Safety Switches

General Description

GHN424NW

HHN426N

HUN361AW

Passed The Test of Time

All Murray safety switches have passed rigid testing requirements to assure reliable performance. In addition to tests designed and conducted during the development and manufacturing processes, switches have performed successfully in tests witnessed by Underwriters' Laboratories. These tests include those for general purpose safety switches and those designed for more specialized purposes where applicable.

Handle Lock-Off

Heavy duty, "H" series safety switches have a provision to lock the handle in the "OFF" position with a maximum of three padlocks. Doors may be locked closed with a padlock. General duty, "G" series switches may be locked in the "OFF" position with one padlock. There is also a padlock feature for locking the door.

General and Heavy Duty Switches Feature a Time Proven Design

A fast, long lasting switch design with a clean, continuous contact. That's the switching system that gives you on-going reliability. The concept is simple: split the arc to shorten the break distance. Uncomplicated mechanics and common sense design assure reliable performance time after time. All switches through 1200A feature visible blade contruction.

Load Break Ratings

All Murray safety switches are UL Listed for load break applications. Included in this process is a series of repeated make and break tests of the switch contacts while carrying the full rated nameplate current and rated voltage.

Horsepower Ratings

Where permitted, all Murray safety switches are UL horsepower Listed. The switch ratings are determined by tests that have been performed successfully in the UL overload test series, including repeated make and break tests of the stalled motor current of the motor for which it is being rated.

Some switches have two or more ratings for a particular voltage and current, and additional ratings if designed for multi-pole applications.

Depending on the switch and its application, various ratings may be assigned. All switches list the ratings on the inside of the cover or the door. The ampere rating and maximum AC voltage rating are always shown on the nameplate on the front of the switch.

Fault Current Performance

Murray Heavy Duty safety switches have successfully passed UL high level fault current tests. This means the risk of mechanical and thermal damage due to high level short circuit currents is minimized due to the reliable switch design.

Suitability tests for service with Class H, R, J, L, and T fuses have been conducted on heavy duty safety switches. Representative switches, with test fuses connected in series with each switch, were subjected to let-throughs in excess of the capacities of the largest fuses acceptable by the switches.

To pass the test, the switch must remain operable after being closed into a high amp available short circuit current. The test fuse is sized so that higher levels of let-through current and energy will be reached than would ever occur during normal usage in the field.

Murray General Duty safety switches have been tested to allow installation on circuits capable of delivering 100,000 AIC of fault current at 240V AC max. with Class R fuses and also with both Class J and T fuses in 100-200A ratings.

Fuse Interchangeability

General Duty Switches, Prefix G,* will accept the following UL class fuses:
Class H
Class K
Class R — Requires class "R" fuse kit to maintain UL listing.
Class J — 100–200A — field convertible.
Class T — with proper adapter kit (100–600A).
*Except 30 amp plug style switches.

Heavy Duty Switches, Prefix H, will accept the following UL class fuses:
Class H
Class K
Class R — Requires class "R" fuse kit to maintain UL listing.
Class J — All 30–200A, 600V and 100–200A, 240V switches — field convertible.
Class L — 800 and 1200A switches only.
Class T — 100–1200A switches with proper adapter kit.

Gutter Space

"G" and "H" series safety switch gutter dimensions conform to 2008 NEC Article #312.6(A). Top and bottom gutters conform to Table #312.6(B).

General Duty Switches; Prefix "G"

General duty switches are available in indoor TYPE 1 and outdoor TYPE 3R enclosures. Enclosures can be locked closed and operating handles can be locked "OFF". Series "G" switches have a quick-make, quick-break mechanism. Fusible switches are available in 1 pole S/N, 2 pole S/N and 3 pole S/N configurations. Non-fusible switches are available in 3 pole configurations. General duty switches are limited to 240V AC, 200 Amps max. rating.

All 30 Amp compact fusible and non-fusible "G" prefix switches are rated 10,000 Amp maximum withstand.

All 30–200 Amp "GF" and "GU" prefix switches are suitable for use on systems capable of delivering not more than 100,000 RMS symmetrical Amps of fault current with Class "R" fuses and the appropriate adapter kit installed. These 100–200 Amp "G" prefix switches may also be used on systems capable of delivering not more than 100,000 RMS symmetrical Amps of fault current with "T" fuses and the appropriate adapter kit installed. In addition, 100–200 general duty switches may also be used with J fuses on systems not capable of delivering more than 100,000 RMS symmetrical amperes of fault current. General duty switches are UL Listed for use as service equipment and are horsepower rated for use with motor loads.

General duty enclosed switches are used for light duty applications where loading and switching operations are not excessive.

Heavy Duty Switches, Single Throw; Prefix "H"

Heavy duty switches are available in indoor TYPE 1, outdoor TYPE 3R, Watertight Type 4/4X, and industrial TYPE 12 enclosures. Dual cover interlocks are provided, such that the door cannot be opened with the switch "ON" and the switch cannot be turned "ON" with the door open. A defeat mechanism allows servicing by authorized personnel. Handles may be locked "OFF" with up to 3 padlocks, and doors may be padlocked closed. Mechanism is "TEASE-PROOF" quick-make, quick-break. Fusible switches are available in 2 pole S/N, 3 pole and 3 pole S/N. Non-fusible switches are available in 3 pole.

Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical amperes of fault current when Class "J" or "R" fuses are installed except the 800 and 1200A switches, which are suitable for use on circuits capable of delivering not more than 200,000 RMS symmetrical amperes of fault current when Class "L" fuses are installed. 100–1200A switches with Class "T" fuses and field adapter kit 200,000 RMS symmetrical rated.

Heavy duty switches are dual horsepower rated and are listed by UL for use as service entrance equipment.

Heavy duty switches are intended for applications where rugged construction, reliable performance, continuity of service and ease of maintenance are required.

Protector-Lock® Switches; Prefix "H"

The Murray Protector-Lock® switch is designed to eliminate shock hazard due to disconnecting heavy duty portable electrical equipment under load. When the switch is in the "ON" position, the safety bar blocks the self-contained receptacle and prevents insertion or removal of the plug. When the switch is "OFF", the bar retracts, allowing insertion or removal of the plug.

Protector-Lock® switches consist of a heavy duty, 30 or 60 Amp, 600V AC, 3 pole fusible or non-fusible enclosed switch, and either Crouse-Hinds® or Arrow Hart® Industrial **receptacles.**

Applications include industrial plants where portable conveyors and welders are used, and truck terminals where on-board refrigeration units require stand-by power.

Double Throw Switches; Prefix "HD"

Double throw switches are available in TYPE 1 and TYPE 3R enclosures. Covers are dual interlocked with the operating mechanism such that the cover cannot be opened when the switch is in either "ON" position, and the switch handle cannot be moved to either "ON" position if the cover is open. Handle may be padlocked in the "OFF" position. Switching action is quick-make, quick-break in both "ON" positions.

They are available in 30–200 Amp ratings, 240V AC, fusible and non-fusible, two and three pole.

Double throw switches are usually applied as transfer switches to switch a load from one power source to another, but can be field converted to switch one power source between two loads. Switching mechanism is located on line side of fuses allowing for a safer fuse replacement. All are suitable for use as service equipment.

Industry and Government Specifications

Murray enclosed switches meet or exceed the latest revision of the following specifications:

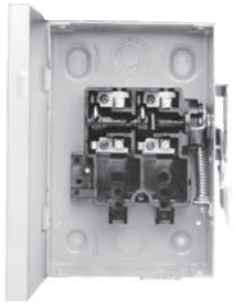
Industry
NEMA
Standard #KS-1-2001

UL-Standard #98

U.S. Government
HD single throw, prefix "H":
Standard #WS-865c type "HD"
HD double throw, prefix "HD":
Standard #WS865c type "NDD"
GD 60–600 Amp, prefix "G":
Standard #WS 865c type "ND"; except where interlock is required.
GD 30 Amp, prefix "G":
Standard #WS-865c type "ND"; except where interlock is required.

