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Heavy Duty Safety Switch Standards and Ratings

Standards

- UL98 approved per file #E4776
- Suitable for use as service entrance equipment (where applicable)
- Meets NEMA standard KS-1-1990 for Type HD switches
- Seismic qualification – all switches have been tested and comply with the 2007 California Building Code CBC (Zone 4)

Ratings

- 30-1200A, 240V and 600V AC and DC
- 2, 3, 4 and 6 pole fusible and non-fusible
- All HD safety switches are both HP and load break rated
- Enclosures are available to meet NEMA 1, 3R, 12 & 4/4X requirements

Safety Switch AIC Ratings When Protected by Fuses

- 30-600A – 10,000 AIC with Class H fuses
- 30-600A – 200,000 AIC with Class R, J or T fuses
- 800 & 1200A – 200,000 AIC with Class L or T fuse

Fuse Provisions supplied in fusible switches

- 30 & 60A 240V – Class H standard, Class R with kit
- 100-600A 240V – Class H standard, Class J by moving load base, Class R with kit
- 30-600A 600V - Class H standard, Class J by moving load base, Class R with kit
- 100 & 200A - Class T with kit
- 400 & 600A - Class H standard, Class J & T by moving load base, Class R with kit
- 800A – Class L standard, Class T by moving load base
- 1200A – Class L standard, Class T with kit (240V max)

Non-Fusible Safety Switch AIC Ratings When Protected by a Circuit Breaker^{①②}

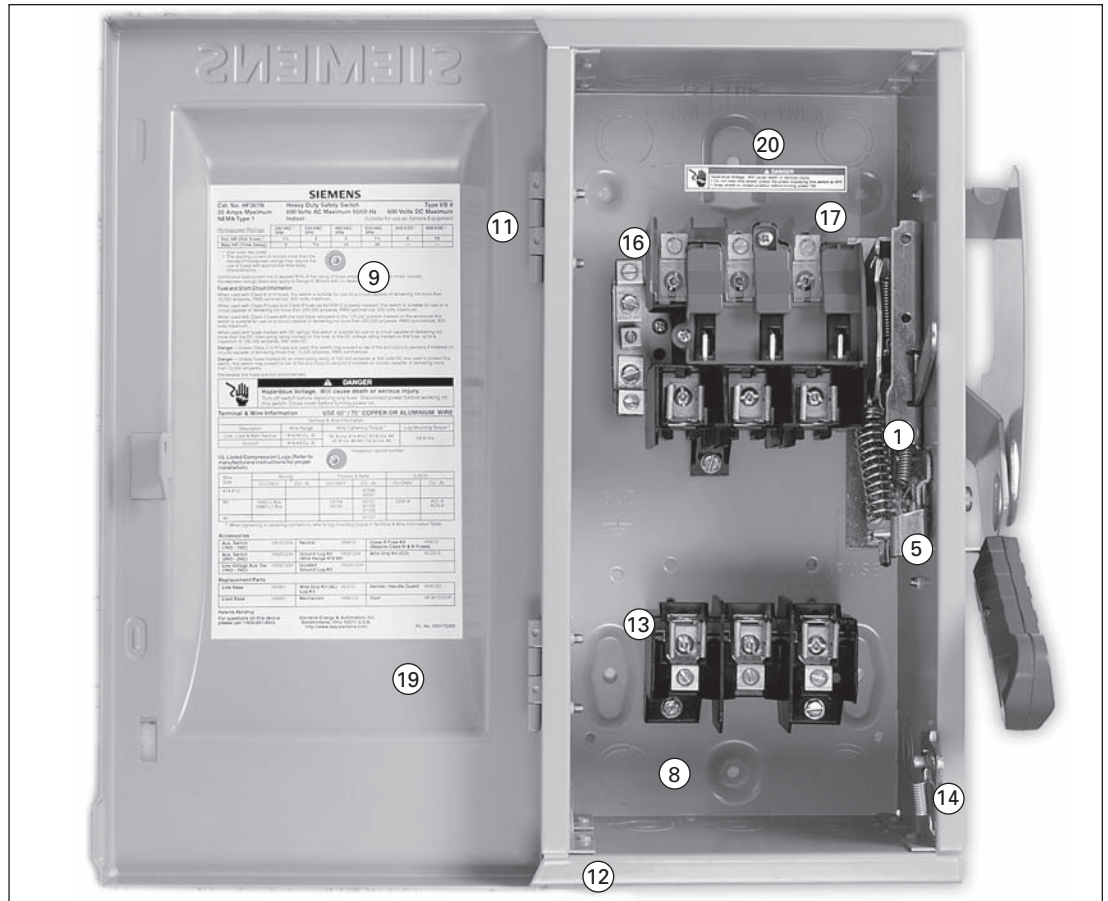
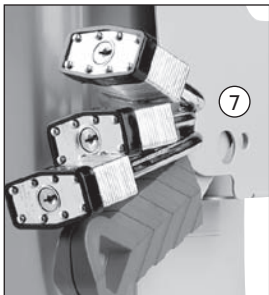
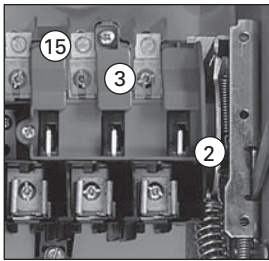
Breaker Frame	Non-Fused Switch	UL Listed Short Circuit Current Rating
NEG, NGB, ED4	30 DT (240V)	18 kA Thru 240 VAC
NEB, NEG, NGG, NGB, ED4	60-100A GD & DT (240V)	18 kA Thru 240 VAC
NEB, NEG, NGG, NGB, ED4	30-100A HD & DT (600V)	18 kA Thru 480 VAC
ED6	30-100A HD & DT (600V)	18 kA Thru 600 VAC
FD6-A, JD6-A	200A HD & DT (600V)	18 KA Thru 600 VAC
JD6-A, LD6-A	400A GD & DT (240V)	18 kA Thru 240 VAC
JD6-A, LD6-A	400A HD & DT (600V)	18 kA Thru 600 VAC
LD6-A	600A GD & DT (240V)	25kA Thru 240 VAC
LD6-A	600A HD & DT (600V)	25kA Thru 600 VAC
NNG	1200A HD & DT (600V)	25 kA Thru 600 VAC

