	Sol.	Str.	Sol.	Str.
Line	14-8	14-2	12-8	12-3
Load	14-8	14-2	12-8	12-3
Bonded Neutral	14-8	14-3	12-8	12-3

Light Duty Switches (SE)[5]

Selection and Ordering Data

SE221

System	Ampere Rating	Catalog Number	Dimensions - inches (mm) Height	Width Including Handle	Depth Including Handle
240V Fusible Service Entrance EEMAC 1 Enclosure					
2 Pole, 2 Fuse plus Neutral 240V AC Max.					
	[1] 30	**SE221**	11¼ (286)	7⅞ (200)	6⁵⁄₁₆ (160)
	[4] 60	**SE222**	15¼ (387)	7⅞ (200)	6⁵⁄₁₆ (160)
	100	**SE223**	20¼ (514)	9⅜ (238)	6⁵⁄₁₆ (160)
	[2] 200	**SE224**	30¾ (781)	11⅞ (302)	7⁵⁄₁₆ (186))
3 Pole, 3 Fuse plus Neutral 240V AC Max.					
	[1] 30	**SE321**	11¼ (286)	7⅞ (200)	6⁵⁄₁₆ (160)
	[4] 60	**SE322**	15¼ (387)	7⅞ (200)	6⁵⁄₁₆ (160)
	100	**SE323**	20¼ (514)	9⅜ (238)	6⁵⁄₁₆ (160)
	[2] 200	**SE324**	30¾ (781)	11⅞ (302)	7⁵⁄₁₆ (186)

[1] Use equivalent 60 Amp switch for 30 Amp HRCI-J fuse application and adjust loadbase to pre-drilled position.
[2] Can be modified in the field to accept HRCI-J fuses by moving loadbase to pre-drilled position.
[4] Use equivalent 600V ID Switch for HRCI-J fuse applications.
[5] Suitable for service entrance

General Duty 30A Plug Fuse – LFC211N

Product Details

- 30 Amp, indoor, plug fuse
- 120/240 Volt, 1 phase, 3 wire, 2-pole, with solid neutral

Features

- Compact size
- Horsepower rated
- Quick Make-quick break mechanism
- Visible "ON"–"OFF" indications
- Solid metal handle, with padlock-off feature
- Door padlock provision
- Suitable for use as service entrance equipment
- Lugs suitable for copper or aluminum wire
- CSA Certified
- Switches accept only plug fuses – not included

Dimensions

- Height 8¼" (210 mm)
- Width (with handle) 5 13/16" (148 mm)
- Depth (with handle) 4¾" (120 mm)

Wire Range

- Cu/Al – #14 to #8 AWG

Safety Switches

30 Amp General Duty Enclosed Switches

Selection and Ordering Data

Ampere Rating	Fuse Type	Indoor - Type 1 Catalog Number	Indoor - Type 1 Ship Wt (Std Pkg)	Outdoor - Type 3R Catalog Number	Outdoor - Type 3R Ship Wt (Std Pkg)	Horsepower Ratings ① 120/240V AC 1 Phase 2W Std	1 Phase 2W Max	3 Phase 3W Std	3 Phase 3W Max	HP Rating 250 Volt DC
120 Volt Fusible - 1 Pole and Neutral										
30	Plug	**LFC111N**	35 (10)	**LFC111NR**	35 (10)	½ ⑥	2 ⑥	—	—	—
120/240 Volt Fusible - 2 Pole and Neutral										
30	Plug	**LFC211N**	35 (10)	**LFC211NR**	35 (10)	1½	3	—	—	—
240 Volt Max Non-Fusible - 2 Pole Special Application (Bottom Cable Entry and Exit Only)										
60	—	Use Outoor	—	**LNFC222R** ③	35 (10)	—	10	—	—	—

Features

- Compact size
- Visible blade, double break switching action
- Quick make, quick break operating mechanism
- Indoor and galvanized steel outdoor enclosures
- Highly visible "ON" / "OFF" indications
- Bondable Neutral (where indicated)
- Cover interlock on indoor enclosures
- Padlocking provisions to lock cover closed or to lock switch in the "OFF"position

Ratings

- CSA listed
- All fusible switches suitable for use as service entrance equipment
- Fused switches rated 10,000 AIC with either plug or Class H fuses or 100,000 AIC with Class R fuses
- Ground bar kit: GSGK60

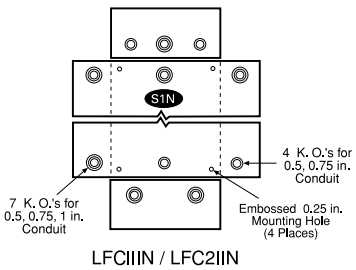
New Switch Catalog Numbering System

PART 1 Switch Type	PART 2 Fused or Non Fused	PART 3 Number of Poles	PART 4 Voltage Rating	PART 5 Ampere Rating	PART 6 With or Without Neutral	PART 7 Enclosure Type
L = Gen. Duty 10k AIC Max. (Plug Fused and 60A Special Application)	F = Fused NF=Non-Fused	1 = 1 2 = 2 3 = 3	1 = 120V or 120/240V 2 = 240V	1 = 30A 2 = 60A	Omit = Less Neutral N = with Neutral	Omit = Type 1 Indoor R = Type 3R Outdoor

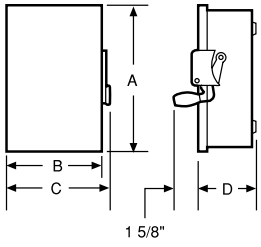
Dimensions & Old to New Cross Reference

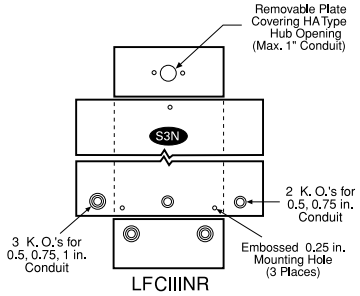
New Switch Catalog Number	Old Vacu-Break Cat. No. (for ref. only)	New Switch Dimensions (Inches) Height A	Width Box B	Width Rain Shed E	Width With Handle C	Depth D	New Switch Knockout Diagram
LFC111N	CFN211	8 1/4	5 1/2	—	5 13/16	3	S1N
LFC111NR	CFNR211	8 1/4	5 3/8	5 9/16	5 13/16	3 1/8	S3N
LFC211N	CFN311	8 1/4	5 1/2	—	5 13/16	3	S1N
LFC211NR	CFNR311	8 1/4	5 3/8	5 9/16	5 13/16	3 1/8	S3N
LNFC222R	CNFR222	8 1/4	5 3/8	5 9/16	5 13/16	3 1/8	S5N

Outline Drawings and Knockout Diagrams

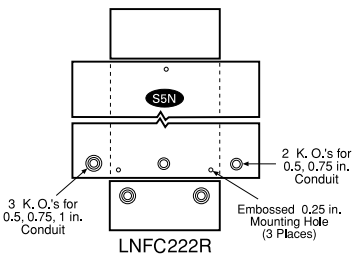


LFCIIIN / LFC2IIN





LFCIIINR



LNFC222R

① Dual horsepower ratings standard applies when non-time delay fuses are installed Max - applies when time delay fuses are installed.

③ Bottom cable entry & exit only No hub provisions supplied.

④ Suitable for 3 Pole motor loads.

⑤ These switches can also be used for 240V 2P, 2W applications and are CSA listed for application on a grounded B system.

⑥ Ratings shown are 120V - 1 Phase, 2W.

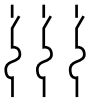
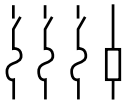
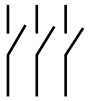
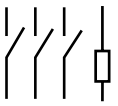
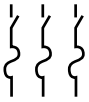
Industrial Duty Switches® (ID) EEMAC 1 Enclosure

Selection and Ordering Data

ID363

ID363 (FUSIBLE)

ID363NF (NON-FUSIBLE)

System	Ampere Rating	Catalog Number	Dimensions - inches (mm) Height	Width Including Handle	Depth Including Handle
600V Fusible Industrial Duty EEMAC 1 Enclosure					
3 Pole, 3 Fuse 600V AC Max., 250V DC[7]					
	30	**ID361**	15⅜ (391)	9³⁄₁₆ (233)	7¼ (184)
	60	**ID362**	15⅜ (391)	9³⁄₁₆ (233)	7¼ (184)
	100	**ID363**	20⅜ (518)	10¹¹⁄₁₆ (271)	7¼ (184)
	[2] 200	**ID364**	30⅞ (784)	13³⁄₁₆ (335)	8¼ (210)
	400	**ID365**	40 (1016)	21½ (546)	12¹⁄₁₆ (306)
	600	**ID366**	48 (1219)	21½ (546)	12¹⁄₁₆ (306)
3 Pole, 3 Fuse plus Neutral 240V AC Max., 250V DC[7]					
	30	**ID361+N60**			
	60	**ID362+N60**			
	100	**ID363+N100**			
	[2] 200	**ID364+N200**			
	400	**ID365+N4001D**			
	600	**ID366+N6001D**			
600V Non-Fusible Industrial Duty EEMAC 1 Enclosure					
3 Pole, 600V AC Max., 250V DC[7]					
	30	**ID361NF**	15⅜ (391)	9³⁄₁₆ (233)	7¼ (184)
	60	**ID362NF**	15⅜ (391)	9³⁄₁₆ (233)	7¼ (184)
	100	**ID363NF**	20⅜ (518)	10¹¹⁄₁₆ (271)	7¼ (184)
	200	**ID364NF**	30⅞ (784)	13³⁄₁₆ (335)	8¼ (210)
	400	**ID365NF**	40 (1016)	21½ (546)	12¹⁄₁₆ (306)
	600	**ID366NF**	48 (1219)	21½ (546)	12¹⁄₁₆ (306)
3 Pole plus Neutral 347/600V AC Max., 250V DC[7]					
	30	**ID361NF+N60**			
	60	**ID362NF+N60**			
	100	**ID363NF+N100**			
	200	**ID364NF+N200**			
	400	**ID365NF+4001D**			
	600	**ID366NF+N6001D**			
240V Fusible Industrial Duty EEMAC 1 Enclosure					
3 Pole, 3 Fuse 240V AC Max., 250V DC[7]					
	[4] 30	**ID321**	15⅜ (391)	9³⁄₁₆ (233)	7¼ (184)
	[6] 60	**ID322**	15⅜ (391)	9³⁄₁₆(233)	7¼ (184)
	100	**ID323**	20⅜ (518)	10¹¹⁄₁₆ (271)	7¼ (184)
	[2] 200	**ID324**	30⅞ (784)	13³⁄₁₆ (335)	8¼ (210)
	400	[5] **ID425**	40 (1016)	21½ (546)	12¹⁄₁₆ (306)
	600	[5] **ID426**	48 (1219)	21½ (546)	12¹⁄₁₆ (306)
240V Fusible Industrial Duty EEMAC 1 Enclosure					
2 Pole, 2 Fuse plus Neutral 240V AC Max					
	400	**ID225**	40 (1016)	18½ (470)	12¹⁄₁₆ (306)
	600	**ID226**	48 (1219)	18½ (470)	12¹⁄₁₆ (306)

(For 3Ø 4W fusible switches 30 to 200 amperes, select 3Ø switch from 3 pole table above and add neutral kit from page 1/10.)

(For 3Ø 4W fusible switches 30 to 200 amperes, select 3Ø switch from 3 pole table above and add neutral kit from page 1/10.)

[1] For ID Safety Switch EEMAC 1 c/w optional viewing window, add suffix "V" to catalog number (eg. ID322V). Contact your local Siemens sales office.
[2] Can be modified in the field to accept HRCI-J fuses by moving loadbase to pre-drilled position.
[4] Use equivalent 60 Amp switch for 30 Amp HRCI-J fuse applications and adjust loadbase to pre-drilled position.
[5] Complete with solid neutral.
[6] Use equivalent 600V ID Switch for HRCI-J fuse applications.
[7] 30-600 Ampere Switches 250V DC rated.

Safety Switches

Industrial Duty Switches (ID) EEMAC 4X and 12 Enclosures[8][9] (also available with interlocked receptacle)

Selection and Ordering Data

12ID363

4ID364
(STAINLESS STEEL)

12ID323W

System	Ampere Rating	EEMAC 4X Enclosure[4] Cat. No.	EEMAC 4X Enclosure[4] Interlocked Receptacle Cat. No.	EEMAC 12 Enclosure[4] Cat. No.	EEMAC 12 Enclosure[4] Interlocked Receptacle Cat. No.	Dimensions - inches (mm) Height Including	Height Including Mtg. flange	Width Including Handle	Depth Including Handle
600V Fusible Industrial Duty EEMAC 4X and 12 Enclosures									
3 Pole, 3 Fuse 600V AC Max., 250V DC									
	30	**4ID361**	**4ID361W**	**12ID361**	**12ID361W**	24⅝ (625)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	60	**4ID362**	**4ID362W**	**12ID362**	**12ID362W**	25⅛ (638)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	[1] 100	**4ID363**	**–**	**12ID363**	**12ID363W**	30⅝ (778)	21⅝ (549)	10¹¹⁄₁₆ (272)	7⁷⁄₁₆ (189)
	[1] 200	**4ID364**	**–**	**12ID364**	-	-	32 (813)	13³⁄₁₆ (335)	8⁷⁄₁₆ (214)
	400	**–**	**–**	**12ID365**	-	-	40 (1016)	21½ (546)	15 (381)
	600	**–**	**–**	**12ID366**	-	-	48 (1219)	21½ (546)	15 (381)
600V Non-Fusible Industrial Duty EEMAC 4X and 12 Enclosures									
3 Pole, 600V AC Max., 250V DC									
	30	**4ID361NF**	**4ID361NFW**	**12ID361NF**	**12ID361NFW**	24⅝ (625)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	60	**4ID362NF**	**4ID362NFW**	**12ID362NF**	**12ID362NFW**	25⅛ (638)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	100	**4ID363NF**	**–**	**12ID363NF**	**12ID363NFW**	30⅝ (778)	21⅝ (549)	10¹¹⁄₁₆ (272)	7⁷⁄₁₆ (189)
	200	**4ID364NF**	**–**	**12ID364NF**	-	-	32 (813)	13³⁄₁₆ (335)	8⁷⁄₁₆ (214)
	400	**–**	**–**	**12ID365NF**	-	-	40 (1016)	21½(546)	15 (381)
	600	**–**	**–**	**12ID366NF**	-	-	48 (1219)	21½ (546)	15 (381)
240V Fusible Industrial Duty EEMAC 4X and 12 Enclosures									
2 Pole, 2 Fuse plus Neutral 240V AC Max., 250V DC									
	[2] 30	**4ID221**	**–**	**12ID221**	-	24⅝ (625)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	60	**4ID222**	**–**	**12ID222**	-	25⅛ (638)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	100	**4ID223**	**–**	**12ID223**	-	30⅝ (778)	21⅝ (549)	10¹¹⁄₁₆ (272)	7⁷⁄₁₆ (189)
	[1] 200	**4ID224**	**–**	**12ID224**	-	-	32 (813)	13³⁄₁₆ (335)	8⁷⁄₁₆ (214)
	400	**–**	**–**	**12ID225**	-	-	40 (1016)	18½ (470)	15 (381)
	600	**–**	**–**	**12ID226**	-	-	48 (1219)	18½ (470)	15 (381)
3 Pole, 3 Fuse, 240V AC Max., 250V DC									
	[2] 30	**4ID321**	**–**	**12ID321**	**12ID321W**	24⅝ (625)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	60	**4ID322**	**–**	**12ID322**	**12ID322W**	25⅛ (638)	16⅝ (422)	9³⁄₁₆ (233)	7⁷⁄₁₆ (189)
	100	**4ID323**	**–**	**12ID323**	**12ID323W**	30⅝ (778)	21⅝ (549)	10¹¹⁄₁₆ (272)	7⁷⁄₁₆ (189)
	[1] 200	**4ID324**	**–**	**12ID324**	-	-	32 (813)	13³⁄₁₆ (335)	8⁷⁄₁₆ (214)
	400	**–**	**–**	**12ID425**[6]	-	-	40 (1016)	21½ (546)	15 (381)
	600	**–**	**–**	**12ID426**[6]	-	-	48 (1219)	21½ (546)	15 (381)

[1] Can be modified in the field to accept HRCI-J fuses by moving loadbase to pre-drilled position.
[2] Use equivalent 60 Amp switch for 30 Amp HRCI-J fuses application and adjust loadbase to pre-drilled position.
[3] Complete with solid neutral.
[4] Stainless steel enclosure.
[5] ID 4x & 12 contain silicone.
[6] A variety of ID switches are also available "**silicone free"**. Please consult you local Siemens sales office.
[7] Receptacle Safety Switches (EEMAC 12 Enclosure) available with 3-phase, plus ground type Crouse-Hinds Arktite receptacle, 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 standard plug is inserted;it accepts Crouse-Hinds "Arktite" plugs.

