



Safety and Disconnect Switches

Industrial Control Product Catalog 2021

18

Section

**General Duty Switch****Heavy Duty Switch**

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Safety and Disconnect Switches



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| | General Duty | Heavy Duty | Double Throw | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|---|--------------------------------|---------|--------|-----------------|---------|--------|--------------|---------|---------|--------------|----------|---------|-------------------|--|-------------------|------------|--------------------------------|---------------------|--------|-----------------|-----------------|--------|--------------|----------------|---------|----------------------|------------|---------|----------------------|------------|---------|----------------------|------------------------------------|---------|----------------------|----------------------------------|---------|-------------------|--|
| Application | General Duty Switches are intended for applications where reliable performance and continuity of service are needed, but where duty requirements are not severe and usual service conditions prevail. (These switches are intended for use primarily with supply circuits rated 240V AC or less where the available fault current is less than 100,000A when used with Class R or T fuses or 10,000A max. when used with Class H fuses.) | Heavy Duty Switches are intended for use in applications where: 1. Rugged construction, reliable performance, continuity of service and ease of maintenance are emphasized, or 2. Available fault currents higher than 10,000A are likely to be encountered, such as in manufacturing plants, mass production industries, and commercial, institutional and other large buildings served by network systems or transformers of higher capacities. 3. System voltage is 600V AC or DC Max. 4. A Type 12 or 4 / 4X enclosure is required. | Double throw switches are intended to transfer loads from one power source to another. All 2 & 3 pole double throw switches are suitable for use as service equipment. All are UL Listed. Switches are rated for use on systems with an available fault current of up to 10,000 AIC when protected with Class H fuses or either 100,000 or 200,000 AIC when protected with Class R, J or Class T fuses. They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible switches so that the fuses are on the load side of the switching mechanism. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Short Circuit Withstand Ratings | Suitable for use on systems capable of delivering not more than 100,000 RMS symmetrical amperes of fault current as follows: <table border="1"> <thead> <tr> <th>Sw. Rating</th> <th>AIC Rating</th> <th>Protective Device[ⓐ]</th> </tr> </thead> <tbody> <tr> <td>30-600A</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-600A</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-600A</td> <td>100,000</td> <td>Class R Fuse</td> </tr> <tr> <td>100-600A</td> <td>100,000</td> <td>Class J or T Fuse</td> </tr> </tbody> </table> | Sw. Rating | AIC Rating | Protective Device [ⓐ] | 30-600A | 10,000 | Circuit Breaker | 30-600A | 10,000 | Class H Fuse | 30-600A | 100,000 | Class R Fuse | 100-600A | 100,000 | Class J or T Fuse | Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical amperes of fault current as follows: <table border="1"> <thead> <tr> <th>Sw. Rating & Type</th> <th>AIC Rating</th> <th>Protective Device[ⓐ]</th> </tr> </thead> <tbody> <tr> <td>All Heavy Duty & DT</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-600A HD & DT</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>60A Compact HD</td> <td>100,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>GD & 4P DT</td> <td>100,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>30-600A HD</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>30-600A DTF & DTNF DT[ⓑ]</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>800 & 1200A HD & DT[ⓑ]</td> <td>200,000</td> <td>Class L or T Fuse</td> </tr> </tbody> </table> | Sw. Rating & Type | AIC Rating | Protective Device [ⓐ] | All Heavy Duty & DT | 10,000 | Circuit Breaker | 30-600A HD & DT | 10,000 | Class H Fuse | 60A Compact HD | 100,000 | Class R, J or T Fuse | GD & 4P DT | 100,000 | Class R, J or T Fuse | 30-600A HD | 200,000 | Class R, J or T Fuse | 30-600A DTF & DTNF DT [ⓑ] | 200,000 | Class R, J or T Fuse | 800 & 1200A HD & DT [ⓑ] | 200,000 | Class L or T Fuse | |
| Sw. Rating | AIC Rating | Protective Device [ⓐ] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-600A | 10,000 | Circuit Breaker | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-600A | 10,000 | Class H Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-600A | 100,000 | Class R Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100-600A | 100,000 | Class J or T Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sw. Rating & Type | AIC Rating | Protective Device [ⓐ] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| All Heavy Duty & DT | 10,000 | Circuit Breaker | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-600A HD & DT | 10,000 | Class H Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60A Compact HD | 100,000 | Class R, J or T Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GD & 4P DT | 100,000 | Class R, J or T Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-600A HD | 200,000 | Class R, J or T Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30-600A DTF & DTNF DT [ⓑ] | 200,000 | Class R, J or T Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 800 & 1200A HD & DT [ⓑ] | 200,000 | Class L or T Fuse | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fuses | Fusible switches will accept the following UL class fuses: 30 "LF" - 30A max plug Fuses 30-600A "GF" Class H & K, Class R with kit 100-600A "GF" Class J-move base 100-200 "GF" Class T with kit 400-600A "GF" Class T-move bases | Fusible switches will accept the following UL class fuses: 30-600A "HF" Class H & K, Class R with kit 30-400A, 600V "HF" Class J-move base 100-600A, 240V "HF" Class J-move base 100-200A "HF" Class T with kit 400-600A "HF" Class T-move bases 800-1200A "HF" Class L, Class T with kit [ⓑ] | Fusible switches will accept the following UL class fuses: 30-200A "DT" & "F" Class H & K, Class R with kit 30 & 60A 600V "DT" Class J-move base 100-200A "DT" Class J-move base, Class T with kit 400-600A "DT" Class J-standard, Class T-move bases 400A 240v "F" Class H-standard 400A, 600V & 600A "F" Class T-Standard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cover Interlocks | Voidable – cover interlocks on switches prevent the switch door from being opened when in the "ON" position. No cover interlock on 30-60A GD or on plug fuse type switches. | Voidable dual cover interlocks standard on all heavy duty switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened. | Dual cover interlocks standard on all double throw switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Underwriters' Laboratories, Inc. | Listed by UL under file #E4776 as enclosed switches and also suitable for use as service equipment (where applicable). UL98 Enclosed and Deadfront Switches. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NEMA Specifications | Meet NEMA standard KS-1-2001 for type GD switches. | Meet NEMA standard KS-1-2001 for type HD switches. | Meet NEMA standard KS-1-2001 type GD for "DTG" & type HD for "DT", "F" & "NF" switches. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Seismic Qualifications | 100-600A GD & all HD switches and "DT" type double throw switches have been tested and comply with the 2010 California Building Code (CBC) and with the 2009 International Building Code (IBC) - Compliance Level SDS = 1.85 g | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Groundable Neutral (All neutrals are bondable for service entrance use.) | Fusible switches have groundable neutral blocks factory installed. Non-fusible switches accept field addable neutrals. | All switches (both Fusible and Non-Fusible) are either supplied with factory installed neutrals or accept field addable neutrals. | All except 4 pole switches will accept field addable neutrals except that "DTG" 100 & 200A switches are also available with factory installed neutrals. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Padlocks | Padlockable cover latch. OFF padlock provisions on handle. | Padlockable cover latch and multiple OFF padlock provisions on handle. | Padlockable cover latch and multiple OFF padlock provisions on handle. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HP & Load Break Ratings | All General Duty, Heavy Duty and Double Throw Switches are both load break and horsepower rated. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

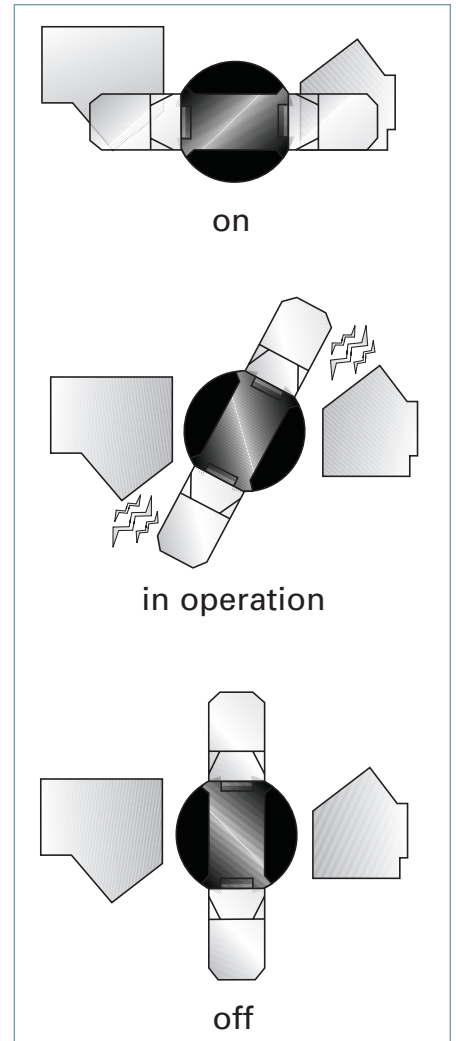
ⓐ The protective device can either be a fuse installed in a fusible switch or an upstream fuse or circuit breaker protecting a non-fusible switch. The ampere rating of the

upstream protective device must not exceed the switch ampere rating.

ⓑ All 4 pole and fusible double switches with catalog numbers starting with "F" are rated 100,000 AIC max.

ⓐ Class T kit available for 240V max. applications on 1200A switches.

| General Duty | Heavy Duty | Double Throw | Features / Ratings |
|----------------|-----------------|-----------------|--|
| ▪ | ▪ | ▪ | 30 thru 600 Amps |
| | ▪ | ▪ | 800 and 1200 Amps |
| ▪ | ▪ | ▪ | 240 Volt AC |
| | ▪ | ▪ | 600 Volt AC |
| ▪ | ▪ | ▪ | 250 Volt DC |
| | ▪ | | 600 Volt DC |
| ▪ | ▪ | ▪ | Double-break visible blade design (30-200A) |
| ▪ | ▪ | ▪ | Quick-make, quick-break switching action (excludes 30A GD) |
| | ▪ | | Handle design for hook stick operation |
| ▪ | ▪ | ▪ | Padlockable cover latch |
| ▪ | ▪ | ▪ | Padlockable handle |
| ▪ | | ▪ | Single voidable cover interlock (excludes 30-60A GD) |
| | ▪ | ▪ | Dual voidable cover interlock |
| ▪ | ▪ | ▪ | Type 1 enclosure |
| ▪ | ▪ | ▪ | Type 3R enclosure |
| | ▪ | ▪ | Type 12 enclosure |
| | ▪ | ▪ | Type 4 / 4X enclosures |
| ▪ | ▪ | ▪ | Generous wiring gutters that meet UL and NEC wire-bending space requirements |
| ▪ ^⑤ | ▪ | ▪ | Lugs suitable for copper or aluminum at 60° or 75°C |
| ▪ | ▪ | ▪ | CU/AL wire lugs that meet UL 486B requirements |
| | ▪ | ▪ | Suitable for field-convertible compression connectors |
| ▪ ^④ | ▪ | ▪ | All plated copper current carrying parts (except lugs) |
| ▪ | ▪ | ▪ | Spring reinforced Fuse Clips (except 30-60A GD) ^② |
| | ▪ | ▪ | Clear pivoting line terminal shield |
| ▪ | ▪ | ▪ | Replacement parts (except 30-60A GD) |
| | ▪ | ▪ | 200% neutral available for purchase separately |
| ▪ ^⑦ | ▪ ^{①⑦} | ▪ ^{①⑦} | Provisions for UL Class T, R and H Fuses |
| | ▪ | ▪ ^① | Provisions for UL Class J and L Fuses |
| | ▪ | ▪ | Metal nameplate |
| ▪ | ▪ | ▪ | Aux. switch kits (excludes 30-60A GD) |
| | ▪ ^③ | | Type 4X with stainless steel interior parts |
| ▪ ^④ | ▪ | | Rolled flange enclosure design (30-200A) |
| | ▪ | ▪ | Isolated ground kits |



Double Break Switching Action

Like the time-proven Vacu-Break Design, the Siemens VBII double break switching action breaks the arc in two places in 30-600A ratings. This reduces heat generation and increases switching speed by doubling the breaking distance. The result is enhanced performance and increased longevity. We also provide the most visible blade design available today. Unlike conventional knife blade switches, the blades are self-aligning to ensure positive contact. In addition, they have no wear and friction point since the “electrical hinge” has been eliminated. The result is a very fast, positive and reliable switching action for even the most severe applications.

① 400, 600V & 600A fusible, double-throw switches accept only Class J or T fuses. Only 800 & 1200A HD switches will accept Class L fuses.
 ② 30-60A general duty switches have fuse clips constructed of spring type copper.

③ 30-200A Type VBII in stainless steel enclosures.
 ④ 100-200A.
 ⑤ 60A only suitable for Cu at 75°.

⑥ 200A general duty switches have aluminum neutral assemblies.
 ⑦ 100-600A GD & DT and 100-1200A HD switches will accept Class T fuses.

Enclosure Types

- A Type 1** enclosures are intended for indoor use primarily to provide protection against contact with the enclosed equipment in locations where unusual service conditions do not exist.
 - B Type 3R** enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain and sleet and must remain undamaged by the formation of ice on the enclosure. They are not intended to provide protection against conditions such as dust, internal condensation, or internal icing.
 - C Type 4, 4X** enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing. Also meets 4X definition by providing a high degree of protection against corrosion. Siemens 30-200A stainless steel 4X switches are supplied stainless interior parts and hardware as standard.
 - D Type 4** enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing.
 - E Type 12[ⓐ]** enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping water. They are not intended to provide protection against conditions such as internal condensation.
- Type 7/9** enclosures for use in hazardous locations. Use with molded case switches listed in Section 7.



