

# Section 2

## Safety Switches

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240 Volt Single-Throw Fusible Switches

Table 2.1: 240 Volt Single-Throw Fusible Safety Switches

Ampere	Type 1	Type 3R	Equipment Ground Kit	Type 12	Type 4X 304 SS	Class R Fuse Kits	Line Side Barriers	Horsepower Ratings				250 Vdc
								Std (Fast Acting One-Time Fuses)		Max (Dual Element Time-Delay Fuses)		
								1Ø	3Ø	1Ø	3Ø	
<b>3 Wire (2 Blade and Fuseholder, 1 neutral) –240 Vac 250 Vdc</b>												
30	VH221BGL	VH221BRBGL	GTK03	VH221BAWKGL	VH221BDSGL	RFK03L	Factory Included	1-1/2	3	3	7-1/2	5
60	VH222BGL	VH222BRBGL	GTK03	VH222BAWKGL	VH222BDSGL	RFK03H	Factory Included	3	7-1/2	10	15	10
100	VH223BGL	VH223BRBGL	GTK0610	VH223BAWKGL	VH223BDSGL	RFK10	Factory Included	7-1/2	15	15	30	20
200	VH224BGL	VH224BRBGL	PKOGTA2	VH224BAWKGL	VH224BDSGL	HRK1020	Factory Included	15	25	—	60	40
400	CH225N	CH225NR	PKOGTA2	CH225NAWK	CH225NDS	HRK4060	LSBG202	—	50	—	125	50
600	CH226N	CH226NR	PKOGTA2	CH226NAWK	CH226NDS	HRK4060	LSBG202	—	75	—	200	50
800	CH227N	CH227NR	PKOGTA7	CH227NAWK	—	—	LSBF202	50	—	—	—	50
1200	CH228N	CH228NR	PKOGTA8	CH228NAWK	—	—	LSBF202	50	—	—	—	50
<b>4 Wire (3 Blade and Fuseholder, 1 neutral) –240 Vac 250 Vdc</b>												
30	VH321BGL	VH321BRBGL	GTK03	VH321BAWKGL	VH321BDSGL	RFK03L	Factory Included	1-1/2	3	3	7-1/2	5
60	VH322BGL	VH322BRBGL	GTK03	VH322BAWKGL	VH322BDSGL	RFK03H	Factory Included	3	7-1/2	10	15	10
100	VH323BGL	VH323BRBGL	GTK0610	VH323BAWKGL	VH323BDSGL	RFK10	Factory Included	7-1/2	15	15	30	20
200	VH324BGL	VH324BRBGL	PKOGTA2	VH324BAWKGL	VH324BDSGL	HRK1020	Factory Included	15	25	—	60	40
400	CH325N	CH325NR	PKOGTA2	CH325NAWK	CH325NDS	HRK4060	LSBG203	—	50	—	125	50
600	CH326N	CH326NR	PKOGTA2	CH326NAWK	CH326NDS	HRK4060	LSBG203	—	75	—	200	50
800	CH327N	CH327NR	PKOGTA7	CH327NAWK	—	—	LSBF203	50	—	—	—	50
1200	CH328N	CH328NR	PKOGTA8	CH328NAWK	—	—	LSBF203	50	—	—	—	50

600 Volt Single-Throw Fusible Switches

Table 2.2: 600 Volt Single-Throw Fusible Safety Switches

Ampere	Type 1	Type 3R	Equipment Ground Kit	Type 12	Type 4X 304 SS	Class R Fuse Kits	Line Side Barriers	Horsepower Ratings				600 Vdc
								Std (Fast acting one-time fuses)		Max (Dual element time-delay fuses)		
								1Ø	3Ø	1Ø	3Ø	
<b>4 Wire (3 Blade and Fuseholder, 1 neutral) –600 Vac 600Vdc</b>												
30	VH361BGL	VH361BRBGL	GTK03	VH361BAWKGL	VH361BDSGL	RFK03L	Factory Included	5	15	7-1/2	20	15
60	VH362BGL	VH362BRBGL	GTK03	VH362BAWKGL	VH362BDSGL	RFK03H	Factory Included	15	30	15	50	30
100	VH363BGL	VH363BRBGL	GTK0610	VH363BAWKGL	VH363BDSGL	RFK10	Factory Included	25	60	30	100	50
200	VH364BGL	VH364BRBGL	PKOGTA2	VH364BAWKGL	VH364BDSGL	HRK1020	Factory Included	50	125	60	150	50
400	CH365N	CH365NR	PKOGTA2	CH365NAWK	CH365NDS	HRK4060	LSBG203	100	250	125	350	50
600	CH366N	CH366NR	PKOGTA2	CH366NAWK	CH366NDS	HRK4060	LSBG203	150	400	200	500	50
800	CH367N	CH367NR	PKOGTA7	CH367NAWK	—	—	LSBF203	200	500	250	500	50
1200	CH368N	CH368NR	PKOGTA8	CH368NAWK	—	—	LSBF203	200	500	250	500	50

SAFETY SWITCHES



**NEMA 7 and 9**

An enclosed automatic molded case switch for use in Divisions 1 and 2 of the following: Class I, Groups C and D; Class II, Groups E, F and G; or Class III, Hazardous Locations as defined in NEC Article 500. Furnished with threaded conduit openings in both top and bottom endwall. Suitable for use as service equipment and listed as “Raintight” for outdoor applications. cULus Listed. Equipment grounding lugs supplied as standard. See CAD drawing of the switch to verify the UL listed short circuit current rating or the enclosed safety switch catalog.