Note: The EEMAC 12 Enclosures c/w Interlock Receptacles are DC Rated.

Safety Switches

Light, and Industrial Duty Switch Accessories (SE and ID)

Selection and Ordering Data

Neutral Assembly & Fuse Puller Kits

Ampere Ratings	Neutral Assembly Kits ID Switches Cat. No.	Fuse Puller Kit Cat. No.
30	N60	FP2
60	N60	FP2
100	N100	FP3
200	N200	FP4
400	N400ID	–
600	N600ID	–

Auxiliary Contact Kits for ID Switches ④

Ampere Ratings	Number of Contacts	Catalog Number
30 60 100	1NO-1NC	MSSAK116
30 60 100	2NO-2NC	MSSAK216
200	1NO-1NC	MSSAK126
200	2NO-2NC	MSSAK226

MSSAK216

Conversions for HRCI-R or HRCI-T

Type	30A	60A	100A	200A	400A	600A
HRCI-R 240V	RFAK21③	RFAK22③④	RFAK3③	RFAK4③	–	–
HRCI-R 600V	RFAK61③④	RFAK62③	RFAK3③	RFAK4③	–	–
HRCI-T 240V	–	–	TFAK23③	TFAK24③	TFAK52	TFAK62
HRCI-T 600V	–	–	TFAK63③	TFAK64③④	⑤	TFAK65

①–One Kit per switch (3 pole).
②–Can be modified in the field.
③–One Kit per pole.
④–Auxiliary contacts for ID safety switches are of a positive action design and meet CSA standards #B44 & Section 38 of the Canadian Electrical Code covering elevators, dumbwaiters, escalators, platform lifts and moving walks.

Industrial Duty Switches HP Ratings and Lug Size Data

Selection and Ordering Data				
Horsepower Ratings[1]				
Switch Ratings		**Maximum Horsepower Rating**		
		Phase		**DC**
Amperes	**Volts**	**Single**	**Three**	**250V**
30	240	3	7.5	5
60		10	15	10
100		15	30	20
200		15	60	40
400		–	125	50
600		–	200	50
30	480	–	15	–
	600	10	20	–
60	480	–	30	–
	600	25	50	–
100	480	–	60	–
	600	40	75	_
200	480	–	125	–
	600	50	150	_
400	480	–	250	–
	600	–	350	_
600	480	–	400	–
	600	–	500	_

Lug Size Data [2]			
		Mains	**Neutral**
Switch Ampere Rating	**Number of Lugs Per Pole**	**Wire Range Copper or Aluminum**	**Wire Range Copper or Aluminum**
30	1	#14 to #4 AWG	#14 to #4 AWG
60	1	#14 to #4 AWG	#14 to #4 AWG
100	1	#14 to #1/0 AWG	#14 to #1/0 AWG
200	1	#6 to 250 MCM	#6 to 250 MCM
400	1	1-1/0 to 750 MCM	1-1/0 to 750 MCM
600	2	or 2-1/0 to 250 MCM	or 2-1/0 to 250 MCM

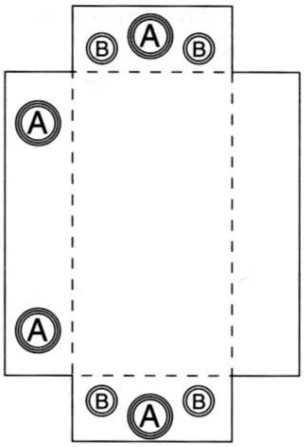
[1] All Safety switches are horsepower rated, except for the SE safety switches.
[2] 30A to 100A switches suitable for use with 60° or 75°C wire. Above 100A switches suitable for use with 75°C rated wire.

Knock-out Data (SE and ID)

K.O. Data For EEMAC 1 Enclosure

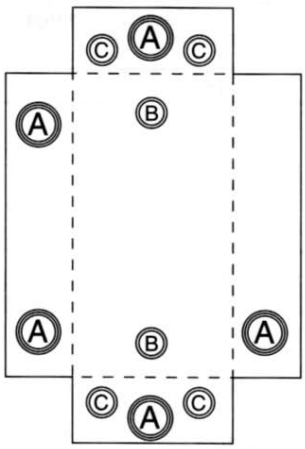
30 Amp Enclosure
Type SE

K.O.'s Trade Size
A = 3/4" - 1" - 1 1/4" - 1 1/2"
B = 1/2" - 3/4"



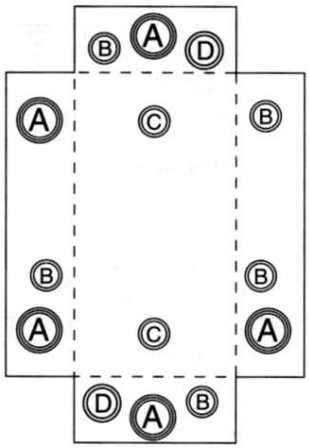
30-60 Amp Enclosure
Type ID
60 Amp Enclosure
Type SE

K.O.'s Trade Size
A = 3/4" - 1" - 1 1/4" - 1 1/2"
B = 3/4" - 1"
C = 1/2" - 3/4"



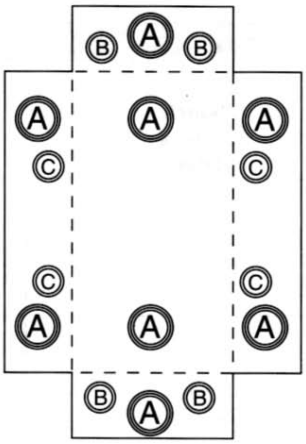
100 Amp Enclosure
Type SE
ID

K.O.'s Trade Size
A = 1" - 1 1/4" - 1 1/2" - 2"
B = 1/2" - 3/4"
C = 3/4" - 1"
D = 1" - 1 1/4"



200 Amp Enclosure
Type SE
ID

K.O.'s Trade Size
A = 1 1/2" - 2" - 2 1/2" - 3"
B = 1" - 1 1/4"
C = 1/2" - 3/4"



NOTE: Knock-out data also available for heavy duty type switches - please consult your Siemens sales office.

Catalog Numbering System

Heavy Duty Safety Switch Catalog Numbering System

H	FC	3	6	4	N	R	CU

Switch Type

H = Heavy Duty

Fused or Non-Fused

FC = Fused*
NFC = Non-Fused*

Number of Poles

1 = 1
2 = 2
3 = 3

Voltage

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

Special Applications With:

CH = Crouse-Hinds Receptacle
CJ = Factory J Fuse Spacings
CR = Class R Clips Installed
CU = Factory-Installed Copper Wire Grips
G = Factory-Installed Ground Bar
H = Height or Size Reduced
PN = Pyle-National 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

Amperes

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

Heavy Duty Accessories Catalog Numbering System

H	R	6	4

Switch Type

H = Heavy Duty

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
G = Ground Lug Kit
G2 = Insulated Ground Lug Kit
LC = Copper Lug Kit
NC = Neutral
NC2 = 200% Neutral
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
56 = 400/600A
5678 = 400/600/800/1200A
78 = 800/1200A

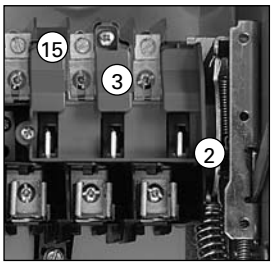
Maximum Voltage

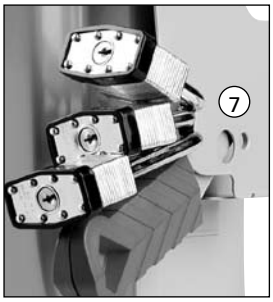
2 = 240V Max
6 = 600V Max

Note: Catalog numbering systems above do not apply to Vacu-Break and double throw switches & accessories.

*Except 4, 6 Pole & Ineterlocked Receptacles

Heavy Duty Safety Switches

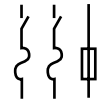
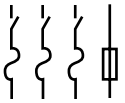
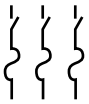




1. Quick-make, quick-break operating mechanism that ensures positive operation
2. Visible blade, double-break switching action
3. Arc chutes dissipate heat and prolong switch life
4. Highly visible red handle grip. Designed for hook stick operation
5. Defeatable dual cover interlock
6. Center punch provided 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 NEC wire-bending space requirements
9. Informative door labeling which includes replacement parts list
10. Tangential knockouts through 200A 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/Al 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 provides highly visible ON/OFF indication
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

Safety Switches

Heavy Duty 240 Volt

System	Ampere Rating	Indoor — Type 1 Catalog Number	List Price	Ship Wt.* Std. Pkg.	Outdoor — Type 3R Catalog Number	List Price	Ship Wt.* Std. Pkg.	Horsepower Ratings② 240V AC 1 Phase, 2 Wire Std.	1 Phase, 2 Wire Max.	2 Phase, 4 Wire Std.	2 Phase, 4 Wire Max.	3 Phase, 3 Wire Std.	3 Phase, 3 Wire Max.	250 Volt DC
240 Volt Fusible⑤														
2-Pole, 2-Fuse, and Solid Neutral③ (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	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	HFC225NH①	-	129	HFC225NRH①	-	131	15	—	—	—	50	125	50
	400	HFC225N	-	153	HFC225NR	-	157	15	—	—	—	50	125	50
	600	HFC226NH①	-	133	HFC226NRH①	-	135	15	—	—	—	75	200	50
	600	HFC226N	-	155	HFC226NR	-	159	15	—	—	—	75	200	50
	800	HFC227N	-	360	HFC227NR	-	362	—	—	—	—	100	250	50
	1200	HFC228N	-	362	HFC228NR	-	364	—	—	—	—	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	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	HFC325NH①	-	137	HFC325NRH①	-	138	15	—	—	—	50	125	50
	400	HFC325N	-	158	HFC325NR	-	162	15	—	—	—	50	125	50
	600	HFC326NH①	-	139	HFC326NRH①	-	142	15	—	—	—	75	200	50
	600	HFC326N	-	161	HFC326NR	-	165	15	—	—	—	75	200	50
	800	HFC327N	-	380	HFC327NR	-	383	—	—	—	—	100	250	50
	1200	HFC328N	-	382	HFC328NR	-	385	—	—	—	—	100	250	50
240 Volt Fusible⑤														
2-Pole, 2-Fuse④		Type 4/4X Stainless			Type 12 Industrial⑥									**240 Volt AC/250 Volt DC**
	30	HFC221S	-	13	HFC221J	-	13	1½	3	—	—	3	7½	5
	60	HFC222S	-	19	HFC222J	-	19	3	10	—	—	7½	15	10
	100	HFC223S	-	24	HFC223J	-	24	7½	15	—	—	15	30	20
	200	HFC224S	-	48	HFC224J	-	48	15	—	—	—	25	60	40
3-Pole, 3-Fuse④ (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	—
	60	HFC322S	-	20	HFC322J	-	20	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	HFC325S	-	154	HFC325J	-	110	15	—	—	—	50	125	50
	600	HFC326S	-	157	HFC326J	-	161	15	—	—	—	75	200	50
	800	HFC327S	-	367	HFC327J	-	367	—	—	—	—	100	250	50

* In pounds (lbs).
① Height reduced switch (45.25 rather than 56 inches in height) for use with 500MCM or smaller conductors.
② Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.
③ These switches are UL-listed for application on grounded B-phase systems and are suitable for 3-phase motor applications.
④ When a neutral is required use a field installed neutral kit.
⑤ Suitable for use as service entrance equipment.
⑥ Also rated Type 3S/3R.
Please contact factory for availability.

Heavy Duty 600 Volt

System	Ampere Rating	Indoor — Type 1 Catalog Number	List Price	Ship Wt.* Std. Pkg.	Outdoor — Type 3R Catalog Number	List Price	Ship Wt.* Std. Pkg.	Horsepower Ratings④ 480V AC 1 Phase, 2 Wire Std.	Max.	3 Phase, 3 Wire Std.	Max.	600V AC 1 Phase, 2 Wire Std.	Max.	3 Phase, 3 Wire Std.	Max.	250 Volt DC	600 Volt DC
600 Volt Fusible⑤																	
2-Pole, 2-Fuse③`																**480 Volt AC/600 Volt AC/600 Volt DC**	
	30	HFC261	-	15	HFC261R	-	15	3	7½	—	—	3	10	—	—	5	15
	60	HFC262	-	20	HFC262R	-	20	5	20	—	—	10	25	—	—	10	30
	100	HFC263	-	26	HFC263R	-	27	10	30	—	—	15	40	—	—	20	50
	400	HFC265	-	149	HFC265R	-	152	—	50	—	—	50	—	—	—	40	50
	600	HFC266	-	150	HFC266R	-	155	—	50	—	—	50	—	—	—	50	50
3-Pole, 3-Fuse`																**480 Volt AC/600 Volt AC/250 Volt DC①**	
	30	HFC361	-	14	HFC361R	-	15	3	7½	5	15	3	10	7½	20	5	—
	60	HFC362	-	19	HFC362R	-	20	5	20	15	30	10	25	15	50	10	25
	100	HFC363	-	24	HFC363R	-	25	10	30	25	60	15	40	30	75	20	25
	200	HFC364	-	48	HFC364R	-	49	25	50	50	125	30	50	60	150	40	50
	400	HFC365H②	-	136	HFC365RH③	-	137	—	—	100	250	—	—	125	350	50	—
	400	HFC365	-	154	HFC365R	-	157	—	—	100	250	—	—	125	350	50	—
	600	HFC366H②	-	138	HFC366RH③	-	141	—	—	150	400	—	—	200	500	50	—
	600	HFC366	-	157	HFC366R	-	161	—	—	150	400	—	—	200	500	50	—
	800	HFC367	-	380	HFC367R	-	382	—	—	200	500	—	—	250	500	50	—
	1200	HFC368	-	383	HFC368R	-	385	—	—	200	500	—	—	250	500	50	—
3-Pole, 3-Fuse and Solid Neutral`																**480 Volt AC/600 Volt AC/250 Volt DC①**	
	30	HFC361N	-	14	HFC361NR	-	15	3	7½	5	15	3	10	7½	20	5	—
	60	HFC362N	-	19	HFC362NR	-	20	5	20	15	30	10	25	15	50	10	25
	100	HFC363N	-	25	HFC363NR	-	26	10	30	25	60	15	40	30	75	20	25
	200	HFC364N	-	49	HFC364NR	-	50	25	50	50	125	30	50	60	150	40	50
	400	HFC365N	-	158	HFC365NR	-	162	—	—	100	250	—	—	125	350	50	—
	600	HFC366N	-	161	HFC366NR	-	165	—	—	150	400	—	—	200	500	50	—
	800	HFC367N	-	382	HFC367NR	-	386	—	—	250	500	—	—	250	500	50	—
	1200	HFC368N	-	385	HFC368NR	-	388	—	—	250	500	—	—	250	500	50	—
600 Volt Fusible⑤ (For 2-Pole Applications use outside poles of 3-Pole Switches)																	
2-Pole, 2-Fuse③`																**480 Volt AC/600 Volt AC/600 Volt DC**	
		Type 4/4X Stainless			Type 12 Industrial⑥												
	30	HFC261S	-	15	HFC261J	-	15	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
	400	HFC265S	-	153	HFC265J	-	155	—	50	—	—	50	—	—	—	40	50
	600	HFC266S	-	156	HFC266J	-	156	—	50	—	—	50	—	—	—	50	50
3-Pole, 3-Fuse`																**480 Volt AC/600 Volt AC/250 Volt DC①**	
	30	HFC361S	-	13	HFC361J	-	14	—	—	5	15	—	—	7½	20	5	—
	60	HFC362S	-	20	HFC362J	-	20	—	—	15	30	—	—	15	50	10	25
	100	HFC363S	-	25	HFC363J	-	25	—	—	25	60	—	—	30	75	20	25
	200	HFC364S	-	49	HFC364J	-	49	—	—	50	125	—	—	60	150	40	50
	400	HFC365S	-	158	HFC365J	-	160	—	—	100	250	—	—	125	350	50	—
	600	HFC366S	-	161	HFC366J	-	161	—	—	150	400	—	—	200	500	50	—
	800	HFC367S	-	380	HFC367J	-	380	—	—	200	500	—	—	250	500	50	—
	1200	HFC368S	-	388	HFC368J	-	388	—	—	250	500	—	—	250	500	50	—

* In pounds (lbs).
① 60-200A 3-Pole switches are also rated 600V DC.
② Height reduced switch (45.25 rather than 56 inches in height) for use with 500MCM or smaller conductors.
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 entrance equipment.
⑥ Also rated Type 3S/3R.
Please contact factory for availability.