General Duty Compact — 10,000 Amp Withstand Plug Fuse Type 1 & Type 3R

GU221



GP321N

General Duty Compact Safety Switches

Symbol	Fuse Type	Indoor TYPE 1 Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Outdoor TYPE 3R Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Hub	Horsepower Rating					
									Single Phase				Three Phase	
									120V AC		240V AC		240V AC	
									Std	Max①	Std	Max①	Std	Max①
30 AMP FUSIBLE 1 POLE 2 WIRE S/N 120V AC (INSULATED GROUNDABLE NEUTRAL)														
Fig-1	Plug	**GP211N**	10	33.60	—	—	—	—	½	2	—	—	—	—
30 AMP FUSIBLE 2 POLE 3 WIRE S/N 240V AC (INSULATED GROUNDABLE NEUTRAL)														
Fig-2	Plug	**GP321N**	10	37.00	**GP321NW**	5	35.00	ECHA	½	2	1½	3	—	—
Fig-3	None	**GU221**	10	33.00	**GU221AW**	5	35.00	ECHA	—	2	—	3	—	—
60 AMP NON-FUSIBLE 2 POLE 240V AC SPECIAL APPLICATION SWITCH														
Fig-4	None	—	—	—	**GU222AW**	10	36.00	—②	—	—	—	10	—	—

Accessories and Lug Data —
See pages 3-48 and 3-49.
Dimensions —
See pages 3-50, 3-51 and 3-52.
Knockout Drawings —
See page 3-53.

Figure 1

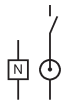


Figure 2

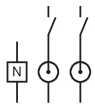


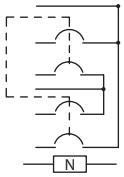
Figure 3

Figure 4

Hubs

Conduit Size (Inches)	Catalog Number	Approx. Wgt. Lbs. (Std. Pkg. — 1)
¾	**ECHA075**	.10
1	**ECHA100**	.10
1¼	**ECHA125**	.10

General Duty Stand-by Power Panel



This unique device provides an economical means to transfer from normal to an alternate source of power. It contains two 100A, 2-pole circuit breakers interlocked in a "double throw" configuration and supplies both overload and short circuit protection (10,000 AIC max.). The external handle is padlockable in the OFF position.

Outdoor TYPE			
Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Hub
100A 2 POLE 3 WIRE S/N 120/240V AC OUTDOOR TYPE 3R④			
DUL313NW③⑤	1	19.00	ECHS

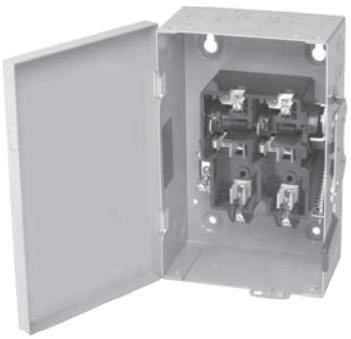
①Starting current of motors above standard horsepower rating may require use of time delay fuses.
②Bottom cable entry & exit only.
③Suitable for service entrance application. Neutral factory installed. UL1008 listed as a non-automatic transfer switch under file #E315030. Suitable for use as Transfer Equipment on optional stand-by systems as defined by Article 702 of the NEC.
④Wire ranges (75°C Cu/Al) Line, load & neutral (1) #14-1 Service ground (1) #14-4
⑤Discount Schedule HDSM.

Safety Switches

General Duty — 30–200 Amp, 10,000 & 100,000 Amp Withstand Cartridge Fuse Type 1 & Type 3R

GUN322

GHN321N



GHN423NW

Switch Selection with Class "H" Fuse Holders 30–600 Amps (Convertible to Class "R")①

		Indoor TYPE 1			Outdoor TYPE 3R				Horsepower Rating				
									Single Phase		Three Phase		
									240V AC		240V AC		250V DC
Symbol	Amps	Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Hub	Std	Max②	Std	Max②	Std
FUSIBLE 2 POLE 3 WIRE S/N 240V AC (INSULATED GROUNDABLE NEUTRAL)③④⑤													
Fig-1	30	**GHN321N**③	10	35.00	**GHN321NW**③	10	35.00	ECHA	1½	3	3	7½	5
	60	**GHN322N**③	1	14.00	**GHN322NW**③	1	14.00	ECHS	3	10	7½	15	10
	100	**GHN323N**③	1	23.00	**GHN323NW**③	1	24.00	ECHS	7½	15	15	30	20
	200	**GHN324N**③	1	47.00	**GHN324NW**③	1	48.00	ECHS	15	—	25	60	40
FUSIBLE 3 POLE 4 WIRE S/N 240V AC (INSULATED GROUNDABLE NEUTRAL)⑤													
Fig-2	30	**GHN421N**	5	24.00	**GHN421NW**	5	24.00	ECHA	1½	3	3	7½	5
	60	**GHN422N**	1	15.00	**GHN422NW**	1	15.00	ECHS	3	10	7½	15	10
	100	**GHN423N**	1	25.00	**GHN423NW**	1	25.00	ECHS	7½	15	15	30	20
	200	**GHN424N**	1	49.00	**GHN424NW**	1	50.00	ECHS	15	—	25	60	40
NON-FUSIBLE 3 POLE 240V AC (SEE PREVIOUS PAGE FOR 2 POLE, 30 AMPS; USE 3 POLE FOR 2 POLE APPLICATION FOR 60–200 AMPS)													
Fig-3	30	**GUN321**	5	24.00	**GUN321AW**	5	24.00	ECHA	—	3	—	7½	5
	60	**GUN322**	1	12.00	**GUN322AW**	1	13.00	ECHS	—	10	—	15	10
	100	**GUN323**	1	23.00	**GUN323AW**	1	24.00	ECHS	—	15	—	30	20
	200	**GUN324**	1	46.00	**GUN324AW**	1	47.00	ECHS	—	15	—	60	40

Accessories and Lug Data —
See pages 3-48 and 3-49.
Dimensions —
See pages 3-50, 3-51 and 3-52.
Knockout Drawings —
See page 3-53 and 3-54.

Figure 1

Figure 2

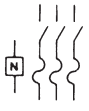


Figure 3

①"G" Series switches are UL Listed for use on circuits capable of delivering up to 100,000 Amps RMS symmetrical fault currents, provided Class "R" or "T" fuses and appropriate rejection or adapter kits are installed. T-fuses can only be used on 100–200 Amp. 100–200A switches can also be used with Class J fuses.

②Starting current of motors above standard horsepower rating may require use of time delay fuses.

③These switches are UL Listed for application on grounded B systems.

④Suitable for 3-pole motor loads.

⑤Has service entrance label, neutral factory installed.