Load Break Ratings

All Siemens safety switches are load break rated. The load break rating is assigned by UL after the switching unit has successfully performed the following tests:

| Switch Ampere Rating | Number of ON/OFF Operations per Minute | Number of Operations | | |
|----------------------|--|----------------------|-----------------|-------|
| | | With Current | Without Current | Total |
| 30-100 | 6 | 6000 | 4000 | 10000 |
| 200 | 5 | 6000 | 2000 | 8000 |
| 400 | 4 | 1000 | 5000 | 6000 |
| 600 | 3 | 1000 | 4000 | 5000 |
| 800 | 2 | 500 | 3000 | 3500 |
| 1200 | 1 | 500 | 2000 | 2500 |

Horsepower Ratings

All Siemens safety switches, where appropriate, are horsepower rated. Ratings are approved by UL only after the switching unit has undergone testing to determine its acceptability which includes repeated interruption of the locked rotor current of the motor for which it is to be rated as follows:

| Max HP Rating | Number of ON/OFF Operations per minute | Number of Cycles of Operation |
|---------------|--|-------------------------------|
| 100 | 6 | 50 |
| 500 | 1 | 10 |

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

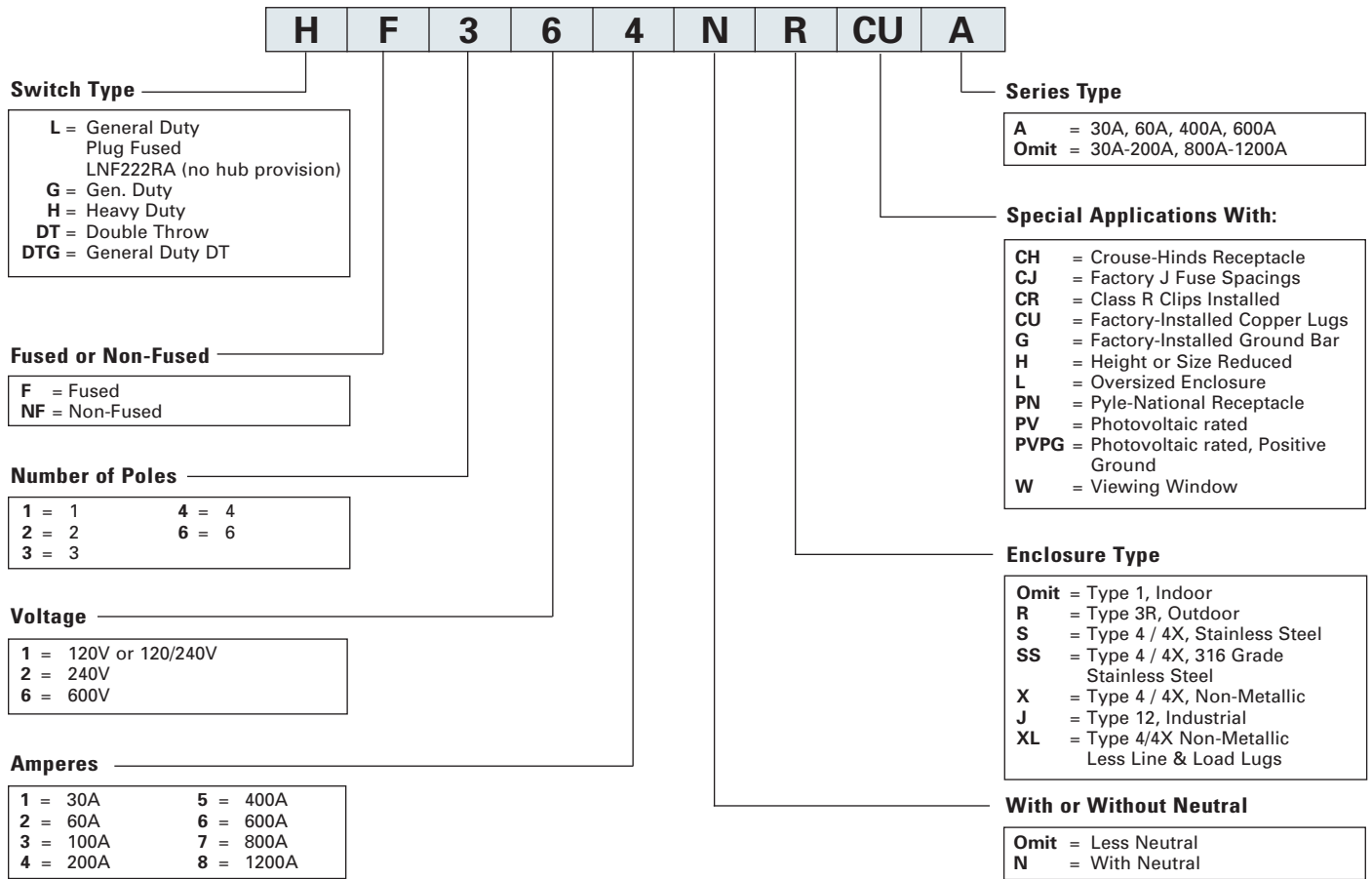
| Breaker Frame | Non-Fused Switch | UL Listed Short Circuit Current Rating |
|-------------------------|------------------------|--|
| NEG, NGB, ED4 | 30 DT (240V) | 18 kA Thru 240 VAC |
| NEB, NEG, NGG, NGB, ED4 | 100A GD & DT (240V) | 18 kA Thru 240 VAC |
| NEB, NEG, NGG, NGB, ED4 | 30-100A HD & DT (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 |

[ⓐ] VBII Type 12 switches are also rated 3R & 3S for outdoor use. Type 3R is defined in B above. 3S rated enclosures provide a degree of protection against windblown dust and allow operation when the enclosure is ice laden.
[ⓑ] All switches above are rated at 10 KA when protected by any UL Listed CB
[ⓒ] Circuit breaker trip rating must not exceed switch ampere rating

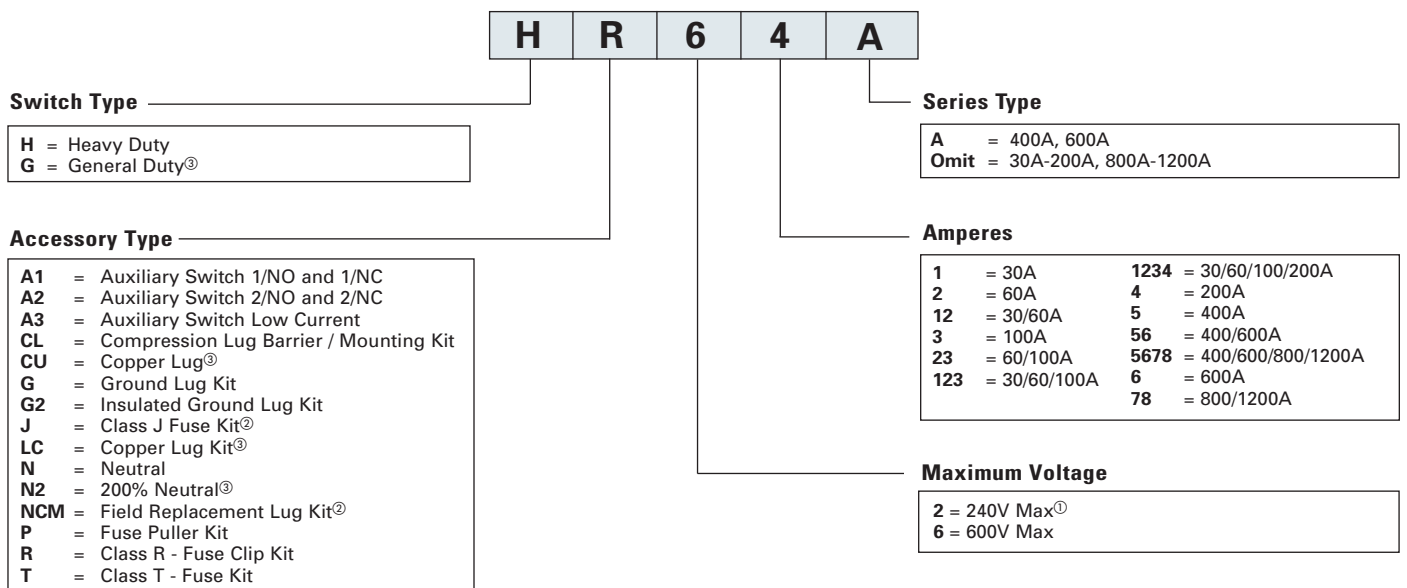
Safety Switches

Type VBII Safety Switch Catalog Numbering System

Product Overview



Type VBII Accessories Catalog Numbering System



Note: Catalog numbering systems above do not apply to 4-pole & Type "F" & "FR" double throw switches & accessories.

① For 400A, 600A use 680V max accessories except for T Fuse Kit.
② Only offered for 400A, 600A.

③ For 30A-200A, 800A-1200A.

Safety Switches

Plug Fuse and 60A Special Application Type

Selection

Features

- Compact size
- Horsepower rated
- Indoor and outdoor enclosures
- Quick make-quick break mechanism
- Visible "ON"-"OFF" indications
- Padlock-off handle feature
- Door padlock provision
- Bondable neutral (where indicated)
- Lugs suitable for copper or aluminum wire
- UL Listed
- Fuses — not included
- Switches accept Edison base plug fuses
- Hubs — see page 18/23
- Lugs — see page 18/23

Dimensions (inches)

| Type | Height | Width | Depth |
|------|-----------------|-----------------|-----------------|
| 1 | 8 $\frac{1}{4}$ | 5 $\frac{1}{2}$ | 3 |
| 3R | 8 $\frac{1}{4}$ | 5 $\frac{1}{2}$ | 3 $\frac{1}{2}$ |

Wire Range Table

| Switch Type | Wire Range |
|--------------------------------|-------------------------------------|
| 120/240 Volt Fusible 30 Amp | Cu/Al #14 to #8 AWG [ⓐ] |
| 240 Volt Non-Fusible 60 Amp | Cu #14 to #6 AWG |



| Ampere Rating | Indoor — Type 1 | | Outdoor — Type 3R | | Horsepower Ratings [ⓑ] | |
|---------------|-----------------|--------------------------------|-------------------|--------------------------------|---------------------------------|---------|
| | Catalog Number | Ship. Wt. (lbs.) Pkg. of 10 | Catalog Number | Ship. Wt. (lbs.) Pkg. of 10 | 1-Phase, 2-Wire | |
| | | | | | Standard | Maximum |

120/240 Volt Fusible

1-Pole and Solid Neutral[ⓐ]

120 Volt — 1-Phase, 2-Wire

| | | | | | | |
|----|--------|----|---------|----|---------------|---|
| 30 | LF111N | 35 | LF111NR | 35 | $\frac{1}{2}$ | 2 |
|----|--------|----|---------|----|---------------|---|

2-Pole and No Neutral

120/240 Volt — 1-Phase, 2-Wire

| | | | | | |
|----|------------------------------|--|--|--|--|
| 30 | Use 2-Pole and Solid Neutral | | | | |
|----|------------------------------|--|--|--|--|

2-Pole and Solid Neutral[ⓐ]

120/240 Volt — 1-Phase, 3-Wire

| | | | | | | |
|----|--------|----|---------|----|-----------------|---|
| 30 | LF211N | 35 | LF211NR | 35 | 1 $\frac{1}{2}$ | 3 |
|----|--------|----|---------|----|-----------------|---|

240 Volt Non-Fusible

2-Pole Special Application Switch

1 or 2-Pole — No Fuse

240 Volt — 1-Phase, 2-Wire

| | | | | | | |
|----|---|---|-----------------------|----|---|----|
| 60 | — | — | LNF222RA [ⓐ] | 30 | — | 10 |
| 60 | — | — | LNF222RL [ⓐ] | 40 | 3 | 10 |

For inches / millimeters conversion, multiply inches by 25.4.

[ⓐ]Dual horsepower ratings:

Std. — applies when non-time delay plug fuses are installed.

Max — applies when time-delay plug fuses are installed.

[ⓑ]Has service entrance label.

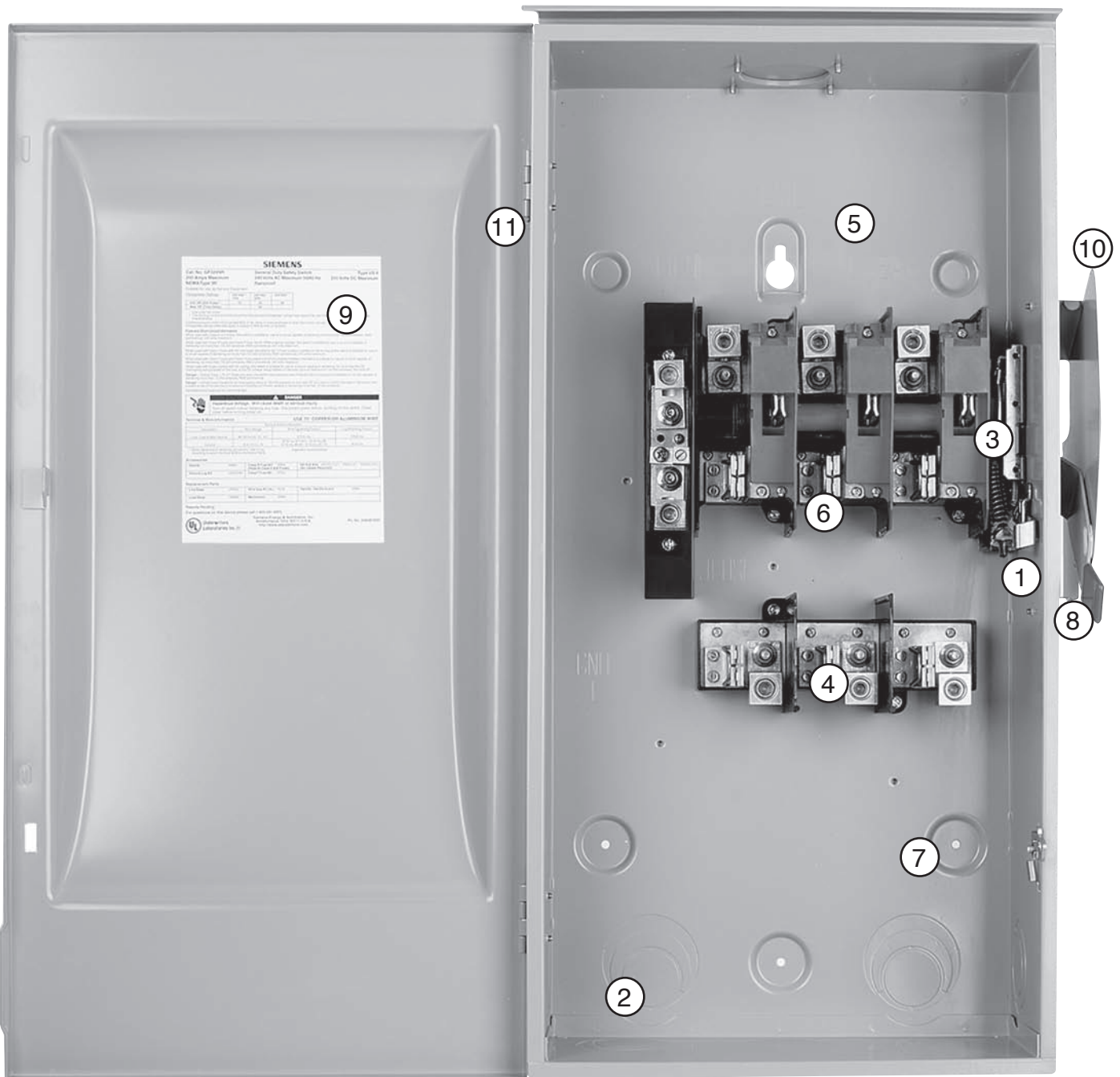
UL Listed as "Enclosed Switches" (suitable for use as service equipment where indicated) under File #E4776. (NEMA) — Type G.D.

Federal Spec. — W-S-865C — type LD or type NDS

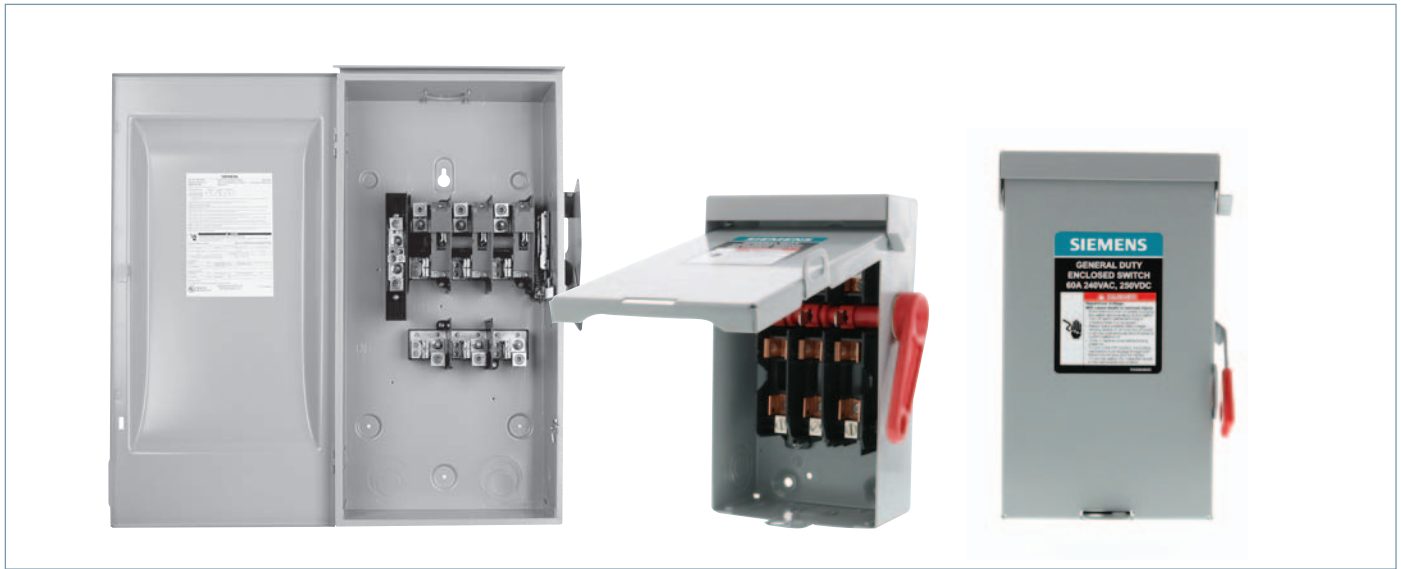
[ⓐ]Bottom cable entry and exit only. No hub provision supplied. Ground lug is included and factory installed.