Heavy Duty 600 Volt

System	Ampere Rating	Indoor - Type 1 Catalog Number	Ship. Wgt.	List Price	Outdoor - Type 3R Catalog Number	Ship. Wgt.	List Price	Horsepower Ratings 240 Volt 1-Phase	240 Volt 3-Phase	480 Volt 1-Phase	480 Volt 3-Phase	600 Volt 1-Phase	600 Volt 3-Phase	250V DC	600V DC

600 Volt Non-Fusible④

2-Pole ③ — **480 Volt AC / 600 Volt AC / 600 Volt DC**

Ampere Rating	Indoor - Type 1 Catalog Number	Ship. Wgt.	List Price	Outdoor - Type 3R Catalog Number	Ship. Wgt.	List Price	240 Volt 1-Phase	240 Volt 3-Phase	480 Volt 1-Phase	480 Volt 3-Phase	600 Volt 1-Phase	600 Volt 3-Phase	250V DC	600V DC
30	**HNFC261**	12	-	**HNFC261R**	13	-	—	—	7 1/2	—	10	—	5	15
60	**HNFC262**	19	-	**HNFC262R**	20	-	—	—	20	—	25	—	10	30
100	**HNFC263**	24	-	**HNFC263R**	25	-	—	—	30	—	40	—	20	50
400	**HNFC265**	109	-	**HNFC265R**	113	-	15	—	50	—	50	—	40	50
600	**HNFC266**	111	-	**HNFC266R**	115	-	15	—	50	—	50	—	50	50

3-Pole — **480 Volt AC / 600 Volt AC / 250 Volt DC**

Ampere Rating	Indoor - Type 1 Catalog Number	Ship. Wgt.	List Price	Outdoor - Type 3R Catalog Number	Ship. Wgt.	List Price	240 Volt 1-Phase	240 Volt 3-Phase	480 Volt 1-Phase	480 Volt 3-Phase	600 Volt 1-Phase	600 Volt 3-Phase	250V DC	600V DC
30	**HNFC361**	12	-	**HNFC361R**	13	-	5	10	7 1/2	20	10	30	5	—
60	**HNFC362H**②	11	-	**HNFC362RH**②	11	-	10	20	20	50	20	40	10	—
60	**HNFC362**①	18	-	**HNFC362R**①	19	-	10	20	20	50	25	60	10	25
100	**HNFC363**①	23	-	**HNFC363R**①	24	-	15	40	30	75	40	100	20	25
200	**HNFC364**①	46	-	**HNFC364R**①	47	-	15	60	50	125	50	150	40	50
400	**HNFC365**	114	-	**HNFC365R**	118	-	15	125	50	250	50	350	50	—
600	**HNFC366**	116	-	**HNFC366R**	120	-	15	200	50	400	50	500	50	—
800	**HNFC367**	302	-	**HNFC367R**	305	-	15	250	50	500	50	500	50	—
1200	**HNFC368**	305	-	**HNFC368R**	307	-	15	250	50	500	50	500	50	—

600 Volt Non-Fusible④

2-Pole ③ — **480 Volt AC / 600 Volt AC / 600 Volt DC**

Ampere Rating	Type 4 / 4X Stainless Catalog Number	Ship. Wgt.	List Price	Type 12 Industrial ⑤ Catalog Number	Ship. Wgt.	List Price	240 Volt 1-Phase	240 Volt 3-Phase	480 Volt 1-Phase	480 Volt 3-Phase	600 Volt 1-Phase	600 Volt 3-Phase	250V DC	600V DC
30	**HNFC261S**	13	-	**HNFC261J**	13	-	—	—	7 1/2	—	10	—	5	15
60	**HNFC262S**	20	-	**HNFC262J**	20	-	—	—	20	—	25	—	10	30
100	**HNFC263S**	25	-	**HNFC263J**	25	-	—	—	30	—	40	—	20	50
400	**HNFC265S**	113	-	**HNFC265J**	114	-	15	—	50	—	—	—	40	50
600	**HNFC266S**	115	-	**HNFC266J**	120	-	15	—	50	—	—	—	50	50

3-Pole — **480 Volt AC / 600 Volt AC / 250 Volt DC**

Ampere Rating	Type 4 / 4X Stainless Catalog Number	Ship. Wgt.	List Price	Type 12 Industrial ⑤ Catalog Number	Ship. Wgt.	List Price	240 Volt 1-Phase	240 Volt 3-Phase	480 Volt 1-Phase	480 Volt 3-Phase	600 Volt 1-Phase	600 Volt 3-Phase	250V DC	600V DC
30	**HNFC361S**	13	-	**HNFC361J**	13	-	5	10	7 1/2	20	10	30	5	—
60	**HNFC362SH**②	15	-	**HNFC362JH**②	14	-	10	20	20	50	20	40	10	—
60	**HNFC362S**①	19	-	**HNFC362J**①	19	-	10	20	20	50	25	60	10	25
100	**HNFC363S**①	24	-	**HNFC363J**①	24	-	15	40	30	75	40	100	20	25
200	**HNFC364S**①	47	-	**HNFC364J**①	47	-	15	60	50	125	50	150	40	50
400	**HNFC365S**	118	-	**HNFC365J**	119	-	15	125	50	250	50	350	50	50
600	**HNFC366S**	120	-	**HNFC366J**	120	-	15	200	50	400	50	500	50	50
800	**HNFC367S**	302	-	**HNFC367J**	302	-	15	250	50	500	50	500	50	50
1200	-	-	-	**HNFC368J**	310	-	15	250	50	500	50	500	50	50

①-Also rated 600V DC.

②-Compact switch (11.1"H, 6.6"W box less cover and handle). Short circuit withstand rating—100,000 RMS sym. amps.

③-Use 3-Pole switch for 200A application.

④-Suitable for use as service entrance equipment.

⑤-Also rated type 3S / 3R.

Please contact factory for availability.

Heavy Duty Safety Switches

Type 4/4X & 12 with Viewing Window

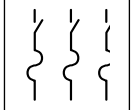
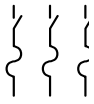
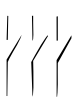
Description

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 (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.

System	Ampere Rating	Catalog Number	List Price $	Ship. Weight①	Maximum Horsepower Ratings⑤					
					240V AC		480V AC	600V AC	250V	600V
					1 Phase, 2 Wire	3 Phase, 3 Wire	3 Phase, 3 Wire	3-Phase, 3 Wire	DC	DC
3-Pole, 3 Wire Fusible, Type 12④⑤ 600 Volt AC / 250 Volt DC②										
	30	**HFC361JW**		17	3	7 1/2	15	20	5	—
	60	**HFC362JW**		22	10	15	30	50	10	30⑥
	100	**HFC363JW**		26	15	30	60	75	20	50⑥
	200	**HFC364JW**		53	—	60	125	150	40	50
	400	**HFC365JW**		166	—	125	250	350	50	—
	600	**HFC366JW**		168	—	200	400	500	50	—
3-Pole, 3 Wire Non-Fusible, Type 12④⑤600 Volt AC / 250 Volt DC②										
	30	**HNFC361JW**		14	3	10	20	30	5	—
	60	**HNFC362JW**		21	10	20	50	60	10	30⑥
	100	**HNFC363JW**		25	15	40	75	100	20	50⑥
	200	**HNFC364JW**		51	15	60	125	150	40	50
	400	**HNFC365JW**		133	15	125	250	350	50	—
3-Pole, 3 Wire Fusible, Type 4X Stainless Steel⑤600 Volt AC / 250 Volt DC②										
	30	**HFC361SW**		17	3	7 1/2	15	20	5	—
	60	**HFC362SW**		23	10	15	30	50	10	30⑥
	100	**HFC363SW**		28	15	30	60	75	20	50⑥
	200	**HFC364SW**		55	—	60	125	150	40	50
	400	**HFC365SW**		168	15	125	250	350	50	—
3-Pole, 3 Wire Non-Fusible, Type 4X Stainless Steel⑤600 Volt AC / 250 Volt DC②										
	30	**HNFC361SW**		15	3	10	20	30	5	—
	60	**HNFC362SW**		23	10	20	50	60	10	30⑥
	100	**HNFC363SW**		27	15	40	75	100	20	50⑥
	200	**HNFC364SW**		54	15	60	125	150	40	50
	400	**HNFC365SW**		134	15	125	250	350	50	—

①In pounds (lbs).
②200A switches are also rated 600V DC.
③Maximum HP ratings listed apply only when time delay fuses are used.
④Also rated 3S/3R for outdoor use.
⑤All switches are suitable for use as service entrance equipment. Use outside poles of 3-pole switch for 2-pole application.
⑥600V DC and 600V DC horsepower rating shown requires (2) poles to be connected in series.

Heavy Duty Safety Switches

Type VBII 4 & 6 Pole Heavy Duty Safety Switches

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.
All 4 & 6 pole switches are service entrance rated.

Description

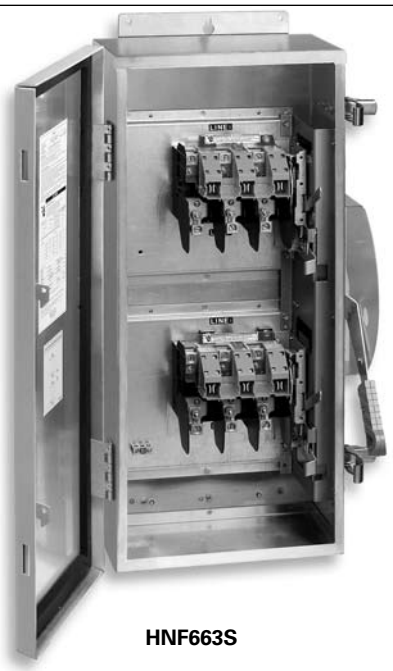
4 & 6 pole switches are available in 30-200A ratings and in both fusible and non-fusible versions. 4-pole switches are supplied with either Type 1 or Type12/3R enclosures.
6-pole switches are available with either Type 12/3R or Type 4X stainless steel enclosures.

Standards

- UL & CUL listed under file #E4776
- Meets UL98 for enclosed switches
- 4 & 6 Pole switches are suitable for use as service entrance
- Meets NEMA Standard KS-1 for enclosed switches
- Meets NEC 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 parts①
- Tangenital knockouts (Type 1, 4-pole switches)



HNF663S

4 Pole Type VBII Switches②

System	Amp Rating	Indoor Type 1 Catalog Number	List Price $	Ship Wt. (lbs.)	Type 12/3R Industrial Catalog Number	List Price $	Ship Wt. (lbs.)	Horsepower Ratings③ 240V, 2¯, 4W Std.	240V, 2¯, 4W Max.	240V 3¯ Std.	240V 3¯ Max.	480V, 3¯ Std.	480V, 3¯ Max.	600V, 3¯ Std.	600V, 3¯ Max.	250V DC
Fusible 600 Volt AC, 250 Volt DC 4 Pole, 4 Fuse④																
	30	**HF461**		36	**HF461J**		36	3	10	3	7 1/2	5	15	7 1/2	20	5
	60	**HF462**		40	**HF462J**		40	7 1/2	20	7 1/2	15	15	30	15	50	10
	100	**HF463**		43	**HF463J**		43	15	30	15	30	25	60	30	75	20
	200	**HF464**		88	**HF464J**		88	25	50	25	60	50	125	60	150	40
Non-fusible 600 Volt AC, 250 Volt DC 4 Pole																
	30	**HNF461**		32	**HNF461J**		32		10		10		20		30	5
	60	**HNF462**		34	**HNF462J**		34		20		20		50		60	10
	100	**HNF463**		36	**HNF463J**		36		30		40		75		100	20
	200	**HNF464**		78	**HNF464J**		78		50		60		125		150	40

6 Pole Type VBII Switches②

System	Amp Rating	Type 12/3R Industrial Catalog Number	List Price $	Ship Wt. (lbs.)	Type 4X Stainless Steel Catalog Number	List Price $	Ship Wt. (lbs.)	Horsepower Ratings③ 240V 3¯ Std.	240V 3¯ Max.	480V, 3¯ Std.	480V, 3¯ Max.	600V, 3¯ Std.	600V, 3¯ Max.	250V DC
Fusible 600 Volt AC, 250 Volt DC 6 Pole, 6 Fuse④														
	30	**HF661J**		37	**HF661S**		37	3	7 1/2	5	15	7 1/2	20	5
	60	**HF662J**		41	**HF662S**		41	7 1/2	15	15	30	15	50	10
	100	**HF663J**		44	**HF663S**		44	15	30	25	60	30	75	20
	200	**HF664J**		90	**HF664S**		90	25	60	50	125	60	150	40
Non-fusible 600 Volt AC, 250 Volt DC 6 Pole														
	30	**HNF661J**		33	**HNF661S**		33		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

① Lugs are aluminum alloy as standard. Optional copper body lugs are available.
② All 4 & 6 pole VBII switches are suitable for use as service equipment when a neutral is installed or equipment ground kit is properly connected.
③ Dual horsepower ratings: Std. applies when non-time-delay fuses are installed. Max. applies when time delay fuses are installed.
④ 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.

Safety Switch Dimensions (Inches)* & Shipping Weights

Safety Switch Dimensions (Inches)* & Shipping Weights

Catalog Number	Height			Width		Depth			
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G`	Knockout Diagram ① `	Shipping Weight (lbs.)
HFC221J	14.27	17.33		6.65	9.02	5.32	10.46		13
HFC221N	14.26	15.45		6.64	9.01	5.05	10.17	S6	12
HFC221NR	14.39		15.77	6.64	9.01	5.05	10.17	S8	13
HFC221S	14.27	17.33		6.65	9.02	5.32	10.46		13
HFC222J	16.22	19.31		9.17	11.47	5.33	10.46		19
HFC222N	16.26	17.46		9.15	11.53	5.05	10.17	S16	18
HFC222NR	16.26		17.77	9.16	11.53	5.05	10.17	S17	19
HFC222S	16.22	19.31		9.17	11.47	5.33	10.46		19
HFC223J	21.96	23.16		9.65	12.02	5.34	10.46		24
HFC223N	21.95	23.15		9.64	12.01	5.05	10.17	S10	23
HFC223NR	21.95		23.46	9.64	11.97	5.05	10.17	S11	24