HHN422N

HHN323NW

HHN421NW

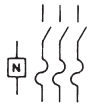
Switch Selection with Class "H" Fuse Holders (Convertible to Class "J", "R" or "T")①

Symbol	Amps	Indoor TYPE 1 Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Outdoor TYPE 3R Catalog Number	Std. Pkg.	Approx. Wgt. Lbs.	Hub	Horsepower Rating Single Phase 240V AC Std	Single Phase 240V AC Max③	Three Phase 240V AC Std	Three Phase 240V AC Max③	Three Phase 250V DC Std
FUSIBLE 2 POLE 3 WIRE S/N 240V AC (INSULATED GROUNDABLE NEUTRAL)④⑤⑧													
Fig-1	30	**HHN321N**	1	12.00	**HHN321NW**	1	13.00	ECHS	1½	3	3	7½	5
	60	**HHN322N**	1	18.00	**HHN322NW**	1	19.00	ECHS	3	10	7½	15	10
	100	**HHN323N**	1	23.00	**HHN323NW**	1	24.00	ECHS	7½	15	15	30	20
	200	**HHN324N**	1	47.00	**HHN324NW**	1	48.00	ECHS	15	—	25	60	40
	800	**HLN327N**②⑥	1	360.00	—	—	—	—	—	—	100	250	—
	1200	**HLN328N**②⑥	1	362.00	—	—	—	—	—	—	100	250	—
FUSIBLE 3 POLE 4 WIRE S/N 240V AC (INSULATED GROUNDABLE NEUTRAL)⑤⑧													
Fig-2	30	**HHN421N**	1	14.00	**HHN421NW**	1	15.00	ECHS	1½	3	3	7½	5
	60	**HHN422N**	1	19.00	**HHN422NW**	1	20.00	ECHS	3	10	7½	15	10
	100	**HHN423N**	1	25.00	**HHN423NW**	1	26.00	ECHS	7½	15	15	30	20
	200	**HHN424N**	1	49.00	**HHN424NW**	1	50.00	ECHS	15	—	25	60	40
	800	**HLN427N**②⑥	1	380.00	**HLN427NW**②⑥	1	383.00	ECHV⑦	—	—	100	250	—
	1200	**HLN428N**②⑥	1	382.00	**HLN428NW**②⑥	1	385.00	ECHV⑦	—	—	100	250	—

Accessories and Lug Data — See pages 3-48 and 3-49.
Dimensions — See pages 3-51 and 3-52.
Knockout Drawings — See pages 3-53 and 3-54.

Figure 1

Figure 2



①Switches through 1200 Amps listed by Underwriters' Laboratories for use on circuits delivering up to 200,000 Amps RMS symmetrical fault current, provided class "R", "J", "L", or "T" fuses are used. Rejection kits must be installed for "R" fuse application. "T" fuse adapter kit required for "T" fuse application. See Accessory Page.
"J" fuses can only be used on 100–200A ratings.
"T" fuses can only be used on 100–1200A ratings.

②Factory set for use with class "L" fuses.

③Starting current of motors above standard horsepower rating may require use of time delay fuses.

④Suitable for 3-pole motor loads.

⑤Suitable for service entrance application. Neutral factory-installed.

⑥Supplied without knockouts.

⑦800A and larger Type 3R switches have no provisions for mounting hubs. Drill or punch hole in the field to accommodate hub size desired.

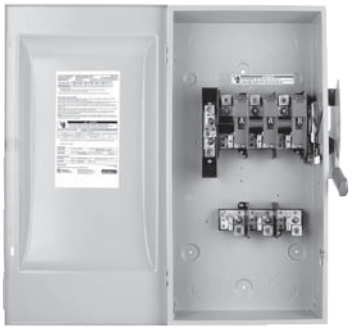
⑧Also rated 250V DC

Safety Switches

Heavy Duty — 600v AC, 10,000 & 200,000 Amp Withstand Cartridge Fuse Type 1 & Type 3R

HHN361AW

HHN364 Plus Neutral HN64M



Switch Selection with Class "H" Fuse Holders (Convertible to Class "J", "R" or "T")①

Symbol	Amps	Indoor TYPE 1 Catalog Number	Indoor TYPE 1 Approx. Wgt. Lbs. (Std. Pkg. 1)	Outdoor TYPE 3R Catalog Number	Outdoor TYPE 3R Approx. Wgt. Lbs. (Std. Pkg. 1)	Hub	Horsepower Rating 480V AC 1Ø Std	480V AC 1Ø Max④	480V AC 3Ø Std	480V AC 3Ø Max④	600V AC 1Ø Std	600V AC 1Ø Max④	600V AC 3Ø Std	600V AC 3Ø Max④	250V DC	600V DC
FUSIBLE 3 POLE 600V AC (NO NEUTRAL)⑤⑥																
Fig-1	30	**HHN361**	14.00	**HHN361AW**	15.00	ECHS	3	7½	5	15	3	10	7½	20	5	—
	60	**HHN362**	19.00	**HHN362AW**	20.00	ECHS	5	20	15	30	10	25	15	50	10	25
	100	**HHN363**	24.00	**HHN363AW**	25.00	ECHS	10	30	25	60	15	40	30	75	20	25
	200	**HHN364**	48.00	**HHN364AW**	49.00	ECHS	25	50	50	125	30	50	60	150	40	50
	800	**HLN367②**	380.00	**HLN367AW②**	382.00	ECHV⑦	—	—	200	500	—	—	200	500	—	—
	1200	**HLN368②**	383.00	**HLN368AW②**	385.00	ECHV⑦	—	—	200	500	—	—	200	500	—	—
FUSIBLE 3 POLE 4 WIRE S/N 480Y / 277V AC (INSULATED GROUNDABLE NEUTRAL)⑥																
Fig-2	30	③	—	**HHN461NW**	15.00	ECHS	3	7½	5	15	3	10	7½	20	5	—
	60	③	—	**HHN462NW**	20.00	ECHS	5	20	15	30	10	25	15	50	10	25
NON-FUSIBLE 3 POLE 600V AC (USE FOR 2 POLE)⑤⑥⑨																
Fig-3	30	**HUN361**	12.00	**HUN361AW**	13.00	ECHS	7½	—	—	15	—	10	—	20	5	—
	60	**HUN362**	18.00	**HUN362AW**	19.00	ECHS	20	—	—	30	—	25	—	50	10	25
	100	**HUN363**	23.00	**HUN363AW**	24.00	ECHS	30	—	—	60	—	40	—	75	20	25
	200	**HUN364**	46.00	**HUN364AW**	47.00	ECHS	50	—	—	125	—	50	—	150	40	50

Accessories and Lug Data —
See pages 3-48 and 3-49.
Dimensions —
See pages 3-51 and 3-52.
Knockout Drawings —
See pages 3-53 and 3-54.

Figure 1

Figure 2

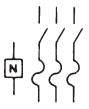


Figure 3

①Switches through 1200 Amps listed by Underwriters' Laboratories for use on circuits delivering up to 200,000 Amps RMS symmetrical fault current, provided class "R", "J", "L", or "T" fuses are used. Rejection kits must be installed for "R" fuse applications.

②Class "L" fuse provision. Single fuse per pole. Supplied without knockouts.

③Order 3 pole switch from chart above, and neutral from accessory page.

④Starting current of motors above standard horsepower rating may require use of time delay fuses.

⑤For service equipment or applications requiring a solid neutral, order neutral kit as an accessory, page 3-8.

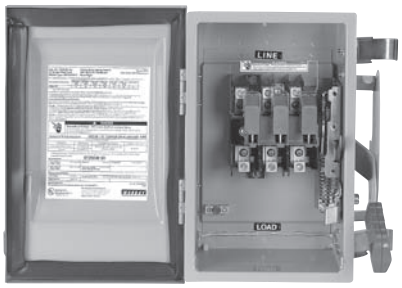
⑥60-200A switches are also rated 600V DC when 2 poles are connected in series.

⑦800A and larger Type 3R switches have no provisions for mounting hubs. Drill or punch hole in the field to accommodate hub size desired.

⑨Non-fusible switches also have the following max. HP ratings.

Amps	1Ø 240V AC	3Ø 240V AC
30	5	10
60	10	20
100	15	40
200	15	60

HUN361AJ



Accessories and Lug Data —
See pages 3-48 and 3-49.
Dimensions —
See pages 3-51 and 3-52.