Amperes	Enclosed Molded Case Switch	Solid Neutral Assembly	Horsepower Ratings 3Ø			Size of Threaded Conduit Openings
	Cat. No.	Cat. No.	240 V	480 V	600 V	
60	H60XBD	100SNA	15	15	50	3/4 in.
60	H60XBDAA					
100	H100XBD		30	60	75	
100	H100XBDAA					
225	H225XJG	225SNA	60	125	150	2-1/2 in.
225	H225XJGAA					

**Table 2.3: Conduit Provisions**

Amperes	Top and Bottom Endwall
	NEMA Type 7 and 9 [1]
30	—
60	3/4 in.
100	1-1/4 in.
200	2-1/2 in.

[1] Threaded conduit opening

**Interlocked Receptacle Switches**

**Interlocked Receptacle Switches** are furnished with a factory-installed three-phase four-wire Appleton Powertite<sup>™</sup>, Crouse-Hinds Style 2 Arkrite<sup>™</sup>, or Hubbelock<sup>™</sup> receptacle. The fourth wire is connected to the switch equipment grounding terminal and is not a solid neutral termination. Interlocking linkage between the receptacle and switch mechanism protects against insertion or removal of the plug while the switch is in the “ON” position or insertion of any plug other than specified. Grounding lugs are included. See wiring diagram of the switch to verify the UL listed short circuit current rating or the Square D Enclosed Safety Switches catalog.



H362AWA  
Interlocked Receptacle  
Switch with Appleton  
Powertite Receptacle



H362AWC  
Interlocked Receptacle  
Switch with Crouse-Hinds  
Arkrite Receptacle



H362AWH  
Interlocked Receptacle  
Switch with Hubbell  
Hubbelock Receptacle

**Appleton Powertite Receptacle**

- UL Listed and CSA Certified
- Available in 30–100 A, 600 Vac / 250 Vdc, fused or non-fused, NEMA Type 1, NEMA Type 4 / 4X / 5 stainless steel and NEMA Type 12 / 3R
- Suitable for use as service equipment (USA only)
- Receptacles are epoxy powder coated over copper-free cast aluminum

**Table 2.4: Appleton Powertite Receptacle Switches**

Amperes	NEMA Type 1	NEMA Types 3, 3R, 4, 4X, 5, 12 304 Stainless Steel Enclosure	NEMA Types 12, 3R	Use with Plug [2]	Horsepower Ratings—3Ø					
					480 Vac [3]		600 Vac [3]		250 Vdc [4]	
					Std.	Max.	Std.	Max.	Std.	Max.
<b>Fusible—3P, 600 Vac, 250 Vdc</b>										
30	H361WA	H361DSWA	H361AWA	ACP3034BC	5	15	7-1/2	20	5	—
60	H362WA	H362DSWA	H362AWA	ACP6034BC	15	30	15	50	10	—
100	H363WA	H363DSWA	H363AWA	ACP1034CD	25	60	30	75	20	—
<b>Non-Fusible—3P, 600 Vac, 250 Vdc</b>										
30	HU361WA	HU361DSWA	HU361AWA	ACP3034BC	—	20	—	30	—	5
60	HU362WA	HU362DSWA	HU362AWA	ACP6034BC	—	50	—	60	—	10
100	HU363WA	HU363DSWA	HU363AWA	ACP1034CD	—	75	—	100	—	20

**Table 2.5: Appleton Powertite Receptacle Switches Fuses and Circuit Breakers**

Ampere	10 kAIR Fuse	100 kAIR Fuses	200 kAIR Fuses	14 kAIR Circuit Breaker	18kAIR Circuit Breaker
<b>Fusible—3P, 600 Vac, 250 Vdc</b>					
30	H, K	—	J, R	—	—
60	H, K	—	J, R	—	—
100	H, K	—	J, R	—	—
<b>Non-Fusible—3P, 600 Vac, 250 Vdc</b>					
30	H, K	J, R, T [5]	J, R, T	FA	FH
60	H, K	—	J, R, T	FA	FH
100	H, K	—	J, R, T	FA	FH

[2] Receptacle UL listed for use with Appleton ACP or CPH plugs; UL Classified for use with Crouse-Hinds APJ Arkrite plugs. (see Table 2.6).  
 [3] Std.—Using fast acting one time fuses. Max.—Using dual element time delay fuses.  
 [4] For switching dc, use two outside switching poles.  
 [5] SCCR when using 60 A Max fuse.

**Crouse-Hinds Arktite Receptacle**

- UL Listed
- Available in 30–100 A, 600 Vac / 250 Vdc, fused or non-fused, NEMA Type 1, NEMA Types 4/4X/5 stainless steel and NEMA Types 12/3R
- Suitable for use as service equipment
- Receptacles are cast aluminum, copper free for NEMA Type 1 and NEMA Types 12/3R safety switches
- Receptacles are epoxy powder coated, copper free cast aluminum for NEMA Types 4/4X/5 stainless steel safety switches