[ⓑ]Line lugs will accept and are UL approved for #14 to #6 Cu/Al cable.

[ⓐ]Legacy style, oversize enclosure. Ground lug is included and factory installed.



- 1. Cover interlock
 - 2. Tangential knockouts 100-600A for easy conduit lineup
 - 3. Quick-make, quick-break operating mechanism that ensures positive operation
 - 4. Provisions for T, R, J, H, and K class fuses (T & J 100-600A)
 - 5. Wiring gutters that meet or exceed NEC wire-bending space requirements
 - 6. Visible blade, double-break switch action
 - 7. Positive 2 or 3 point mounting
 - 8. Highly visible red handle grip
 - 9. Informative door labeling which includes replacement parts list
 - 10. Handle and cover padlocking provisions
 - 11. 100A and above have side-hinged door that opens 180 degrees for easier wiring
- Note.** 400A and 600A GD switches include internal shields which meet 2020 NEC 230.62 touch safe requirements for service entrance equipment.



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

240 Volt Fusible^①

2-Pole, 2-Fuse, and Solid Neutral^{②③④}

240 Volt AC/250 Volt DC

| | | | | | | | | | | | | |
|--|-----|---------|-----------------|-----------------------|-----------------|----|----|---|---|----|----|----|
| | 30 | GF221NA | 30 ^⑦ | GF221NRA ^⑤ | 30 ^⑦ | 1½ | 3 | — | — | 3 | 7½ | 5 |
| | 60 | GF222NA | 20 ^⑧ | GF222NRA ^⑤ | 20 ^⑧ | 3 | 10 | — | — | 7½ | 15 | 10 |
| | 100 | GF223N | 23 | GF223NR | 23 | 7½ | 15 | — | — | 15 | 30 | 20 |
| | 200 | GF224N | 47 | GF224NR | 48 | 15 | — | — | — | 25 | 60 | 40 |

3-Pole, 3-Fuse, and Solid Neutral^④

240 Volt AC/250 Volt DC

| | | | | | | | | | | | | |
|--|-----|---------|-----------------|-----------------------|-----------------|----|----|---|---|----|-----|----|
| | 30 | GF321NA | 30 ^⑦ | GF321NRA ^⑤ | 30 ^⑦ | 1½ | 3 | — | — | 3 | 7½ | 5 |
| | 60 | GF322NA | 20 ^⑧ | GF322NRA ^⑤ | 20 ^⑧ | 3 | 10 | — | — | 7½ | 15 | 10 |
| | 100 | GF323N | 25 | GF323NR | 25 | 7½ | 15 | — | — | 15 | 30 | 20 |
| | 200 | GF324N | 49 | GF324NR | 50 | 15 | — | — | — | 25 | 60 | 40 |
| | 400 | GF325NA | 94.6 | GF325NRA | 94.6 | 15 | — | — | — | 50 | 125 | 50 |
| | 600 | GF326NA | 95.6 | GF326NRA | 95.6 | 15 | — | — | — | 75 | 200 | — |

240 Volt Non-Fusible^{③④⑩}

2-Pole or 3-Pole

240 Volt AC/250 Volt DC

| | | | | | | | | | | | | |
|--|-----|-----------------------|-----------------|----------------------------|-----------------|---|----|---|---|-----|---|----|
| | 30 | GNF221A | 20 ^⑦ | GNF221RA ^⑤ | 20 ^⑦ | — | 3 | — | — | — | — | 5 |
| | 30 | GNF321A ^⑥ | 20 ^⑦ | GNF321RA ^{⑤⑥} | 20 ^⑦ | — | 3 | — | — | 7½ | — | 5 |
| | 30 | GNF321LA ^⑥ | 30 ^⑦ | GNF321RLA ^{⑤⑥} | 30 ^⑦ | — | 3 | — | — | 7½ | — | 5 |
| | 60 | GNF222A | 30 ^⑦ | GNF222RA ^⑤ | 30 ^⑦ | — | 10 | — | — | 15 | — | 10 |
| | 60 | GNF322A | 30 ^⑦ | GNF322RA ^⑤ | 30 ^⑦ | — | 10 | — | — | 15 | — | 10 |
| | 100 | GNF323 | 23 | GNF323R | 24 | — | 15 | — | — | 30 | — | 20 |
| | 200 | GNF324 | 46 | GNF324R | 47 | — | 15 | — | — | 60 | — | 40 |
| | 400 | GNF325A | 114 | Use 600V Switch — HNF365RA | — | — | 15 | — | — | 125 | — | 50 |
| | 600 | GNF326A | 116 | Use 600V Switch — HNF366RA | — | — | 15 | — | — | 200 | — | — |

① Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

② These switches are UL-listed for application on grounded B-phase systems.

③ Suitable for use on 3-phase motor loads.

④ Service entrance labeled.

⑤ Has provision for ECHA type hub.

⑥ 5 switches per standard package.

⑦ 10 switches per standard package.

⑧ Height reduced switch (45.25 rather than 56 inches in height) for use with 500MCM or smaller conductors.

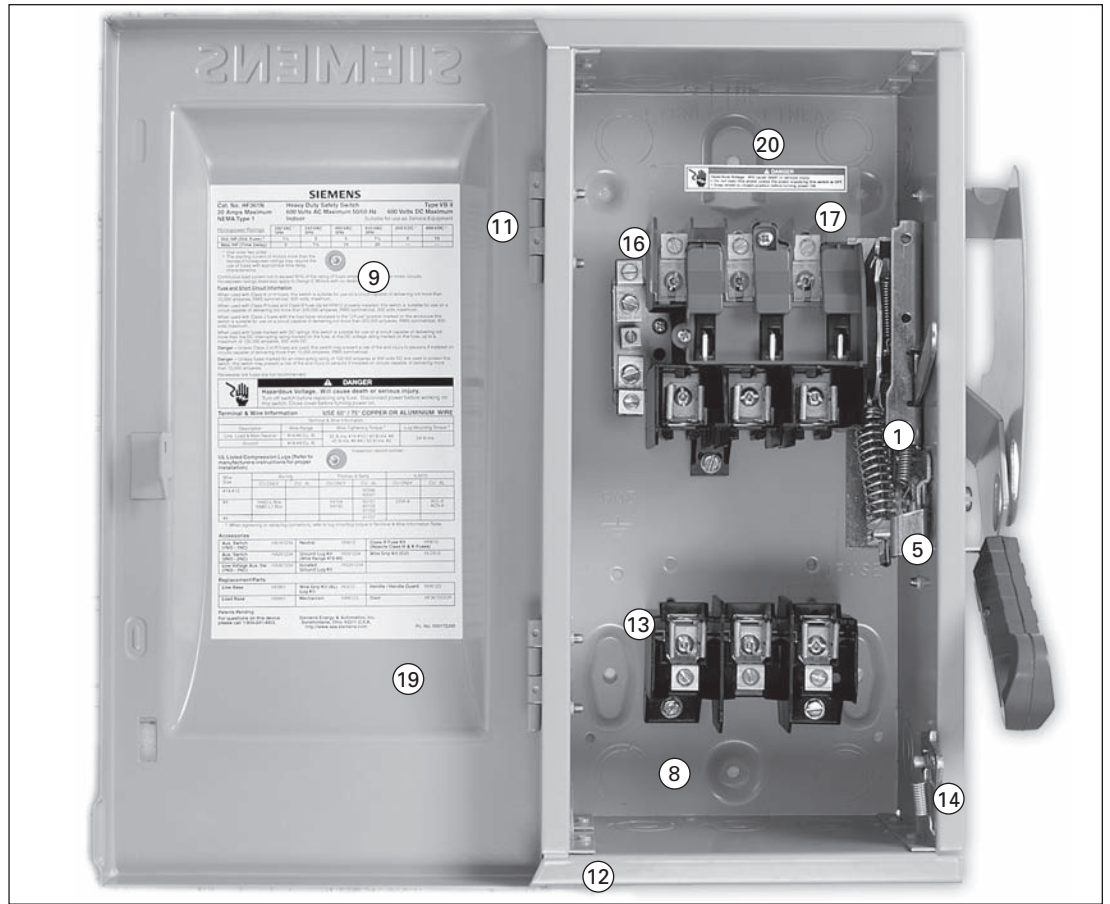
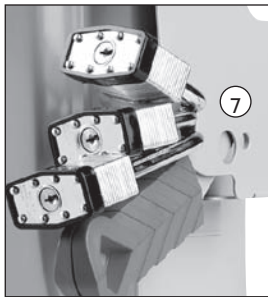
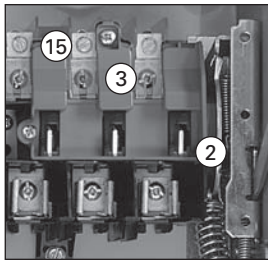
⑨ Not suitable for service entrance.

⑩ Indicates oversized enclosure.

⑪ Internal shields for 30A to 200A switches to meet 2020 NEC 230.62 touch safe requirements for service entrance equipment can be purchased separately. See accessory section for catalog numbers.

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.

Safety Switches

Heavy Duty Safety Switches

Selection



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

240 Volt Fusible^⑤

2-Pole, 2-Fuse, and Solid Neutral^③ (Also used for 2-Pole, 2-Wire Applications) 240 Volt AC/250 Volt DC

| Ampere Rating | Indoor Type 1 Catalog Number | Indoor Type 1 Ship Wt. (lbs.) Std. Pkg | Outdoor Type 3R Catalog Number | Outdoor Type 3R Ship Wt. (lbs.) Std. Pkg | 1-Phase, 2-Wire Std. | 1-Phase, 2-Wire Max. | 2-Phase, 4-Wire Std. | 2-Phase, 4-Wire Max. | 3-Phase, 3-Wire Std. | 3-Phase, 3-Wire Max. | 250 Volt DC Std. |
|---------------|------------------------------|--|--------------------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------|
| 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 | HF225NA | 91.1 | HF225NRA | 91.1 | 15 | — | — | — | 50 | 125 | 50 |
| 600 | HF226NA | 95.6 | HF226NRA | 95.6 | 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

| Ampere Rating | Indoor Type 1 Catalog Number | Indoor Type 1 Ship Wt. (lbs.) Std. Pkg | Outdoor Type 3R Catalog Number | Outdoor Type 3R Ship Wt. (lbs.) Std. Pkg | 1-Phase, 2-Wire Std. | 1-Phase, 2-Wire Max. | 2-Phase, 4-Wire Std. | 2-Phase, 4-Wire Max. | 3-Phase, 3-Wire Std. | 3-Phase, 3-Wire Max. | 250 Volt DC Std. |
|---------------|------------------------------|--|--------------------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------|
| 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 | HF325NA | 94.6 | HF325NRA | 94.6 | 15 | — | — | — | 50 | 125 | 50 |
| 600 | HF326NA | 99.6 | HF326NRA | 99.6 | 15 | — | — | — | 75 | 200 | 50 |
| 800 | HF327N | 375 | HF327NR | 375 | — | — | — | — | 100 | 250 | 50 |
| 1200 | HF328N | 395 | HF328NR | 388 | — | — | — | — | 100 | 250 | 50 |

240 Volt Fusible^⑤

2-Pole, 2-Fuse^④ 240 Volt AC/250 Volt DC

| Ampere Rating | Type 4/4X Stainless ^⑦ | | Type 12 Industrial ^⑥ | | 1-Phase, 2-Wire Std. | 1-Phase, 2-Wire Max. | 2-Phase, 4-Wire Std. | 2-Phase, 4-Wire Max. | 3-Phase, 3-Wire Std. | 3-Phase, 3-Wire Max. | 250 Volt DC Std. |
|---------------|----------------------------------|--------------------------|---------------------------------|--------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------|
| | 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^④ (Also used for 2-Pole, 2-Wire Applications in 400–800A Ratings) 240 Volt AC/250 Volt DC

| Ampere Rating | Indoor Type 1 Catalog Number | Indoor Type 1 Ship Wt. (lbs.) Std. Pkg | Outdoor Type 3R Catalog Number | Outdoor Type 3R Ship Wt. (lbs.) Std. Pkg | 1-Phase, 2-Wire Std. | 1-Phase, 2-Wire Max. | 2-Phase, 4-Wire Std. | 2-Phase, 4-Wire Max. | 3-Phase, 3-Wire Std. | 3-Phase, 3-Wire Max. | 250 Volt DC Std. |
|---------------|------------------------------|--|--------------------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|------------------|
| 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 | HF325SA | 93 | HF325JA | 93 | 15 | — | — | — | 50 | 125 | 50 |
| 400 | HF325SSA | 93 | — | — | 15 | — | — | — | 50 | 125 | 50 |
| 600 | HF326SA | 98 | HF326JA | 98 | 15 | — | — | — | 75 | 200 | 50 |
| 600 | HF326SSA | 98 | — | — | 15 | — | — | — | 75 | 200 | 50 |
| 800 | HF327S■ | 370 | HF327J■ | 365 | — | — | — | — | 100 | 250 | 50 |

■ Built to order. Allow 3-5 weeks for delivery.

① Height reduced switch (45.25 rather than 56 inches in height) for use with 500MCM or smaller conductors.

② Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

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

④ When a neutral is required use a field installed neutral kit.

⑤ Suitable for use as service entrance equipment.

⑥ Also rated Type 3S/3R.

⑦ 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, see page 18/19.