Figure 1

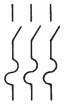


Figure 2

Switch Selection With Class "H" Fuse Holders (Convertible To Class "J", "R" or "T")①

Symbol	Amps	Industrial Type 12 Catalog Number	Approx. Wgt. Lbs. (Std. Pkg. 1)	Horsepower Rating 480V AC 3Ø Std	480V AC 3Ø Max②	600V AC 3Ø Std	600V AC 3Ø Max②	250V DC	600V DC
FUSIBLE 3 POLE 600V AC (NO NEUTRAL)③⑥									
Fig-1	30	**HHN361AJ**	14.00	5	15	7½	20	5	—
	60	**HHN362AJ**	20.00	15	30	15	50	10	25
	100	**HHN363AJ**	25.00	25	60	30	75	20	25
	200	**HHN364AJ**	49.00	50	125	60	150	40	50
NON-FUSIBLE 3 POLE 600V AC (USE FOR 2 POLE)③⑤⑥									
Fig-2	30	**HUN361AJ**	13.00	—	20	—	30	5	—
	60	**HUN362AJ**	19.00	—	50	—	60	10	25
	100	**HUN363AJ**	24.00	—	75	—	100	20	25
	200	**HUN364AJ**	47.00	—	125	—	150	40	50

Symbol	Amps	Type 4X Stainless Steel Catalog Number	Approx. Wgt. Lbs. (Std. Pkg. 1)	Horsepower Rating 480V AC 3Ø Std	480V AC 3Ø Max②	600V AC 3Ø Std	600V AC 3Ø Max②	250V DC	600V DC
FUSIBLE 3 POLE 240V AC (NO NEUTRAL)③④									
Fig-1	30	**HHN321AS**	14.00	⑤	⑤	—	—	5	—
	60	**HHN322AS**	20.00	⑤	⑤	—	—	10	—
FUSIBLE 3 POLE 600V AC (NO NEUTRAL)③⑥									
Fig-1	30	**HHN361AS**	13.00	5	15	7½	20	5	—
	60	**HHN362AS**	20.00	15	30	15	50	10	25
	100	**HHN363AS**	25.00	25	60	30	75	20	25
	200	**HHN364AS**	49.00	50	125	60	150	40	50
NON-FUSIBLE 3 POLE 600V AC (NO NEUTRAL)③④⑤⑥									
Fig-2	30	**HUN361AS**	13.00	—	20	—	30	5	—
	60	**HUN362AS**	19.00	—	50	—	60	10	25
	100	**HUN363AS**	24.00	—	75	—	100	20	25
	200	**HUN364AS**	47.00	—	125	—	150	40	50

①Switches through 200 Amps listed by Underwriters' Laboratories for use on circuits delivering up to 200,000 Amps RMS symmetrical fault current, provided class "J", "R" or "T" fuses are used. Rejection kits must be installed for "R" fuse applications.

②Starting current of motors above standard horsepower rating may require use of time delay fuses.

③For service equipment or applications requiring a solid neutral, order neutral kit as an accessory, page 3-8.

④Use 3 pole switch for 2 pole applications.

⑤240V 3Ø HP ratings are as follows:

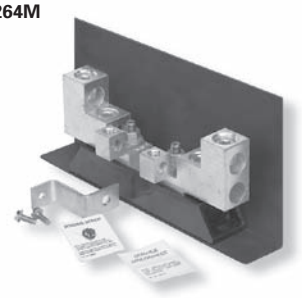
Amps	HP Std	HP Max. Fusible	HP Max. Non-Fusible
30	3	7½	10
60	7½	15	20
100	15	30	40
200	25	60	60

⑥60-200A switches are also rated 600V DC when 2 poles are connected in series.

Safety Switches

VBII Type Double Throw Switches Type 1 & Type 3R

HNC264M



HDHN322

HDUN363AW

Double Throw Switches①⑦

Symbol	Amps	Indoor TYPE 1 Catalog Number	Indoor TYPE 1 Approx. Wgt. Lbs.	Outdoor TYPE 3R② Catalog Number	Outdoor TYPE 3R② Approx. Wgt. Lbs.	Hub	Horsepower Rating 1Ø Std	1Ø Max	3Ø Std	3Ø Max	250V DC
NON-FUSIBLE 2 POLE 240V AC											
Fig-1 ③	30	HDUN221	33.00	—	—	—	—	5	—	—	5
	60	HDUN222	35.00	—	—	—	—	10	—	—	10
	100	HDUN223	37.00	—⑥	—	—	—	15	—	—	20
	200	HDUN224	79.00	HDUN224AW⑥	79.00	ECHS	—	15	—	—	40
NON-FUSIBLE 3 POLE 240V AC											
Fig-2 ③	30	HDUN321	34.00	—	—	—	—	5	—	10	5
	60	HDUN322	36.00	—	—	—	—	10	—	20	10
	100	HDUN323	37.00	HDUN323AW⑥	38.00	ECHS	—	15	—	40	20
	200	HDUN324	82.00	HDUN324AW⑥	82.00	ECHS	—	15	—	60	40
FUSIBLE 3 POLE 240V AC											
Fig-3 ③	30	HDHN321	38.00	HDHN321AW	39.00	ECHS	—	3	—	7½	5
	60	HDHN322	43.00	HDHN322AW	44.00	ECHS	—	10	—	15	10
	100	HDHN323	45.00	HDHN323AW	46.00	ECHS	—	15	—	30	20
	200	HDHN324	92.00	—	—	—	—	15	—	60	40
NON-FUSIBLE 3 POLE 600V AC											
Fig-2 ③	30	HDUN361	34.00	HDUN361AW	35.00	ECHS	—	5	—	20④	5
	60	HDUN362	36.00	HDUN362AW	37.00	ECHS	—	10	—	50④	10
	100	HDUN363	37.00	HDUN363AW	38.00	ECHS	—	15	—	75④	20
	200	HDUN364	82.00	HDUN364AW	82.00	ECHS	—	15	—	125④	40

Neutral Kits

For use with Double Throw Switches

Switch Amps	Catalog Number
30	HNC612M
60-100	HN263M
200	HNC264M

Fuse Capabilities of Fusible Switches

Amp Rating	Fuse Type H	R	T	J
30 & 60 A	Std	Yes (kit)	No	No
100 & 200A	Std	Yes (kit)	Yes (kit)	Yes ⑤

Figure 1

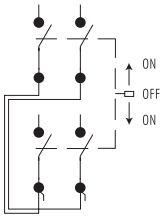


Figure 2

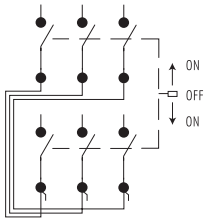
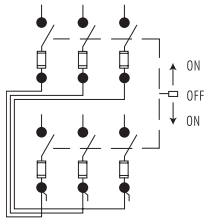


Figure 3



Double Throw Switches – Lug Data

Switch Amp Range	Number of Cables Per Terminal	Cu and/or Al	Wire Range
30	1 pc.	Cu or Al	#14 to #6
60	1 pc.	Cu or Al	#14 to #2
100	1 pc.	Cu or Al	#14 to #1/0
200	1 pc.	Cu or Al	#6 to 250 kcmil

① Rated 10,000 AIC with Class H or 200,000 AIC when used with or protected by Class R, J or T fuses. Fuse rating must not exceed switch ampere rating.
② 800A and larger double throw switches do not have a hub provision.
③ Typical wiring diagrams for 30-200 amp switches are shown.
④ HP ratings at 480V.
⑤ Move load side base.
⑥ General Duty Double Throw Switches are also available in 100 and 200A ratings. Contact sales for additional info.
⑦ A 100A 2P General Duty Stand-by Power Panel is also available on page 3-41.

