# **Switching Devices**

#### Safety Switches

#### Heavy-Duty Safety Switch



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# **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 61light 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

#### 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

### Safety Switches

#### **Features, Benefits and Functions**

- Visible double-break quickmake, 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 singlethrow 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

# 1HD362NF





|                | Ampere<br>Rating | Maximum Horsepower Ratings<br>Single-Phase AC |         |                   | Three-Phase AC |      |      | DC   |      | Type 1<br>Enclosure<br>Indoor | Type 3R <sup>①</sup><br>Enclosure<br>Rainproof |
|----------------|------------------|---|---------|-------------------|----------------|------|------|------|------|-------------------------------|--|
| System         |                  | 240V  | 480V    | 600V              | 240V           | 480V | 600V | 250V | 600V | Catalogue<br>Number           | Catalogue<br>Number                            |
| Two-Pole – 48  | 30 Vac−6         | 00 Vac o                                      | r Vdc ② |                   |                |      |      |      |      |                               |  |
|                | 30               | 3   | 7-1/2   | 10                | _              | _    | _    | _    | 15   | 1HD261NF                      | 3HD261NF                                       |
|                | 60               | 10  | 20      | 25                | _              | _    | _    | _    | 25   | 1HD262NF                      | 3HD262NF                                       |
|                | 100              | 20  | 30      | 40                | _              | _    | _    | 20   | 25   | 1HD263NF                      | 3HD263NF                                       |
|                | 200              | 15  | 50      | 50                | _              | _    | _    | _    | 50   | 1HD264NF                      | 3HD264NF                                       |
|                | 400              | _   | _       | _                 | _              | _    | _    | 50   | _    | 1HD265NF                      | 3HD265NF                                       |
|                | 600              | _   | _       | _                 | _              | _    | _    | _    | _    | 1HD266NF                      | 3HD266NF                                       |
|                | 800              | _   | _       | _                 | _              | _    | _    | _    | _    | 1HD267NF ②                    | 3HD267NF ②                                     |
|                | 1200             | _   | _       | _                 | _              | _    | _    | _    | _    | 3                             | 3  |
| Three-Pole -4  | 180 Vac-         | 600 Vac,                                      | 250 Vdc |                   |                |      |      |      |      |                               |  |
| 6,6,6,         | 30               | 3   | 7-1/2   | 10                | 10             | 20   | 30   | 5    | _    | 1HD361NF                      | 3HD361NF                                       |
|                | 60               | 10  | 20      | 25                | 20             | 50   | 60   | 10   | _    | 1HD362NF                      | 3HD362NF                                       |
|                | 100              | 20  | 40      | 50                | 40             | 75   | 100  | 20   | _    | 1HD363NF                      | 3HD363NF                                       |
|                | 200              | 15  | 50      | 50                | 60             | 125  | 150  | 40   | _    | 1HD364NF                      | 3HD364NF                                       |
|                | 40               | _   | _       | _                 | 125            | 250  | 350  | 50   | _    | 1HD365NF                      | 3HD365NF                                       |
|                | 600              | _   | _       | _                 | 200            | 400  | 500  | _    | _    | 1HD366NF                      | 3HD366NF                                       |
|                | 800              | _   | _       | _                 | _              | 500  | 500  | _    | _    | 1HD367NF                      | 3HD367NF                                       |
|                | 1200             | _   | _       | _                 | _              | 500  | 500  | _    | _    | 1HD368NF                      | 3HD368NF                                       |
| Four-Pole – 48 | 30 Vac-6         | 00 Vac,                                       | 250 Vdc |                   |                |      |      |      |      |                               |  |
| \$ \$ \$ \$    | 30               | 10 @  | 20 ④    | 25 <sup>(4)</sup> | 10             | 20   | 30   | 5    | _    | 1HD461NF                      | 3HD461NF                                       |
|                | 60               | 20 @  | 40 ④    | 50 @              | 20             | 50   | 60   | 10   | _    | 1HD462NF                      | 3HD462NF                                       |
|                | 100              | 40 @  | 50 @    | 50 @              | 40             | 75   | 100  | 20   | _    | 1HD463NF                      | 3HD463NF                                       |
|                | 200              | 50 @  | 50 @    | 50 @              | 60             | 125  | 150  | 40   | _    | 1HD464NF                      | 3HD464NF                                       |
|                | 400              | 50 @  | _       | _                 | 125            | 250  | 350  | 50   | _    | 1HD465NF                      | 3  |
|                | 600              | _   | _       | _                 | 200            | 400  | 500  | _    | _    | 1HD466NF                      | 3  |
|                | 800              | _   | _       | _                 |                | _    | _    | _    |      | 23                            | 23   |

#### 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 DC rating for 800A switches is 250V.
- ③ Contact Customer Support (1-800-268-3578) for availability of this product.
- Ratings are for two-phase AC.
- ⑤ Type 4X stainless steel enclosure.
- Type 4 painted steel enclosure.