**Table 2.6: Crouse-Hinds Arktite Safety Switches**

Amperes	NEMA Type 1	NEMA Types 4, 4X, 5 304 Stainless Steel Enclosure	NEMA Types 12, 3R	Use with Plug	Horsepower Ratings—3Ø					
					480 Vac [6]		600 Vac [6]		250 Vdc [7]	
					Std.	Max.	Std.	Max.	Std.	Max.
<b>Fusible—3P, 600 Vac, 250 Vd</b>										
30	H361WC	H361DSWC	H361AWC	APJ3485	5	15	7-1/2	20	5	—
60	H362WC	H361DSWC	H361AWC	APJ6485	15	30	15	50	10	—
100	H363WC	H363DSWC	H362AWC	APJ10487	25	60	30	75	20	—
<b>Non-Fusible—3P, 600 Vac, 250 Vdc</b>										
30	HU361WC	HU361DSWC	HU361AWC	APJ3485	—	20	—	30	—	5
60	HU362WC	HU362DSWC	HU362AWC	APJ6485	—	50	—	60	—	10
100	HU363WC	HU363DSWC	HU363AWC	APJ10487	—	60	—	100	—	20

**Table 2.7: Crouse-Hinds Arktite Safety Switches Fuses and Circuit Breakers**

Amperes	10 kAIR Fuses	100 kAIR Fuses	200 kAIR Fuses	14 kAIR Circuit Breaker	18 kAIR Circuit Breaker
<b>Fusible—3P, 600 Vac, 250 Vd</b>					
30	H, K	—	J, R	—	—
60	H, K	—	J, R	—	—
100	H, K	—	J, R	—	—
<b>Non-Fusible—3P, 600 Vac, 250 Vdc</b>					
30	H, K	J, R, T [8]	J, R, T	FA	FH
60	H, K	—	J, R, T	FA	FH
100	H, K	—	J, R, T	FA	FH

**Hubbelock Receptacle**

- UL Listed
- Available in 30–100 A, 600 Vac / 250 Vdc, fused or non-fused, NEMA Type 1, and NEMA Type 12
- Suitable for use as service equipment [9]
- Receptacles are zinc plated steel for NEMA Types 1 and 12 safety switches
- Short Circuit Current Rating for fusible switches is 10 kAIR maximum when used with Class H, K, J or R fuses
- Short Circuit Current Rating for non-fusible switches is 10 kAIR maximum when using Class H, K, J, R or T fuses

**Table 2.8: Hubbelock Receptacle Safety Switch**

Amperes	NEMA Type 1	NEMA Type 12	Use with Plug [10]	Horsepower Ratings—3Ø			
				480 Vac [11]		600 Vac [11]	
				Std.	Max.	Std.	Max.
<b>Fusible—3P, 600 Vac</b>							
60	H362WH	H362AWH	SD12781	15	30	15	50
<b>Non-Fusible—3P, 600 Vac</b>							
60	HU362WH	HU362AWH	SD12781	—	50	—	60

[6] Std.—Using fast acting one time fuses. Max.—Using dual element time delay fuses.

[7] For switching dc, use two outside switching poles.

[8] SCCR when using 60 A Max fuse.

[9] Receptacle only rated for NEMA Type 1 and 12 applications.

[10] Hubbell plug is furnished with a Kellems grip for 1-1/2 in. to 1-21/64 in. cable diameter.

[11] Std.—Using fast acting one time fuses. Max.—Using dual element time delay fuses.



### Key Interlock Systems and Sample Applications

**Factory-installed only** on heavy duty and double throw safety switches.

Interlocks help protect against unauthorized operation. Not available on hazardous location devices (NEMA 7/9) or fiberglass reinforced polyester (NEMA 4X).

The key interlock system is a simple and easy method of applying individual key interlock units and assemblies to the above equipment so as to require operation in a predetermined sequence. UL Listed.

**Quoting:** Contact Schneider Electric for catalog number, availability and pricing prior to quoting a job.

**Ordering:** Order cannot be released for production until the following information has been provided:

- End User—Company name, address.
- Function of each lock (e.g., switch to be locked open with key removed, key held when switch is closed).
- Existing Equipment—if switch is to be interlocked with equipment already on site, provide brand of existing lock and key number.
- Other New Equipment—if switch is to be interlocked with new equipment not yet installed at the site, then provide contact person and phone number so that locks may be coordinated.
- Additional information may be required upon order entry.

**Use these suffixes on switch catalog numbers:**

- KI = 1 lock per switch
- KI2 = 1 lock with 2 cylinders per switch
- KIKI = 2 separate locks per switch

#### Key Interlock Sample Applications

**Sample Application—1** (see Figure 1)

To protect against two devices from being closed simultaneously.

Two devices are shown in Figure 1. In operation they are not closed at the same time. With the interlocks arranged as shown only one key is required in the interlocking system. Both devices are shown open, therefore, the key is free. To close any one device the key is inserted and turned in that particular lock, the key is held in this lock until the device is again locked open. This simple interlocking sequence lends itself to a multitude of applications. The procedure is the same for two devices, neither of which is to be opened at the same time.

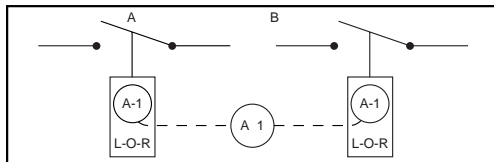


Figure 1

**Sample Application—2** (see Figure 2)

To protect against opening of switch A when circuit breaker B is closed.

Switch A and circuit breaker B are in closed position. Key A-1 is held in circuit breaker B interlock.

