Contents

Contents

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
- Short Circuit ratings

Fusible switches (and non-fusible 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

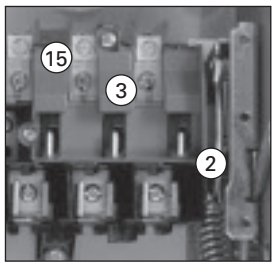
Fuse Provisions supplied in fusible switches

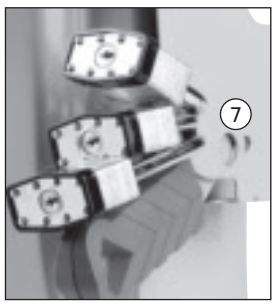
- 30 & 60A 240V – Class H standard, Class R with kit
- 100-600A 240V – Class H standard, Class J by moving load base, Class R with kit
- 30-600A 600V - Class H standard, Class J by moving load base, Class R with kit
- 100 & 200A - Class T with kit
- 400 & 600A - Class H standard, Class J & T by moving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

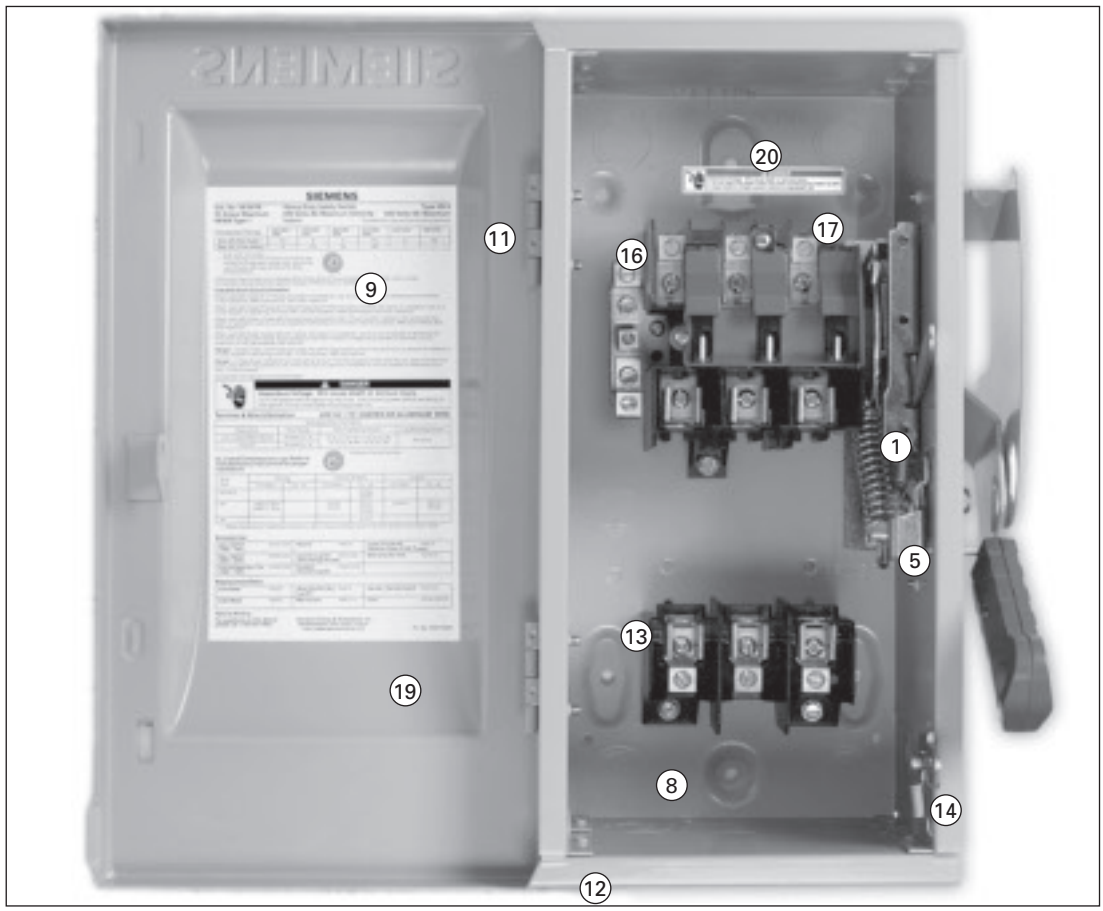
Non-fusible switches when protected by a circuit breaker

Switch Ampere Rating	Breaker Frame	UL Listed Short Circuit Rating
30-1200A	All UL listed circuit breakers	10,000 AIC thru 600 VAC
30-100A	NEB, NEG, NGG, NBG & ED4	18,000 AIC thru 480 VAC
30-100A	ED6	18,000 AIC thru 600 VAC
200A	FD6-A & JD6-A	18,000 AIC thru 600 VAC
400A	JD6-A & LD6-A	18,000 AIC thru 600 VAC
600A	LD6-A	25,000 AIC thru 600 VAC
1200A	NNG	25,000 AIC thru 600 VAC

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.

Application

4 & 6 pole Switches are commonly used as a disconnecting means for two-speed, two-winding motors. Fused switches provide both over current and short circuit protection. Non-fusible switches normally provide a local disconnection means for two-speed motors which are remote from their motor controller. 4 pole switches are also used in 3-phase, 4-wire circuits when a switching neutral is required. All 4 & 6 pole switches are service entrance rated.

