

Product Information

Heavy Duty Safety Switches

240 Volt

Class 3110

Visible blade heavy duty safety switches are designed for application where maximum performance and continuity of service are required. All heavy duty safety switches feature quick-make, quick-break operating mechanism, a dual cover interlock and a color coded indicator handle. They are suitable for use as service equipment when equipped with a field or factory installed neutral assembly or equipment grounding kit, unless a 600Y/347 V or 480 Y/277 V, 1000 A or greater, solidly grounded WYE system is used, per NEC 215-10. Heavy duty safety switches are UL Listed (except as noted), File E2875 & 154828 and meet or exceed the NEMA Standard KS1. For UL Listed short circuit current ratings, see page 3-6.









NEMA 1

NEMA 3R

NEMA 4, 4X and 5 Stainless Steel

NEMA 12

240 Volt—Single Throw Fusible

						NEM	Α.			NEMA	NEMA		Horsep	ower F	atings ■									
		NEM	۸ 1	NEMA 3R Rainproof (Bolt-on Hubs, page 3-9)		4, 4X, 5, ▲ (304 Stainless Steel) Dusttight, Watertight, Corrosion Resistant (Watertight Hubs, page 3-9)		l w	with		12, 3R ♦ Without		240) Vac										
System	Amps	Indo						(Wate	ekouts ertight page 3-9)	Knockouts (Watertight Hubs, page 3-9)		(Usi	Std. ng Fast cting, me Fuses)	Max. (Using Dual Element, Time Delay Fuses)		250 Vdc								
		Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	1Ø	3Ø	1Ø	3Ø									
2 Wire (2 Bla	des and	Fuseholde	rs)—240	Vac, 250 Vdc							-			-										
30 30 9 9 60 5 7 100 200		Use 3 Wire Devices For 2 Wire Applications				H221DS - H222DS H223DS H224DS	H222DS H223DS		-	H221AWK H2212AWK▼ H222AWK H223AWK H224AWK		1½ 1½ 3 7½ 15	1½ – 3 7½★ 7½ 15 ★	3 3 10 15 –	7½★ - 15 ★ 30 ★ 60 ★	5 5 10 20 40								
33	400 600 800 1200	H225 H226 H227 H228		H225R H226R H227R△ H228R△		H225DS H226DS - -		- - -		H225AWK H226AWK H227AWK H228AWK		- 50 50	- 75 ★ - -	- 50 50	200 * -	50 50 50 50								
3 Wire (2 Bla	des and	Fuseholde	rs, 1 Neu	itral)—240 Vac	, 250 Vdc	•	•				•				•									
	30 60 100 200	H221N H221NRB H222N H222NRB H223N H223NRB H224N H224NRB		H222N H223NRB H223NRB		H222NRB H223NRB H224NRB		H222NRB H223NRB H224NRB		H222NRB H223NRB H224NRB		H222NRB H223NRB H224NRB		LIGOENIDO		stallable So	ire Devices, lid Neutral As ely. See page	3-10		1½ 3 7½ 15	3 ★ 7½★ 15 ★ 25 ★ 50 ★	3 10 15 -	7½★ 15 ★ 30 ★ 60 ★ 125 ★	5 10 20 40
	400 600 800 1200	H226N H227N H228N		H226NR H227NR△ H228NR△		H225NDS H226NDS - -	<u>-</u>	- - -	1111	H225NAWK H226NAWK H227NAWK H228NAWK		- 50 50	50 ★ 75 ★ - -	50 50	200 * - -	50 50 50 50								
3 Wire (3 Bla	des and	Fuseholde	rs)—240	Vac, 250 Vdc																				
9 9 9	30 60 100 200 400	H325		Vire Devices re Applications		H321DS H322DS H323DS H324DS		H321A H322A H323A H324A		H321AWK H322AWK H323AWK H324AWK		1½ 3 7½ 15	3 7½ 15 25	3 10 15 -	7½ 15 30 60	5 10 20 40 50								
	600 800 1200	H326 H327 H328		H326R H327R△ H328R△		H325DS H326DS - -	<u>-</u>	- - -	-	H325AWK H326AWK H327AWK H328AWK		- 50 50	50 75 100 100	- 50 50	125 200 250 250	50 50 50 50								
4 Wire (3 Bla			rs, 1 Neu	utral)—240 Vac	, 250 Vdc																			
999	30 60 100 200	H321N H322N H323N H324N		H321NRB H322NRB H323NRB H324NRB		Field Installable		Use 3 Wire Devices, estallable Solid Neutral Assemblies der Separately. See page 3-10				1½ 3 7½ 15	3 7½ 15 25	3 10 15 –	7½ 15 30 60	5 10 20 40								
1333	400 600 800 1200	H325N H326N H327N H328N		H325NR H326NR H327NR△ H328NR△		H325NDS H326NDS - -	=	- - -		H325NAWK H326NAWK H327NAWK H328NAWK		- 50 50	50 75 100 100	- 50 50	125 200 250 250	50 50 50 50								
4 Wire (4 Bla	des and	Fuseholde	rs)	•		•					•	•				•								
	30 60 100 200 400 600						Us	se 600 Vac D	evices. See	page 3-5.														