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

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

Heavy Duty Safety Switches

Safety Switch Dimensions (Inches)* & Shipping Weights

Catalog Number	Height Box A	With Door B	With Rain Shed C	Width Box D	With Handle E	Depth Box F	With Handle G	Knockout Diagram ①	Shipping Weight (lbs.)
HFC223S	21.96	23.16		9.65	12.02	5.34	10.46		24
HFC224J	29.96	31.07		14.62	16.95	6.63	12.58		48
HFC224N	29.90	31.07		14.62	16.98	6.36	12.33	S12	47
HFC224NR	29.90		31.42	14.61	16.99	6.36	12.33	S13	48
HFC224S	29.96	31.07		14.62	16.95	6.63	12.58		48
HFC225N	56.00	56.57		24.65	26.21	9.23	14.68	S14	153
HFC225NH	45.25	45.82		24.65	26.21	9.23	14.68	S14	129
HFC225NR	56.07		57.19	24.65	26.70	9.23	14.68	S15	162
HFC225NRH	45.31		46.44	24.65	26.70	9.23	14.68	S15	131
HFC226N	56.00	56.57		24.65	26.21	9.23	14.68	S14	155
HFC226NH	45.25	45.82		24.65	26.21	9.23	14.68	S14	133
HFC226NR	56.07		57.19	24.65	26.70	9.23	14.68	S15	159
HFC226NRH	45.31		46.44	24.65	26.70	9.23	14.68	S15	135
HFC227N	66.25	66.82		38.40	39.96	9.24	14.68		360
HFC227NR	66.25		67.36	38.40	39.96	9.24	14.68		362
HFC228N	66.25	66.82		38.40	39.96	9.24	14.68		362
HFC228NR	66.25		67.36	38.40	39.96	9.24	14.68		364
HFC265	56.00	56.57		24.65	26.21	9.23	14.68	S14	149
HFC265J	56.14	56.57		24.82	26.44	9.19	14.64		155
HFC265R	56.07		57.19	24.65	26.70	9.23	14.68	S15	152
HFC265S	56.14	56.57		24.82	26.44	9.19	14.64		153
HFC266	56.00	56.57		24.65	26.21	9.23	14.68	S14	155
HFC266J	56.14	56.57		24.82	26.44	9.19	14.68		156
HFC266R	56.07		57.19	24.65	26.70	9.23	14.68	S15	155
HFC266S	56.14	56.57		24.82	26.44	9.19	14.68		161
HFC321J	14.27	17.33		6.65	9.02	5.32	10.46		14
HFC321N	14.26	15.45		6.64	9.01	5.05	10.17	S6	14
HFC321NR	14.39		15.77	6.64	9.01	5.05	10.17	S8	15
HFC321S	14.27	17.33		6.65	9.02	5.32	10.46		14
HFC322J	16.27	19.31		9.17	11.47	5.33	10.46		20
HFC322N	16.26	17.46		9.15	11.53	5.05	10.17	S16	19
HFC322NR	16.26		17.77	9.16	11.53	5.05	10.17	S17	20
HFC322S	16.27	19.31		9.17	11.47	5.33	10.46		20
HFC323J	21.96	23.16		9.65	12.02	5.34	10.46		25
HFC323N	21.95	23.15		9.64	12.01	5.05	10.17	S10	25
HFC323NR	21.95		23.46	9.64	11.97	5.05	10.17	S11	26
HFC323S	21.96	23.16		9.65	12.02	5.34	10.46		25
HFC324J	29.96	31.07		14.62	16.95	6.63	12.58		49
HFC324N	29.90	31.07		14.62	16.98	6.36	12.33	S12	49
HFC324NR	29.90		31.42	14.61	16.99	6.36	12.33	S13	50
HFC324S	21.96	31.07		14.62	16.95	6.63	12.58		49
HFC325J	56.14	56.57		24.82	26.44	9.19	14.64		160
HFC325N	56.00	56.57		24.65	26.21	9.23	14.68	S14	158
HFC325NH	45.25	45.82		24.65	26.21	9.23	14.68	S14	137
HFC325NR	56.07		57.19	24.65	26.70	9.23	14.68	S15	162
HFC325NRH	45.31		46.44	24.65	26.70	9.23	14.68	S15	138
HFC325S	56.14	56.57		24.82	26.44	9.19	14.64		158
HFC326J	56.14	56.57		24.82	26.44	9.19	14.64		161
HFC326N	56.00	56.57		24.64	26.21	9.23	14.68	S14	161
HFC326NH	45.25	45.82		24.65	26.21	9.23	14.68	S14	139
HFC326NR	56.07		57.19	24.64	26.70	9.23	14.68	S15	165
HFC326NRH	45.31		46.44	24.65	26.70	9.23	14.68	S15	142
HFC326S	56.14	56.57		24.82	26.44	9.19	14.64		161
HFC327J	66.25	66.82		38.40	39.96	9.24	14.68		367
HFC327N	66.25	66.82		38.40	39.96	9.24	14.68		380
HFC327NR	66.25		67.36	38.40	40.25	9.24	14.68		383
HFC327S	66.25	66.82		38.40	39.96	9.24	14.68		367
HFC328N	66.25	66.82		38.40	39.96	9.24	14.68		382
HFC328NR	66.25		67.36	38.40	40.25	9.24	14.68		385
HFC361	14.26	15.45		6.64	9.01	5.05	10.17	S6	14
HFC361J, JW	14.27	17.33		6.65	9.02	5.32	10.46		14
HFC361L	16.26	17.46		9.15	11.53	5.05	10.17	S16	19
HFC361N	14.26	15.45		6.64	9.01	5.05	10.17	S6	14
HFC361NR	14.39		15.77	6.64	9.01	5.05	10.17	S8	15
HFC361R	14.39		15.77	6.64	9.01	5.05	10.17	S8	15
HFC361RL	16.26		17.77	9.16	11.53	5.05	10.17	S17	20
HFC361S, SW	14.27	17.33		6.65	9.02	5.32	10.46		15
HFC362	16.26	17.46		9.15	11.53	5.05	10.17	S16	19

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

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

Safety Switch Dimensions (Inches)* & Shipping Weights

Catalog Number	Height Box A	With Door B	With Rain Shed C	Width Box D	With Handle E	Depth Box F	With Handle G	Knockout Diagram ①	Shipping Weight (lbs.)
HFC362J, JW	16.27	19.31		9.17	11.47	5.33	10.46		20
HFC362N	16.26	17.46		9.15	11.53	5.05	10.17	S16	19
HFC362NR	16.26		17.77	9.16	11.53	5.05	10.17	S17	20
HFC362R	16.26		17.77	9.16	11.53	5.05	10.17	S17	20
HFC362RL	21.95		23.46	9.64	11.97	5.05	10.17	S11	25
HFC362S, SW	16.27	19.31		9.17	11.47	5.33	10.46		20
HFC363	21.95	23.15		9.64	12.01	5.05	10.17	S10	24
HFC363J, JW	21.96	23.16		9.65	12.02	5.34	10.46		25
HFC363N	21.95	23.15		9.64	12.01	5.05	10.17	S10	25
HFC363NR	21.95		23.46	9.64	11.97	5.05	10.17	S11	26
HFC363R	21.95		23.46	9.64	11.97	5.05	10.17	S11	25
HFC363S	21.96	23.16		9.65	12.02	5.34	10.46		25
HFC364	29.90	31.07		14.62	16.98	6.36	12.33	S12	48
HFC364J, JW	29.96	31.07		14.62	16.95	6.63	12.58		49
HFC364N	29.90	31.07		14.62	16.98	6.36	12.33	S12	49
HFC364NR	29.90		31.42	14.61	16.99	6.36	12.33	S13	48
HFC364R	29.90		31.42	14.61	16.99	6.36	12.33	S13	49
HFC364S, SW	29.96	31.07		14.62	16.95	6.63	12.58		49
HFC365	56.00	56.57		24.65	26.21	9.23	14.68	S14	154
HFC365H	45.25	45.82		24.65	26.21	9.23	14.68	S14	136
HFC365J, JW	56.14	56.57		24.82	26.44	9.19	14.64		160
HFC365N	56.00	56.57		24.65	26.21	9.23	14.68	S14	158
HFC365NR	56.07		57.19	24.65	26.70	9.23	14.68	S15	162
HFC365R	56.07		57.19	24.65	26.70	9.23	14.68	S15	157
HFC365RH	45.25	45.82		24.65	26.70	9.23	14.68	S15	137
HFC365S, SW	56.14	56.57		24.82	26.44	9.19	14.64		158
HFC366	56.00	56.57		24.64	26.21	9.23	14.68	S14	157
HFC366H	45.25	45.82		24.65	26.21	9.23	14.68	S14	138
HFC366J, JW	56.14	56.57		24.82	26.44	9.19	14.64		161
HFC366N	56.00	56.57		24.65	26.21	9.23	14.68	S14	161
HFC366NR	56.07		57.19	24.65	26.70	9.23	14.68	S15	165
HFC366R	56.07		57.19	24.65	26.70	9.23	14.68	S15	161
HFC366RH	45.25	45.82		24.65	26.70	9.23	14.68	S15	141
HFC366S	56.14	56.57		24.82	26.44	9.19	14.64		161
HFC367	66.25	66.82		38.40	39.96	9.24	14.68		380
HFC367J	66.25	66.82		38.40	39.96	9.24	14.68		380
HFC367N	66.25	66.82		38.40	39.96	9.24	14.68		382
HFC367NR	66.25		67.36	38.40	40.25	9.24	14.68		386
HFC367R	66.25		67.36	38.40	40.25	9.24	14.68		382
HFC367S	66.25	66.82		38.40	39.96	9.24	14.68		380
HFC368, J, S	66.25	66.82		38.40	39.96	9.24	14.68		383
HFC368N	66.25	66.82		38.40	39.96	9.24	14.68		385
HFC368NR	66.25		67.36	38.40	40.25	9.24	14.68		388
HFC368R	66.25		67.36	38.40	40.25	9.24	14.68		385
HNFC265	44.00	44.57		24.65	26.21	9.23	14.68	S14	109
HNFC265J	44.14	44.57		24.82	26.44	9.19	14.64		119
HNFC265R	44.07		45.19	24.65	26.70	9.23	14.68	S15	118
HNFC265S	44.14	44.57		24.82	26.44	9.19	14.64		118
HNFC266	44.00	44.57		24.65	26.21	9.23	14.68	S14	111
HNFC266J	44.14	44.57		24.82	26.44	9.19	14.64		115
HNFC266R	44.07		45.19	24.64	26.70	9.23	14.68	S15	120
HNFC266S	44.14	44.57		24.82	26.44	9.19	14.64		115
HNFC361	11.11	12.31		6.64	9.01	5.05	10.17	S7	12
HNFC361J, JW	11.12	14.14		6.65	9.02	5.56	10.46		13
HNFC361R	11.11		12.63	6.64	9.01	5.05	10.17	S9	13
HNFC361RL	16.26		17.77	9.16	11.53	5.05	10.17	S17	20
HNFC361S, SW	11.12	14.14		6.65	9.02	5.56	10.46		13
HNFC362	16.26	17.46		9.15	11.53	5.05	10.17	S16	18
HNFC362J, JW	16.27	17.46		9.17	11.47	5.33	10.46		19
HNFC362R	16.26		17.77	9.16	11.53	5.05	10.17	S17	19
HNFC362RL	21.95		23.46	9.64	11.97	5.05	10.17	S11	24
HNFC362S, SW	16.27	17.46		9.17	11.47	5.33	10.46		19
HNFC363	21.95	23.15		9.64	12.01	5.05	10.17	S10	23
HNFC363J, JW	21.96	23.16		9.65	12.02	5.34	10.46		24
HNFC363R	21.95		23.46	9.64	11.97	5.05	10.17	S11	24
HNFC363S, SW	21.96	23.16		9.65	12.02	5.34	10.46		24
HNFC364	29.90	31.07		14.62	16.98	6.36	12.33	S12	46
HNFC364J, JW	29.96	31.07		14.62	16.95	6.63	12.58		47
HNFC364R	29.90		31.42	14.61	16.99	6.36	12.33	S13	47
HNFC364S, SW	29.96	31.07		14.62	16.95	6.63	12.58		47

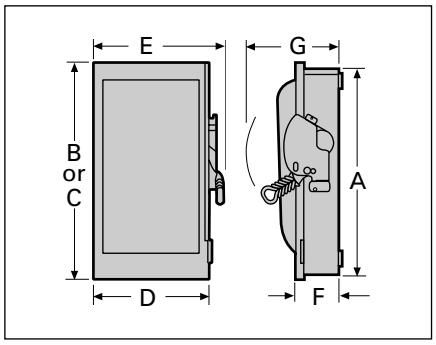
***For inches / millimeters conversion, multiply inches by 25.4.**

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

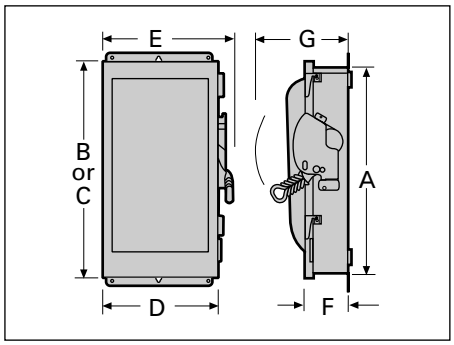
Safety Switch Dimensions (Inches)* & Shipping Weights

Catalog Number	Height Box A	With Door B	With Rain Shed C	Width Box D	With Handle E	Depth Box F	With Handle G	Knockout Diagram ①	Shipping Weight (lbs.)
HNFC365	44.00	44.57		24.65	26.21	9.23	14.68	S14	114
HNFC365J, JW	44.14	44.57		24.82	26.44	9.19	14.64		114
HNFC365R	44.07		45.19	24.65	26.95	9.23	14.68	S15	118
HNFC365S, SW	44.14	44.57		24.82	26.44	9.19	14.64		118
HNFC366	44.00	44.57		24.65	26.21	9.23	14.68	S14	116
HNFC366J, S	44.14	44.57		24.82	26.44	9.19	14.64		115
HNFC366R	44.07		45.19	24.65	26.95	9.23	14.68	S15	120
HNFC367, J	54.25	54.82		38.40	39.96	9.24	14.68		302
HNFC367R	54.25		55.36	38.40	40.25	9.24	14.68		304
HNFC367S	54.25	54.82		38.40	39.96	9.24	14.68		302
HNFC368, J	54.25	54.82		38.40	39.96	9.24	14.68		305
HNFC368R	54.25	54.82		38.40	40.25	9.24	14.68		307