- Open circuit breaker.
- Turn key A-1 in L-O-R interlock on circuit breaker B to lock open. Key A-1 is now free.
- Insert key A-1 in L-C-R interlock on switch A and turn to unlock.
- Open switch A. Key A-1 is now held. Reverse sequence to restore service.

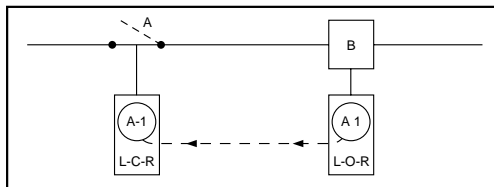


Figure 2

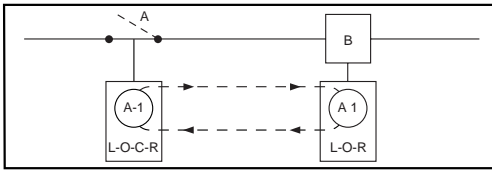


Figure 3

**Sample Application—3** (see Figure 3)

To protect against operation of switch A when circuit breaker B is closed. Permits re-closing of circuit breaker for servicing when switch is locked open.

Switch A and circuit breaker B are in closed position. Key A-1 is held in circuit breaker interlock.

- Open circuit breaker.
- Turn key A-1 in L-O-R interlock on circuit breaker B to lock open. Key A-1 is now free.
- Insert key A-1 in L-O-C-R interlock on switch A and turn to unlock.
- Open switch A.
- Turn key A-1 in L-O-C-R interlock on switch A to lock open. Key A-1 is now free.
- Return key A-1 to circuit breaker interlock and unlock for operation during servicing period.

Reverse sequence to restore service.

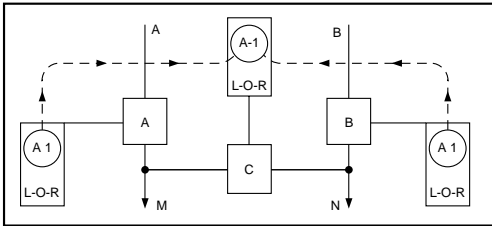


Figure 4

**Sample Application—4 (Main-Tie-Main)** (See Figure 4)

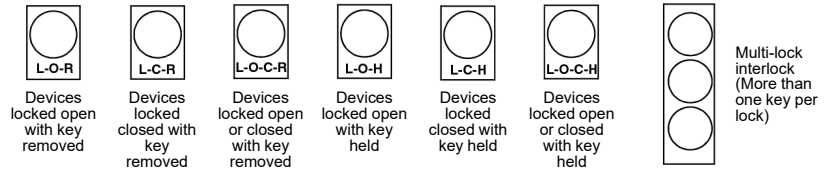
To protect against paralleling of lines A and B; two loads, fed from either source.

Circuit breaker A is closed to supply load M. Circuit breaker B is closed to supply load N. Tie-circuit breaker C is open. Keys A-1 are held in interlocks on both circuit breakers A and B. Tie-circuit breaker C cannot be closed unless either A or B is locked open.

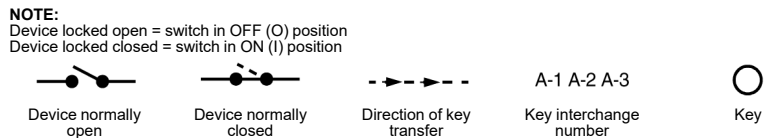
To transfer load N to circuit breaker A, proceed as follows:

- Open circuit breaker B.
- Turn key A-1 in L-O-R interlock on circuit breaker B to lock open. Key A-1 is now free.
- Insert Key A-1 in L-O-R interlock on tie-circuit breaker C and turn to unlock. Key A-1 is now held.
- Close tie-circuit breaker C.
- Reverse sequence to restore service.
- Load M can be supplied through circuit breaker B in a similar manner.