Safety Switches

Heavy Duty Safety Switches

Selection



| System | Ampere Rating | Indoor — Type 1 | | Outdoor — Type 3R | | Horsepower Rating ^④ | | | | | | | | | |
|--------|---------------|-----------------|--------------------------|-------------------|--------------------------|--------------------------------|------|-----------------|------|-----------------|------|-----------------|------|-------------|-------------|
| | | Catalog Number | Ship Wt. (lbs.) Std. Pkg | Catalog Number | Ship Wt. (lbs.) Std. Pkg | 480V AC | | | | 600V AC | | | | 250 Volt DC | 600 Volt DC |
| | | | | | | 1-Phase, 2-Wire | | 3-Phase, 3-Wire | | 1-Phase, 2-Wire | | 3-Phase, 3-Wire | | | |
| Std. | Max. | Std. | Max. | Std. | Max. | Std. | Max. | Std. | Max. | Std. | Max. | Std. | Max. | | |

600 Volt Fusible^⑤

2-Pole, 2-Fuse^③

| | | | | | | 480 Volt AC/600 Volt AC/600 Volt DC | | | | | | | | | |
|--|-----|-------|----|--------|----|-------------------------------------|----|---|---|----|----|---|---|----|----|
| | 30 | HF261 | 15 | HF261R | 15 | 3 | 7½ | — | — | 3 | 10 | — | — | 5 | 15 |
| | 60 | HF262 | 20 | HF262R | 20 | 5 | 20 | — | — | 10 | 25 | — | — | 10 | 30 |
| | 100 | HF263 | 26 | HF263R | 27 | 10 | 30 | — | — | 15 | 40 | — | — | 20 | 50 |

3-Pole, 3-Fuse

| | | | | | | 480 Volt AC/600 Volt AC/250 Volt DC ^① | | | | | | | | | |
|------|-------|---------------------|--------|----------------------|-----|--|-----|-----|-----|----|-----|-----|-----|----|-----------------|
| | 30 | HF361 | 14 | HF361R | 15 | 3 | 7½ | 5 | 15 | 3 | 10 | 7½ | 20 | 5 | — |
| | 30 | HF361L ^② | 19 | HF361RL ^② | 20 | 3 | 7½ | 5 | 15 | 3 | 10 | 7½ | 20 | 5 | — |
| | 60 | HF362 | 19 | HF362R | 20 | 5 | 20 | 15 | 30 | 10 | 25 | 15 | 50 | 10 | 30 ^⑥ |
| | 60 | — | — | HF362RL ^② | 25 | 5 | 20 | 15 | 30 | 10 | 25 | 15 | 50 | 10 | 30 ^⑥ |
| | 100 | HF363 | 24 | HF363R | 25 | 5 | 20 | 25 | 60 | 15 | 40 | 30 | 75 | 20 | 50 ^⑥ |
| | 200 | HF364 | 48 | HF364R | 49 | 25 | 50 | 50 | 125 | 30 | 50 | 60 | 150 | 40 | 50 |
| | 400 | HF365A ^① | 93 | HF365RA ^① | 157 | — | — | 100 | 250 | — | — | 125 | 350 | 50 | — |
| | 600 | HF366A ^① | 98 | HF366RA ^① | 161 | — | — | 150 | 400 | — | — | 200 | 500 | 50 | — |
| | 800 | HF367 | 365 | HF367R | 365 | — | — | 200 | 500 | — | — | 250 | 500 | 50 | — |
| 1200 | HF368 | 383 | HF368R | 385 | — | — | 200 | 500 | — | — | 250 | 500 | 50 | — | |

3-Pole, 3-Fuse and Solid Neutral

| | | | | | | 480 Volt AC/600 Volt AC/250 Volt DC ^① | | | | | | | | | |
|--|------|---------|------|----------|------|--|----|-----|-----|----|----|-----|-----|----|-----------------|
| | 30 | HF361N | 14 | HF361NR | 15 | 3 | 7½ | 5 | 15 | 3 | 10 | 7½ | 20 | 5 | — |
| | 60 | HF362N | 19 | HF362NR | 20 | 5 | 20 | 15 | 30 | 10 | 25 | 15 | 50 | 10 | 30 ^⑥ |
| | 100 | HF363N | 25 | HF363NR | 26 | 10 | 30 | 25 | 60 | 15 | 40 | 30 | 75 | 20 | 50 ^⑥ |
| | 200 | HF364N | 49 | HF364NR | 50 | 25 | 50 | 50 | 125 | 30 | 50 | 60 | 150 | 40 | 50 |
| | 400 | HF365NA | 94.6 | HF365NRA | 94.6 | — | — | 100 | 250 | — | — | 125 | 350 | 50 | — |
| | 600 | HF366NA | 99.6 | HF366NRA | 99.6 | — | — | 150 | 400 | — | — | 200 | 500 | 50 | — |
| | 800 | HF367N | 375 | HF367NR | 375 | — | — | 250 | 500 | — | — | 250 | 500 | 50 | — |
| | 1200 | HF368N | 395 | HF368NR | 388 | — | — | 250 | 500 | — | — | 250 | 500 | 50 | — |

600 Volt Fusible^⑤ (For 2-Pole Applications use outside poles of 3-Pole Switches)

2-Pole, 2-Fuse^③

| | | | | | | 480 Volt AC/600 Volt AC/600 Volt DC | | | | | | | | | |
|--|---------------|----------------------------------|--------------------------|---------------------------------|--------------------------|-------------------------------------|------|------|------|------|------|------|------|----|----|
| | Ampere Rating | Type 4/4X Stainless ^⑤ | | Type 12 Industrial ^⑥ | | | | | | | | | | | |
| | | Catalog Number | Ship Wt. (lbs.) Std. Pkg | Catalog Number | Ship Wt. (lbs.) Std. Pkg | Std. | Max. | Std. | Max. | Std. | Max. | Std. | Max. | | |
| | 30 | HF261S | 15 | HF261J■ | 15 | 3 | 7½ | — | — | 3 | 10 | — | — | 5 | 15 |
| | 60 | HF262S | 20 | HF262J■ | 20 | 5 | 20 | — | — | 10 | 25 | — | — | 10 | 30 |
| | 100 | HF263S■ | 27 | HF263J■ | 27 | 10 | 30 | — | — | 15 | 40 | — | — | 20 | 50 |

3-Pole, 3-Fuse

| | | | | | | 480 Volt AC/600 Volt AC/250 Volt DC ^① | | | | | | | | | |
|--|------|----------------------|-----|----------------------|-----|--|---|-----|-----|---|---|-----|-----|----|-----------------|
| | 30 | HF361S | 13 | HF361J | 14 | — | — | 5 | 15 | — | — | 7½ | 20 | 5 | — |
| | 60 | HF362S | 20 | HF362J | 20 | — | — | 15 | 30 | — | — | 15 | 50 | 10 | 30 ^⑥ |
| | 100 | HF363S | 25 | HF363J | 25 | — | — | 25 | 60 | — | — | 30 | 75 | 20 | 50 ^⑥ |
| | 200 | HF364S | 49 | HF364J | 49 | — | — | 50 | 125 | — | — | 60 | 150 | 40 | 50 |
| | 400 | HF365SA ^① | 93 | HF365JA ^① | 93 | — | — | 100 | 250 | — | — | 125 | 350 | 50 | — |
| | 400 | HF365SSA | 93 | — | — | — | — | 100 | 250 | — | — | 125 | 350 | 50 | — |
| | 600 | HF366SA ^① | 98 | HF366JA ^① | 98 | — | — | 150 | 400 | — | — | 200 | 500 | 50 | — |
| | 600 | HF366SSA | 98 | — | — | — | — | 150 | 400 | — | — | 200 | 500 | 50 | — |
| | 800 | HF367S | 370 | HF367J■ | 365 | — | — | 200 | 500 | — | — | 250 | 500 | 50 | — |
| | 1200 | HF368S■ | 388 | HF368J■ | 388 | — | — | 250 | 500 | — | — | 250 | 500 | 50 | — |

■ Built to order. Allow 3-5 weeks for delivery.

① 60-600A 3-Pole switches are also rated 600V DC.

② Height reduced switch (45.25 rather than 56 inches in height) for use with 500MCM or smaller conductors.

③ Use 3-Pole switch for 200A applications.

④ Dual horsepower ratings: Std.- applies when non-time

delay fuses are installed. Max.- applies when time-delay fuses are installed.

⑤ Suitable for use as service entrance equipment except on 1200 Amp solidly grounded wye systems per NEC 230.95.

⑥ Also rated Type 3S/3R.

⑦ Indicates oversized enclosure (30A switch with 60A

lugs in a 60A enclosure or 60A switch with 100A lugs in a 100A enclosure).

⑧ 600V DC & 600V DC horsepower rating shown requires (2) poles to be connected in series.

⑨ 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, see page 18/19.

Safety Switches

Heavy Duty Safety Switches

Selection



| System | Ampere Rating | Indoor — Type 1 | | Outdoor — Type 3R | | Horsepower Rating | | | | | | | |
|--------|---------------|-----------------|-----------------|-------------------|-----------------|-------------------|---------|----------|---------|----------|---------|---------|---------|
| | | Catalog Number | Ship Wt. (lbs.) | Catalog Number | Ship Wt. (lbs.) | 240 Volt | | 480 Volt | | 600 Volt | | 250V DC | 600V DC |
| | | | | | | 1-Phase | 3-Phase | 1-Phase | 3-Phase | 1-Phase | 3-Phase | | |

600 Volt Non-Fusible^④

2-Pole^③

| | | | | | | 480 Volt AC / 600 Volt AC / 600 Volt DC | | | | | | | |
|--|-----|--------|----|---------|----|---|---|----|---|----|---|----|----|
| | 30 | HNF261 | 12 | HNF261R | 13 | — | — | 7½ | — | 10 | — | 5 | 15 |
| | 60 | HNF262 | 19 | HNF262R | 20 | — | — | 20 | — | 25 | — | 10 | 30 |
| | 100 | HNF263 | 24 | HNF263R | 25 | — | — | 30 | — | 40 | — | 20 | 50 |

3-Pole

| | | | | | | 480 Volt AC / 600 Volt AC / 250 Volt DC | | | | | | | |
|------|--------|----------------------|---------|-----------------------|-----|---|-----|-----|-----|-----|-----|----|-----------------|
| | 30 | HNF361 | 12 | HNF361R | 13 | 5 | 10 | 7½ | 20 | 10 | 30 | 5 | — |
| | 30 | — | — | HNF361RL ^⑥ | 19 | 5 | 10 | 7½ | 20 | 10 | 30 | 5 | — |
| | 60 | HNF362H ^② | 11 | HNF362RH ^② | 11 | 10 | 20 | 20 | 50 | 20 | 40 | 10 | — |
| | 60 | HNF362 ^① | 18 | HNF362R ^① | 19 | 10 | 20 | 20 | 50 | 25 | 60 | 10 | 30 ^⑦ |
| | 60 | — | — | HNF362RL ^⑥ | 24 | 10 | 20 | 20 | 50 | 25 | 60 | 10 | 30 ^⑦ |
| | 100 | HNF363 ^① | 23 | HNF363R ^① | 24 | 15 | 40 | 30 | 75 | 40 | 100 | 20 | 50 ^⑦ |
| | 200 | HNF364 ^① | 46 | HNF364R ^① | 47 | 15 | 60 | 50 | 125 | 50 | 150 | 40 | 50 |
| | 400 | HNF365A ^① | 75 | HNF365RA ^① | 75 | 15 | 125 | 50 | 250 | 50 | 350 | 50 | — |
| | 600 | HNF366A ^① | 77 | HNF366RA ^① | 77 | 15 | 200 | 50 | 400 | 50 | 500 | 50 | — |
| | 800 | HNF367 | 295 | HNF367R | 295 | 15 | 250 | 50 | 500 | 50 | 500 | 50 | — |
| 1200 | HNF368 | 305 | HNF368R | 307 | 15 | 250 | 50 | 500 | 50 | 500 | 50 | — | |

600 Volt Non-Fusible^④

2-Pole^③

| | | | | | | 480 Volt AC / 600 Volt AC / 600 Volt DC | | | | | | | |
|--|-----|------------------------------------|-----------------|---------------------------------|-----------------|---|---------|---------|---------|---------|---------|---------|---------|
| | | Type 4 / 4X Stainless ^⑥ | | Type 12 Industrial ^⑤ | | | | | | | | | |
| | | Catalog Number | Ship Wt. (lbs.) | Catalog Number | Ship Wt. (lbs.) | 1-Phase | 3-Phase | 1-Phase | 3-Phase | 1-Phase | 3-Phase | 250V DC | 600V DC |
| | 30 | HNF261S | 13 | HNF261J | 13 | — | — | 7½ | — | 10 | — | 5 | 15 |
| | 60 | HNF262S | 20 | HNF262J | 20 | — | — | 20 | — | 25 | — | 10 | 30 |
| | 100 | HNF263S■ | 25 | HNF263J■ | 25 | — | — | 30 | — | 40 | — | 20 | 50 |

3-Pole

| | | | | | | 480 Volt AC / 600 Volt AC / 250 Volt DC | | | | | | | |
|------|----------|-----------------------|----------|-----------------------|-----|---|-----|-----|-----|-----|-----|----|-----------------|
| | 30 | HNF361S | 13 | HNF361J | 13 | 5 | 10 | 7½ | 20 | 10 | 30 | 5 | — |
| | 60 | HNF362SH ^② | 15 | HNF362JH ^② | 14 | 10 | 20 | 20 | 50 | 20 | 40 | 10 | — |
| | 60 | HNF362S ^① | 19 | HNF362J ^① | 19 | 10 | 20 | 20 | 50 | 25 | 60 | 10 | 30 ^⑦ |
| | 100 | HNF363S ^① | 24 | HNF363J ^① | 24 | 15 | 40 | 30 | 75 | 40 | 100 | 20 | 50 ^⑦ |
| | 200 | HNF364S ^① | 47 | HNF364J ^① | 47 | 15 | 60 | 50 | 125 | 50 | 150 | 40 | 50 |
| | 400 | HNF365SA ^① | 75 | HNF365JA ^① | 75 | 15 | 125 | 50 | 250 | 50 | 350 | 50 | — |
| | 400 | HNF365SSA | 75 | — | — | 15 | 125 | 50 | 250 | 50 | 350 | 50 | — |
| | 600 | HNF366SA ^① | 77 | HNF366JA ^① | 77 | 15 | 200 | 50 | 400 | 50 | 500 | 50 | — |
| | 600 | HNF366SSA | 77 | — | — | 15 | 200 | 50 | 400 | 50 | 500 | 50 | — |
| | 800 | HNF367S | 295 | HNF367J■ | 295 | 15 | 250 | 50 | 500 | 50 | 500 | 50 | — |
| 1200 | HNF368S■ | 310 | HNF368J■ | 310 | 15 | 250 | 50 | 500 | 50 | 500 | 50 | — | |

■ Built to order. Allow 3-5 weeks for delivery.

① 60-600A 3-Pole switches are also rated 600V DC.

② Compact switch (11.1"H, 6.6"W box less cover and handle).

Short circuit withstand rating—100,000 RMS sym. amps.

③ Use 3-Pole switch for 200A application.

④ Suitable for use as service entrance equipment except for 1200 when used on a 480 or 600V grounded wye system.

⑤ Also rated type 3S / 3R.

⑥ Indicates oversized enclosure (30A switch in a 60A enclosure or a 60A switch in a 100A enclosure).

⑦ 600V DC and 600V DC horsepower rating shown requires (2) poles to be connected in series.

⑧ 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, see page 18/19.

Heavy Duty Safety Switches

Type 3R, 4/4X, & 12 with Viewing Window

Description

30–600A, 3-pole 600V max. in fusible and non-fusible versions in Type 4/4X stainless steel and Type 12 enclosures.




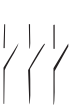

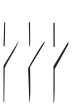
All allow viewing of visible blade position. 30–200A also allow viewing of indicating type fuses.