HHN362CJ

Protector-Lock® Switches With Arrow Hart® Power Lock® Receptacles

Symbol	Switch Amps	Recept Amps	Industrial Enclosure Catalog Number	Industrial Enclosure Approx. Wgt. Lbs. (Std. Pkg. 1)	Use Plug #②	
FUSIBLE, 3 POLE 600V AC SWITCH						
Fig-1	30	30	**HHN361KJ**	17.00	AX103S	20415S
	60	30	**HHN362KJ**①	17.00	AX103S	20415S
	60	60	**HHN362LJ**	17.00		26415S

Protector-Lock® Switches With Crouse-Hinds® Receptacles

Symbol	Switch Amps	Recept Amps	Industrial Type 12 Catalog Number	Industrial Type 12 Approx. Wgt. Lbs. (Std. Pkg. 1)	Use Plug #②
FUSIBLE, 3 POLE 600V AC SWITCH (STYLE 2 RECEPTACLE, 4 WIRE, ONE WIRE GROUNDED)					
Fig-1	60	60	**HHN362CJ**	30.00	APJ6485
NON-FUSIBLE, 3 POLE 600V AC SWITCH (STYLE 2 RECEPTACLE, 4 WIRE, ONE WIRE GROUNDED)					
Fig-2	60	60	**HUN362CJ**	29.00	APJ6485

Figure 1

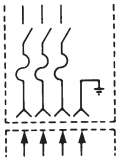
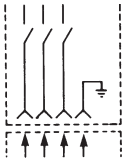


Figure 2



Accessories and Lug Data — See pages 3-48 and 3-49.
Dimensions — See pages 3-51 and 3-52.

①Not UL listed.
②See Accessories page 3-49 for plug selection.

Safety Switches

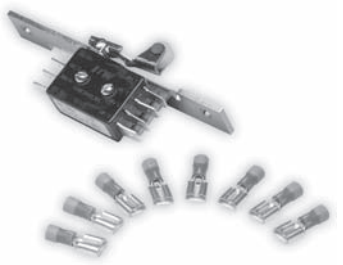
Accessories

HN612M

HT63M

HR612M

HA161234M



HA261234M

Neutral Kits①

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

Switch Ampere Rating	Kit Catalog Number
30 GD	**W410190M**
30 HD, 60 GD	**HN612M**
60, 100 HD, 100 GD	**HN623M**
200	**HN64M**
800 & 1200 VBII	**HN678M**

Class T Fuse Adapter Kits③

All 200A General Duty and 100-1200A Heavy Duty Switches are field convertible to accept Class T fuses.

Catalog Number	Description
HT23M④	100A, 240V Kit
HT63M	100A, 600V Kit
HT24M④	200A, 240V Kit
HT64M	200A, 600V Kit
HX327TF	800A, 240V Kit
HX367TF	800A, 600V Kit
HX328TF	1200A, 240V Kit

Class R Fuse Clip Kits②

Catalog Number	Description
GSRK321M	30A, 240V Kit (GD only)
HR21M	30A, 240V Kit (HD only)
HR612M	30A, 600V Kit/60A, 240V Kit
HR62M	60A, 600V Kit
HR63M	100A Kit
HR64M	200A Kit

Equipment Ground Kits

Equipment Ground Lug Kits are available for all General Duty, Heavy Duty and Double Throw 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.

Switch Ampere Rating	Catalog Number	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30A GD	**GSGK60M**	2	#14-8 AWG
60-200 GD	**HG61234M**	2	#14-4 AWG
30-200 HD	**HG61234M**	2	#14-4 AWG
800-1200	**HG678M**	8	#6 AWG-250 Kcmil

Class J Fuse

All 100-200A General Duty and 600V 30-200A Heavy Duty Switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position.

①All neutral kits are provided with a grounding lug and also contain a bonding provision.

②One kit per switch required for General and Heavy Duty switches. Two kits required per Doubble Throw Switch.

③(1) kit per pole required.

④100 and 200A Double Throw switches are also convertible from H to T fuses by using (6) kits per switch.

Type VBII 3R Hubs[1]
(60–600A GD 30–1200A HD)

Conduit Size (Inches)	Catalog Number	Std. Pkg.	Ship. Wgt. (Std. Pkg.)	For Use on Switches Rated
¾	**ECHS075**	1	.50	30–200A HD, 60–200AGD
1	**ECHS100**	1	.50	30–200A HD, 60–200AGD
1¼	**ECHS125**	1	.50	30–200A HD, 60–200AGD
1½	**ECHS150**	1	.50	30–200A HD, 60–200AGD
2	**ECHS200**	1	.50	30–200A HD, 60–200AGD
2½	**ECHS250**	1	.50	30–200A HD, 60–200AGD
2½	**ECHV250**	1	1.00	800–1200A[3][5]
3	**ECHV300**	1	1.00	800–1200A[3][5]
3½	**ECHV350**	1	1.00	800–1200A[3][5]
4	**ECHV400**	1	1.00	800–1200A[3][5]

Auxiliary Contacts[7]

Auxiliary Contacts are available only for Heavy Duty and Double Throw Switches. The auxiliary contacts are available in 1 normally open and 1 normally closed or 2 normally open and 2 normally closed configurations. All auxiliary contacts make after and break before the main switch contacts.

Switch Ampere Rating	Aux. Switch Catalog Number	Kit Ampere Rating			Kit Horsepower Rating		
		125V AC	250V AC	28V DC	125V AC	250V AC	28V DC
		Max.	Max.	Max.	Max.	Max.	Max.
With 1 NO & 1 NC Isolated Contacts							
30-200	**HA161234M**	10	10	–	1/2	3/4	–
800-1200	**HA165678M**	10	10	–	1/2	3/4	–
With 2 NO & 2 NC Isolated Contacts							
30-200	**HA261234M**	10	10	7	1/2	3/4	–
800-1200	**HA265678M**	10	10	7	1/2	3/4	–

Compact & 30A GD Switch Hubs

Conduit Size (Inches)	Catalog Number	Approx. Wgt. Lbs. (Std. Pkg.—1)
¾	**ECHA075**	.10
1	**ECHA100**	.10
1¼	**ECHA125**	.10

Plugs for Protector-Lock® Switches

Catalog Number[2]	Approx. Wgt. Lbs. (Std. Pkg.—1)	Rating	Description
APJ6485	5.00	60A, 600V AC	High impact strength, copper-free aluminum. Accepts 0.64–1.37" diameter cord.
AX103S	.80	30A, 600V AC	Armored steel with cord grip. Accepts 0.562–1.000" diameter cord.

Closure Plates

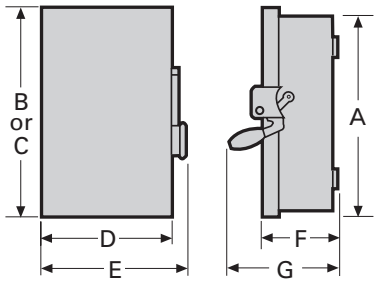
Catalog Number	Rating
ECHS000	[6]
ECHV000	800–1200A
HVHRA[4]	800–1200A

General & Heavy Duty Switches
Lug Data

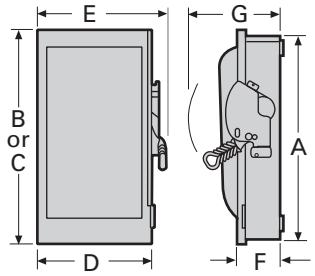
30-100A Switches are suitable for use with 60° or 75°C wire.
100-1200A are suitable for use with 75°C rated wire.