**Locking Position—Designations**



**Diagram Symbols**



240 Volt Single-Throw Fusible Switches Obsolete – April 28, 2023

Table 2.9: 240 V Single-Throw Fusible Safety Switches

Amperes	NEMA Type 1 Indoor	NEMA Type 3R Rainproof (Bolt-on Hubs [12])	NEMA Type 4, 4X, 5, [13] 304 Stainless Steel [14] Dust Resistant, Water Resistant, Corrosion Resistant (Water Resistant Hubs [12])	NEMA Type 12K With Knockouts (Water Resistant Hubs [12])	NEMA Type 3R, 5 or 12 [15] Without Knockouts (Water Resistant Hubs [12])	Line Side Barriers Factory Included [16]	Horsepower Ratings				
							240 Vac				250 Vdc [17]
							Std. (Using Fast Acting, One Time Fuses)		Max. (Using Dual Element, Time Delay Fuses)		
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.	1Ø	3Ø	1Ø	3Ø			
<b>2-Wire (2 Blades and Fuseholders)—240 Vac, 250 Vdc</b>											
30	Use three-wire devices for two-wire applications	H221DS	H221A	H221AWK	Factory Included	1-1/2	3 [18]	3	7-1/2 [18]	5	
30		—	—	H2212AWK [19]	Factory Included	1-1/2	—	3	—	5	
60		H222DS	—	H222AWK	Factory Included	3	7-1/2 [18]	10	15 [18]	10	
100		H223DS	H223A	H223AWK	Factory Included	7-1/2	15 [18]	15	30 [20]	20	
200		H224DS	H224A	H224AWK	Factory Included	15	25 [18]	—	60 [18]	40	
<b>3-Wire (2 Blades and Fuseholders, 1 Neutral)—240 Vac, 250 Vdc</b>											
30	H221N	H221NRB	Use two-wire devices.	Factory Included	1-1/2	3 [18]	3	7-1/2 [20]	5		
60	H222N	H222NRB		Factory Included	3	7-1/2 [18]	10	15 [18]	10		
100	H223N	H223NRB		Factory Included	7-1/2	15 [18]	15	30 [18]	20		
200	H224N	H224NRB		Factory Included	15	25 [18]	—	60 [18]	40		
<b>3-Wire (3 Blades and Fuseholders)—240 Vac, 250 Vdc</b>											
30	Use four-wire devices For three-wire applications	H321DS	H321A	H321AWK	Factory Included	1-1/2	3	3	7-1/2	5	
60		H322DS	H322A	H322AWK	Factory Included	3	7-1/2	10	15	10	
100		H323DS	H323A	H323AWK	Factory Included	7-1/2	15	15	30	20	
200		H324DS	H324A	H324AWK	Factory Included	15	25	—	60	40	
<b>4-Wire (3 Blades and Fuseholders, 1 Neutral)—240 Vac, 250 Vdc</b>											
30	H321N	H321NRB	Use three-wire devices. See Digest section 3.	Factory Included	1-1/2	3	3	7-1/2	5		
60	H322N	H322NRB		Factory Included	3	7-1/2	10	15	10		
100	H323N	H323NRB		Factory Included	7-1/2	15	15	30	20		
200	H324N	H324NRB		Factory Included	15	25	—	60	40		

SAFETY SWITCHES

[12] For Rainproof Bolt-On Hubs and Water Resistant Hubs see Digest section 3.  
 [13] Complete rating is NEMA Type 3, 3R, 4, 4X, 5 and 12. For NEMA Type 3R applications, remove drain screw from bottom endwall.  
 [14] See 316 Grade Stainless Steel-NEMA Type 3, 3R, 4, 4X, 5, 12, in Digest section 3.  
 [15] Also suitable for NEMA Type 3R application by removing drain screw from bottom endwall.  
 [16] Factory included to prevent inadvertent contact with live parts per UL 869A and NEC Service entrance barrier requirements.  
 [17] For switching dc, use two outside switching poles.  
 [18] For corner grounded delta systems, use switching poles for ungrounded conductors. See data bulletin 2700D60202 for additional information.  
 [19] 60 A switch with 30 A fuse spacing and clips. Must use 60 A enclosure accessories including electrical interlocks.  
 [20] For corner grounded delta systems, use switching poles for ungrounded conductors.

**600 Volt Single-Throw Fusible Switches**

**Table 2.10: 600 Volt Single-Throw Fusible Safety Switches**

Amperes	NEMA Type 1 Indoor	NEMA Type 3R Rainproof (Bolt-on Hubs [21])	NEMA Type 4, 4X, 5 [22] 304 Stainless Steel (316 stainless steel [23]) Dust Resistant, Water Resistant, Corrosion Resistant (Water Resistant Hubs [21])	NEMA Type 12K With Knockouts (Water Resistant Hubs [21])	NEMA Type 3R, 5 or 12 Without Knockouts (Water Resistant Hubs [21])	Line Side Barriers Factory Included	Horsepower Ratings					
							480 Vac		600 Vac		DC	
							Std. (Using Fast Acting, One Time Fuses)	Max. (Using Dual Element, Time Delay Fuses)	Std. (Using Fast Acting, One Time Fuses)	Max. (Using Dual Element, Time Delay Fuses)		
Cat. No.	Cat. No.	Cat. No.	Cat. No.	Cat. No.		3Ø	3Ø	3Ø	3Ø	250	600	
<b>3-Wire (3 Blades and Fuseholders)—600 Vac, 600 Vdc</b>												
30	H361	H361RB	H361DS	H361A	H361AWK	Factory included	5	15	7-1/2	20	5	15
30	H3612	H3612RB	—	H3612A	H3612AWK	Factory included	5	15	7-1/2	20	—	15
60	H362	H362RB	H362DS	H362A	H362AWK	Factory included	15	30	15	50	—	30
100	H363	H363RB	H363DS	H363A	H363AWK	Factory included	25	60	30	100	—	50
200	H364	H364RB	H364DS	H364A	H364AWK	Factory included	50	125	60	150	40	50
<b>4-Wire (3 Blades and Fuseholders, 1 Neutral)—600 Vac, 600 Vdc</b>												
30	H361N	H361NRB	—			Factory included	5	15	7-1/2	20	—	15
60	H362N	H362NRB	—			Factory included	15	30	15	50	—	30
100	H363N	H363NRB	—			Factory included	25	60	30	75	—	50
200	H364N	H364NRB	H364NDS	H364NA	H364NAWK	Factory included	50	125	60	150	40	50
<b>4-Wire (4 Blades and Fuseholders)—600 Vac, 600 Vdc</b>												
30	H461	—	—	—	—	Factory included	7-1/2	20	10	25	5	15
60	H462	—	—	—	—	Factory included	15	40	20	50	10	30
100	H463	—	—	—	—	Factory included	25	60	30	75	20	30
200	H464	—	—	—	—	Factory included	50	125	60	150	40	50
400	H465	—	—	—	—	QTY (2): LSBG602	100	250	125	350	50	50
600	H466	—	—	—	—	QTY (2): LSBG602	150	400	200	500	50	50

[21] For Rainproof Bolt-On Hubs and Water Resistant Hubs see Digest section 3.