	Dimensions NEMA 1 and 3R	
	NEMA 4, 4X and 5 Stainless and NEMA 12	page 3-13
- 4	Accessories pages 3-9 th	rough 3-11

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

 Refer to page 6-35 for additional motor application data. The starting current of motors of more than standard horsepower may require the use of fuses with appropriate time delay characteristics.
 Also suitable for NEMA 3R application by removing drain screw from bottom endwall.
 For corner grounded delta systems only and with neutral assembly installed. Use switching poles for ungrounded conductors.
 ✓ 60 ampere switch with 30 ampere fuse spacing and clips. Must use 60 A enclosure accessories including electrical interlocks.
 Suitable for NEMA 5 applications with drain screw installed.
 □ For switching DC, use two switching poles.

Heavy Duty Safety Switches

600 Volt Class 3110

600 Volts-Single Throw Fusible

													Horsep	ower Rat	ings■	
						NEMA 4,	4X.5▲					480	Vac	600) Vac	
System	Amps	NEM Indo		NEMA Rainpr (Bolt-on page 3	oof Hubs,	(304 Stainle Dusttight, W Corrosion F (Watertigh page 3	ss Steel) atertight, Resistant It Hubs,	NEMA With Kno (Watertigh page 3	ckouts t Hubs,	NEMA 12, Without Kno (Watertight page 3-	ckouts Hubs,	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)	dc ▼
		Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	3Ø	3Ø	3Ø	3Ø	250 6
2 Wire (2 Blades	and Fu	seholders)—600 Va	c, 600 Vdc		•					•					
	30 60 100 200					Use 3 W For 2 Wire	ire Devices Applicatio					- - -	- - -	1 1 1		
{ {	400 600 800 1200	H265 H266 H267 H268		H265R H266R H267R♦ H268R♦		H265DS H266DS - -	-	- - - -	- - -	H265AWK H266AWK H267AWK H268AWK		100★ 150★ - -	250★ 400★ - -	- - -	- - -	50 - 50 5 50 5
3 Wire (3 Blades	and Fu	seholders)—600 Va	ac, 600 Vdc ▼						'						
	30 60 100 200 400 600 800 1200	H361 H361-2□ H362 H363 H364 H365 H366 H367 H368		H361RB H3612RB□ H362RB H363RB H364RB H365R H366R H366R H367R♦ H368R♦		H361DS H362DS H363DS H364DS H365DS H366DS - -	-	H361A H361-2A H362A H363A H364A - - -	- - -	H361AWK H3612AWK I H362AWK H363AWK H364AWK H365AWK H366AWK H367AWK H368AWK		5 5 15 25 50 100 150 200 200	15 15 30 60 125 250 400 500 500	7½ 7½ 15 30 60 125 200 250	20 20 50 75 150 350 500 500	5 1 - 1 - 3 - 5 40 5 50 5 50 5 50 5
4 Wire (3 Blades			, 1 Neutra		600 Vdc											
	30 60 100 200 400 600 800 1200	H362N H363N H364N H365N H366N H367N H368N		H361NRB H362NRB H363NRB H364NRB H365NR H366NR H367NR ♦				Devices Field s. Order Sepa H364NA – – – –		e Solid Neutral e page 3-10 H364NAWK H365NAWK H366NAWK H367NAWK H368NAWK		5 15 25 50 100 150 200 200	15 30 60 125 250 400 500	7½ 15 30 60 125 200 250 250	20 50 75 150 350 500 500	- 1 - 3 - 5 50 50 50 50 50
4 Wire (4 Blades)—600 Va	ac, 600 Vdc☆								2Ø	2Ø	2Ø	2Ø	
\$ \$ \$ \$	30 60 100 200 400 600	H461 H462 H463 H464 H465△ H466△		- - - - -	- - - -	H461DS H462DS H463DS H464DS - -	_ _	- - - - -	11111	H461AWK H462AWK H463AWK H464AWK H465AWK	_	7½ 15 25 50 –	20 40 50 - - -	10 20 30 50 -	25 50 75 - - -	5 1 10 3 20 3 40 5
6 Wire (6 Blades												3Ø	3Ø	3Ø	3Ø	
	200	-	-	-	-	H663DS H664DS		-	-	H663AWK			60 oplications r apability, us Refe		al interlock	

- Complete rating is NEMA 3, 3R, 4, 4X, 5 and 12.