Features

- Rugged installer-friendly enclosure design features a gasket flange with continuously welded seams
- Tool-free cover latches
- Two, three and four point mounting

- Metal handle with large insulating grip features a positive stop in both ON and OFF position
- Ground lugs provided as standard
- Type 12 enclosures are fabricated from galvanized steel and are also rated for 3R/3S outdoor applications
- Type 4X stainless steel switches (30–200A) are provided with stainless steel interior parts
- The widest range of accessories available including 200% neutrals, gold plated PLC auxiliary contacts and isolated ground kits



| System | Ampere Rating | Catalog Number | Ship Wt. (lbs.) | Maximum Horsepower Rating ^② | | | | | |
|---|---------------|----------------|-----------------|--|-----------------|-----------------|-----------------|---------|-----------------|
| | | | | 240V AC | | 480V AC | 600V AC | 250V DC | 600V DC |
| | | | | 1-Phase, 2-Wire | 3-Phase, 3-Wire | 3-Phase, 3-Wire | 3-Phase, 3-Wire | — | — |
| 3-Pole, 3-Wire Fusible, Type 3R^④ | | | | 600 Volt AC / 250 Volt DC^① | | | | | |
|  | 30 | HF361RW | 17 | 3 | 7½ | 15 | 20 | 5 | — |
| | 60 | HF362RW | 22 | 10 | 15 | 30 | 50 | 10 | 30 ^⑤ |
| 3-Pole, 3-Wire Non-Fusible, Type 3R^④ | | | | 600 Volt AC / 250 Volt DC^① | | | | | |
|  | 30 | HNF361RW | 14 | 3 | 10 | 20 | 30 | 5 | — |
| | 60 | HNF362RW | 21 | 10 | 20 | 50 | 60 | 10 | 30 ^⑤ |
| 3-Pole, 3-Wire Fusible, Type 12^{③④} | | | | 600 Volt AC / 250 Volt DC^① | | | | | |
|  | 30 | HF361JW | 17 | 3 | 7½ | 15 | 20 | 5 | — |
| | 60 | HF362JW | 22 | 10 | 15 | 30 | 50 | 10 | 30 ^⑤ |
| | 100 | HF363JW | 26 | 15 | 30 | 60 | 75 | 20 | 50 ^⑤ |
| | 200 | HF364JW | 53 | — | 60 | 125 | 150 | 40 | 50 |
| | 400 | HF365JWA | 93 | — | 125 | 250 | 350 | 50 | — |
| | 600 | HF366JWA | 98 | — | 200 | 400 | 500 | 50 | — |
| 3-Pole, 3-Wire Non-Fusible, Type 12^{③④} | | | | 600 Volt AC / 250 Volt DC^① | | | | | |
|  | 30 | HNF361JW | 14 | 3 | 10 | 20 | 30 | 5 | — |
| | 60 | HNF362JW | 21 | 10 | 20 | 50 | 60 | 10 | 30 ^⑤ |
| | 100 | HNF363JW | 25 | 15 | 40 | 75 | 100 | 20 | 50 ^⑤ |
| | 200 | HNF364JW | 51 | 15 | 60 | 125 | 150 | 40 | 50 |
| | 400 | HNF365JWA | 75 | 15 | 125 | 250 | 350 | 50 | — |
| 3-Pole, 3-Wire Fusible, Type 4X Stainless Steel^{④⑥} | | | | 600 Volt AC / 250 Volt DC^① | | | | | |
|  | 30 | HF361SW | 17 | 3 | 7½ | 15 | 20 | 5 | — |
| | 60 | HF362SW | 23 | 10 | 15 | 30 | 50 | 10 | 30 ^⑤ |
| | 100 | HF363SW | 28 | 15 | 30 | 60 | 75 | 20 | 50 ^⑤ |
| | 200 | HF364SW | 55 | — | 60 | 125 | 150 | 40 | 50 |
| | 400 | HF365SWA | 75 | 15 | 125 | 250 | 350 | 50 | — |
| | 400 | HF365SSWA | 75 | 15 | 125 | 250 | 350 | 50 | — |
| 3-Pole, 3-Wire Non-Fusible, Type 4X Stainless Steel^{④⑥} | | | | 600 Volt AC / 250 Volt DC^① | | | | | |
|  | 30 | HNF361SW | 15 | 3 | 10 | 20 | 30 | 5 | — |
| | 60 | HNF362SW | 23 | 10 | 20 | 50 | 60 | 10 | 30 ^⑤ |
| | 100 | HNF363SW | 27 | 15 | 40 | 75 | 100 | 20 | 50 ^⑤ |
| | 200 | HNF364SW | 54 | 15 | 60 | 125 | 150 | 40 | 50 |
| | 400 | HNF365SWA | 75 | 15 | 125 | 250 | 350 | 50 | — |
| | 400 | HNF365SSWA | 75 | 15 | 125 | 250 | 350 | 50 | — |

① 200A switches are also rated 600V DC.

② Maximum HP ratings listed apply only when time delay fuses are used.

③ Also rated 3S/3R for outdoor use.

④ All switches are suitable for use as service entrance equipment. Use outside poles of 3-pole switch for 2-pole application.

⑤ 600V DC and 600V DC horsepower rating shown requires (2) poles to be connected in series.

⑥ 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, see page 18/19.

Elevator Control Switches

Application

Siemens Type (ECS) Elevator Control disconnect switches are designed for single cable or hydraulic elevator application to interrupt the incoming AC power upon receiving a signal from the Fire Alarm Control Panel (FACP).

Description

The Elevator Control switch units come completely assembled for quick installation, eliminating the labor and time needed to assemble individual components. Therefore, the numbering system assures that you get all of the correct components, assembled with the correct ratings, without having to individually order accessories.

It is easy to meet Code requirements for selective coordination in a fully fused system. Siemens Type (ECS) Elevator Control disconnect switches utilize Class J fuses that easily coordinate with any upstream fuse by simply using a 2:1 line-side to load-side fuse ratio.

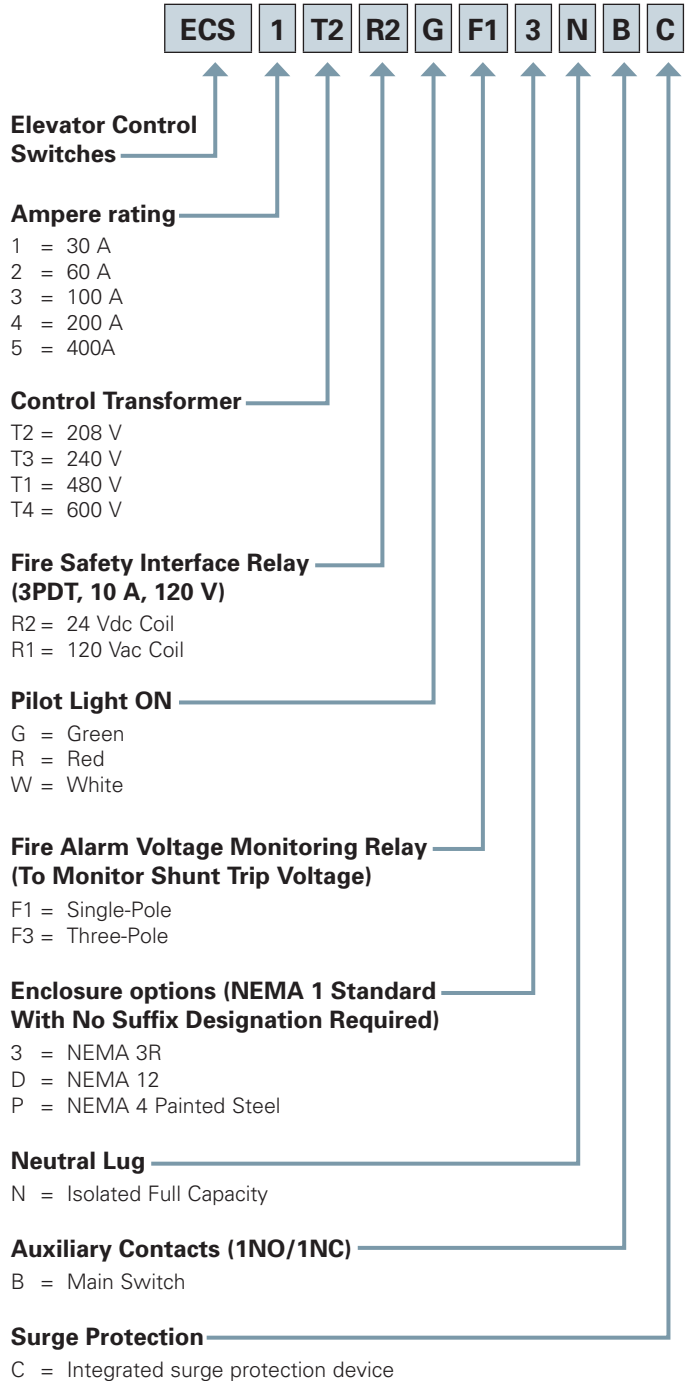
Standards

- UL 98 Enclosed and Dead Front Switch – Guide 96NK3917, File E182262



Catalog Number System

The following catalog numbering system defines an Elevator Control Switch construction.



© 100 VA with Primary and Secondary fusing (120 V Secondary)
 © For information on Siemens TPS3 03 protection device refer to product literature or Speedfax

Elevator Control Switches

Standard Features

- 30-400 A, 600 Vac, 3-phase fused power switch
- 200 kA RMS assembly short-circuit current rating
- Shunt trip 120 V
- Control power terminal block
- Ground lug compliant with the National Electric Code
- Class J fuse mounting only (Class J fuses not included)
- Key to test switch
- Pilot light – "ON"
- Mechanically interlocked auxiliary contact for hydraulic elevators with battery backup (5 A, 120 Vac rated)
- Handle designed for hook stick operation
- OSHPD Special Seismic Certification Preapproval (OSP)

Configurable Standard Features

- Control power transformer with fuses and blocks
- Fire safety interface relay
- Isolated neutral lug
- Fire Alarm Voltage Monitoring Relay (to monitor Shunt Trip Voltage)
- NEMA 3R, 4, and 12 enclosures available

Optional Features

- Oversized 200% rated neutral option available where required by excessive non-linear loads
- Additional auxiliary contact (1NO / 1NC)
- Integrated surge protection device (TPS3 03). Externally viewable through window in door

Other Options

Optional features include contact closure, i.e. battery lowering/door opening system. The B option offers support for the states of Arizona, Oregon, and Texas requirements to prevent "nuisance" fire alarms by over-riding the "Control Power not Available" signal when the Siemens Elevator control disconnect is manually (intentionally) turned off, and distinctive signaling for ON-OFF-TRIPPED conditions (Option B).

UL_A / NEC_B Listed Horsepower Ratings

| Voltage / Poles | 30A | | 60A | | 100A | | 200A | | 400A | |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | Std ^② | Max ^① | Std ^② | Max ^① | Std ^② | Max ^① | Std ^② | Max ^① | Std ^② | Max ^① |
| 208VAC / 3 Pole _B | 2 | 5 | 5 | 10 | 10 | 15 | 20 | 40 | 40 | 75 |
| 240VAC / 3 Pole _A | 2 | 7½ | 7½ | 15 | 15 | 30 | 25 | 60 | 50 | 75 |
| 480VAC / 3 Pole _A | 5 | 15 | 15 | 30 | 25 | 60 | 50 | 125 | 100 | 150 |
| 6008VAC / 3 Pole _A | 7½ | 20 | 15 | 50 | 30 | 75 | 60 | 150 | 125 | 200 |

Fuse and Short Circuit Information

This switch is suitable for use with Class J Fuses ONLY.

① Max HP with time delay Class J Fuses.
 ② Max HP with non-time delay Class J Fuses.

All Siemens Elevator Control elevator disconnect switches are UL-Listed and designed for safe access by qualified personnel. When maintenance or shutdown service is required, no energized parts are exposed inside the enclosure when the disconnect switch is manually turned to the OFF position. For proper maintenance safety precautions, always turn off incoming power to the Siemens Elevator Control elevator switch when possible. When servicing any live electrical equipment, always wear appropriate personal protective equipment.

Shunt-Trip Operation

The disconnect means is a shunt-trip operated switch. The control power source for the shunt-trip operator is a 120 Vac supply originating in the Siemens Elevator Control switch. Current to the shunt-trip device is switched by an isolation relay, which is in turn controlled by the FACP.

The control signal may be either 24 Vdc from the FACP (Option R2) or a "dry" contact closure in the FACP (Option R1). In the case of a "dry" contact closure, the sensing voltage is 120 Vac originating in the Siemens Elevator Control switch.

A key test switch (Option K) is included for testing the shunttrip circuit.

Supervisory Indication

Additionally, an optional separate relay can be specified to monitor the 120 Vac control power source in the Siemens Elevator Control switch. This relay (Option F1 or F3) is used to provide supervisory indication of "Control Power Available" as required by NFPA 72 Section 6.15.4.4.

Transformer Fuse Details

| ECS Voltage/ Transformer Voltage | Primary Fuse (amps) | Secondary Fuse (amps) |
|-------------------------------------|------------------------|--------------------------|
| 208/120 | FNQ-R-2 | FNM-1 1/4 |
| 240/120 | FNQ-R-2 | FNM-1 1/4 |
| 480/120 | FNQ-R-1 | FNM-1 1/4 |
| 600/120 | FNQ-R-1 | FNM-1 1/4 |

Safety Switches

Type VBII 4 & 6-Pole Heavy Duty Safety Switches

Selection

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 Type 12/3R 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 parts^①
- Tangential knockouts (Type 1, 4-pole switches)



HNF662J

4-Pole Type VBII Switches^{①②}

| System | Amp Rating | Indoor Type 1 | | Type 12/3R Industrial ^③ | | Horsepower Ratings ^③ | | | | 480V, 3Ø | | 600V, 3Ø | | 250V DC |
|--------|------------|----------------|-----------------|------------------------------------|-----------------|---------------------------------|--|---------|--|----------|------|----------|------|---------|
| | | Catalog Number | Ship Wt. (lbs.) | Catalog Number | Ship Wt. (lbs.) | 240V, 2Ø, 4W | | 240V 3Ø | | Std. | Max. | Std. | Max. | |

Fusible 600 Volt AC, 250 Volt DC — 4-Pole, 4 Fuse^④

| | | | | | | | | | | | | | | |
|--|-----|-------|----|--------|----|----|----|----|----|----|-----|----|-----|----|
| | 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 | 4 |

6-Pole Type VBII Switches^{①②⑤}

| System | Amp Rating | Type 12/3R Industrial | | Type 4X Stainless Steel | | Horsepower Ratings ^③ | | | | 250V DC |
|--------|------------|-----------------------|-----------------|-------------------------|-----------------|---------------------------------|--|----------|--|---------|
| | | Catalog Number | Ship Wt. (lbs.) | Catalog Number | Ship Wt. (lbs.) | 240V 3Ø | | 480V, 3Ø | | |

Fusible 600 Volt AC, 250 Volt DC — 6-Pole, 6 Fuse^④

| | | | | | | | | | | | | |
|--|-----|--------|----|--------|----|----|----|----|-----|----|-----|----|
| | 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 3-5 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.

⑤ Supplied with factory installed ground lugs.

Special Application Safety Switches

Interlocked Receptacle Switches

Application

Receptacle Safety Switches provide cord connection protection of heavy-duty portable equipment (welders, infrared ovens, batch feeders, portable conveyors, assembly line fixtures and tools, refrigerator trucks, etc.) under load or fault conditions.

Standards

All receptacle switches are UL listed under file #E4776. Those with a viewing window are also CSA certified under file #1079316.

Description^{①②}

Type 12 and 4/4X Receptacle Safety Switches are available with 3-phase, 4-wire grounded type Crouse-Hinds Arkite™ 2 or Pyle-National receptacle, pre-wired and mounted with interlock linkage to the switch mechanism. Insertion or removal of the plug is prevented by the interlock linkage while the switch is in the "ON" position. Receptacle prevents operation of switch if incorrect plug is inserted.