Description

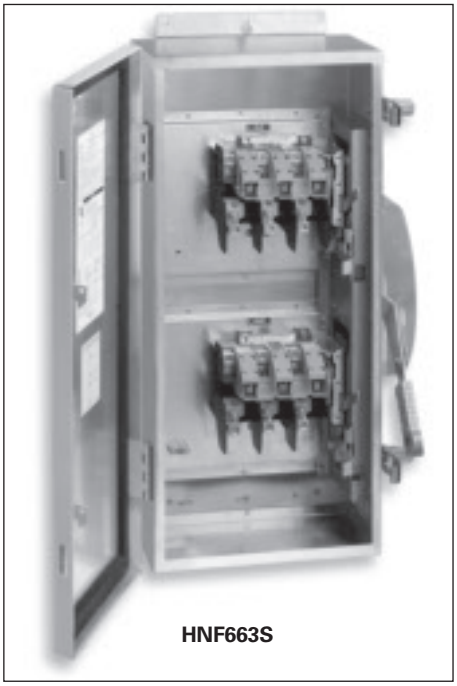
4 & 6 pole switches are available in 30-200A ratings and in both fusible and non-fusible versions. 4-pole switches are supplied with either Type 1 or Type12/3R enclosures.
6-pole switches are available with either Type 12/3R or Type 4X stainless steel enclosures.

Standards

- UL & CUL listed under file #E4776
- Meets UL98 for enclosed switches
- 4 & 6 Pole switches are suitable for use as service entrance
- Meets NEMA Standard KS-1 for enclosed switches
- Meets NEC wire bending space requirements

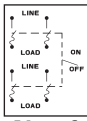
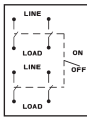
Features

- Visible blade, double break switching action
- Highly visible ON/OFF indication
- Defeatable dual cover interlock
- Padlock option in OFF position
- All copper current carrying parts①
- Tangenital knockouts (Type 1, 4-pole switches)

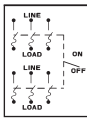
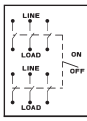


HNF663S

4 Pole Type VBII Switches①②

System	Amp Rating	Indoor Type 1 Catalog Number	List Price $	Ship Wt. (lbs.)	Type 12/3R Industrial Catalog Number	List Price $	Ship Wt. (lbs.)	Horsepower Ratings③ 240V, 2Ø, 4W Std.	240V, 2Ø, 4W Max.	240V 3Ø Std.	240V 3Ø Max.	480V, 3Ø Std.	480V, 3Ø Max.	600V, 3Ø Std.	600V, 3Ø Max.	250V DC
Fusible 600 Volt AC, 250 Volt DC — 4 Pole, 4 Fuse④																
	30	HF461		36	HF461J		36	3	10	3	7½	5	15	7½	20	5
	60	HF462		40	HF462J		40	7½	20	7½	15	15	30	15	50	10
	100	HF463		43	HF463J		43	15	30	15	30	25	60	30	75	20
	200	HF464■		88	HF464J■		88	25	50	25	60	50	125	60	150	40
Non-fusible 600 Volt AC, 250 Volt DC — 4 Pole																
	30	HNF461		32	HNF461J		32	—	10	—	10	—	20	—	30	5
	60	HNF462		34	HNF462J		34	—	20	—	20	—	50	—	60	10
	100	HNF463■		36	HNF463J■		36	—	30	—	40	—	75	—	100	20
	200	HNF464■		78	HNF464J■		78	—	50	—	60	—	125	—	150	40

6 Pole Type VBII Switches①②

System	Amp Rating	Type 12/3R Industrial Catalog Number	List Price $	Ship Wt. (lbs.)	Type 4X Stainless Steel Catalog Number	List Price $	Ship Wt. (lbs.)	Horsepower Ratings③ 240V 3Ø Std.	240V 3Ø Max.	480V, 3Ø Std.	480V, 3Ø Max.	600V, 3Ø Std.	600V, 3Ø Max.	250V DC
Fusible 600 Volt AC, 250 Volt DC — 6 Pole, 6 Fuse④														
	30	HF661J		37	HF661S■		37	3	7½	5	15	7½	20	5
	60	HF662J		41	HF662S■		41	7½	15	15	30	15	50	10
	100	HF663J■		44	HF663S■		44	15	30	25	60	30	75	20
	200	HF664J■		90	HF664S■		90	25	60	50	125	60	150	40
Non-fusible 600 Volt AC, 250 Volt DC — 6 Pole														
	30	HNF661J		33	HNF661S		33	—	10	—	20	—	30	5
	60	HNF662J		35	HNF662S		35	—	20	—	50	—	60	10
	100	HNF663J		37	HNF663S		37	—	40	—	75	—	100	20
	200	HNF664J		80	HNF664S■		80	—	60	—	125	—	150	40

■ Built to order. Allow 2–3 weeks for delivery.

① Lugs are aluminum alloy as standard. Optional copper body lugs are available.

② All 4 & 6 pole VBII switches are suitable for use as service equipment when a neutral is installed or equipment ground kit is properly connected.

③ Dual horsepower ratings: Std. – applies when non-time-delay fuses are installed. Max. – applies when time delay fuses are installed.

④ Fusible switches accept Class H Fuses as the standard. Class R & J fuses can also be installed and increase the rating from 10,000 to 200,000 AIC. For Class J, the load base is moved upward. For Class R fuses, rejection kits are required.