[22] Complete rating is NEMA Type 3, 3R, 4, 4X, 5 and 12. For NEMA Type 3R applications, remove drain screw from bottom endwall.

[23] See 316 Grade Stainless Steel-NEMA Type 3, 3R, 4, 4X, 5, 12, in Digest section 3.

600 Volt Single-Throw Non-Fusible Obsolete – April 28, 2023

Table 2.11: 600 Volt Single-Throw Non-Fusible Switches

Amperes	NEMA Type 1 Indoor	NEMA Type 3R Rainproof (Bolt-on Hubs [24])	NEMA Type 4, 4X, 5 [25] 304 Stainless Steel [26] Dust Resistant, Water Resistant, Corrosion Resistant (Water Resistant Hubs [24])	NEMA Type 12K With Knockouts [24]	NEMA Type 3R, 5 or 12 [27] Without Knockouts [24]	Line Side Barriers	Horsepower Ratings (Max.)											
							Volts AC						Volts DC [28]					
							240		Line 480		600		250		600			
Cat. No.		Cat. No.		Cat. No.		Cat. No.		Cat. No.		1Ø	3Ø	1Ø	3Ø	1Ø	3Ø	250	600	
<b>3-Wire (3 Blades)—600 Vac, 600 Vdc</b>																		
30	HU361	HU361RB	HU361DS	HU361A	HU361AWK	[29]	5	10	7-1/2	20	10	30	5	15				
39	HU361EI [30]	HU361RBEI [30]	HU361DSEI [30]	HU361AEI [30]	HU361AWKEI [30]	[29]	5	10	7-1/2	20	10	30	5	15				
30	—	HU3612RB [31]	—	HU3612A [31]	HU3612AWK [31]	[29]	5	10	7-1/2	20	10	30	5	15				
60	HU362	HU362RB	HU362DS	HU362A	HU362AWK	[29]	10	20	25	50	30	60	10	30				
60	—	—	HU362DSEI [30]	—	—	[29]	10	20	25	50	30	60	10	30				
100	HU363	HU363RB	HU363DS	HU363A	HU363AWK	[29]	20	40	40	75	40	100	20	50				
200	HU364	HU364RB	HU364DS	HU364A	HU364AWK	[29]	15	60	50	125	50	150	40	50				

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[24] For Rainproof Bolt-On Hubs and Water Resistant Hubs see Digest section 3.

[25] Complete rating is NEMA Type 3, 3R, 4, 4X, 5 and 12. For NEMA Type 3R applications, remove drain screw from bottom endwall.

[26] See 316 Grade Stainless Steel-NEMA Type 3, 3R, 4, 4X, 5, 12, in Digest section 3.

[27] Also suitable for NEMA Type 3R application by removing drain screw from bottom endwall.

[28] or switching dc use two switching poles.

[29] Factory Included to help avoid inadvertent contact with live parts per UL 869A and NEC service entrance barrier requirements.

[30] Switches with EI suffix are stocked with factory-installed electrical interlocks with one normally-open and one normally-closed contact.

[31] Use 60 A enclosure accessories, including electrical interlocks.

### 316 Grade Stainless Steel - NEMA Type 3, 3R, 4, 4X, 5, 12 Obsolete – April 28, 2023

316 stainless steel enclosure safety switches offer superior corrosion resistance to a wider range of chemicals than 304 stainless switches. 316 better resists chloride and is often used in marine, waste treatment, and transportation applications. Use water resistant hubs, see Hubs in Digest Section 3.

Equipment grounding lugs are supplied as standard through 200 A. See Terminal Lug Data in Digest Section 3 for wire termination data for grounding lugs.

**Table 2.12: 316 Grade Stainless Steel Three-pole 600 Vac, 600 Vdc**

Amperes	Cat. No.	Line Side Barriers [32]	Horsepower Ratings– 3Ø				
			480 Vac [33]		600 Vac [33]		600 Vdc [34]
			Std.	Max.	Std.	Max.	Max.
<b>Fusible—3P, 600 Vac, 600 Vdc</b>							
30	H361SS	Factory Included	5	15	7-1/2	20	15
60	H362SS	Factory Included	15	30	15	50	30
100	H363SS	Factory Included	25	60	30	75	50
200	H364SS	Factory Included	50	125	60	150	50
<b>Non-Fusible—3P, 600 Vac, 600 Vdc</b>							
30	HU361SS	Factory Included	—	20	—	30	15
60	HU362SS	Factory Included	—	50	—	60	30
100	HU363SS	Factory Included	—	75	—	100	50
200	HU364SS	Factory Included	—	125	—	150	50

[32] Factory-included to help avoid inadvertent contact with live parts per UL 869A and NEC service entrance barrier requirements.

[33] Std.—Using fast acting, one time fuses. Max.—Using dual element time delay fuses.

[34] For switching dc use two switching poles.