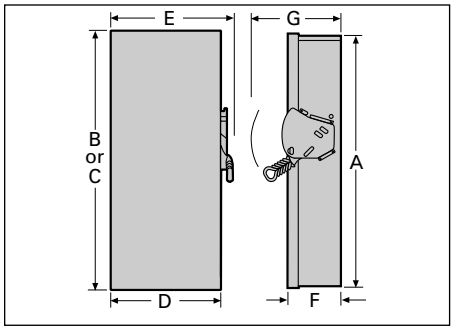
Type 1 or 3R
30-200A HD Type VBII



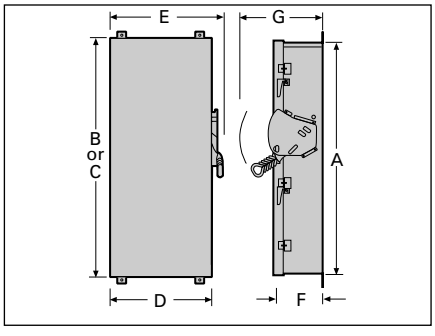
Type 4/4X or 12
30-200A HD Type VBII



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



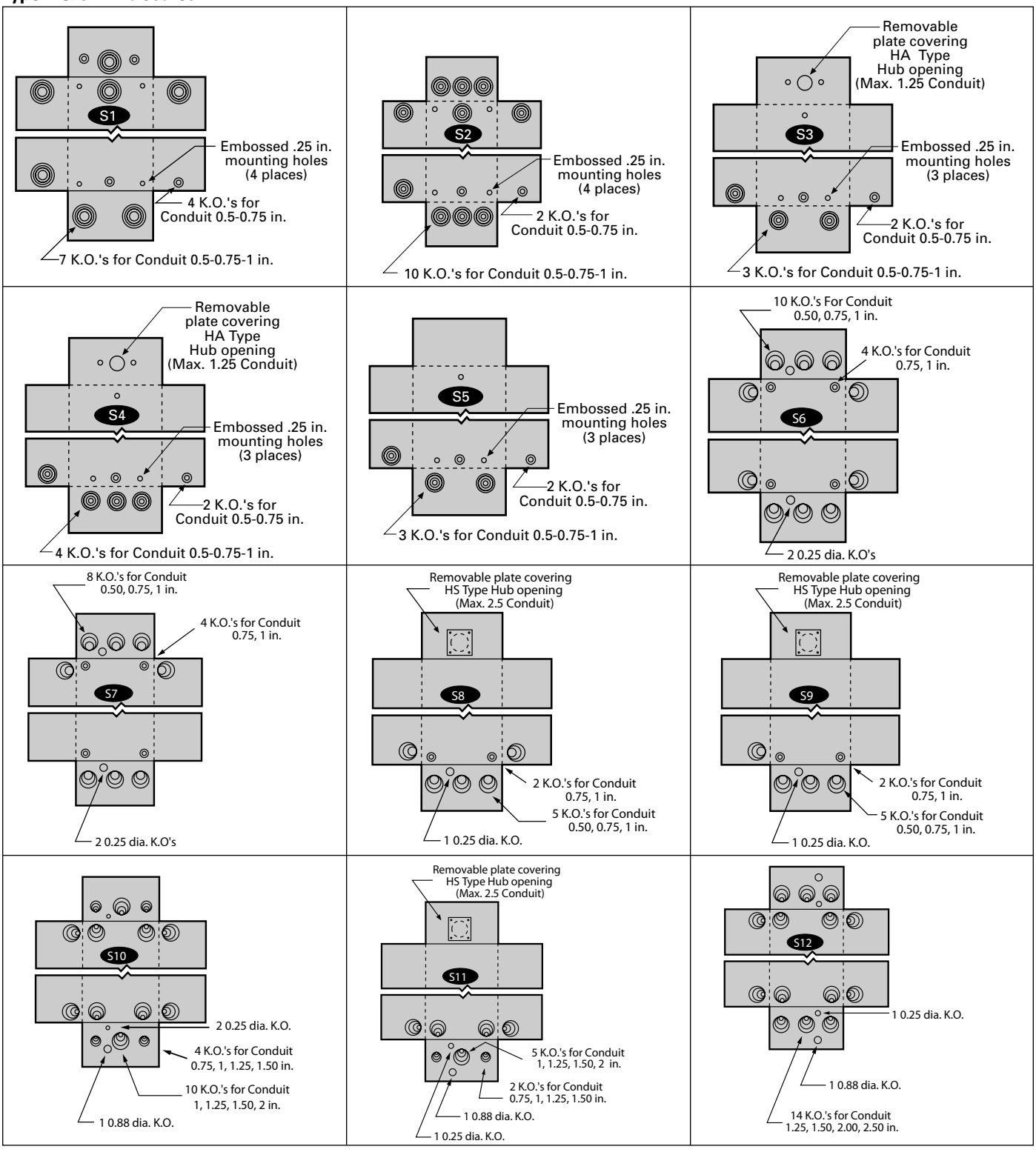
Type 4/4X or 12
400-1200A HD Type VBII



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

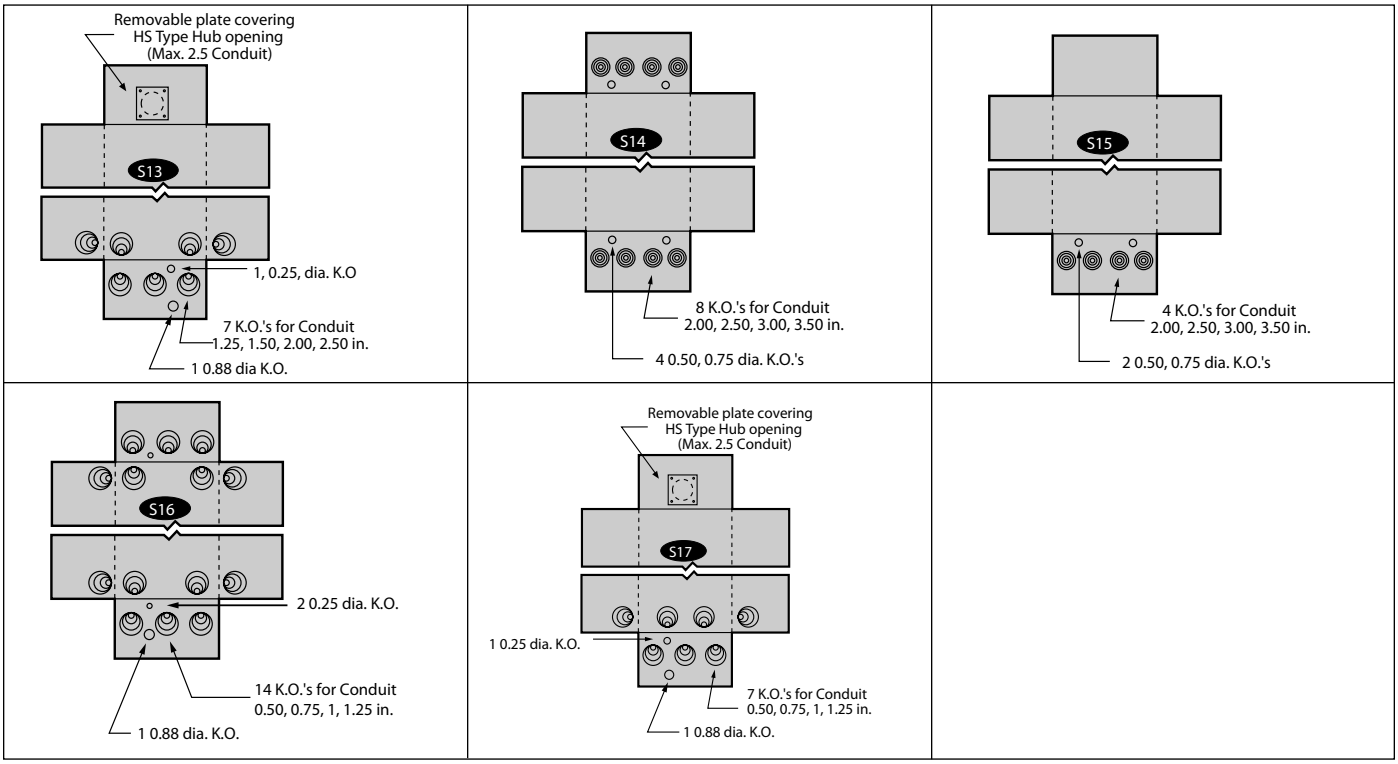
① Knocks not provided on Type 4 / 4X and 12 or in 800 & 1200A switches.

Type 1 & 3R Enclosures



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

Type 1 & 3R Enclosures



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

Special Applications Safety Switches Dimension Drawings

4-Pole & 6-Pole

4 & 6 Pole Safety Switch Dimensions Inches (mm)

Catalog Number	Enclosure			Mounting		
	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

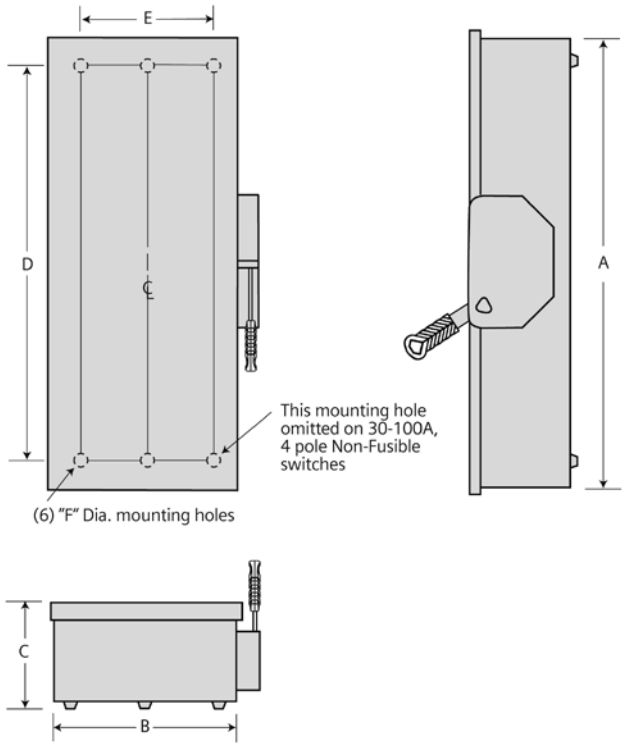
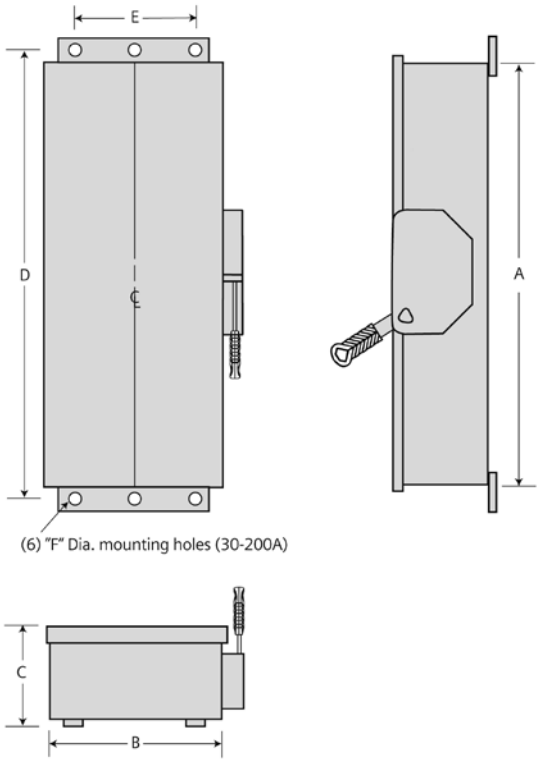


Figure 2 : Type 12/3R and 4X



Special Application Safety Switches Dimension Drawings

Double Throw

Description

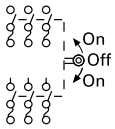
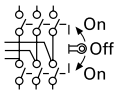
Double throw switches are intended to transfer loads from one power source to another. All 2 & 3 pole fusable double throw switches are suitable for use as service equipment. All are CSA Listed. Switches are rated for use on systems up to 10,000A when protected with Class H fuses or 200,000A when protected with Class R or Class T fuses②. 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.

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

Fuse Capabilities of Fusible Switches

Amp Rating	Fuse Type			
	H	R	T	J
30 & 60A, 240V	Std	Yes (kit)	No	No
30 & 60A, 600V	Std	Yes (kit)	No	Yes③
100 & 200A	Std	Yes (kit)	Yes (kit)	Yes③
400 & 600A	No	No	Yes③`	Std④

Double Throw Switches

System	Voltage	Number of Poles	Amps	Type 1 - Indoor Catalog Number	Type 3R - Outdoor① Catalog Number
Heavy Duty Fusible (30-200A) with Class H fuse spacings ②					
	240 Volt AC or 250 Volt DC	3	30 60 100 200	**DTFC321** **DTFC322** **DTFC323** **DTFC324**	**DTFC321R**
	600 Volt AC, 250 Volt DC	3	30 60 100 200	**DTFC361** **DTFC362** **DTFC363** **DTFC364**	
Heavy Duty Non-Fusible ②					
	240 Volt AC or 250 Volt DC	2	30 60 100 200 400	**DTNFC221** **DTNFC222** **DTNFC223** **DTNFC224** **DTNFC225**	 **DTNFC224R** **DTNFC225R**
		3	30 60 100 200 400 600	**DTNFC321** **DTNFC322** **DTNFC323** **DTNFC324** **DTNFC325** **DTNFC326**	 **DTNFC323R** **DTNFC324R**
	600 Volt AC, 250 Volt DC	3	30 60 100 200 400 600	**DTNFC361** **DTNFC362** **DTNFC363** **DTNFC364** **DTNFC365** **DTNFC366**	**DTNFC361R** **DTNFC362R** **DTNFC363R** **DTNFC364R** **DTNFC365R** **DTNFC366R**

① Use HS Type hubs for 30-200A switches. 400A and larger switches do not have hub provisions.
② All Heavy Duty double throw switches with a catalog 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.
③ Move load base.

Double Throw

Accessories, Lug Data and Horsepower Ratings

Accessories 2 and 3 Pole Switches Only

Description		Catalog Number
Neutral Kits	30A 60 & 100A 200A 400 & 600A	**HND61** **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)④	30-200A with (1) NO & (1) NC contact 30-200A with (2) NO & (2) NC contacts 400-1200A with (1) NO & (1) NC contact 400-1200A with (2) NO & (2) NC contacts	**HA161234** **HA261234** **HA165678** **HA265678**
Class R Fuse Clip Kits (two required per switch)	30A, 240V Kit 30A, 600V Kit/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 (30-200A)	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		125	125	125	50
600		125			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
400-800		125	250	350	50

④ One aux. required for normal and one required for emergency switch line base.

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

30-200A 2, 3 Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) New VBII Design Line, Load and Neutral
30	(1) #146
60	(1) #142
100	(1) #141/0 AWG
200	(1) #6250 kcmil

400-600A 2 & 3 Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) New VBII Design Line, Load and Neutral
400	(1) 1/0 AWG750 kcmil or (2) 1/0 AWG250 kcmil
600	(2) 1/0 AWG500 kcmil

Replacement Parts 2 and 3 Pole Switches Only

Type 1, 3R & 12 Replacement Handle	30-200A	**HHD61234**
Type 4X Replacement Handle	30-200A	**HHD61234S**

VBII Design Double Throw Dimensions Inches (mm)

VBII Design Double Throw Dimensions Inches (mm)

Catalog Number	Enclosure			Mounting		
	A	B	C	D	E	F
Figure 1 (30-600A Type 1 & 3R)						
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, DTFC323R, DTFC363, DTFC363R	36.44 (926)	12.18 (309)	6.09 (155)	28.11 (714)	8.00 (203)	0.268 (7)
DTNFC224, 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)
DTFC325, DTFC326	73.54	28.22 (717)	9.44 (240)	65.50	16.00 (406)	0.56 (14)
DTNFC225, DTNFC225R, DTNFC325, DTNFC365, DTNFC365R	57.71	28.22 (717)	9.44 (240)	49.75(1264)	16.00 (406)	0.56 (14)
DTNFC326, DTNFC366, DTNFC366R	58.50(1484)	28.22 (717)	9.44 (240)	49.75(1264)	16.00 (406)	0.56 (14)

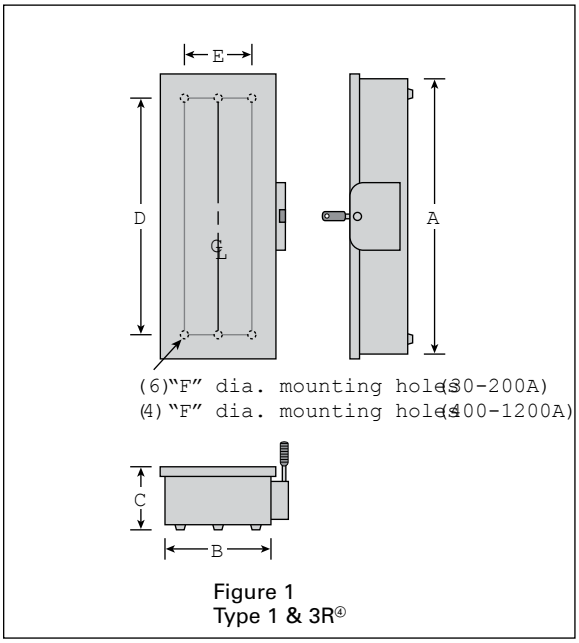


Figure 1
Type 1 & 3R④

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

① (3) Mounting holes supplied (1 at top).

② (4) Mounting holes provided.

③ These switches are not Type VBII design.

④ Drip hood not shown but provided on Type 3R enclosures.

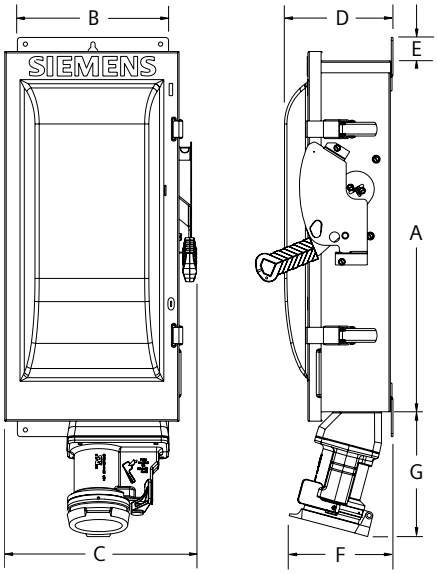
Special Application / Interlocked Receptacle Switches

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.

Description

Type 12 and 4/4X Receptacle Safety Switches are available with 3-phase, 4-wire grounded type Crouse-Hinds Arktite™ prewired and mounted receptacles 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 Swithces

Ampere Rating⑤	Type 12⑥ Catalog Number	Type 4/4X⑦ Catalog Number	Shipping Weight Std. Pkg.④	Accepts Crouse-Hinds Arktite① Plug Catalog Number
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

VBII Interlocked Receptacle Switches

Ampere Rating	Dimensions (Inches) A	B	C	D	E	F	G
Cr-H Type Fusible (240 & 600V)							
30	14.27	7.42	9.02	6.22	1.52	6.1	6.0
60	16.27	9.17	11.47	6.34	1.52	6.4	7.4
100	21.96	9.65	12.02	6.80	1.52	6.5	7.6
Cr-H Type Non-Fusible (600V max)							
30	11.12	7.42	9.02	6.22	1.52	6.1	6.0
60	16.27	9.17	11.47	6.34	1.52	6.4	7.4
100	21.96	9.65	12.02	6.80	1.52	6.5	7.6

① Arktite™ is a registered trademark of the Crouse-Hinds Company. Plugs are not sold or supplied by Siemens.
④ In pounds (lb).
⑤ Ampere rating of both switch and receptacle.
⑥ Also rated Type 3R/3S
⑦ Enclosure is constructed of Type 304 stainless steel

Heavy Duty Safety Switch Accessories

HR612

Class R Fuse Clip Kits

All 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 switch).

Class R Fuse Clip Kits①

Catalog Number	Description
HR21	30A, 240V Kit (HD only)
HR612	30A, 600V Kit/60A, 240V Kit
HR62	60A, 600V Kit
HR63	100A Kit
HR64	200A Kit
HR656	400A/600A Kit

Class J Fuse

All 30-600A, 600V 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 200-600A, 240V fusible Heavy Duty switches can also be field converted to accept Class J fuses.

