

Heavy-Duty Safety Switch



Heavy-Duty

Application Description

For light to heavy commercial and industrial applications. Main service entrance, branch and motor circuit protection, disconnecting or transferring to alternate power source. Where reliable performance and service continuity are critical.

Product Description

- 30–1200A
- 600 Vac, 600 Vdc maximum
- Horsepower rated
- Fusible and non-fusible switches are 100% load break and 100% load make rated
- The continuous load current of fusible switches is not to exceed 80% of the rating of fuses employed in other than motor circuits. Non-fusible switches are 100%

- continuous load rated
- Fusible switches suitable for service entrance applications unless otherwise noted
- Enclosures, Type 1, 3R, 12/3R, 4 are painted steel ANSI 61 light grey electrocoat. and 4X are grade 304 stainless steel, grade 316 available upon request.
- For factory modifications, refer to **Pages 12** through **14**

240 Vac Heavy-Duty, Fusible, Single-Throw

- 30–1200A
- Horsepower rated
- Fusible switches suitable for service entrance use, except four-pole switches
- For accessories refer to **Pages 5 and 6**

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600 Vac Heavy-Duty, Fusible, Single-Throw

- 30–1200A
 - Horsepower rated
 - Suitable for service entrance use, except four pole switches.
- Note:** Must use suitable ground fault protection @ 1200 Ampere for service entrance.

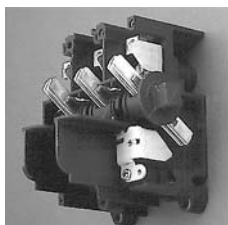
600 Vac Heavy-Duty, Non-Fusible, Single-Throw

- 30–1200A
- Horsepower rated
- Not suitable for service entrance per CEC

Features, Benefits and Functions

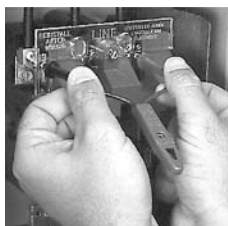
- Visible double-break quick-make, quick-break rotary blade mechanism. Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life
- Triple padlocking capability. Personnel safety feature since the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks. Cabinet door can be further padlocked at the top and bottom
- Interlocking mechanism. Door cannot be opened when the handle is in the ON position. Built-in defeater mechanism provides for user access when necessary
- Deionizing arc chutes; arc chutes confine and suppress the arcs produced by opening contacts under load
- Mechanically interlocked cover to prevent easy access when the switch is in the ON position
- Clear line shield with probe holes
- Clearly visible palm fitting red handle
- Tangential knockouts on Type 1 and Type 3R enclosures through 200A
- Built-in fuse pullers on Type 4X and Type 12 enclosures through 200A
- Additional door locking capability
- Complete accessory and renewal parts data shown on inner door label.
- 30–1200A Type 12 designs convertible to Type 3R by opening factory-installed drain hole
- 30–1200A switches are seismic qualified and exceed the requirements of the Uniform Building CodeT (UBC) and California Code Title 24

- Two points of contact provide a positive open and close, easier operation, and also help prevent contact burning for longer contact life



Visible Double-Break Rotary Blade Mechanism

- Protects against accidental contact with energized parts. Probe holes enable the user to test if the line side is energized without removing the shield.



Clear Line Shield

- Provide easy removal of fuses



Built-In Fuse Pullers (Type 12 and 4X 30–200A)

- The position (ON or OFF) can be clearly seen from a distance and the length provides for easy operation



Clearly Visible Handle

- Personnel safety feature since the large hasp can accommodate up to three 3/8-inch (9.5 mm) shank locks



Triple Padlocking Capability

- Cabinet door can be further padlocked at the top and bottom as applicable



Additional Locking Capability

- Door cannot be opened when the handle is in the ON position. Front and side operable defeater mechanism provides for user access when necessary on single-throw switches



Interlocking Mechanism

- An ample number are provided on the top, bottom and sides of both NEMA Types 1 and 3R enclosures through 200A



Tangential Knockouts

- For switches in a Type 3R, 30–200A. Use a Myers type hub for all others



Bolt-On Hub Kits

- Type 12 and 4X 30–100A have padlockable suitcase latches vs screw type latches.



Padlockable Suitcase Latches

Standards and Certifications

- CSA Certified File No. 69743
- Meets C22.2 No. 4 for enclosed switches
- Refer to page 2 for additional certifications
- ISO 9001:2008



Switching Devices

Safety Switches

Product Selection

3HD221N



240 Vac Heavy-Duty, Fusible, Single-Throw, Fusible—Type 1, 3R

Maximum Horsepower Ratings							Type 1	Type 3R	
System	Ampere Rating	Fuse Type Provision	AC		Time Delay	Three-Phase	DC 250V	Enclosure Indoor Catalogue Number	Enclosure Rainproof Catalogue Number
			Standard Fuse Single-Phase	Three-Phase					
Three-Wire (Two Blades, Two Fuses, S/N)—240 Vac, 250 Vdc									
	30	H	1-1/2	3	3	7-1/2	5	1HD221N	3HD221N
	60	H	3	7-1/2	10	15	10	1HD222N	3HD222N
	100	H	7-1/2	15	15	30	20	1HD223N	3HD223N
	200	H	15	25	15	60	40	1HD224N	3HD224N
	400	H	—	50	—	125	50	1HD225N	3HD225N
	600	H	—	75	—	200	—	1HD226N	3HD226N
	800	L	—	100	—	—	—	1HD227N	3HD227N
Four-Wire (Three Blades, Three Fuses, S/N)—240 Vac, 250 Vdc									
	30	H	1-1/2	3	3	7-1/2	5	1HD321N	3HD321N
	60	H	3	7-1/2	10	15	10	1HD322N	3HD322N
	100	H	7-1/2	15	15	30	20	1HD323N	3HD323N
	200	H	15	25	15	60	40	1HD324N	3HD324N
	400	H	—	50	—	125	50	1HD325N	3HD325N
	600	H	—	75	—	200	—	1HD326N	3HD326N
	800	L	—	100	—	250	—	1HD327N	3HD327N
1200	L	—	—	—	—	—	1HD328N	3HD328N	
Four-Pole—240 Vac, 250 Vdc									
	30	H	3	3	10	7-1/2	5	1HD421	①
	60	H	7-1/2	7-1/2	20	15	10	1HD422	①
	100	H	15	15	30	30	20	1HD423	①
	200	H	30	25	50	60	40	1HD424	①
	400	H	50	50	—	125	50	1HD425	①②
	600	H	—	75	—	200	—	1HD426	①③

Notes

- ① Type 12 enclosures (30–1200A) can be field modified to meet Type 3R rainproof requirements when a factory provided drain hole is opened.
- ② Contact Customer Support (1-800-268-3578) for availability of this product.
- ③ Type 4x stainless steel enclosure.
- ④ Type 4 painted steel enclosure.

Note: For 'J' Fusing on 240V Heavy Duty Switches Field Modification Required.
 30-60 amperes not available.
 100-400 amperes, reposition loadside fuse block to accept 'J' fuse.
 600 amperes adapter kit included with switch.
 For 'R' fuse rejector adapter kit and 'T' fusing see page 5 accessory application options.