**NEMA Type 4, 4X, 5, 7, 9, and 12 Obsolete – April 28, 2023**  
Terminal lug data can be found in Digest Section 3.

**Table 2.13: Approximate Dimensions for NEMA Type 4, 4X, 5, 7, 9, and 12 Safety Switches**

Cat. No.	Series	H		W		D		W/H		Cat. No.	Series	H		W		D		W/H	
		in.	mm	in.	mm	in.	mm	in.	mm			in.	mm	in.	mm	in.	mm	in.	mm
H221A	F6	14.60	371	6.63	168	4.96	125	7.55	192	H362SS	F6	16.87	428	8.92	227	6.97	177	10.81	275
H221AWK	F6	14.60	371	6.63	168	4.96	125	7.55	192	H363AWA	F7	20.50	521	9.00	229	7.00	178	10.50	267
H221DS	F6	14.93	379	7.22	183	5.11	130	8.67	220	H363AWC	F7	20.50	521	9.00	229	7.00	178	10.50	267
H2212AWK	F6	16.50	419	9.00	229	7.00	178	10.50	267	H363A	F6	20.50	521	9.00	229	7.00	178	10.50	267
H222A	F6	14.60	371	6.63	168	4.96	125	7.55	192	H363AWK	F6	20.50	521	9.00	229	7.00	178	10.50	267
H222AWK	F6	14.60	371	6.63	168	4.96	125	7.55	192	H363DS	F6	20.82	529	9.36	238	6.97	177	11.25	286
H222DS	F6	14.93	379	7.22	183	5.11	130	8.67	220	H363DSWA	F7	20.82	529	9.36	238	6.97	177	11.25	286
H223A	F6	20.50	521	9.00	229	7.00	178	10.50	267	H363DSWC	F7	20.82	529	9.36	238	6.97	177	11.25	286
H223AWK	F6	20.50	521	9.00	229	7.00	178	10.50	267	H363SS	F7	20.82	529	9.36	238	6.97	177	11.25	286
H223DS	F6	20.82	529	9.36	238	6.97	177	11.25	286	H364A	F6	29.00	737	17.25	438	8.75	216	18.63	473
H224A	F6	29.00	737	17.25	438	8.75	216	18.63	473	H36AWK	F6	29.00	737	17.25	438	8.75	216	18.63	473
H224AWK	F6	29.00	737	17.25	438	8.75	216	18.63	473	H364DS	F6	29.00	737	17.75	451	8.88	226	19.25	489
H224DS	F6	29.00	737	17.25	451	8.88	226	19.25	489	H364NDS	F6	29.00	737	17.75	451	8.88	226	19.25	489
H321AWK	F6	14.60	371	6.63	168	4.96	125	7.55	192	H364NA	F6	29.00	737	17.25	438	8.75	216	18.63	473
H321A	F6	14.60	371	6.63	168	4.96	125	7.55	192	H364NAWK	F6	29.00	737	17.25	438	8.75	216	18.63	473
H321DS	F6	14.93	379	7.22	183	5.11	130	8.67	220	H364SS	F6	29.00	737	17.25	451	8.88	226	19.25	489
H321AWK	F6	14.60	371	6.63	168	4.96	125	7.55	192	HU361AWA	F7	16.50	419	9.00	229	7.00	178	10.50	267
H322A	F6	14.60	371	6.63	168	4.96	125	7.55	192	HU361AWC	F7	16.50	419	9.00	229	7.00	178	10.50	267
H322DS	F6	14.93	379	7.22	183	5.11	130	8.67	220	HU361A	F6	14.60	371	6.63	168	4.96	125	7.55	192
H323AWK	F6	20.50	521	9.00	229	7.00	178	10.50	267	HU361AWK	F6	14.60	371	6.63	168	4.96	125	7.55	192
H323A	F6	20.50	521	9.00	229	7.00	178	10.50	267	HU361DS	F6	14.93	379	7.22	183	5.11	130	8.67	220
H323DS	F6	20.82	529	9.36	238	6.97	177	11.25	286	HU361DSWA	F7	16.87	428	8.92	227	5.11	130	10.81	275
H324A	F6	29.00	737	17.25	438	8.75	216	18.63	473	HU361DSWC	F7	16.87	428	8.92	227	5.11	130	10.79	274
H324AWK	F6	29.00	737	17.25	438	8.75	216	18.63	473	HU361SS	F6	14.93	379	7.22	183	5.11	130	8.67	220
H324DS	F6	29.00	737	17.75	451	8.88	226	19.25	489	HU362DSWA	F7	16.87	428	8.92	227	5.11	130	10.81	275
H326DS	E5	46.25	1175	26.25	667	10.13	259	26.25	667	HU362DSWC	F7	16.87	428	8.92	227	5.11	130	10.79	274
H326NAWK	E5	46.25	1175	26.25	667	10.13	259	26.25	667	HU362SS	F6	16.87	428	8.92	227	6.97	177	10.81	275
H326DS	E5	46.25	1175	26.25	667	10.13	259	26.25	667	HU363AWA	F7	20.50	521	9.00	229	7.00	178	10.50	267
H326NAWK	E5	46.25	1175	26.25	667	10.13	259	26.25	667	HU363AWC	F7	20.50	521	9.00	229	7.00	178	10.50	267
H326NDS	E5	46.25	1175	26.25	667	10.13	259	26.25	667	HU363A	F6	20.50	521	9.00	229	7.00	178	10.50	267
H361AWA	F7	16.5	419	10.50	267	7.0	178	10.50	267	HU363AWK	F6	20.50	521	9.00	229	7.00	178	10.50	267
H361AWC	F7	16.5	419	10.50	267	7.0	178	10.50	267	HU363DS	F6	20.82	529	9.36	238	6.97	177	11.25	286
H361AWK	F7	14.60	371	7.55	192	4.96	125	7.55	192	HU363DSWA	F7	20.82	529	9.36	238	6.97	177	11.25	286
H361A	F7	14.60	371	7.55	192	4.96	125	7.55	192	HU363DSWC	F7	20.82	529	9.36	238	6.97	177	11.25	286
H361DS	F6	14.93	379	8.67	220	5.11	130	8.67	220	HU363SS	F6	20.82	529	9.36	238	6.97	177	11.25	286
H361DSWA	F7	16.87	428	8.92	227	5.11	130	10.81	275	HU364A	F6	29.00	737	17.25	438	8.75	216	18.63	473
H361DSWC	F7	16.87	428	8.92	227	5.11	130	10.79	274	HU364AWK	F6	29.00	737	17.25	438	8.75	216	18.63	473
H361SS	F6	14.93	379	7.22	183	5.11	130	8.67	220	HU364DF	E1	31.30	795	26.30	668	11.80	300	26.30	668
H3612A	F6	16.50	419	9.00	229	7.00	178	10.50	267	HU364DS	F6	29.00	737	17.75	451	8.88	226	19.25	489
H3612AWK	F6	16.50	419	9.00	229	7.00	178	10.50	267	HU364SS	F6	29.00	737	17.75	451	8.88	226	19.25	489
H362AWA	F7	16.50	419	9.00	229	7.00	178	10.50	267	HU365AWK	E5	46.25	1175	26.25	667	10.13	259	26.25	667
H362AWC	F7	16.50	419	9.00	229	7.00	178	10.50	267	HU365DS	E5	46.25	1175	26.25	667	10.13	259	26.25	667
H362AWH	F6	16.50	419	9.00	229	7.00	178	10.50	267	HU365SS	E5	46.25	1175	26.25	667	10.13	259	26.25	667
H362A	F6	16.50	419	9.00	229	7.00	178	10.50	267	HU366AWK	E5	46.25	1175	26.25	667	10.13	259	26.25	667
H362AWK	F6	16.50	419	9.00	229	7.00	178	10.50	267	HU366DS	E5	46.25	1175	26.25	667	10.13	259	26.25	667
H362DS	F6	16.87	428	8.92	227	6.97	177	10.81	275	HU366SS	E5	46.25	1175	26.25	667	10.13	259	26.25	667
H362DSWA	F7	16.87	428	8.92	227	5.11	130	10.81	275	HU367AWK	E4	69.13	1756	36.62	930	17.75	451	36.62	930
H362DSWC	F7	16.87	428	8.92	227	5.11	130	10.79	274	HU368AWK	E4	69.13	1756	36.62	930	17.75	451	36.62	930