HT63

Class T Fuse Adapter Kits

All 100-1200A Heavy Duty Switches are field convertible to accept Class T fuses. 400-600A 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 Kits①

Catalog Number	Description
HT23	100A, 240V Kit
HT63	100A, 600V Kit
HT24	200A, 240V Kit
HT64	200A, 600V Kit
TFAK72	800A, 240V Kit
TFAK75	800A, 600V Kit
TFAK82	1200A, 240V Kit

Neutral Kits

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

Neutral Kits②

Switch Ampere Rating	Kit Catalog Number
30	**HNC612**
60, 100	**HNC623**
200	**HNC64**
400 & 600	**HNC656**
800 & 1200 (VBII)	**HNC678**

HNC612

HNC264

200% Neutral Kits

UL listed 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.

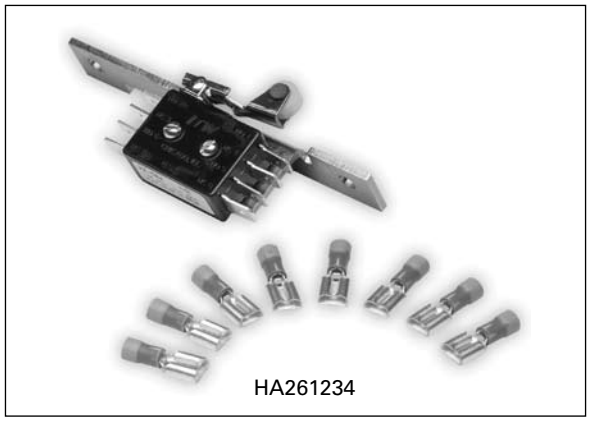
200% Neutral Kits③

Switch Ampere Rating	Kit Catalog Number	Wire Range Line & Load Lugs (Cu/Al)
100	**HNC263**	(2) #14-1/0 AWG
200	**HNC264**	(2) #6 AWG-300 Kcmil
400	**HNC656**	(2) 1/0 AWG-750 Kcmil or (4) 1/0 AWG-250 Kcmil
600	**HNC678**	(4) 1/0 AWG-750 Kcmil

①One kit per pole required.
②Applies to Visible Blade Type VBII Switches only.
③For Visible Blade Type VBII Switches only.

Heavy Duty Safety Switch Accessories

HA161234



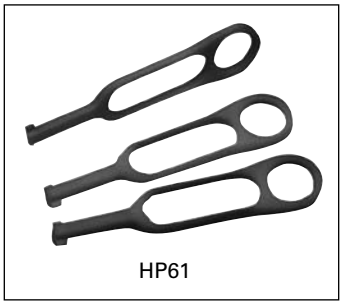
HA261234

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.

Auxillary Contacts①

Switch Ampere Rating	Aux. Switch Catalog Number	Kit Ampere Rating			Kit Horsepower Rating		
		125V AC Max.	250V AC Max.	28V DC Max.	125V AC Max.	250V AC Max.	28V DC Max.
With 1 NO & 1 NC Isolated Contacts							
30-200	**HA161234**	10	10	—	1/2	3/4	—
400-1200	**HA165678**	10	10	—	1/2	3/4	—
With 2 NO & 2 NC Isolated Contacts							
30-200	**HA261234**	10	10	7	1/2	3/4	—
400-1200	**HA265678**	10	10	7	1/2	3/4	—
Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts							
30-200	**HA361234**	10	10	—	1/2	3/4	—
400-1200	**HA365678**	10	10	—	1/2	3/4	—



HP61

Fuse Puller Kits

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

Fuse Puller Kits①

Switch Ampere	Fuse Puller Kit
30	**HP61**
60	**HP62▲**
100	**HP63▲**

▲ Built to order. Allow 7 - 9 weeks for delivery.

① Applies to Visible Blade Type VBII Switches only.

Note: For touch-up spray paint (16 oz. can) order catalog number XTP060.

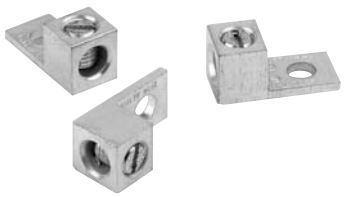
Heavy Duty Safety Switch Accessories

Copper Lug Kits

Heavy duty switches are UL and CSA approved to accept field installed copper lug kits.

Copper Lug Kits

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



HLC612

HG261234

Equipment Ground Kits

Equipment Ground Lug Kits are available for all 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 Switches.

Equipment Ground Kits①

Switch Ampere Rating	Catalog Number	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30–200 HD	**HG61234**	2	#14-4 AWG
400 & 600	**HG656**	4	#6 AWG-250 Kcmil
800–1200	**HG678**	8	#6 AWG-250 Kcmil

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 Kits②

Switch Ampere Rating	Catalog Number	Number of Terminals		Wire Range Per Terminal (Cu/Al)
		Isolated	Grounded	
30–200	**HG261234**	2	2	#14-4 AWG
400–600	**HG2656**	4	4	#6 AWG-250 Kcmil

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

① Applies to Visible Blade Type VBII Switches only.

② For Visible Blade Type VBII Switches only.

Heavy Duty Hub and Lug Data

SSH150

ECHV300

ECHS200

SL0420

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.

Hubs

Conduit Size (inches)	Catalog Number	Used On
Type 3R①		
3/4 1 1 1/4 1 1/2 2 2 1/2	**ECHS075** **ECHS100** **ECHS125** **ECHS150** **ECHS200** **ECHS250**	30–200A
2 1/2 3 3 1/2 4	**ECHV250** **ECHV300** **ECHV350** **ECHV400**	400–1200A
Type 4/4X②		
3/4 1 1 1/4 1 1/2 2	**SSH075** **SSH100** **SSH125** **SSH150** **SSH200**	30–200A

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.

Compression Lug Mounting & Neutral Barrier Kit

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.

Compression Lug Mounting③ and Neutral Barrier Kits

Switch Ampere Rating	Catalog Number	Kit Description
30	**HCL612**	Neutral Barrier Kit
60 & 100	**HCL623**	Neutral Barrier Kit
400④	**HCL65**	1 Pole, Compression Lug Mounting Kit
400 & 600⑤	**HCL65678**	1 Pole, Compression Lug Mounting Kit
800 & 1200⑤	**HCL65678**	1 Pole, Compression Lug Mounting Kit

Wire Grips (Lugs)

30 & 60A Switches are suitable for use with 60° or 75°C wire. 100–1200A are suitable for use with 75°C rated wire.

Multiple Padlock Accessory

A tamper-proof device to provide for multiple padlocking to meet OSHA or plant requirements. Accepts up to 6 padlocks. Catalog number SL0420. Standard Carton-12.

Kirk-Key Interlocks

Kirk-Key Interlocks can be factory-installed only on Type VBII Heavy Duty Safety Switches.
Interlocks are used to prevent the authorized operator from making an unauthorized operation. The interlock system is a simple method of applying key interlocks to safety switches so as to require operation in a predetermined sequence.

Before consulting the factory, the following information is required:

- User name and address
- Key number from lock assemblies on any existing locks to be interlocked with
- Complete locking scheme.

Wire Ranges (Line, Load and Standard Neutral)

Switch Ampere Rating	Wire Range with Wire Bending Space Per NEC Table 373-6	Wire Grip Range
30HD	#12-6 AWG (Al) or #14-6 AWG (Cu/Al)	#14-2 AWG (Cu/Al)
60	#12-3 AWG (Al) or #14-3 AWG (Cu/Al)	#14-2 AWG (Cu/Al)
100	#14-1/0 AWG (Cu/Al)	#14-1/0 AWG (Cu/Al)
200	#6 AWG-300 Kcmil (Cu/Al)	#6 AWG-300 Kcmil (Cu/Al)
400⑦	1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)	(1) 1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)
600⑦	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 -250 Kcmil (Cu/Al)	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 AWG-250 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

① Hubs suitable for 3R Switches.
② Also suitable for Type 12 applications.
③ Neutral Barrier kits are required on 30-100A switch only and only with 1-Phase / 3W or 3-Phase / 4W loads. Compression Lugs mounting kits are required on 400-1200A switches only.

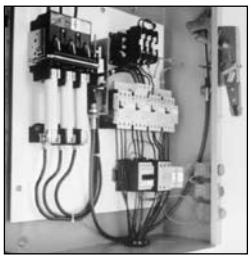
④ Provides mounting for a single line or load lug.
⑤ Provides mounting for (2) compression lugs per phase on line or load.

⑥ Line lugs are UL approved to accept #14-6 CU/Al cable.
⑦ Max. wire size for height reduced switches is 500 kcmil (Cu/Al).
⑨ Consult factory for delivery

Siemens MCS Disconnect Switches that go the distance . . . in durability, performance and installation flexibility

30 through 200 Amp Type MCS Disconnect Switches from Siemens go the distance in durability, performance and installation flexibility. They deliver unmatched advantages in reliability and ease of installation. Quick make, quick break mechanism insures proper switch operation regardless of handle speed.

Our integral switch and over-center toggle mechanism construction simplifies mounting while insuring proper alignment of mechanism and contacts. Rugged construction - with a short circuit current rating of 200 kA at 600 volts maximum AC when fused with Class J or R fuses - meets the most stringent industry standards set forth by the automotive, petrochemical, and pulp and paper industries.



Type MCS Disconnect Switch with Variable depth Max-Flex™ handle operator

Compact size and three handle operator options allow you to locate the switch where you need it. Use the fixed-depth flange-mounted handle operator for standard installations. When an application requires through-the-door mounting, select our rotary handle operator. Our exclusive Max-Flex™ handle operator allows for variable width, height and depth switch installations, as well as remote location of the handle if required.

With visible blade contacts for ease of inspection and front removable fuse clips and lugs, Siemens Type MCS Disconnect Switches make day-to-day operation and maintenance quick and easy.

UL Recognized and CSA Certified, they are available with Class H, J and R fuse kits – for a wide range of fused, non-fused, and over-fusing options. Field installable auxiliary switches are available for 30 through 200 ampere switches, as well as field addable fuse ejectors on 100 and 200 ampere switches.

Fixed-Depth, Flange-Mounted Handle Operator

This economical handle operator is ruggedly constructed for many years of trouble-free use. Designed for applications where variable width, height, and depth of installation are not required. Available in left and right-handed door mounts.

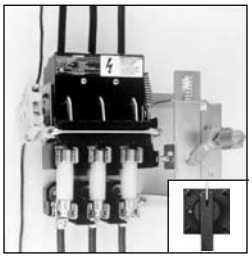
Rotary Handle Operator

Our rotary through-the-door mounted handle operator is the economical way to simplify panel layout and installation. It can be located at virtually any location within the enclosure and is available with a variable depth shaft. Shafts and handles are interchangeable with those used of Siemens Sentron™ Series molded case circuit breakers.

Siemens Max-Flex™ Handle Operator

The Siemens Max-Flex provides virtually unlimited flexibility for mounting disconnect switches.

A flexible cable connecting a flange-mounted operating handle to the switch operator eliminates the fixed linkages of conventional handle operators. The Max-Flex handle operator offers variable width, variable height and variable depth installations. You can mount the switch whenever it best suits your design considerations, without being concerned with its proximity to the handle.



Type MCS Disconnect Switch with rotary handle operator

The Max-Flex handle operator cuts installation time and labour costs. There is no need for meticulous measurements to assure mounting in a precise location. And unlike conventional linkages, the cable cannot shift out of alignment over time, so time-consuming adjustments are eliminated. Also available in left and right-handed door mounts.

When it comes to flexibility, ease of installation and reliability, you can see why the Max-Flex handle operator is in a class by itself.

Disconnect Devices Used on Motor Circuit

Disconnect devices should be applied in accordance with applicable sections of C.S.A. In general, disconnect devices for motor circuits shall have a continuous Ampere rating of not less than 115% of full load current of the motor as stated in Section 430-110.

Motor Control Disconnect Switch

Type MCS (30-200A)

Basic Switches

Ampere Rating	Maximum Voltage Rating	Catalog Number Right Hand	Catalog Number Left Hand	Max. Fault Current (Amp③)	Maximum Horsepower Rating, 3 Phase						250 Volts DC (max.)
					240 Volts AC		480 Volts AC		600 Volts AC		
					Standard	Time Delay	Standard	Time Delay	Standard	Time Delay	
30	600	**MCS603R**	**MCS603L**	**200,000**	3	7½	5	15	7½	20	5
60	600	**MCS606R**	**MCS606L**	**200,000**	7½	15	15	30	15	50	10
100	600	**MCS610R**	**MCS610L**	**200,000**	15	30	25	60	30	75	20
200	600	**MCS620R**	**MCS620L**	**200,000**	25	60	50	125	60	150	40

Fusible and Non-Fusible Kits

Basic Switch Rating	Switch Catalog Number	Kit Description	No Fuse	For Class H	For Class J	For Class R	Lug Wire Size
			Catalog Number① (Standard)	Catalog Number①②	Catalog Number①	Catalog Number①	
30 Amp	**MCS603R** or **MCS603L**	No Fuse 30A, 250V 30A, 600V 60A, 250V 60A, 600V	**TMK606** — — — —	— **FCK203** **FCK206** **FCK206** **FCK606**	— — **FCJK603** — **FCJK606**	— **FCRK203** **FCRK206** **FCRK206** **FCRK606**	#14 to #4 AWG Cu/Al
60 Amp	**MCS606R** or **MCS606L**	No Fuse 60A, 250V 60A, 600V 100A, 250V 100A, 600V	**TMK606** — — — —	— **FCK206** **FCK606** **OFCK661** **OFCK661**	— — **FCJK606** **OFCK661** **OFCK661**	— **FCRK206** **FCRK606** ②* ②*	#14 to #4 AWG Cu/Al
100 Amp	**MCS610R** or **MCS610L**	No Fuse 100A, 250V 100A, 600V 200A, 250V 200A, 600V	**TMK610** — — — —	— **FCK610** **FCK610** **OFCK620** **OFCK620**	— **FCK610** **FCK610** **OFCK620** **OFCK620**	— ②* ②* ②** ②**	#14 to #2/0 AWG Cu/Al
200 Amp	**MCS620R** or **MCS620L**	No Fuse 200A, 250V 200A, 600V	**TMK620** — —	— **FCK620** **FCK620**	— **FCK620** **FCK620**	— ②** ②**	#6 to 300 kcmil Cu/Al

① For "Copper only" lug kit, add suffix "C" to catalog number.
② To order Class R fuse kit, you must order Class H fuse kit and corresponding Class R fuse conversion kit from the table below.
③ Max fault current (200,000) applies only when switch is used in conjunction with 200,000 AIR (class R & J) rated fuses.

Class R Fuse Conversion Kits

Fuse Clip Rating	Catalog Number
100A, 600V	**SSRK33***
200A, 600V	**SSRK34****
400A, 600V	**SSRK35*****

Fuse Ejector Kits

Switch Catalog Number	Fuse Ejector Kit Catalog Number
MCS610 **MCS620**	**FE100** **FE200**

④ It is recomended practice that all fuses installed in each switch be of the same brand, class, type and rating.