① All switches above are rated at 10 KA when protected by any UL Listed CB
 ② Circuit breaker trip rating must not exceed switch ampere rating

Switches

Heavy Duty Safety Switches

Features



1. Quick-make, quick-break operating mechanism that ensures positive operation.
2. Visible blade, double-break switching action.
3. Arc chutes dissipate heat and prolong switch life.
4. Highly visible red handle grip. Designed for hook stick operation.
5. Defeatable dual cover interlock.
6. Center punch provided for field drilling to allow ON padlocking.
7. Handle can be padlocked in the OFF position with up to (3) padlocks with 5/16" hasps.
8. Generous top, bottom and side gutters that meet or exceed NEC wire-bending space requirements.
9. Informative door labeling which includes replacement parts list.
10. Tangential knockouts through 600A for easy conduit lineup.
11. Side-hinged door that opens past 180 degrees for easier wiring.
12. Unique enclosure design increases rigidity and prevents cuts and scrapes to conductors and installer's hands.
13. Spring reinforced fuse clips that assure reliable contact for cool operation.
14. Door latch securely holds door closed and allows cover padlocking.
15. Front removable mechanical lugs that are suitable for CU/Al 60 or 75° C conductors.
16. Lugs are field convertible to copper body and to a wide variety of compression connectors.
17. Hinged clear line terminal shield with probe holes for inspecting or testing line side terminals.
18. Embossed aluminum nameplate on Heavy Duty Switches provides highly visible ON/OFF indication.
19. Drawn cover for increased rigidity and resistance to abuse.
20. Top key hole and bottom mounting holes provide easy 2 or 3 point mounting.

Switches

Heavy Duty Safety Switches

Selection



System	Ampere Rating	Indoor — Type 1		Outdoor — Type 3R		Horsepower Ratings [Ⓞ]						
		Catalog Number	Ship. Wt. (lbs.) Std. Pkg.	Catalog Number	Ship. Wt. (lbs.) Std. Pkg.	240V AC		2-Phase, 4-Wire		3-Phase, 3-Wire		250 Volt DC
						1-Phase, 2-Wire	Std.	Max.	Std.	Max.	Std.	