 Refer to page 6-35 for additional motor application data. The starting current of motors of more than standard horsepower may require the use of fuses with appropriate time delay characteristics. Also suitable for NEMA 3R application by removing drain screw from bottom endwall.

 For corner grounded delta systems only and with neutral assembly installed. Use switching poles for ungrounded conductors.

 On 3-Pole devices, use two outside poles for switching DC.

- △ 600 Vac only.
 □ 60 ampere switch with 30 ampere fuse spacing and clips. Must use 60 A enclosure accessories including electrical interlocks.
 ◆ Suitable for NEMA 5 applications with drain screw installed.
 ★ Not suitable for use as service equipment.

Class H Fuse Provisions:

Fusible 30 through 600 ampere heavy duty safety switches accept Class H fuses as standard. With Class H fuses installed, the switch is UL Listed for use on systems with up to 10,000 RMS symmetrical amperes available fault current.

Class R Fuse Provisions:



Fusible 30 through 600 ampere heavy duty safety switches will accept Class R fuses as standard. A field installable rejection kit is available which, when installed, rejects all but Class R fuses. With the installation of the rejection kit and Class R fuses, the switch is UL Listed for use on systems with up to 200,000 RMS symmetrical amperes available fault current. See Class R fuse kits on page 3-9.

Class J Fuse Provisions:

Provisions for installing Class J fuses are included in 30 through 400 ampere 600 Volt, and 100 through 400 ampere 240 Volt, fusible heavy duty safety switches. Conversion to Class J fuse spacing requires relocating the load side fuse base assembly from the standard Class H fuse location to an alternate position as marked in the enclosure. With Class J fuses installed, the switch is UL Listed for use on systems with up to 200,000 RMS symmetrical amperes available fault current. Switches rated 600 amperes, 240 or 600 Volt, require the addition of an adapter kit, H600J at One kit per 3-pole switch.

Class L Fuse Provisions:

Fusible 800 A and 1200 A safety switches use Class L bolt-in fuses and are rated for use on systems with up to 200,000 RMS symmetrical amperes at 600 Vac maximum. 1200 A switches accept class L fuses from 601-1200 A, 800 A switches accept class L fuses from 601-800 A.

Dimensions NEMA 1 and 3R page	3-12
NEMA 4, 4X and 5 Stainless and NEMA 12page	3-13
Accessories pages 3-9 through	3-11