Type MCS (30-200A)

Disconnect Switch Handle Operators
Fixed Depth, Flange Mounted, Types 1, 3, 3R, 12①

Switch	Handle Only	Switch Operator Only
Catalog Number	Catalog Number	Catalog Number
MCS603R MCS603L	FDH10 FDH10	FDS06R FDS06L
MCS606R MCS606L	FDH10 FDH10	FDS06R FDS06L
MCS610R MCS610L	FDH10 FDH10	FDS06R FDS06L
MCS620R MCS620L	FDH20 FDH20	FDS20R FDS20L

Variable Depth, Flange Mounted Max-Flex, Types 1, 3, 3R, 12②

Switch	Handle Only	Switch Operator Only	Cable Only③
Catalog Number	Catalog Number	Catalog Number	Catalog Number
MCS603R MCS603L	FHOHS FHOHS	FHOS06R FHOS06L	FHOEC036 FHOEC036
MCS606R MCS606L	FHOHS FHOHS	FHOS06R FHOS06L	FHOEC036 FHOEC036
MCS610R MCS610L	FHOHS FHOHS	FHOS06R FHOS06L	FHOEC036 FHOEC036
MCS620R MCS620L	FHOHS FHOHS	FHOS20R FHOS20L	FHOJC036 FHOJC036

Variable Depth Rotary, Through-The-Door-Mounted, Types 1, 12④⑤

Switch	Handle Only	Switch Operator Only	Shaft Only Variable Depth
Catalog Number	Catalog Number	Catalog Number	Catalog Number
MCS603R	CRHOH	RHOS06	RHOSVD
MCS606R	CRHOH	RHOS06	RHOSVD
MCS610R	CRHOH	RHOS06	RHOSVD
MCS620R	CRHOH	RHOS20	RHOSVD

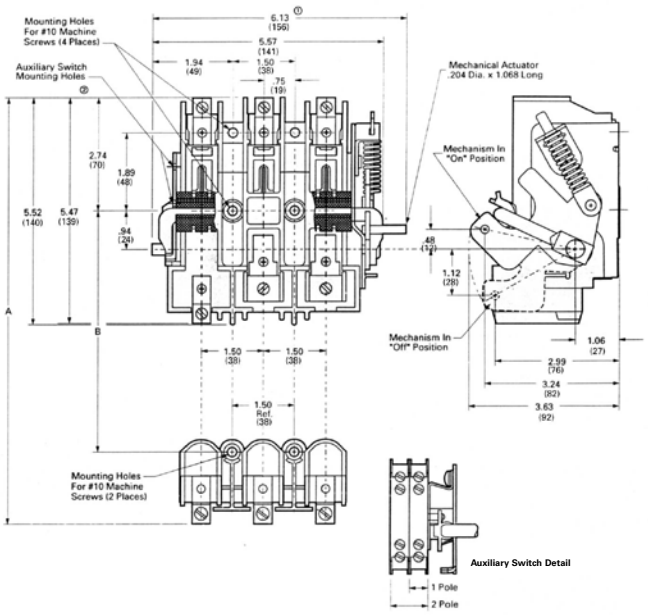
Auxiliary Switch Kits

Switch	Contact Arrangement	
	1 N.O./1 N.C.	2 N.O./2 N.C.
Catalog Number	Catalog Number	Catalog Number
MCS603R MCS603L	MCSAKR136 MCSAKL136	MCSAKR236 MCSAKL236
MCS606R MCS606L	MCSAKR136 MCSAKL136	MCSAKR236 MCSAKL236
MCS610R MCS610L	MCSAK116 MCSAK116	MCSAK216 MCSAK216
MCS620R MCS620L	MCSAK126 MCSAK126	MCSAK226 MCSAK226

①For Type 4 and 4X applications, order handle only catalog number FDH104/FDH204.
②For Type 4 and 4X applications, order handle only catalog number FHOHS4.
③Standard cable length is 36-inches. Alternate cable lengths are available by special order.
④For Type 4 and 4X applications, order handle only catalog number RHOH4.
⑤For Type 3 and 3R applications, order handle only catalog number RHOH.

Motor Control Disconnect Switch

Outline Drawing 30/60A Switch Mechanism

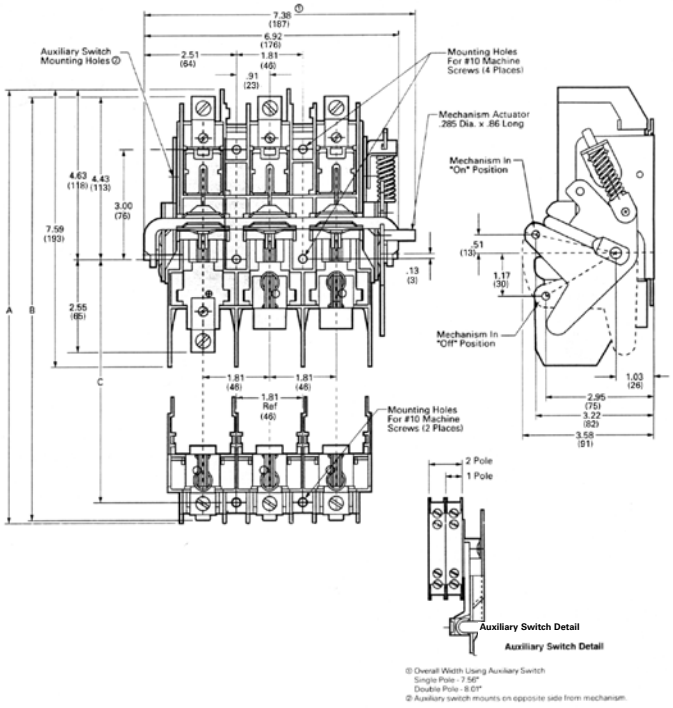


Dimensional Data for Fused Applications inches (mm)

Basic Switch Catalog Number	Size	A	B	Fuse Class
MCS603	30A/240V	8.11 (206)	3.63 (92)	H, K, R
	30A/600V	10.11 (257)	5.63 (143)	H, K, R
	30A/600V	8.48 (215)	4.00 (102)	J
MCS606	60A/240V	7.86 (200)	3.38 (86)	H, K, R
	60A/600V	10.36 (263)	5.88 (149)	H, K, R
	60A/600V	8.36 (212)	3.88 (99)	J

① Overall Width Using Auxiliary Switch
Single Pole - 7.18" (182)
Double Pole - 7.63" (194)
②–Auxiliary switch mounts on opposite side from mechanism.

Outline Drawing 100A Switch Mechanism



Dimensional Data for Fused Applications inches (mm)

Basic Switch Catalog Number	Size	A	B	C	Fuse Class
MCS610	100A/240V	11.85 (301)	11.41 (290)	6.66 (169)	H, K, R
	100A/600V	13.85 (352)	13.41 (341)	8.66 (220)	H, K, R
	100A/600V	10.60 (296)	10.16 (258)	5.41 (137)	J

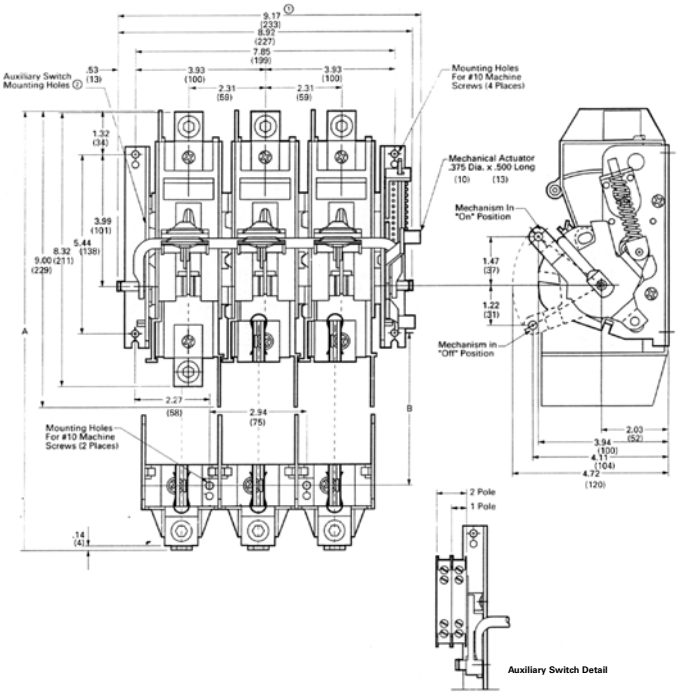
① Overall Width Using Auxiliary Switch
Single Pole - 7.56" (192)
Double Pole - 8.01" (203)
②–Auxiliary switch mounts on opposite side from mechanism.

Outline Drawing 200A Switch Mechanism

Dimensional Data for Fused Applications inches (mm)

Basic Switch Catalog Number	Size	A	B	Fuse Class
MCS620	200A/240V	14.70 (373)	6.00 (152)	H, K, R
	200A/600V	17.20 (437)	8.50 (216)	H, K, R
	200A/600V	13.32 (338)	4.62 (117)	J

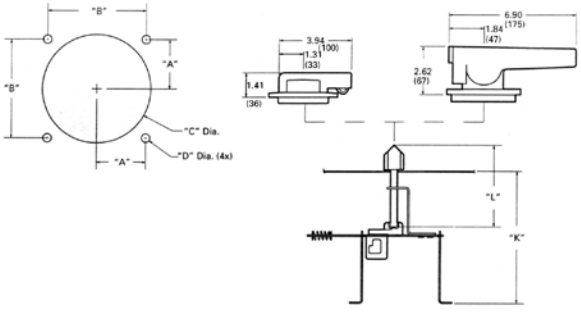
① Overall Width Using Auxiliary Switch
Single Pole - 9.30" (236)
Double Pole - 9.75" (248)
①—Auxiliary switch mounts on opposite side from mechanism.



Rotary Handle Operator

Dimensions inches (mm)

	A	B	C	D
CRHOH	1.18 (30)	2.36 (60)	3.00 (76)	0.175 (4)
RHOH	1.59 (40)	3.18 (81)	3.50 (89)	0.281 (7)

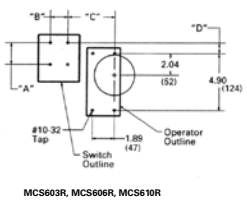


Dimensions inches (mm)

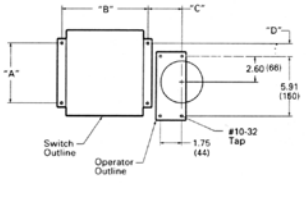
	CRHOS06	CRHOS20	RHOS06	RHOS20
Enclosure Depth (K)				
Minimum	5.42 (138)	6.17 (157)	4.75 (121)	5.50 (140)
Maximum	15.73 (400)	16.28 (414)	16.30 (419)	16.85 (428)
Shaft Length (L)	K-2.77 (70)	K-3.42 (87)	K-2.25 (57)	K-2.90 (74)

Dimensions inches (mm)

	A	B	C	D
MCS603R, MCS606R,	1.89 (48)	1.50 (38)	4.03 (102)	1.10 (28)
MCS610R	3.00 (76)	1.81 (46)	4.37 (111)	1.17 (30)
MCS620R	5.44 (138)	7.85 (199)	2.53 (64)	1.41 (36)



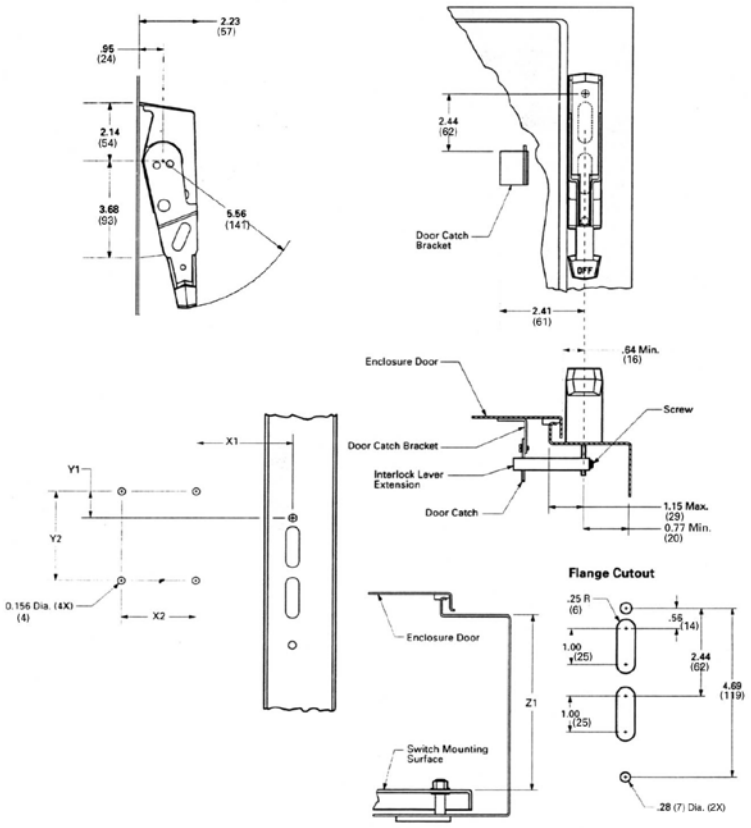
MCS603R, MCS606R, MCS610R



MCS620R

Motor Control Disconnect Switches

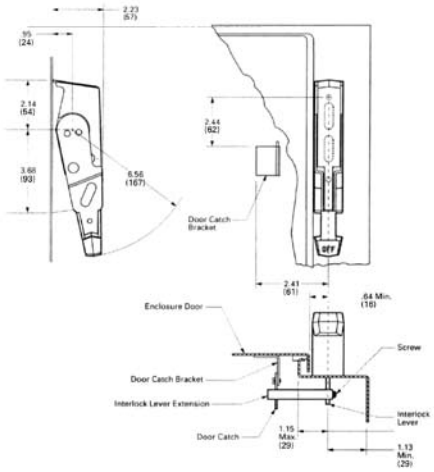
Fixed Depth Handle Operator

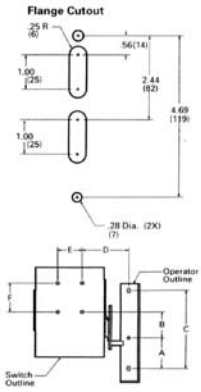


Dimensions inches (mm)

	X1	X2	Y1	Y2	Z1
MCS603, MCS606	3.52 (89)	1.50 (38)	0.00 (0)	1.89 (48)	6.44 (164)
MCS610	3.91 (99)	1.81 (46)	0.13 (3)	3.00 (76)	6.44 (164)
MCS620	1.51 (38)	7.86 (200)	0.38 (10)	5.44 (138)	10.93 (278)

Max Flex™ Variable Depth Handle Operator



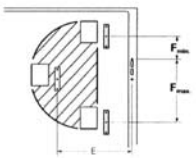


Dimensions inches (mm)

	A	B	C	D	E	F
MCS603, MCS606	2.00 (51)	1.69 (43)	5.10 (130)	2.88 (73)	1.50 (38)	1.89 (48)
MCS610	2.00 (51)	0.82 (21)	5.10 (130)	3.21 (82)	1.81 (46)	3.00 (76)
MCS620	2.50 (64)	-1.00(-25)	5.50 (140)	1.00 (25)	7.86 (200)	5.44 (138)

Maximum "E" Dimension ①

Switch Catalog Number	Cable Cagalog Number	Enclosure Depth inches (mm)						
		8	10	12	16	18	20	24
MCS603, MCS606 MCS610	**FHOEC036**	16.0 (406)	13.0 (330)	13.5 (343)	8.0 (203)	-	-	-
	FHOEC048	26.0 (660)	26.0 (660)	26.0 (660)	23.0 (584)	21.0 (533)	18.0 (457)	17.0 (432)
MCS620	**FHOJC036**	15.0 (381)	12.0 (305)	12.5 (318)	7.0 (178)	-	-	-
	FHOJC048	25.0 (635)	25.0 (635)	25.0 (635)	22.0 (559)	20.0 (508)	17.0 (432)	16.0 (406)



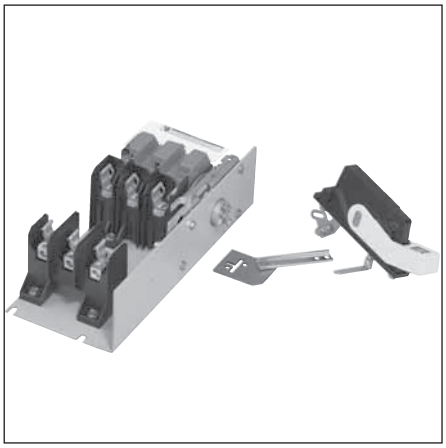
① Maximum "E" Dimension only if F_{max} = 4.6" (117)

Enclosure Depth in. (mm)	36" Cable		48" Cable	
	$F_{min.}$	$F_{max.}$	$F_{min.}$	$F_{max.}$
8 (203)	7.0 (178)	14.5 (368)	16.1 (409)	23.9(607)
10 (254)	5.5 (140)	13.1 (333)	16.0 (406)	23.6(599)
12 (305)	5.0 (127)	12.0 (305)	15.9 (404)	22.8(579)
16 (406)	4.0 (102)	9.4 (239)	14.7 (373)	22.0(559)
18 (457)	-	-	14.6 (371)	21.9 (556)
20 (508)	-	-	13.3 (338)	19.9 (505)
24 (610)	-	-	12.0 (305)	16.9 (429)

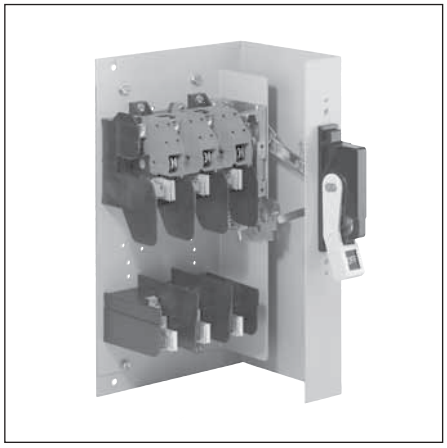
Type VBII Disconnect Switches

Features

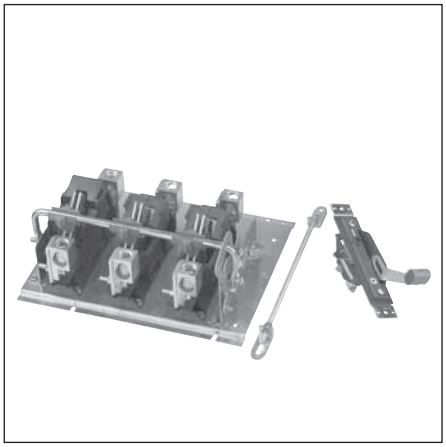
- 30-600A, 600VAC and DC ratings
- UL Recognized (file# 12152 vol. 1 & 2) and CSA Certified
- Visible blade quick make and break switching action
- Panel and Flange mounted assemblies facilite installation
- Panel mounted switches are variable depth
- Short circuit rating of 10,000 AIC with class H fuse, and of 200,000 AIC with class R or J fuses
- Flange mounted handles are Type 1, 3R and 12 rated and padlockable in the off position with up to (3) padlocks with 5/16 hasps
- Meets UL98 requirements and suitable for both main and branch circuit applications
- A complete line of aux contacts are available
- Load break and horsepower rated
- Defeatable cover interlock standard with all handles



VBFS361, VBLK1 & VBH1



VBFS362F



VBNFS365, VBLK4 & VBH2

Ordering Information

1. Determine the ratings required (amps, volts, HP, Fusible, NF), the mounting needed (Panel or Flange), and select the appropriate switch.
2. For panel mounted switches with a rigid operating shaft (30-600A), order panel mounted switch flange mounted operating handle & rigid linkage kit based on depth required.
3. For panel mounted switches with a Max-Flex operator, order panel mounted switch, Max-Flex Handle & Adapter Kit and drive cable.
4. Select accessories if required.