HF362JCH

Crouse-Hinds Interlocked Receptacle Switches

| Ampere Rating ^④ | Type 12 ^⑤ | Type 4/4X ^⑥ | Shipping Wt. (lbs.) Std. Pkg. | Accepts Crouse-Hinds Arkite [®] Plug Catalog Number |
|----------------------------|----------------------|------------------------|-------------------------------|--|
| | Catalog Number | Catalog Number | | |

240V Fusible, 3-Pole, 3-Wire

| | | | | |
|-----|----------|-----------|----|---------------------|
| 30 | HF321JCH | HF321SCH▲ | 23 | APJ3485 & NPJ3485 |
| 60 | HF322JCH | HF322SCH▲ | 30 | APJ6485 & NPJ6485 |
| 100 | HF323JCH | HF323SCH▲ | 36 | APJ10487 & NPJ10487 |

600V Fusible, 3-Pole, 3-Wire

| | | | | |
|-----|----------|-----------|----|---------------------|
| 30 | HF361JCH | HF361SCH | 24 | APJ3485 & NPJ3485 |
| 60 | HF362JCH | HF362SCH | 30 | APJ6485 & NPJ6485 |
| 100 | HF363JCH | HF363SCH▲ | 36 | APJ10487 & NPJ10487 |

600V Non-Fusible, 3-Pole, 3-Wire

| | | | | |
|-----|------------|------------|----|---------------------|
| 30 | HNF361JCH▲ | HNF361SCH▲ | 22 | APJ3485 & NPJ3485 |
| 60 | HNF362JCH | HNF362SCH | 29 | APJ6485 & NPJ6485 |
| 100 | HNF363JCH▲ | HNF363SCH▲ | 35 | APJ10487 & NPJ10487 |

600V Fusible, 3-Pole, 3-Wire with Viewing Window

| | | | | |
|-----|------------|------------|----|---------------------|
| 30 | HF361JCHW▲ | HF361SCHW▲ | 24 | APJ3485 & NPJ3485 |
| 60 | HF362JCHW | HF362SCHW | 30 | APJ6485 & NPJ6485 |
| 100 | HF363JCHW▲ | HF363SCHW▲ | 36 | APJ10487 & NPJ10487 |

600V Non-Fusible, 3-Pole, 3-Wire with Viewing Window

| | | | | |
|-----|-------------|-------------|----|---------------------|
| 30 | HNF361JCHW▲ | HNF361SCHW▲ | 22 | APJ3485 & NPJ3485 |
| 60 | HNF362JCHW | HNF362SCHW▲ | 29 | APJ6485 & NPJ6485 |
| 100 | HNF363JCHW▲ | HNF363SCHW▲ | 35 | APJ10487 & NPJ10487 |

Pyle-National Interlocked Receptacle Switches 3-Poles Fusible and Non-Fusible

| Ampere Rating | | Voltage Rating | Type 12 Catalog Number ^⑤ | Type 12 Stainless Steel Catalog Number ^⑥ | Shipping Wt. (lbs.) Std. Pkg. | Accepts Pyle-National QuelArc™ ^{②③} Plugs Plug Catalog Number |
|---------------|------------|----------------|-------------------------------------|---|-------------------------------|--|
| Switch | Receptacle | | | | | |
| 30 | 30 | 600 (F) | HF361JPN▲ | HF361SPN▲ | 23 | JPD-83046 |
| | | 600 (N-F) | HNF361JPN | HNF361SPN | 21 | |
| 60 | 60 | 240 (F) | HF322JPN▲ | — | 28 | JPD-116046 |
| | | 600 (F) | HF362JPN▲ | HF362SPN▲ | 28 | |
| | | 600 (N-F) | HNF362JPN | HNF362SPN | 27 | |

▲ Built to order. Allow 6–8 weeks for delivery.

① Arkite™ is a registered trademark of the Crouse-Hinds Company. Plugs are not sold or supplied by Siemens.

② Indicates plug with maximum diameter cable bushing.

③ QuelArc™ is a registered trademark of the Pyle-National Company.

④ Ampere rating of both switch and receptacle.

⑤ Also rated Type 3R/3S.

⑥ Enclosure is constructed of Type 304 stainless steel.

Special Application Safety Switches

Type VBII Non-Metallic & 316 Grade Stainless Steel

Application

Siemens Non-metallic and 316 grade stainless steel switches provide a superior level of corrosion resistance to assure trouble free performance in the most severe conditions. 316 grade stainless steel provides increased corrosion resistance when compared to 304 grade, especially in atmospheres containing a high level of chlorine commonly encountered in marine and waste management applications. Our non-metallic enclosures are constructed from fiberglass reinforced polyester and are extremely resistant to a wide range

of corrosive atmospheres. They allow a wide range of operating temperatures and their insulating properties virtually eliminate problems caused by internal condensation.

Description

30-200A, 600V Max, fusible and non-fusible switches are available in both non-metallic and 316 grade stainless steel versions. All are supplied with factory installed ground bars as standard. Viewing windows are also available in the stainless offering.



Type 4/4X Non-Metallic

| Ampere Rating | Catalog Number | Ship Weight Std. pkg. (lbs.) | Horsepower Rating—3-Phase | | | | | | 250 Volts DC | 600 Volts DC |
|--|-----------------------|------------------------------|---------------------------|------|-------------|------|-------------|------|--------------|-----------------|
| | | | 240 Volt AC | | 480 Volt AC | | 600 Volt AC | | | |
| | | | Std. | Max. | Std. | Max. | Std. | Max. | | |
| 3-Pole, 4-Wire, 240 Volt Fusible, Type 4X^③ | | | | | | | | | | |
| 30 | HF321NX | 21 | 3 | 7½ | — | — | — | — | 5 | — |
| 60 | HF322NX▲ | 22 | 7½ | 15 | — | — | — | — | 10 | — |
| 3-Pole, 4-Wire, 600 Volt AC Fusible, Type 4X^{②③⑤} | | | | | | | | | | |
| 30 | HF361NX | 21 | 3 | 7½ | 5 | 15 | 7½ | 20 | 5 | 15 ^④ |
| 60 | HF362NX | 22 | 7½ | 15 | 15 | 30 | 15 | 50 | 10 | 30 ^④ |
| 100 | HF363NX▲ ^① | 39 | 15 | 30 | 25 | 60 | 30 | 75 | 20 | 50 ^④ |
| 200 | HF364NX▲ ^① | 83 | 25 | 60 | 50 | 125 | 60 | 150 | 40 | 50 |
| 3-Pole, 3-Wire, 600 AC Volt Non-Fusible,^① Type 4X^{②③} | | | | | | | | | | |
| 30 | HNF361X | 20 | — | 7½ | — | 20 | — | 30 | 5 | 15 ^④ |
| 60 | HNF362X | 20 | — | 15 | — | 50 | — | 60 | 10 | 30 ^④ |
| 100 | HNF363X▲ | 38 | — | 30 | — | 75 | — | 100 | 20 | 50 ^④ |
| 200 | HNF364X▲ | 81 | — | 60 | — | 125 | — | 150 | 40 | 50 |

Type 4/4X 316 Grade Stainless Steel

| Ampere Rating | Standard | | Ship Weight (lbs.) | Horsepower Rating—3-Phase | | | | | | 250 Volts DC | 600 Volts DC |
|--|----------------|---------------------|--------------------|---------------------------|------|-------------|------|-------------|------|--------------|-----------------|
| | Catalog Number | With Viewing Window | | 240 Volt AC | | 480 Volt AC | | 600 Volt AC | | | |
| | | Catalog Number | | Std. | Max. | Std. | Max. | Std. | Max. | | |
| 240V AC, 250V DC Fusible 3-Pole, 3-Wire | | | | | | | | | | | |
| 30 | HF321SS▲ | — | 15 | 3 | 7½ | — | — | — | — | 5 | — |
| 60 | HF322SS▲ | — | 19 | 7½ | 15 | — | — | — | — | 10 | — |
| 100 | HF323SS▲ | — | 27 | 15 | 30 | — | — | — | — | 20 | — |
| 200 | HF324SS▲ | — | 48 | 25 | 60 | — | — | — | — | 40 | — |
| 600V AC, 250V DC Fusible 3-Pole, 3-Wire^③ | | | | | | | | | | | |
| 30 | HF361SS | HF361SSW | 17 | 3 | 7½ | 5 | 15 | 7½ | 20 | 5 | — |
| 60 | HF362SS | HF362SSW▲ | 21 | 7½ | 15 | 10 | 30 | 15 | 50 | 10 | 30 ^④ |
| 100 | HF363SS | HF363SSW▲ | 28 | 15 | 30 | 25 | 60 | 30 | 75 | 20 | 50 ^④ |
| 200 | HF364SS | HF364SSW▲ | 54 | 25 | 60 | 50 | 125 | 60 | 150 | 40 | 50 |
| 600V AC, 250 V DC Non-Fusible 3-Pole, 3-Wire^{①③} | | | | | | | | | | | |
| 30 | HNF361SS | HNF361SSW | 15 | — | 10 | — | 20 | — | 30 | 5 | — |
| 60 | HNF362SS | HNF362SSW▲ | 21 | — | 20 | — | 50 | — | 60 | 10 | 30 ^④ |
| 100 | HNF363SS | HNF363SSW▲ | 26 | — | 40 | — | 75 | — | 100 | 20 | 50 ^④ |
| 200 | HNF364SS | HNF364SSW▲ | 51 | — | 60 | — | 125 | — | 150 | 40 | 50 |

▲ Built to order. Allow 6-8 weeks for delivery.
 ① Also used for 240 volt applications.

② Add "L" to end of catalog number for switches less line & load lugs with mounting hardware for crimp type or copper body lugs.
 ③ 200A switches are also rated 600V DC max.

④ 600V DC voltage and horsepower rating shown requires (2) poles to be connected in series.
 ⑤ Supplied with factory installed neutral.

Enclosed Solar Photovoltaic (PV) Switches

Application, Description, Selection

Application

Solar disconnect switches are designed to be used in the DC portion of photovoltaic power generation circuits. They incorporate powerful magnets within the switch line base which work in combination with a double break switching action to quickly dissipate the very hot arc that is generated when a 600V DC circuit is opened under load. These circuits are defined by article 690 of the NEC which requires the grounded conductor to be at ground potential at all times and therefore cannot be switched.

Description

30-200A switches are available in both Type 1 and 3R enclosures and in both fusible and non-fusible versions. They are provided with an additional door mounted warning label as required by the NEC and are supplied with a factory installed equipment ground bar. They are built to UL98 requirements but are UL listed in file number E335018 as UL1741 photovoltaic disconnect switches. They are 3 pole switches that are approved to switch 3 separate 600V DC circuits (one per pole). The design incorporates

many of the standard VBII switch features including a rolled out enclosure front flange, a large metal operating handle, oversized line and load lugs and large wire gutters. 1000VDC photovoltaic switches are UL98B listed for solar applications and comply with article 690 of the NEC. The new 400-600Amp switches are also UL98B listed at 600VDC and come in NEMA Type 3R.

Solar Photovoltaic Enclosed Disconnect Switches

| Ampere Rating | Indoor – Type 1 | | Outdoor – Type 3R | | Rated Isc Per NEC Article 690 |
|---|-----------------|--------------------|-------------------|--------------------|-------------------------------|
| | Catalog Number | Ship Wt* Std. Pkg. | Catalog Number | Ship Wt* Std. Pkg. | |
| Negative Ground 3 Pole 3 Wire Fusible 600Volt DC | | | | | |
| 30 | HF361PV | 14 | HF361RPV | 15 | 19.2 A |
| 60 | HF362PV | 20 | HF362RPV | 21 | 38.4 A |
| 100 | HF363PV▲ | 25 | HF363RPV | 26 | 64.0 A |
| 200 | HF364PV▲ | 49 | HF364RPV | 50 | 128.0 A |
| Negative Ground 3 Pole 3 Wire Non-Fusible 600Volt DC | | | | | |
| 30 | HNF361PV | 12 | HNF361RPV | 13 | 24.0 A |
| 60 | HNF362PV | 19 | HNF362RPV | 20 | 48.0 A |
| 100 | HNF363PV▲ | 24 | HNF363RPV | 25 | 80.0 A |
| 200 | HNF364PV▲ | 47 | HNF364RPV | 48 | 160.0 A |
| Positive and Negative Ground, 1 Pole, Fusible 1000 Volt DC | | | | | |
| 200 | HF1104NPV▲ | 52 | HF1104NRPV▲ | 53 | 128.0A |
| Positive and Negative Ground, 1 Pole, Non-Fusible 1000 Volt DC | | | | | |
| 200 | HNF1104NPV▲ | 50 | HNF1104NRPV▲ | 51 | 160.0A |
| Positive Ground 3 Pole 3 Wire Fusible 600Volt DC | | | | | |
| 30 | HF361PVPG | 14 | HF361RPVPG | 15 | 19.2 A |
| 60 | HF362PVPG▲ | 20 | HF362RPVPG | 21 | 38.4 A |
| 100 | HF363PVPG▲ | 25 | HF363RPVPG▲ | 26 | 64.0 A |
| 200 | HF364PVPG▲ | 49 | HF364RPVPG▲ | 50 | 128.0 A |
| Positive Ground 3 Pole 3 Wire Non-Fusible 600Volt DC | | | | | |
| 30 | HNF361PVPG | 12 | HNF361RPVPG | 13 | 24.0 A |
| 60 | HNF362PVPG▲ | 19 | HNF362RPVPG | 20 | 48.0 A |
| 100 | HNF363PVPG▲ | 24 | HNF363RPVPG▲ | 25 | 80.0 A |
| 200 | HNF364PVPG▲ | 47 | HNF364RPVPG▲ | 48 | 160.0 A |
| Positive and Negative Ground, 2 Wire, 600Volt DC, Type 3R | | | | | |
| Amperage Rating | No. Poles | Fuse Type | Catalog Number | Ship Wt* Std. Pkg | Rated Isc Per NEC Article 690 |
| 400A | 1 | Fusible | HF165NRPV▲ | 165 | 256A |
| 400A | 1 | Non-fusible | HNF165NRPV▲ | 127 | 256A |
| 600A | 1 | Fusible | HF166NRPV▲ | 167 | 384A |
| 600A | 1 | Non-fusible | HNF166NRPV▲ | 129 | 384A |



HF361PV



HNF361RPV



HF362RPV

▲ Built to order. Allow 6-8 weeks for delivery.

* In pounds (lbs)

Note: All disconnects are rated at 10,000 AIC per UL requirements when used with or protected by Class K, J or R fuses rated at 600VDC.

Safety Switches

General and Heavy Duty Safety Switches

Accessories



HR612

Class R Fuse Clip Kits

All General Duty and Heavy Duty Switches are field convertible to accept Class R Fuse Clip Kits. The kits prevent the installation of Class H and K fuses (one kit required per 3-pole switch).

Class R Fuse Clip Kits

| Catalog Number | Description |
|----------------|-------------------------|
| HR21A | 30A, 240V Kit (GD only) |
| HR21 | 30A, 240V Kit (HD only) |
| HR612 | 30A, 600V Kit |
| HR22A | 60A 240V Kit (GD only) |
| HR62 | 60A, 600V Kit |
| HR63 | 100A Kit |
| HR64 | 200A Kit |
| HR65A | 400A Kit |
| HR66A | 600A Kit |

Class J Fusing

All 30-600A, 600V and 100-600A, 240V fusible Heavy Duty Switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position. All 100-600A, 240V fusible General Duty switches can also be field converted to accept Class J fuses.