Wire Ranges (Line, Load and Standard Neutral)		
Switch Ampere Rating	**Wire Range with Wire-Bending Space Per NEC Table 373-6**	**Lug Range**
30 GD	#14-8 AWG (Cu/Al)[8]	#14-8 AWG (Cu/Al)[8]
30	#12-6 AWG (Al) or #14-6 AWG (Cu)	#14-2 AWG (Cu/Al)
60	#12-3 AWG (Al) or #14-3 AWG (Cu)	#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)
800	(3) 3/0 AWG-750 Kcmil (Cu/Al) Line and Load or (6) 3/0 AWG-250 Kcmil (Cu/Al) (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral	(3) 1/0 AWG-750 Kcmil (Cu/Al) Line and Load or (6) 1/0 AWG-600 Kcmil (Cu/Al) neutral (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral
1200	(4) 3/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 AWG-600 Kcmil (Cu/Al) neutral	(4) 1/0 AWG-750 Kcmil (Cu/Al) Line and Load (4) 1/0 AWG-600 Kcmil (Cu/Al) neutral

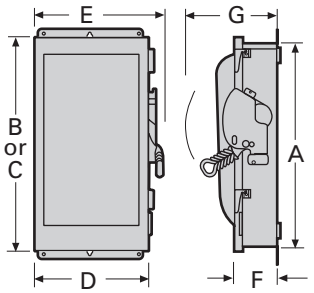
[1] Also for 30-200 double throw switches. Not for use on compact switches.
[2] Net Price. No discount.
[3] 800A and larger Type 3R switches have no provisions for mounting hubs. Drill or punch hole in the field to accommodate hub size desired.
[4] HV to HR adapter plate. Order ECHR series hub separately.
[5] For gasket kit for HV type hub order catalog number HVGKM.
[6] 60-200A GD, 30-200A HD
[7] Two auxiliary contacts required per double throw switch.
[8] Connector will accept up to #6; conductors on line side and retain UL listing. Also applies to 30 compact switches.
[9] Max. wire size for height reduced switches is 500 kcmil (Cu/Al).



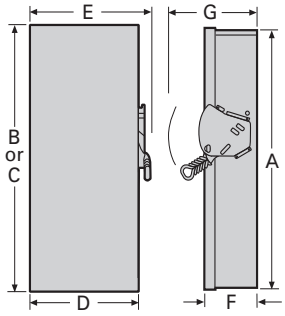
Type 1 or 3R
30A GD



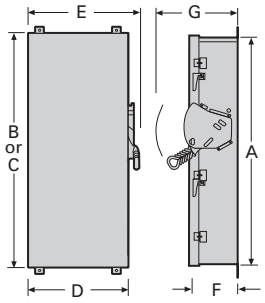
Type 1 or 3R
60-200A GD, 30-200A Type VBII



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



Type 1 or 3R
400-1200A Type VBII



Type 4/4X or 12
400-600A Type VBII

Safety Switch Dimensions②

Catalog Number	Height			Width		Depth		Knockout Diagram①
	Box	With Door	With Rain Shed	Box	With Handle	Box	With Handle	
	A	B	C	D	E	F	G	
GHN321N	7.97	8.13	—	5.50	5.94	3.00	5.88	S1
GHN321NW	8.07	—	8.16	5.16	5.94	3.13	5.88	S3
GHN322N	14.26	15.45	—	6.64	8.70	5.05	8.63	S6
GHN322NW	14.39	—	15.76	6.64	8.70	5.05	8.63	S8
GHN323N	21.95	23.15	—	9.64	11.70	5.05	8.63	S10
GHN323NW	21.95	—	23.46	9.64	11.67	5.05	8.70	S11
GHN324N	29.90	31.07	—	14.62	16.68	6.36	10.92	S12
GHN324NW	29.90	—	31.42	14.61	16.68	6.36	10.92	S13
GHN325N	56.00	56.57	—	24.64	26.21	9.23	14.68	S14
GHN325NH	45.25	45.82	—	24.64	26.21	9.23	14.68	S14
GHN325NW	56.07	—	57.19	24.64	26.70	9.23	14.68	S15
GHN325NWH	45.31	—	46.44	24.64	26.70	9.23	14.68	S15
GHN326N	56.00	56.57	—	24.64	26.21	9.23	14.68	S14
GHN326NH	45.25	45.82	—	24.64	26.21	9.23	14.68	S14
GHN326NW	56.07	—	57.19	24.64	26.70	9.23	14.68	S15
GHN326NWH	45.31	—	46.44	24.64	26.70	9.23	14.68	S15
GHN421N	7.97	8.19	—	7.19	7.69	3.00	5.88	S2
GHN421NW	8.07	—	8.16	7.19	8.16	3.13	5.88	S4
GHN422N	14.26	15.45	—	6.64	8.70	5.05	8.63	S6
GHN422NW	14.39	—	15.76	6.64	8.70	5.05	8.63	S8
GHN423N	21.95	23.15	—	9.64	11.70	5.05	8.63	S10
GHN423NW	21.95	—	23.46	9.64	11.67	5.05	8.70	S11
GHN424N	29.90	31.07	—	14.62	16.68	6.36	10.92	S12
GHN424NW	29.90	—	31.42	14.61	16.68	6.36	10.92	S13
GHN425N	56.00	56.57	—	24.64	26.21	9.23	14.68	S14
GHN425NH	45.25	45.82	—	24.64	26.21	9.23	14.68	S14
GHN425NW	56.07	—	57.19	24.64	26.70	9.23	14.68	S15
GHN425NWH	45.31	—	46.44	24.64	26.70	9.23	14.68	S15
GHN426N	56.00	56.57	—	24.64	26.21	9.23	14.68	S14
GHN426NH	45.25	45.82	—	24.64	26.21	9.23	14.68	S14
GHN426NW	56.07	—	57.19	24.64	26.70	9.23	14.68	S15
GHN426NWH	45.31	—	46.44	24.64	26.70	9.23	14.68	S15
GP211N	7.97	8.13	—	5.50	5.94	3.00	5.38	S2
GP321N	7.97	8.13	—	5.50	5.94	3.00	5.38	S1
GP321NW	8.07	—	8.16	5.16	5.94	3.13	5.38	S3
GU221	7.97	8.13	—	5.50	5.94	3.00	5.88	S1

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

②Accurate to ±⅛".