SAFETY SWITCHES

**Electrical Interlock Kits**

Electrical interlocks for heavy duty 30–1200 A safety switches are available factory-installed or in kit form for field installation. Each kit contains instructions for proper field mounting. A pivot arm operates from switch mechanism, breaking the control circuit before the main switch blades break. Switches with electrical interlocks installed are UL Listed. For factory-installed electrical interlocks add EI (for one contact) or EI2 (for two contacts) suffix to catalog number.

**Table 2.14: Electrical Interlock Kit** [35] [36]

Switch Amperes Rating	Series Number [37]	Electrical Interlock Kit Cat. No. [38]
30	F5–F6	EIK031
		EIK032
60 (600 V)	F5–F6	EIK1
		EIK2
60 (240 V)	F5–F6	EIK031
		EIK032
100–200	F5–F6	EIK1
		EIK2
30–100 Receptacle Switches	F5–F7	EIK1
		EIK2
30–200 4 and 6 Pole Switches	F5–F6	EIK1
		EIK2
400–1200	E4–E5	EIK40601
		EIK40602

**Table 2.15: Electrical Interlock Contact Ratings** [39]

Interlock Type	AC - 50 or 60 Hz				DC		
	Volts	Make	Break	Cont.	Volts	Make & Break	Cont.
<b>Cat. no. ending with a 1 utilize a 9007A01 limit switch.</b>							
1 NO/1 NC Contact	120	40 A	15 A	15 A	115	0.50 A	15 A
	240	20 A	10 A	15 A	230	0.25 A	15 A
	480	10 A	6 A	15 A	—	—	—
	600	8 A	5 A	15 A	600	0.05 A	15 A
<b>Cat. no. ending with a 2 utilize a 9007C03 limit switch.</b>							
2 NO/2 NC Contacts	120	30 A	3.0 A	10 A	115	1.0 A	10 A
	240	15 A	1.5 A	10 A	230	0.30 A	10 A
	480	7.5 A	0.75 A	10 A	—	—	—
	600	6.0 A	0.60 A	10 A	600	0.10 A	10 A

[35] For series not shown in table refer to the switch wiring diagram.

[36] Electrical interlocks for Type 4X fiberglass reinforced polyester and Krydon™ see Digest Section 3.

[37] See Digest Section 3 for safety switch series.

[38] Electrical interlock kit catalog numbers ending in 1 indicates one normally open and one normally closed contact. These kits use a 9007A01 industrial snap switch. Electrical interlock kit catalog numbers ending in 2 indicates two normally open and two normally closed contacts. These kits use a 9007C03 industrial snap switch.

[39] Single pole single throw interlock kits are rated 1/2 hp @ 110 and 220 Vac.