Class J Fuse Kits

| Catalog Number | Description |
|----------------|---------------------|
| HJ66A | 600A, 240V/600V Kit |

Internal Shield Kits (for fusible switches)

Kits provide a clear plastic inner door to prevent accidental contact with live parts. Test probe holes are provided and fuses can be replaced without removal of kit.

Internal Shield Kits^③

| Switch Ampere Rating | Kit Catalog Number | Coverage |
|-----------------------------|--------------------|-----------|
| 30-60A GD Non-fusible | HSK212BA | Line side |
| 30A GD Fusible | HSK21BA | Line side |
| 60A GD Fusible | HSK22BA | Line side |
| 100A GD | HSK23B | Line side |
| 200A GD | HSK24B | Line side |
| 30A HD Fusible ^② | HSK61SSW | Full |
| 60A HD ^② | HSK62SSW | Full |
| 100A HD ^② | HSK63SSW | Full |
| 200A HD ^② | HSK64SSW | Full |



HT63

Class T Fuse Adapter Kits

All 100-600A, General Duty and 100-200Amp and 1200Amp Heavy Duty Switches are field convertible to accept Class T fuses.

Class T Fuse Adapter Kits^①

| Catalog Number | Description |
|----------------|-----------------|
| HT23 | 100A, 240V Kit |
| HT63 | 100A, 600V Kit |
| HT24 | 200A, 240V Kit |
| HT64▲ | 200A, 600V Kit |
| HT25A | 400A, 240V Kit |
| HT65A | 400A, 600V Kit |
| HT26A | 600A, 240V Kit |
| HT66A | 600A, 600V Kit |
| TFAK72 | 800A, 240V Kit |
| TFAK75 | 800A, 600V Kit |
| TFAK82 | 1200A, 240V Kit |



HN612

Neutral Kits

Standard Neutral Kits can be field installed in General and Heavy Duty Switches.

Neutral Kits

| Switch Ampere Rating | Kit Catalog Number |
|----------------------|--------------------|
| 30 GD | n/a |
| 30 HD | HN612 |
| 60 GD | HN22A |
| 60, 100 HD, 100 GD | HN623 |
| 200 | HN64 |
| 400 & 600 | HN656A |
| 800 & 1200 | HN678 |

▲ Built to order. Allow 6-8 weeks for delivery.

① One kit per pole required.

② Not designed for use in Non-metallic 4X safety switches. Not designed for use with Auxiliary Contacts.



HN264

200% Neutral Kits

UL listed 200% Neutrals are available on 100-600A Heavy Duty Switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

200% Neutral Kits

| Switch Ampere Rating | Kit Catalog Number | Wire Range Line & Load Lugs (Cu/Al) |
|----------------------|--------------------|---|
| 100 | HN263 | (2) #14-1/0 AWG |
| 200 | HN264 | (2) #6 AWG-300 Kcmil |
| 400 | HN656A | (2) 1/0 AWG-600 Kcmil (2) #6 AWG-300 Kcmil |
| 600 | HN678A | (4) 1/0 AWG - 600 Kcmil (2) #6 AWG - 300 Kcmil |



HP61

Fuse Puller Kits

Fuse Puller Kits are field installable in 30-100A Type VBII Heavy Duty Switches (one kit required per 3-pole switch).

Fuse Puller Kits

| Switch Ampere Rating | Fuse Puller Kit Catalog Number |
|----------------------|--------------------------------|
| 30 | HP61 |
| 60 | HP62▲ |
| 100 | HP63▲ |

③ Internal shields meet 2020 NEC 230.62 touch safe requirements for service entrance.



HA261234



HA265678



HLC612

HG261234

Auxiliary Contacts

Auxiliary Contacts are available only for Heavy Duty Switches. The auxiliary contacts are available in 1 normally open and 1 normally closed or 2 normally open and 2 normally closed configurations. Siemens offers a PLC Auxiliary Switch (30-600A) that has very low resistance for low voltage and current typical in PLC circuits. All auxiliary contacts make after and break before main switch contacts.

Auxiliary Contacts^①

| Switch Ampere | Aux. Switch Catalog Number | Kit Ampere Rating | | | Horsepower Rating | |
|---------------|----------------------------|-------------------|--------------|-------------|-------------------|--------------|
| | | 125V AC Max. | 250V AC Max. | 28V DC Max. | 125V AC Max. | 250V AC Max. |
| 30-600 | HA161234 | 10 | 10 | 7 | 1/2 | 3/4 |
| 800-1200 | HA165678 | 10 | 10 | — | 1/2 | 3/4 |

With 1 NO & 1 NC Isolated Contacts

| | | | | | | |
|----------|----------|----|----|---|-----|-----|
| 30-600 | HA161234 | 10 | 10 | 7 | 1/2 | 3/4 |
| 800-1200 | HA165678 | 10 | 10 | — | 1/2 | 3/4 |

With 2 NO & 2 NC Isolated Contacts

| | | | | | | |
|----------|----------|----|----|---|-----|-----|
| 30-600 | HA261234 | 10 | 10 | 7 | 1/2 | 3/4 |
| 800-1200 | HA265678 | 10 | 10 | 7 | 1/2 | 3/4 |

Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts

| | | | | | | |
|----------|----------|----|----|---|-----|-----|
| 30-600 | HA361234 | 10 | 10 | 7 | 1/2 | 3/4 |
| 800-1200 | HA365678 | 10 | 10 | — | 1/2 | 3/4 |

Copper Lug Kits

Heavy duty switches are UL approved to accept field installed copper lug kits.

Copper Lug Kits

| Switch Ampere Rating | Copper Lug Catalog Number | Description |
|----------------------|---------------------------|------------------------------------|
| 30-60 | HLC612 | (9) Lugs/Kit #14-4 AWG Cu |
| 100 | HLC63▲ | (9) Lugs/Kit #14-1/0 AWG Cu |
| 200 | HLC64▲ | (9) Lugs/Kit #6 AWG-300 Kcmil Cu |
| 400-600 | HCU656A■ | (1) Lugs/Kit #1/0 AWG-600 Kcmil Cu |
| 800-1200 | HLC65678 | (1) Lugs/Kit #1/0 AWG-600 Kcmil Cu |

▲ Built to order. Allow 6-8 weeks for delivery.

■ Purchase field replacement kit along with lugs.

① Series A 400A and 600A switches use HA161234, HA261234 or HA361234 auxiliary contacts. Earlier 400A and 600A switches use HA165678, HA265678 or HA365678 auxiliary contacts.

Quick Connects

They provide two point control power take-off capability and are normally used on two poles on the line side when it is required to have control power available when the switch is in the OFF position. They provide a mounting provision for standard ¼" quick connect terminal. Installed in the line or load side. 30A VBII switches have lugs UL listed to accept (2) wires per pole as standard so a 30A kit is not required.

Quick Connects

| Catalog Number | Description |
|----------------|-------------------------------|
| HQC62 | 60A 2 wire quick connect kit |
| HQC63 | 100A 2 wire quick connect kit |
| HQC64 | 200A 2 wire quick connect kit |

Isolated Ground Kits

Isolated Ground Kits are available on 30-600A Heavy Duty Switches. They are normally used on circuits with a high content of computer or other electronic loading which require a ground which is isolated from the building ground and neutral circuits. The kit includes both isolated and grounded terminals as listed below.

Isolated Ground Kits

| Switch Ampere Rating | Catalog Number | Number of Terminals | | Wire Range Per Terminal (Cu/Al) |
|----------------------|----------------|---------------------|----------|---------------------------------|
| | | Isolated | Grounded | |
| 30-200 | HG261234 | 2 | 2 | #14-4 AWG |
| 400-600 | HG2656A | 4 | 4 | 2/0-14 AWG 2/0-6 AWG |

Equipment Ground Kits

Equipment Ground Lug Kits are available for all General and Heavy Duty Switches. They are field installable in Type 1 and Type 3R Switches and are factory installed as standard in Type 4 / 4X and Type 12 and also in all VBII 4&6-pole Switches.

Equipment Ground Kits

| Switch Ampere Rating | Catalog Number | Number of Terminals | Wire Range Per Terminal (Cu/Al) |
|----------------------|----------------|---------------------|---------------------------------|
| 30-200 GD | HG61234 | 2 | #14-4 AWG |
| 30-200 HD | HG61234 | 2 | #14-4 AWG |
| 400 & 600 | HG656A | 4 | 2/0-6 AWG |
| 800-1200 | HG678 | 8 | #6 AWG-250 Kcmil |

Safety Switches

General and Heavy Duty Safety Switches

Hub and Lug Selection

Interchangeable Hubs

Conduit hubs are available for Type 3R, 12 and 4 / 4X applications. 30-200A Type 3R Switches are provided with a conduit hub provision and a removable hub plate on their top rainshed.

| Conduit Size (inches) | Catalog Number | Used On |
|-----------------------|----------------|---------|
|-----------------------|----------------|---------|

Type 3R^①

| Cover | Catalog Number | Used On | |
|-------|----------------|---------------------------|-----------|
| 3/4 | ECHA000 | 30-60A GD Only | |
| 1 | ECHA075 | | |
| 1 1/4 | ECHA100 | | |
| 1 1/4 | ECHA125 | 100-200A GD 30-200A HD | |
| Cover | ECHS000 | | |
| 3/4 | ECHS075 | | |
| 1 | ECHS100 | | |
| 1 1/4 | ECHS125 | | |
| 1 1/2 | ECHS150 | | |
| 2 | ECHS200 | | |
| 2 1/2 | ECHS250 | | |
| 2 1/2 | ECHV250 | | 400-1200A |
| 3 | ECHV300 | | |
| 3 1/2 | ECHV350 | | |
| 4 | ECHV400 | | |

Type 4/4X^②

| Cover | Catalog Number | Used On |
|-------|----------------|---------|
| 3/4 | SSH075 | 30-200A |
| 1 | SSH100 | |
| 1 1/4 | SSH125 | |
| 1 1/2 | SSH150 | |
| 2 | SSH200 | |

Note: 30 thru 200A. Type 3R Switches have removable hub plates on rainshed. 400A and larger Type 3R Switches have no provisions for mounting hubs. Drill or punch hole in the field to accommodate hub size desired.

Field Replacement Kits and Neutral Barrier Kits

All Heavy Duty Switches are field convertible for (Crimp) type lugs. When compression lugs are required for 30-100A switches, a neutral barrier kit is required for 1-Phase, 3W or 3-Phase, 4W applications. When compression lugs are required on 400-1200A switches, lug mounting kits are required.

Field Replacement Kits and Neutral Barrier Kits

| Switch Ampere Rating | Catalog Number | Kit Description |
|-------------------------|----------------|--------------------------------------|
| 30 | HCL612 | Neutral Barrier Kit |
| 60 & 100 | HCL623 | Neutral Barrier Kit |
| 400 | HCM65A | 240V/600V Fusible Kit |
| 400 | HNCM65A | 240/600V Non-Fusible Kit |
| 600 | HCM66A | 240V/600V Fusible Kit |
| 600 | HNCM66A | 240V/600V Non-Fusible Kit |
| 800 & 1200 ^③ | HCL65678■ | 1 Pole, Compression Lug Mounting Kit |

Lugs

30 & 60A HD Switches are suitable for use with 60° or 75°C wire. 100-1200A are suitable for use with 75°C rated wire.

Multiple Padlock Accessory

A tamper-proof device to provide for multiple padlocking to meet OSHA or plant requirements. Accepts up to 6 1/4" padlocks. Catalog number **SL0420**. Standard Carton-12.



Wire Ranges (Line, Load and Standard Neutral)

| Switch Ampere Rating | Wire Range with Wire Bending Space Per NEC Requirements | Lug Wire Range |
|----------------------|--|--|
| 30GD | #14-8 AWG (Cu/Al) | #14-2 AWG (Cu/Al) ^⑥ |
| 60GD | #14-6 AWG (Cu) | #14-2 AWG (Cu) ^⑥ |
| 30HD | #14-6 AWG (Cu/Al) | #14-2 AWG (Cu/Al) |
| 60HD ^⑧ | #14-3 AWG (Cu/Al) | #14-2 AWG (Cu/Al) |
| 100 ^⑨ | #14-1/0 AWG (Cu/Al) | #14-1/0 AWG (Cu/Al) |
| 200 ^⑨ | #6 AWG-250 Kcmil (Cu/Al) | #6 AWG-300 Kcmil (Cu/Al) |
| 400 ^⑦ | (1) 1/0 AWG-600 Kcmil (Cu/Al) (2) 1/0 AWG-500 Kcmil (Cu/Al) | (2) 1/0 AWG-600 Kcmil (Cu/Al) |
| 600 ^⑦ | (1) 1/0 AWG-600 Kcmil (Cu/Al) (2) 1/0 AWG-500 Kcmil (Cu/Al) | (2) 1/0 AWG-600 Kcmil (Cu/Al) |
| 800 | (3) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral | (3) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral |
| 1200 | (4) 3/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral | (4) 1/0 AWG-750 Kcmil (Cu/Al) Line Load (4) 1/0 AWG-750 Kcmil (Cu/Al) neutral |

■ Built to order. Allow 3-4 weeks for delivery.

- ① Hubs suitable for 3R Switches.
- ② Also suitable for Type 12 applications.
- ③ Neutral Barrier kits are required on 30-100A switches only and only with 1-Phase / 3W or 3-Phase / 4W loads. Compression Lugs mounting kits are required on 400-1200A switches only.
- ④ Provides mounting for a single line or load lug.
- ⑤ Provides mounting for (2) compression lugs per phase on line or load.
- ⑥ Neutral lugs (only) are UL approved to accept #14-4 CU/Al cable.
- ⑦ Max. wire size for height reduced switches is 500 kcmil (Cu/Al).
- ⑧ Compact HD NF switches are also UL approved for #2 Cu/Al conductors.
- ⑨ All 200A Heavy Duty Switches have a wire range & wire bending space for (1) #6-300 Kcmil (Cu/Al).
- ⑩ Also for 30A oversized heavy duty switches.
- ⑪ Also for 60A oversized heavy duty switches.