Dimensions — General & Heavy Duty Switches

Safety Switch Dimensions②

Catalog Number	Height④ Box A	With Door B	With Rain Shed C	Width Box D	With Handle E	Depth Box F	With Handle G	Knockout Diagram①
GU221AW	8.07	—	8.16	5.16	5.94	3.13	5.38	S5
GU222AW	8.07	—	8.16	5.22	5.94	2.94	5.38	S5
GUN321	7.97	8.19	—	7.19	7.69	3.00	5.88	S2
GUN321AW	8.07	—	8.16	7.19	7.69	3.13	5.88	S4
GUN322	11.11	12.31	—	6.64	8.71	5.05	8.61	S7
GUN322AW	11.11	—	12.62	6.64	8.71	5.05	8.61	S9
GUN323	21.95	23.15	—	9.64	11.70	5.05	8.63	S10
GUN323AW	21.95	—	23.46	9.64	11.67	5.05	8.70	S11
GUN324	29.90	31.07	—	14.62	16.68	6.36	10.92	S12
GUN324AW	29.90	—	31.42	14.61	16.68	6.36	10.92	S13
HHN321AS	14.27	15.45	—	6.65	9.02	5.32	10.46	—
HHN321N	14.26	15.45	—	6.64	9.01	5.05	10.17	S6
HHN321NW	14.39	—	15.77	6.64	9.01	5.05	10.17	S8
HHN322AS	16.27	19.31	—	9.17	11.47	5.33	10.46	—
HHN322N	16.26	17.46	—	9.15	11.53	5.05	10.17	S16
HHN322NW	16.26	—	17.77	9.16	11.53	5.05	10.17	S17
HHN323N	21.95	23.15	—	9.64	12.01	5.05	10.17	S10
HHN323NW	21.95	—	23.46	9.64	11.97	5.05	10.17	S11
HHN324N	29.90	31.07	—	14.62	16.98	6.36	12.33	S12
HHN324NW	29.90	—	31.42	14.61	16.99	6.36	12.33	S13
HHN361	14.26	15.45	—	6.64	9.01	5.05	10.17	S6
HHN361AJ	14.27	15.45	—	6.65	9.02	5.32	10.46	—
HHN361AS	14.27	15.45	—	6.65	9.02	5.32	10.46	—
HHN361AW	14.39	15.45	15.77	6.64	9.01	5.05	10.17	S8
HHN362	16.26	17.46	—	9.15	11.53	5.05	10.17	S16
HHN362AJ	16.27	17.46	—	9.17	11.47	5.33	10.46	—
HHN362AW	16.26	—	17.77	9.16	11.53	5.05	10.17	S17
HHN362AS	16.27	17.46	—	9.17	11.47	5.33	10.46	—
HHN362CJ③	16.27	17.46	—	9.10	11.47	5.33	10.46	—
HHN361KJ③	14.27	15.45	—	6.65	9.02	5.32	10.46	—
HHN362KJ③	16.27	17.46	—	9.10	11.47	5.33	10.46	—
HHN362LJ③	16.27	17.46	—	9.10	11.47	5.33	10.46	—
HHN363	21.95	23.15	—	9.64	12.01	5.05	10.17	S10
HHN363AJ	21.96	23.16	—	9.65	12.02	5.34	10.46	—
HHN363AS	21.96	23.16	—	9.65	12.02	5.34	10.46	—
HHN363AW	21.95	—	23.46	9.64	11.97	5.05	10.17	S11
HHN364	29.90	31.07	—	14.62	16.98	6.36	12.33	S12
HHN364AJ	29.96	31.07	—	14.62	16.95	6.63	12.58	—
HHN364AS	29.96	31.07	—	14.62	16.95	6.63	12.58	—
HHN364AW	29.90	—	31.42	14.61	16.99	6.36	12.33	S13
HHN421N	14.26	15.45	—	6.64	9.01	5.05	10.17	S6
HHN421NW	14.39	—	15.77	6.64	9.01	5.05	10.17	S8
HHN422N	16.26	17.46	—	9.15	11.53	5.05	10.17	S16
HHN422NW	16.26	—	17.77	9.16	11.53	5.05	10.17	S17
HHN423N	21.95	23.15	—	9.64	12.01	5.05	10.17	S10
HHN423NW	21.95	—	23.46	9.64	11.97	5.05	10.17	S11
HHN424N	29.90	31.07	—	14.62	16.98	6.36	12.33	S12
HHN424NW	29.90	—	31.42	14.61	16.99	6.36	12.33	S13
HHN461NW	14.39	—	15.77	6.64	9.01	5.05	10.17	S8
HHN462NW	16.26	—	17.77	9.16	11.53	5.05	10.17	S17
HLN327N	66.67	67.16	—	38.40	39.96	9.24	14.68	—
HLN328N	66.67	67.16	—	38.40	39.96	9.24	14.68	—
HLN367	66.67	67.16	—	38.40	39.96	9.24	14.68	—
HLN367AW	66.67	—	67.74	38.40	39.96	9.24	14.68	—

①Knocks not provided on Type 4/4X and 12 or in 800 & 1200A Switches.
②Accurate to ±⅛".
③Dimensions are for switch less receptacle and mounting feet.
④Dimensions are less mounting feet on Type 12 and 4X switches.

Safety Switches

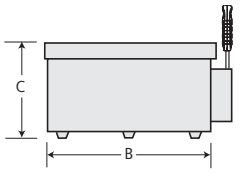
Dimensions — General & Heavy Duty Switches, Protector-Lock® Switches, Double Throw Switches

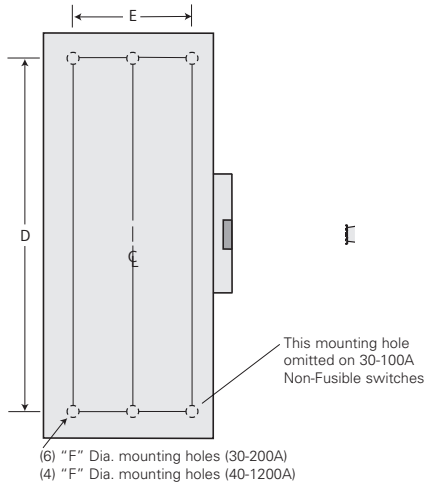
Safety Switch Dimensions③④

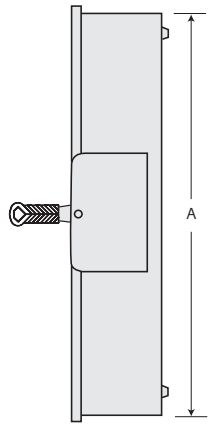
Catalog Number	Height			Width		Depth		Knockout Diagram①
	Box	With Door	With Rain Shed	Box	With Handle	Box	With Handle	
	A	B	C	D	E	F	G	
HLN368	66.67	67.16	—	38.40	39.96	9.24	14.68	—
HLN368AW	66.67	—	67.74	38.40	39.96	9.24	14.68	—
HLN427N	66.67	67.16	—	38.40	39.96	9.24	14.68	—
HLN427NW	66.67	—	67.74	38.40	39.96	9.24	14.68	—
HLN428N	66.67	67.16	—	38.40	39.96	9.24	14.68	—
HLN428NW	66.67	—	67.74	38.40	39.96	9.24	14.68	—
HUN361	11.11	12.31	—	6.64	9.01	5.05	10.17	S7
HUN361AJ	11.12	12.31	—	6.65	9.02	5.56	10.46	—
HUN361AW	11.11	—	12.63	6.64	9.01	5.05	10.17	S9
HUN361AS	11.12	12.31	—	6.65	9.02	5.56	10.46	—
HUN362	16.26	17.46	—	9.15	11.53	5.05	10.17	S16
HUN362AJ	16.27	17.46	—	9.17	11.47	5.33	10.46	—
HUN362AW	16.26	—	17.77	9.16	11.53	5.05	10.17	S17
HUN362AS	16.27	17.46	—	9.17	11.47	5.33	10.46	—
HUN362CJ②	16.26	17.46	—	9.17	—	5.33	10.46	—
HUN363	21.95	23.15	—	9.64	12.01	5.05	10.17	S10
HUN363AJ	21.96	23.16	—	9.65	12.02	5.34	10.46	—
HUN363AS	21.96	23.16	—	9.65	12.02	5.34	10.46	—
HUN363AW	21.95	—	23.46	9.64	11.97	5.05	10.17	S11
HUN364	29.90	31.07	—	14.62	16.98	6.36	12.33	S12
HUN364AJ	29.96	31.07	—	14.62	16.95	6.63	12.58	—
HUN364AS	29.96	31.07	—	14.62	16.95	6.63	12.58	—
HUN364AW	29.90	—	31.42	14.61	16.99	6.36	12.33	S13

VBII Design Double Throw Dimensions (Inches)⑤

Catalog Number	Enclosure			Mounting		
	A	B	C	D	E	F
(30-600A Type 1 & 3R) ⑤						
HDUN221, HDUN321, HDUN361, HDUN361AW	24.50	9.53	6.09	19.00	6.75	0.268
HDHN321, HDHN321AW	29.12	9.53	6.09	23.50	6.75	0.268
HDUN222, HDUN322, HDUN362, HDUN362AW	24.88	11.50	6.09	19.00	9.38	0.268
HDHN322, HDHN322AW	33.53	11.50	6.09	27.50	9.38	0.268
HDUN223, HDUN323, HDUN323AW, HDUN363, HDUN363AW	27.62	12.18	6.09	19.36	8.00	0.268
HDHN323, HDHN323AW	36.44	12.18	6.09	28.11	8.00	0.268
HDUN224, HDUN324, HDUN224AW HDUN324AW, HDUN364, HDUN364AW	36.00	19.12	6.42	31.02	15.00	0.44
HDHN324	49.48	19.12	6.42	44.50	15.00	0.44

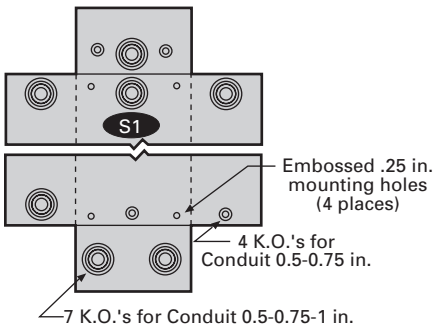






① Knockouts not provided on Type 4/4X and 12 or on 800 & 1200A switches.
② Dimensions are for switch-less receptacle & mounting feet.
③ Accurate to ±1/8".
④ For dimensions in millimeters, multiply inches by 25.4.
⑤ Drip hood not shown but supplied on Type 3R enclosures.