240 Volt Fusible[Ⓟ]

2-Pole, 2-Fuse, and Solid Neutral[Ⓟ] (Also used for 2-Pole, 2-Wire Applications) 240 Volt AC/250 Volt DC

	30	HF221N	12	HF221NR	13	1½	3	—	—	3	7½	5
	60	HF222N	18	HF222NR	19	3	10	—	—	7½	15	10
	100	HF223N	23	HF223NR	24	7½	15	—	—	15	30	20
	200	HF224N	47	HF224NR	48	15	—	—	—	25	60	40
	400	HF225NH [Ⓡ]	129	HF225NRH [Ⓡ]	131	15	—	—	—	50	125	50
	400	HF225N	153	HF225NR	157	15	—	—	—	50	125	50
	600	HF226NH [Ⓡ]	133	HF226NRH [Ⓡ]	135	15	—	—	—	75	200	50
	600	HF226N	155	HF226NR	159	15	—	—	—	75	200	50
	800	HF227N	365	HF227NR	365	—	—	—	—	100	250	50
	1200	HF228N■	385	HF228NR■	385	—	—	—	—	100	250	50

3-Pole, 3-Fuse, and Solid Neutral (Also used for 3-Pole, 3-Wire Applications) 240 Volt AC/250 Volt DC

	30	HF321N	14	HF321NR	15	1½	3	—	—	3	7½	5
	60	HF322N	19	HF322NR	20	3	10	—	—	7½	15	10
	100	HF323N	25	HF323NR	26	7½	15	—	—	15	30	20
	200	HF324N	49	HF324NR	50	15	—	—	—	25	60	40
	400	HF325NH [Ⓡ]	137	HF325NRH [Ⓡ]	138	15	—	—	—	50	125	50
	400	HF325N	158	HF325NR	162	15	—	—	—	50	125	50
	600	HF326NH [Ⓡ]	139	HF326NRH [Ⓡ]	142	15	—	—	—	75	200	50
	600	HF326N	161	HF326NR	165	15	—	—	—	75	200	50
	800	HF327N	375	HF327NR	375	—	—	—	—	100	250	50
	1200	HF328N	395	HF328NR	388	—	—	—	—	100	250	50

240 Volt Fusible[Ⓟ]

2-Pole, 2-Fuse[Ⓡ] 240 Volt AC/250 Volt DC

	Ampere Rating	Type 4/4X Stainless [Ⓡ]		Type 12 Industrial [Ⓡ]		1-Phase, 2-Wire	2-Phase, 4-Wire	3-Phase, 3-Wire	250 Volt DC			
		Catalog Number	Ship. Wt. (lbs.) Std. Pkg.	Catalog Number	Ship. Wt. (lbs.) Std. Pkg.							
	30	HF221S	13	HF221J	13	1½	3	—	—	3	7½	5
	60	HF222S	19	HF222J	19	3	10	—	—	7½	15	10
	100	HF223S	24	HF223J	24	7½	15	—	—	15	30	20
	200	HF224S	48	HF224J	48	15	—	—	—	25	60	40

3-Pole, 3-Fuse[Ⓡ] (Also used for 2-Pole, 2-Wire Applications in 400–800A Ratings) 240 Volt AC/250 Volt DC

	30	HF321S	14	HF321J	14	1½	3	—	—	3	7½	—
	60	HF322S	20	HF322J	20	3	10	—	—	7½	15	10
	100	HF323S	25	HF323J	25	7½	15	—	—	15	30	20
	200	HF324S	49	HF324J	49	15	—	—	—	25	60	40
	400	HF325S	154	HF325J■	110	15	—	—	—	50	125	50
	600	HF326S	157	HF326J■	161	15	—	—	—	75	200	50
	800	HF327S■	370	HF327J■	365	—	—	—	—	100	250	50

■ Built to order. Allow 3-5 weeks for delivery.
[Ⓡ] Height reduced switch (45.25 rather than 56 inches in height) for use with 500MCM or smaller conductors.

[Ⓞ] Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

[Ⓟ] These switches are UL-listed for application on grounded B-phase systems and are suitable for 3-phase motor applications.

[Ⓡ] When a neutral is required use a field installed neutral kit.

[Ⓢ] Suitable for use as service entrance equipment.

[Ⓣ] Also rated Type 3S/3R.

[Ⓤ] 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, see page 18/9.