Product Information

Heavy Duty Safety Switches

Not Fusible 600 Volt **Class 3110**

600 Volt—Single Throw Not Fusible

		NEMA		NEMA 31 Rainprod		NEMA 4, 4X, (304 Stainless S Dusttight, Wate	Steel)	NEMA 12 With		NEMA 12, 3R ♦ Without			Horsepower Rating (Max.)■ Volts ac				ngs	gs	
System	Amps	Indoor		(Bolt-on Hu page 3-9	ıbs,	Corrosion Resi (Watertight Hipage 3-9)	istant	Knockout (Watertight H page 3-9	lubs,	Knockouts (Watertight Hu page 3-9)		240		olts 480		600		dc ▼	
		Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	Cat. No.	Price	1Ø 3	3Ø 1	Ø	3Ø 1	Ø 3Ø	250	600	
2 Wire (2 Bla		600 Vac, 600	0 Vdc																
1,1,	30 60 100 200					Use 3 Wire De For 2 Wire Appli						-	- -		-	- - - -	- - -	-	
[7]	400 600 800 1200	HU265 HU266 HU267 HU268		HU265R HU266R HU267R★ HU268R★		HU265DS HU266DS - -	=	- - - -	-	HU265AWK HU266AWK HU267AWK HU268AWK			- 5	- 50 50	- 5	-	50 50 - 50	50 50 50 50	
3 Wire (3 Bla	des)—	600 Vac, 600	0 Vdc																
777	30 30 60 60 100 200 400 600 800	HU361 HU361EI□ HU3612* HU362 - HU363 HU364 HU365 HU366 HU366 HU367 HU368	_	HU361RB HU361RBEI□ HU3612RB* HU362RB - HU363RB HU364RB HU365R HU366R HU366R HU366R HU368R*	-	HU361DS HU361DSEID - HU362DS HU362DSEID HU363DS HU364DS HU365DS HU366DS - -	-	HU361A HU361AEI□ HU3612A* HU362A — HU363A HU364A — — — —		HU361AWK HU361AWKEIII HU3612AWK* HU362AWK HU363AWK HU363AWK HU365AWK HU366AWK HU366AWK HU366AWK HU366AWK HU368AWK	_	10 10 20 15 - 1 - 2 50	10 10 20 20 20 40 40 25 25 20 25 25	- : - : 50 :	20 1 50 3 75 2 125 5 250 400 500 5	10 30 10 30 10 30 30 60 30 60 40 100 50 150 - 350 - 500 500 500	5 5 10 10 10 20 40 50 50 50	15 15 15 30 30 50 50 50 50 50	
4 Wire (4 Bla	des)	600 Vac, 600	0 Vdc ◊					•			•	2Ø 3	3Ø 2	ø	3Ø 2	2Ø 3Ø			
	60 100 200 400	HU461☆ HU462☆ HU463☆ HU464☆ HU465△ HU466△		- - - - -	- - - -	HU461DS HU462DS HU463DS HU464DS - -	<u>-</u>	- - - - -		HU461AWK⊽ HU462AWK HU463AWK HU464AWK HU465AWK△	_	20 30 50 -	20 4 40 5 60 5	20 40 50 50 -	75 5	25 30 50 60 50 75 50 150 	20	15 ♦ 30 30 50 -	
6 Wire (6 Bla	des)—	600 Vac ◊										3	вø	T	3Ø	30			
	30 60 100 200	- - - -	- - - -	- - - -	- - - -	HU661DS HU662DS HU663DS HU664DS		- - - -		HU661AWK⊕ HU662AWK⊕ HU663AWK⊕ HU664AWK⊕			20 40	- - -	20 50 75 125	- 30 - 60 - 75 - 150	0 -	- - -	

- Complete rating is NEMA 3, 3R, 4, 4X, 5 and 12.

 Refer to page 6-35 for additional motor application data.

 Also suitable for NEMA 9R application by removing drain screw from bottom endwall.

 Suitable for NEMA 5 applications with drain screw installed.

 For switching DC, use two switching poles.

 400–600 A is 600 Vac only.

 Switches with El suffix are stocked with factory-installed electrical interlocks with one normally open and one normally closed contact.

- Not suitable for use as service equipment.
 No knockouts are provided.
 Check series number on switch for correct accessory. See page 3-13.
 Check series number on switch for correct accessory. See page 3-13.
 Check series number on switch for correct accessory. See page 3-13.
 Check series number on switch for correct accessory. See page 3-13.
 Check number of the series of the ser

UL Listed Maximum Short Circuit Current Ratings—AC only

Note: Consult the wiring diagram of the switch to verify the UL Listed short circuit current rating.

Fusible Safety Switches

For the short circuit current rating, refer to the below table.

Heavy Duty Safety Switch Type	UL Listed Fuse Class	UL Listed Short Circuit Current Ratings (RMS Symmetrical Amperes)
Fusible	H, K	10,000
rusible	R,T,J,L	200,000◑

Not Fusible Safety Switches

Any brand of circuit breaker or fuse not exceeding the ampere rating of the switch may be used ahead of an unfused safety switch when there is up to 10,000 A short circuit current available. (See below table.)

Heavy Duty Safety Switch Type	Switch Ampere Rating (Amperes)≎	Upstream Fuse or Circuit Breaker Type ☑	UL Listed Short Circuit Circuit Current Rating of switch (RMS Symmetrical Amperes)
		Any Brand Circuit Breaker	up to
	all	H, K	10,000
		R,T,J.L	200,000
	30–100	FA	14,000
	30–100	FH	18,000
Unfused Switches	200	KA	
	400	LA	22,000
	600	MA	
	200	KH	
	400	LH	25,000
	600	MH	

- On 600 V, 200 A switches, 100,000 A max. on corner grounded delta when protected by Class J or R fuses.
 Applies to NEMA 1, 3R, 4X stainless, 12 switches.
 Ampere rating of fuse or circuit breaker not to exceed switch ampere rating.

Maximum I2t and Ip Ratings of Heavy Duty Switches

Switch Rating Ampere	Max. I2t Rating (Amp2 sec)	Max Ip Rating (Amperes)				
30	50,000	14,000				
60	200,000	26,000				
100	500,000	32,000 50,000				
200	2,000,000					
400	6,000,000	75,000				
600	12,000,000	100,000				
800	10,000,000	80,000				
1200	15,000,000	120,000				

[♦] Per UL 489, table 7.12.2.1