S1



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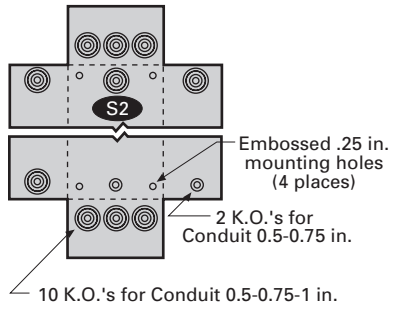

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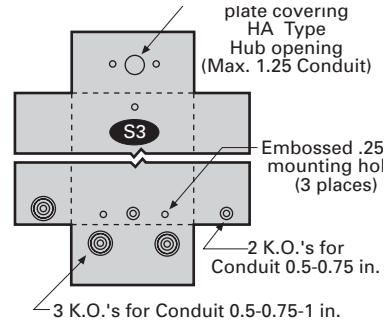

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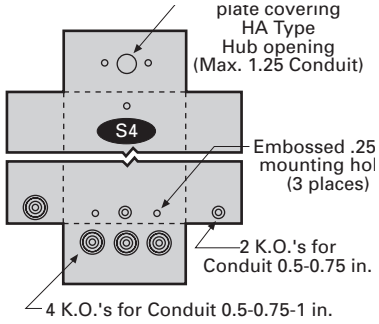

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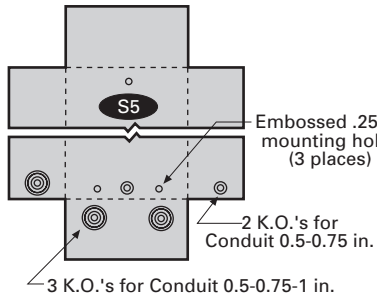

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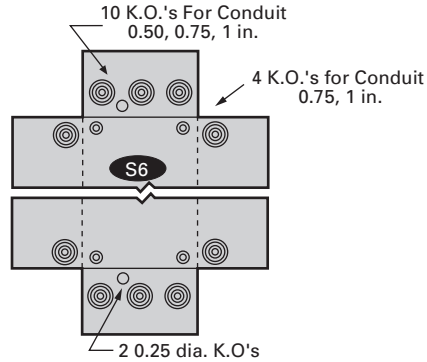

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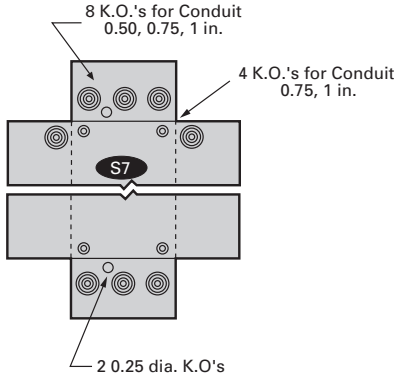

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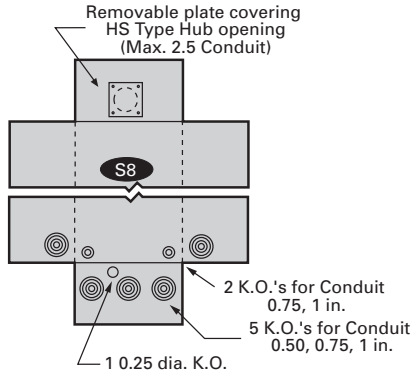
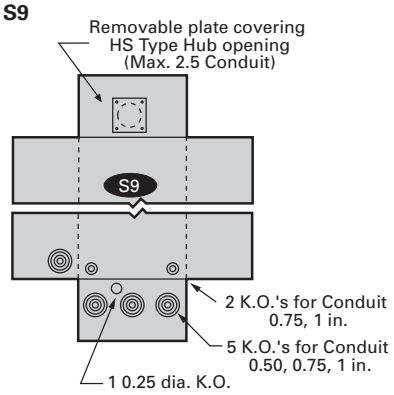


Knockout Drawings

S9



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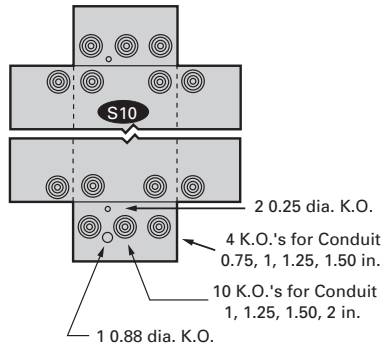

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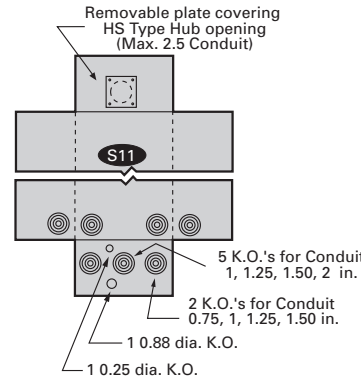
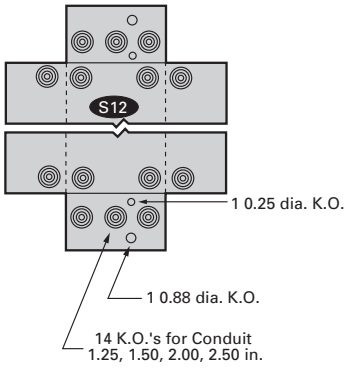


S12



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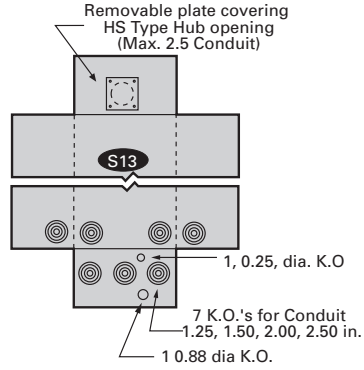
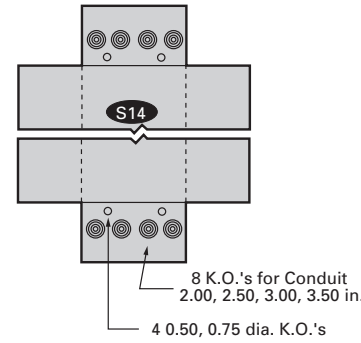


S14



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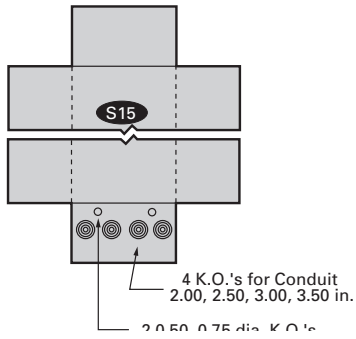

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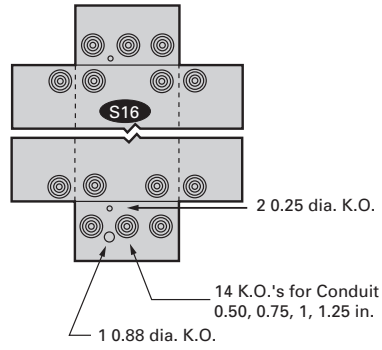

S17