Type VBII Disconnect Switches

Switches

Switch Ampere Rating	Max. AC Voltage Rating	Catalog Number	Horsepower Rating, Switches and 3 Phase[4]						600 List (max)[9]	Price $
			240 Volts AC		480 Volts AC		600 Volts AC	Volts DC		
			Standard	Max.	Standard	Max.	Standard	Max.		
Fusible Panel Mounted Variable Depth Switches - 3 Pole[5,7]										
30	240	**VBFS321**	3	7 1/2	—	—	—	—	— $	
60	240	**VBFS322**	7 1/2	15	—	—	—	—	— %	
30	600	**VBFS361**	—	—	5	15	7 1/2	20	15 &	
60	600	**VBFS362**	—	—	15	30	15	50	30 &	
100	600	**VBFS363**	—	—	25	60	30	75	50 &	
200	600	**VBFS364**	—	—	50	125	60	150	50	
400	600	**VBFS365**	—	—	100	250	125	350	50 &	
600	600	**VBFS366**	—	—	150	400	200	500	50 &	
Non-fusible Panel Mounted Variable Depth Switches - 3 Pole[5]										
30	600	**VBNFS361**	—	10	—	20	—	30	15 &	
60	600	**VBNFS362**	—	20	—	50	—	60	30 &	
100	600	**VBNFS363**	—	40	—	75	—	100	50 &	
200	600	**VBNFS364**	—	60	—	125	—	150	50	
400	600	**VBNFS365**	—	125	—	250	—	300	50 &	
600	600	**VBNFS366**	—	200	—	400	—	500	50 &	
Fusible Flange Mounted Switches - 3 Pole[6]										
30	240	**VBFS321F**	3	7 1/2	—	—	—	—	— $	
60	240	**VBFS322F**	7 1/2	15	—	—	—	—	— %	
30	600	**VBFS361F**	—	—	5	15	7 1/2	20	15 &	
60	600	**VBFS362F**	—	—	15	30	15	50	30 &	
100	600	**VBFS363F**	—	—	50	60	30	75	50 &	
200	600	**VBFS364F**	—	—	100	125	60	150	50	
Non-fusible Flange Mounted Switches - 3 Pole[6]										
30	600	**VBNFS361F**	—	10	—	20	—	30	15 &	
60	600	**VBNFS362F**	—	20	—	50	—	60	30 &	
100	600	**VBNFS363F**	—	40	—	75	—	100	50 &	
200	600	**VBNFS364F**	—	60	—	125	—	150	50	

Note: Fusible switches include fuse provisions for Class H Fuses. The load base can be moved to pre-drilled holes for Class J Fuses. If Class R Fuses are required add a Class R Fuse Clip Kit.

Flange Mounted Operating Handles

(Type 1, 3R and 12)
For use with Panel Mounted Switches. Included with Flange Mounted Switches as standard.

Catalog Number	Description	List Price $
VBH1	30-200A Handle Assembly	
VBH2	400 & 600A Handle Assembly	

Rigid Linkage Kits

For use with Panel Mounted Switches. Not required for Flange Mounted Switches.

Catalog Number	Switch Ampere Rating	Enclosure Depth[7]		List Price $
		Min	Max.	
VBLK1	30-200	6.75	6.75	
VBLK2	30-200	6.75	19.0	
VBLK3	400 & 600	9.0	9.0	
VBLK4	400 & 600	9.0	19.0	

Max-Flex™ Handle and Adapter Kit

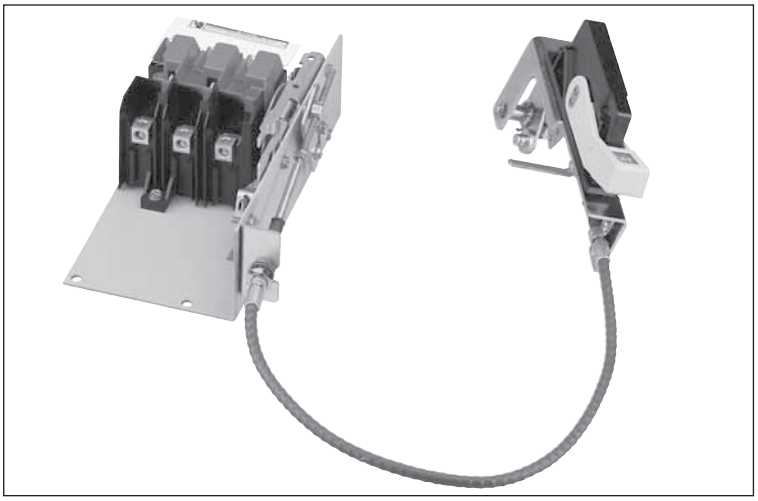
(Type 1, 12 and 3R)
Use with 30-200A panel mounted switches and cable kit.

Catalog Number	Description	List Price $
VBHM1	30-200A Max-Flex Adapter Kit	

Cable Kit

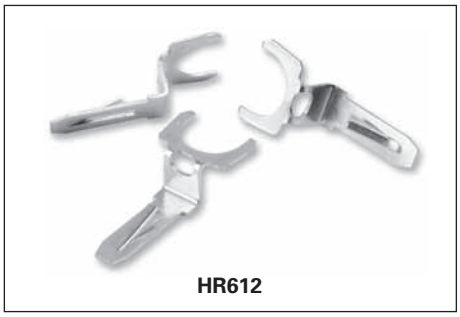
For use with 30-200A panel mounted switches and Max-Flex handle and adapter kit.

Catalog Number	Description	List Price $
FHOEC036	36" long dive cable	



VBNFS361, VBHM1 & FHOEC036

① Rated 5 HP at 250V DC.
② Rated 10 HP at 250V DC.
③ 600V DC & 600V DC horsepower rating shown requires (2) poles to be connected in series.
④ Std. - applies when non-time delay fuses are used.
Max. - applies when time delay fuses are used.
⑤ Includes line base, load base, operating mechanism and line and load lugs. Order operating handle and linkage kits from tables on this page.
⑥ Includes line base, load base, operating mechanism line and load lugs operating handle and required linkage.
⑦ Dimensions (min. & max.) from enclosure mounting pan to outside surface of enclosure handle mounting flange.



HR612

Class R Fuse Clip Kits

These kits prevent the installation of Class H and K fuses (one kit required per switch).

Class R Fuse Clip Kits

Catalog Number	List Price $	Description
HR21		30A, 240V Kit (HD only)
HR612		30A, 600V Kit/60A, 240V Kit
HR62		60A, 600V Kit
HR63		100A Kit
HR64		200A Kit
HR656		400A/600A Kit

Class J Fuse

All 30-600A, 600V fusible switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position.

HT63

Class T Fuse Adapter Kits

100-600A fusible switches are field convertible to accept Class T fuses. 400-600A 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 ①

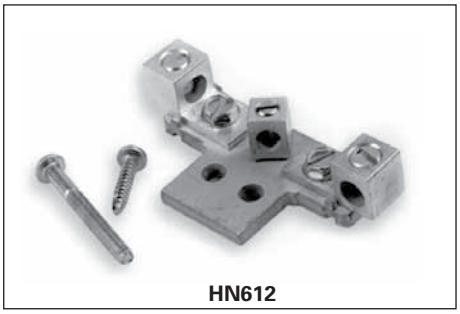
Catalog Number	List Price $	Description
HT23		100A, 240V Kit
HT63		100A, 600V Kit
HT24		200A, 240V Kit
HT64▲		200A, 600V Kit

Neutral Kits

Standard Neutral Kits can be field installed in 30-100A switches.

Neutral Kits

Switch Ampere Rating	Kit Catalog Number	List Price $
30A 600V, 60A 240V	**HNC612**	
60A, 600V & 100A	**HNC623**	



HN612

200% Neutral Kits

UL listed 200% Neutrals are available on 60 & 100A switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

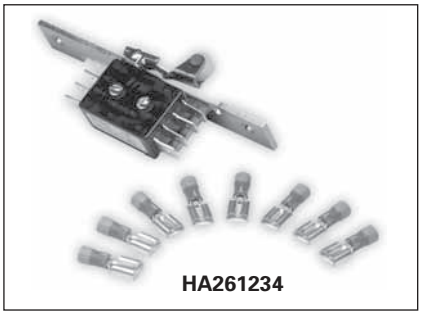
200% Neutral Kits

Switch Ampere Rating	Kit Catalog Number	List Price $	Wire Range Line & Load Lugs (Cu/Al)
100	**HNC263**		(2) #14-1/0 AWG
200	**HNC264**		(2) #6 AWG-300 Kcmi

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

① One kit per pole required.

HA161234

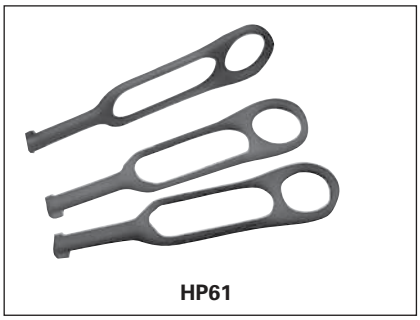


HA261234

Auxiliary Contacts

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.

Switch Ampere Rating	Aux. Switch Catalog Number	List Price $	Kit Ampere Rating			Kit Horsepower Rating		
			125V AC Max.	250V AC Max.	28V DC Max.	125V AC Max.	250V AC Max.	28V DC Max.
With 1 NO & 1 NC Isolated Contacts								
30-200	**HA161234**		10	10	—	1/2	3/4	—
400-600	**HA165678**		10	10	—	1/2	3/4	—
With 2 NO & 2 NC Isolated Contacts								
30-200	**HA261234**		10	10	7	1/2	3/4	—
400-600	**HA265678**		10	10	7	1/2	3/4	—
Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts								
30-200	**HA361234**		10	10	—	1/2	3/4	—
400-600	**HA365678**		10	10	—	1/2	3/4	—



HP61

Fuse Puller Kits

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

Switch Ampere Rating	Fuse Puller Kit Catalog Number	List Price $
30	**HP61**	
60	**HP62▲**	
100	**HP63▲**	

HLC612

Copper Lug Kits

All switches are UL approved to accept field installed copper lug kits.

Switch Ampere Rating	Copper Lug Catalog Number	List Price $	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
400–600A	**HLC65678**		(1) Lugs/Kit #1/0 AWG-600 Kcmil Cu

Equipment Ground Kits

Equipment Ground Lug Kits are available for all switches.

Switch Ampere Rating	Catalog Number	List Price $	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30–200	**HG61234**		2	#14-4 AWG
400 & 600	**HG656**		4	#6 AWG-250 Kcmil

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

Lugs

30 & 60A switches are suitable for use with 60° or 75°C wire. 100–600A switches are suitable for use with 75°C rated wire.

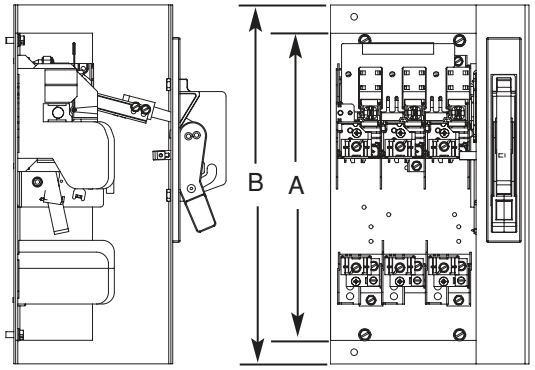
Wire Ranges (Line, Load and Standard Neutral)

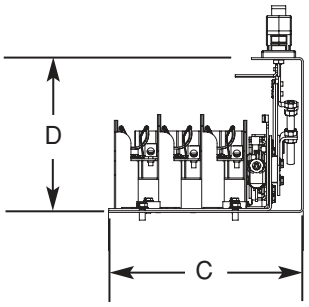
Switch Ampere Rating	UL Approved Wire Range	Lug Wire Range
30	#14-6 AWG (Cu/Al)	#14-2 AWG (Cu/Al)
60	#14-2 AWG (Cu/Al)	#14-2 AWG (Cu/Al)
100	#14-1/0 AWG (Cu/Al)	#14-1/0 AWG (Cu/Al)
200	#6 AWG-300 Kcmil (Cu/Al)	#6 AWG-300 Kcmil (Cu/Al)
400	1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)	(1) 1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)
600	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 -250 Kcmil (Cu/Al)	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 AWG-250 Kcmil (Cu/Al)

Approximate Dimensions

Mounting bracket shown with handle installed is supplied with Flange Mounted Switches only. All Panel Mounted Switches have a "L" shaped mounting pan with a line base, load base (if usible) and mechanism installed.

Catalog Number	Dimensions				
	A	B	C①	D (min)	D (max)
Fusible, Panel Mounted					
VBFS321	11.88	N/A	6.63	6.75	19
VBFS322	13.06	N/A	8.38	6.75	19
VBFS361	11.88	N/A	6.63	6.75	19
VBFS362	13.06	N/A	8.38	6.75	19
VBFS363	13.06	N/A	8.38	6.75	19
VBFS364	17	N/A	12.13	6.94	19
VBFS365	26.12	N/A	16.44	9	19
VBFS366	26.12	N/A	16.44	9	19
Non-fusible, Panel Mounted					
VBNFS361	9.75	N/A	6.63	6.75	19
VBNFS362	9.75	N/A	8.38	6.75	19
VBNFS363	9.75	N/A	8.38	6.75	19
VBNFS364	10.75	N/A	12.13	6.94	19
VBNFS365	13	N/A	16.44	9	19
VBNFS366	13	N/A	16.44	9	19
Fusible, Flange Mounted					
VBFS321F	11.88	13	6.69	6.75	N/A
VBFS322F	13.06	15.25	8.44	6.75	N/A
VBFS361F	11.88	13	6.69	6.75	N/A
VBFS362F	13.06	15.25	8.44	6.75	N/A
VBFS363F	13.06	15.25	8.44	6.75	N/A
VBFS364F	17	18.75	12.19	6.94	N/A
Non-fusible, Flange Mounted					
VBNFS361F	9.75	11.25	6.69	6.75	N/A
VBNFS362F	9.75	11.25	8.44	6.75	N/A
VBNFS363F	9.75	11.25	8.44	6.75	N/A
VBNFS364F	10.75	11.6	12.19	6.94	N/A





① Dimension C for panel mounted switches indicates the minimum width from the left hand edge of the switch mounting pan to the right hand inside surface of the enclosure.