

# Light Duty Enclosed Switches

## Plug Fuse and 60A Special Application Type

Selection

### Features

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



### Dimensions - in. (mm)

Enclosure Type	Height	Width	Depth
1	8¼ (210)	5½ (140)	3 (76)
3R	8¼ (210)	5¾ (137)	3¾ (79)

### Wire Range Table

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

Ampere Rating	Indoor — Type 1		Outdoor — Type 3R		Horsepower Ratings®	
					1-Phase, 2-Wire	
	Catalogue Number	Ship. Wt. (lbs.)	Catalogue Number	Ship. Wt. (lbs.) Pkg. of 10	Standard	Maximum

### 120/240 Volt Fusible

1-Pole and Solid Neutral <sup>②</sup>				120 Volt — 1-Phase, 2-Wire		
30	LFC111N	3.6	—	—	1/2	2

2-Pole and Solid Neutral <sup>②</sup>				120/240 Volt — 2-Phase, 3-Wire		
30	LFC211N	3.5	LFC211NR	35	1/2	2

### 240 Volt Non-Fused

2-Pole Special Application Switch				240 Volt — 1-Phase, 2-Wire		
60	—	—	LNFC222R <sup>③</sup>	35	3	10

®Dual horsepower ratings:

Std. — applies when non-time delay plug fuses are installed.

Max — applies when time-delay plug fuses are installed.

®Has service entrance label. CSA certified as

"Enclosed Switches" (suitable for use as service equipment where indicated).

®Bottom cable entry and exit only. No hub provision supplied. **GSGK60** is included and factory installed.

®Line lugs are CSA approved for #14 to #6 Cu/Al cable.

# General and Heavy Duty Safety Switches

## Accessories

## Selection



HA261234



HA261234



HLC612

HG261234

### Auxiliary Contacts

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

### Auxiliary Contacts

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

### With 1 NO & 1 NC Isolated Contacts

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

### With 2 NO & 2 NC Isolated Contacts

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

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

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

### Copper Lug Kits

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

### Copper Lug Kits

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

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

■ Purchase field replacement kit along with lugs.

### NEW Quick Connects

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

### Quick Connects

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

### Isolated Ground Kits

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

### Isolated Ground Kits

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

### Equipment Ground Kits

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

### Equipment Ground Kits

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

# Enclosed Switches

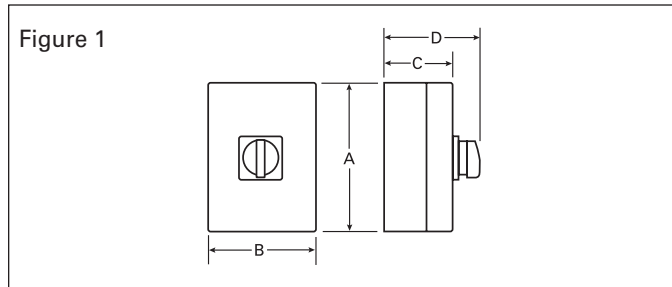
## Rotary Disconnect Switches

Selection

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

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

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



### UL and cUL Short Circuit Withstand Ratings

Ampere Rating	Short Circuit Withstand Rating and Fuse Class				
	With Line Side Fusing			With Load Side Fusing <sup>①</sup>	
	5 kA at 600V Max	10 kA at 600V Max	18 kA at 480V Max	5 kA at 480V Max	18 kA at 480V Max
16	RK5 (50A Max)	—	—	—	—
25 & 30	RK5 (80A Max)	—	—	—	—
63	RK5 (175A Max)	—	—	—	—
100 & 125	—	RK5 (200A Max)	—	—	—

### 3LD2 Type Switches<sup>③</sup>

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

### HNF Type Switches

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

- ① For use as supplemental protection on the load side of the branch circuit over current protective device.
- ② Ground lug kit has two lugs for #14-4 Cu/Al wire.
- ③ Factory installed ground lugs supplied as follows: 16-30A #14-10 Cu, 63A #14-8 Cu. Ground lug not provided and is not available on catalog numbers 3LD2264-2TW51-0US2 and 3LD2264-2TW53-0US2.
- ④ 6.38 inches high including mounting feet.
- ⑤ 7.85 inches high including mounting feet.
- ⑥ 60 & 100A HNF switches are rated 10kA at 480V max. with line side Class H, K & RK5 150A max. fuses.
- ⑦ Wire range (1) #14-2 AWG 60/75 °C Cu only.
- ⑧ 16-63A 3LD switches are also rated 5kA at 600VAC max when protected by a 3RV type MSP of the same or lesser ampere rating.

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

Wire ranges 60/75°C Cu Only

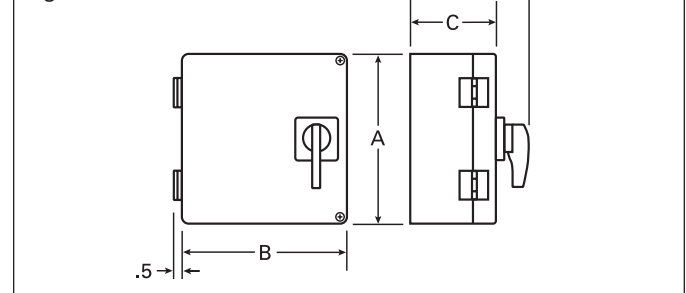
### 3LD2 Type Switches<sup>③</sup>

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

### HNF Type Switches

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

Figure 2



### IEC Fuse and Withstand Ratings

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

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

### HNF Hinged Cover Switches

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

### Accessories

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

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

### HNF Type Switches

30-100A	GSGK60	Ground Lug Kit <sup>②</sup>
30A	LBRA1	Auxiliary Contact Kit (1 NO-1 NC)
60-100A	LBRA2	Auxiliary Contact Kit (1 NO-1 NC)
30-100A	HF63CX <sup>⑦</sup>	Neutral Kit