Safety Switches

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions (Inches)* & Shipping Weights

| Catalog Number | Height | | | Width | | | Depth | | Knockout Diagram [Ⓞ] | Shipping Weight (lbs.) |
|---------------------|--------|-------------|------------------|-------|---------------|-------|---------------|-----|-------------------------------|------------------------|
| | Box A | With Door B | With Rain Shed C | Box D | With Handle E | Box F | With Handle G | | | |
| GF221NA | 8.4 | 8.56 | — | 5.08 | 5.44 | 2.93 | 3.96 | S4 | 30(10) | |
| GF221NRA | 8.4 | 8.56 | 8.56 | 5.08 | 5.44 | 2.93 | 3.96 | S5 | 30(10) | |
| GF222NA | 9.91 | 10.07 | — | 6.06 | 6.42 | 3.21 | 4.24 | S21 | 20(5) | |
| GF222NRA | 9.91 | 10.07 | 10.07 | 6.06 | 6.42 | 3.21 | 4.24 | S22 | 20(5) | |
| GF223N | 21.95 | 23.15 | — | 9.64 | 11.7 | 5.05 | 8.63 | S10 | 23 | |
| GF223NR | 21.95 | — | 23.46 | 9.64 | 11.67 | 5.05 | 8.7 | S11 | 24 | |
| GF224N | 29.9 | 31.07 | — | 14.62 | 16.68 | 6.36 | 10.92 | S12 | 47 | |
| GF224NR | 29.9 | — | 31.42 | 14.61 | 16.68 | 6.36 | 10.92 | S13 | 48 | |
| GF225NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 91.1 | |
| GF225NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 91.1 | |
| GF226NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 95.6 | |
| GF226NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 95.6 | |
| GF321NA | 8.4 | 8.56 | — | 5.08 | 5.44 | 2.93 | 3.96 | S4 | 30(10) | |
| GF321NRA | 8.4 | 8.56 | 8.56 | 5.08 | 5.44 | 2.93 | 3.96 | S5 | 30(10) | |
| GF322NA | 9.91 | 10.07 | — | 6.06 | 6.42 | 3.21 | 4.24 | S21 | 20(5) | |
| GF322NRA | 9.91 | 10.07 | 10.07 | 6.06 | 6.42 | 3.21 | 4.24 | S22 | 20(5) | |
| GF323N | 21.95 | 23.15 | — | 9.64 | 11.7 | 5.05 | 8.63 | S10 | 25 | |
| GF323NR | 21.95 | — | 23.46 | 9.64 | 11.67 | 5.05 | 8.7 | S11 | 25 | |
| GF324N | 29.9 | 31.07 | — | 14.62 | 16.68 | 6.36 | 10.92 | S12 | 49 | |
| GF324NR | 29.9 | — | 31.42 | 14.61 | 16.68 | 6.36 | 10.92 | S13 | 50 | |
| GF325NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 94.6 | |
| GF325NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 94.6 | |
| GF326NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 99.6 | |
| GF326NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 99.6 | |
| GF326NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 99.6 | |
| GNF221A | 6.18 | 6.35 | — | 4.2 | 4.56 | 2.88 | 3.93 | S4 | 20(10) | |
| GNF221RA | 6.18 | 6.35 | 6.35 | 4.2 | 4.56 | 2.88 | 3.93 | S5 | 20(10) | |
| GNF321LA | 8.4 | 8.56 | — | 5.08 | 5.43 | 2.93 | 3.95 | S4 | 30(10) | |
| GNF321RLA | 8.4 | 8.56 | 8.56 | 5.08 | 5.43 | 2.93 | 3.95 | S5 | 30(10) | |
| GNF222A | 8.4 | 8.56 | — | 5.08 | 5.43 | 2.93 | 3.95 | S4 | 30(10) | |
| LNF222RA | 8.4 | 8.56 | 8.56 | 5.08 | 5.43 | 2.93 | 3.95 | S20 | 30(10) | |
| GNF222RA | 8.4 | 8.56 | 8.56 | 5.08 | 5.43 | 2.93 | 3.95 | S5 | 30(10) | |
| GNF321A | 6.18 | 6.35 | — | 4.2 | 4.56 | 2.88 | 3.93 | S4 | 20(10) | |
| GNF321RA | 6.18 | 6.35 | 6.35 | 4.2 | 4.56 | 2.88 | 3.93 | S5 | 20(10) | |
| GNF322A | 8.4 | 8.56 | — | 5.08 | 5.43 | 2.93 | 3.95 | S4 | 30(10) | |
| GNF322RA | 8.4 | 8.56 | 8.56 | 5.08 | 5.43 | 2.93 | 3.95 | S5 | 30(10) | |
| GNF323 | 21.95 | 23.15 | — | 9.64 | 11.7 | 5.05 | 8.63 | S10 | 23 | |
| GNF323R | 21.95 | — | 23.46 | 9.64 | 11.67 | 5.05 | 8.7 | S11 | 24 | |
| GNF324 | 29.9 | 31.07 | — | 14.62 | 16.68 | 6.36 | 10.92 | S12 | 46 | |
| GNF324R | 29.9 | — | 31.42 | 14.61 | 16.68 | 6.36 | 10.92 | S13 | 47 | |
| GNF325A | 33.47 | 33.96 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 75 | |
| GNF326A | 33.47 | 33.96 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 77 | |
| HF221J also HF261J | 14.27 | 17.33 | — | 6.65 | 9.02 | 5.32 | 10.46 | — | 13 | |
| HF221N also HF261 | 14.26 | 14.60 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 | |
| HF221NR also HF261R | 14.34 | — | 14.91 | 6.64 | 7.88 | 5.00 | 9.18 | S8 | 14 | |
| HF221S also HF261S | 14.27 | 17.33 | — | 6.65 | 9.02 | 5.32 | 10.46 | — | 13 | |
| HF222J also HF262J | 16.22 | 19.31 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 19 | |
| HF222N also HF262 | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 | |
| HF222NR also HF262R | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 | |
| HF222S also HF262S | 16.22 | 19.31 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 19 | |
| HF223J also HF263J | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 24 | |
| HF223N also HF263 | 21.95 | 23.15 | — | 9.64 | 12.01 | 5.05 | 10.17 | S10 | 23 | |
| HF223NR also HF263R | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 24 | |
| HF223S also HF263S | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 24 | |
| HF224J | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 48 | |
| HF224N | 29.9 | 31.07 | — | 14.62 | 16.98 | 6.36 | 12.33 | S12 | 47 | |
| HF224NR | 29.9 | — | 31.42 | 14.61 | 16.99 | 6.36 | 12.33 | S13 | 48 | |
| HF224S | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 48 | |
| HF225NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 91.1 | |
| HF225NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 91.1 | |
| HF226NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 95.6 | |
| HF226NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 95.6 | |
| HF227N | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 360 | |
| HF227NR | 66.67 | — | 67.74 | 38.4 | 39.96 | 9.24 | 14.68 | — | 362 | |
| HF228N | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 362 | |
| HF228NR | 66.67 | — | 67.74 | 38.4 | 39.96 | 9.24 | 14.68 | — | 364 | |
| HF261 | 14.26 | 14.60 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 | |
| HF261R | 14.34 | — | 14.91 | 6.64 | 7.88 | 5.00 | 9.18 | S8 | 14 | |
| HF262 | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 | |
| HF262R | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 | |
| HF365A | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 93 | |
| HF365JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 93 | |

*For inches / millimeters conversion, multiply inches by 25.4.

Ⓞ Knocks not provided on Type 4 / 4X and 12 or in 800 & 1200A switches.

Safety Switches

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions (Inches)* & Shipping Weights

| Catalog Number | Height | | | Width | | | Depth | | Knockout Diagram ^① | Shipping Weight (lbs.) |
|------------------------|--------|-------------|------------------|-------|---------------|-------|---------------|-----|-------------------------------|------------------------|
| | Box A | With Door B | With Rain Shed C | Box D | With Handle E | Box F | With Handle G | | | |
| HF365RA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 93 | |
| HF365SA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 93 | |
| HF365SSA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 93 | |
| HF366A | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 98 | |
| HF366JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 98 | |
| HF366RA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 98 | |
| HF366SA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 98 | |
| HF366SSA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 98 | |
| HF321J | 14.27 | 17.33 | — | 6.65 | 9.02 | 5.32 | 10.46 | — | 14 | |
| HF321N | 14.26 | 14.60 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 | |
| HF321NR | 14.34 | — | 14.91 | 6.64 | 7.88 | 5.00 | 9.18 | S8 | 14 | |
| HF321S, SS | 14.27 | 17.33 | — | 6.65 | 9.02 | 5.32 | 10.46 | — | 14 | |
| HF322J | 16.27 | 19.31 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 20 | |
| HF322N | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 | |
| HF322NR | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 | |
| HF322S, SS | 16.27 | 19.31 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 20 | |
| HF323J | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 25 | |
| HF323N | 21.95 | 23.15 | — | 9.64 | 12.01 | 5.05 | 10.17 | S10 | 25 | |
| HF323NR | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 26 | |
| HF323S, SS | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 25 | |
| HF324J | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 49 | |
| HF324N | 29.9 | 31.07 | — | 14.62 | 16.98 | 6.36 | 12.33 | S12 | 49 | |
| HF324NR | 29.9 | — | 31.42 | 14.61 | 16.99 | 6.36 | 12.33 | S13 | 50 | |
| HF324S, SS | 21.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 49 | |
| HF325JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 93 | |
| HF325NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 94.6 | |
| HF325NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 94.6 | |
| HF325SA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 93 | |
| HF325SSA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 93 | |
| HF326JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 98 | |
| HF326NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 99.6 | |
| HF326NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 99.6 | |
| HF326SA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 98 | |
| HF326SSA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 98 | |
| HF327J | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 367 | |
| HF327N | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 380 | |
| HF327NR | 66.67 | — | 67.74 | 38.4 | 40.25 | 9.24 | 14.68 | — | 383 | |
| HF327S | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 367 | |
| HF328N | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 382 | |
| HF328NR | 66.67 | — | 67.74 | 38.4 | 40.25 | 9.24 | 14.68 | — | 385 | |
| HF361, PV, PVPG | 14.26 | 14.60 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 | |
| HF361J, JW | 14.27 | 17.33 | — | 6.65 | 9.02 | 5.32 | 10.46 | — | 14 | |
| HF361L | 16.26 | 17.46 | — | 9.15 | 11.53 | 5.05 | 10.17 | S16 | 19 | |
| HF361N | 14.26 | 14.60 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 | |
| HF361NR | 14.34 | — | 14.91 | 6.64 | 7.88 | 5.00 | 9.18 | S8 | 14 | |
| HF361R, RPV, RPVPG | 14.34 | — | 14.91 | 6.64 | 7.88 | 5.00 | 9.18 | S8 | 14 | |
| HF361RL, RW | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 | |
| HF361S, SS, SSW, SW | 14.27 | 17.33 | — | 6.65 | 9.02 | 5.32 | 10.46 | — | 15 | |
| HF362, PV, PVPG | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 | |
| HF362J, JW | 16.27 | 19.31 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 20 | |
| HF362N | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 | |
| HF362NR | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 | |
| HF362R, RPV, RPVPG, RW | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 | |
| HF362RL | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 25 | |
| HF362S, SS, SSW, SW | 16.27 | 19.31 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 20 | |
| HF363, PV, PVPG | 21.95 | 23.15 | — | 9.64 | 12.01 | 5.05 | 10.17 | S10 | 24 | |
| HF363J, JW | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 25 | |
| HF363N | 21.95 | 23.15 | — | 9.64 | 12.01 | 5.05 | 10.17 | S10 | 25 | |
| HF363NR | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 26 | |
| HF363R, RPV, RPVPG | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 25 | |
| HF363S, SS, SSW, SW | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 25 | |
| HF364, PV, PVPG | 29.9 | 31.07 | — | 14.62 | 16.98 | 6.36 | 12.33 | S12 | 48 | |
| HF364J, JW | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 49 | |
| HF364N | 29.9 | 31.07 | — | 14.62 | 16.98 | 6.36 | 12.33 | S12 | 49 | |
| HF364NR | 29.9 | — | 31.42 | 14.61 | 16.99 | 6.36 | 12.33 | S13 | 48 | |
| HF364R, RPV, RPVPG | 29.9 | — | 31.42 | 14.61 | 16.99 | 6.36 | 12.33 | S13 | 49 | |
| HF364S, SS, SSW, SW | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 49 | |
| HF365A | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 93 | |
| HF365JA, HF365JWA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 93 | |
| HF365NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 94.6 | |
| HF365NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 94.6 | |

*For inches / millimeters conversion, multiply inches by 25.4.

① Knocks not provided on Type 4 / 4X and 12 or in 800 & 1200A switches.

Safety Switches

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions (Inches)* & Shipping Weights

| Catalog Number | Height | | | Width | | Depth | | Knockout Diagram ^① | Shipping Weight (lbs.) |
|---|--------|-------------|------------------|-------|---------------|-------|---------------|-------------------------------|------------------------|
| | Box A | With Door B | With Rain Shed C | Box D | With Handle E | Box F | With Handle G | | |
| HF365RA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 93 |
| HF365SA, HF365SWA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 93 |
| HF365SSA, HF365SSWA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 93 |
| HF366A | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 98 |
| HF366JA, HF366JWA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 98 |
| HF366NA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S18 | 99.6 |
| HF366NRA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 99.6 |
| HF366RA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 98 |
| HF366SA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 98 |
| HF366SSA | 45.32 | 45.81 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 98 |
| HF367 | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 380 |
| HF367J | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 380 |
| HF367N | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 382 |
| HF367NR | 66.67 | — | 67.74 | 38.4 | 40.25 | 9.24 | 14.68 | — | 386 |
| HF367R | 66.67 | — | 67.74 | 38.4 | 40.25 | 9.24 | 14.68 | — | 382 |
| HF367S | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 380 |
| HF368, J, S | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 383 |
| HF368N | 66.67 | 67.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 385 |
| HF368NR | 66.67 | — | 67.74 | 38.4 | 40.25 | 9.24 | 14.68 | — | 388 |
| HF368R | 66.67 | — | 67.74 | 38.4 | 40.25 | 9.24 | 14.68 | — | 385 |
| HFC221N | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| HFC221NR | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| HFC222N | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| HFC222NR | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| HFC261 | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| HFC261R | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| HFC262 | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| HFC262R | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| HFC321N | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| HFC321NR | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| HFC322N | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| HFC322NR | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| HFC361 | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| HFC361N | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| HFC361NR | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| HFC361R | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| HFC362 | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| HFC362N | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| HFC362NR | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| HFC362R | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| HNF365JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 75 |
| HNF365RA | 33.47 | 33.96 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 75 |
| HNF365SA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 75 |
| HNF365SSA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 75 |
| HNF366SA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 77 |
| HNF366SSA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 77 |
| HNF366JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 77 |
| HNF366RA | 33.47 | 33.96 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 77 |
| HNF361, PV, PVPG also HNF261 & HNF362H, HNF261, HNF361 | 11.11 | 11.45 | — | 6.64 | 7.72 | 4.7 | 9.15 | S7 | 11 |
| HNF361J, JW also HNF261J & HNF362JH | 11.12 | 14.14 | — | 6.65 | 9.02 | 5.56 | 10.46 | — | 13 |
| HNF361R, RPV, RPVPG also HNF261R & HNF362RH, HNF261R, HNF361R | 11.09 | — | 11.76 | 6.64 | 7.88 | 5 | 8.91 | S9 | 12 |
| HNF361RL, HNF362R, RPV, RPVPG also HNF262R, HNF262R, HNF362R | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.14 | S17 | 18 |
| HNF361S, SS, SSW, SW also HNF261S & HNF362SH | 11.12 | 14.14 | — | 6.65 | 9.02 | 5.56 | 10.46 | — | 13 |
| HNF362, PV, PVPG also HNF262, HNF262, HNF362 | 16.26 | 16.62 | — | 9.16 | 10.26 | 4.71 | 9.04 | S16 | 17 |
| HNF362J, JW also HNF262J | 16.27 | 17.46 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 19 |
| HNF362RL, HNF262R, HNF362R | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 24 |
| HNF362S, SS, SSW, SW also HNF262S | 16.27 | 17.46 | — | 9.17 | 11.47 | 5.33 | 10.46 | — | 19 |
| HNF363, PV, PVPG also HNF263 | 21.95 | 23.15 | — | 9.64 | 12.01 | 5.05 | 10.17 | S10 | 23 |
| HNF363J, JW also HNF263J | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 24 |
| HNF363R, RPV, RPVPG also HNF263R | 21.95 | — | 23.46 | 9.64 | 11.97 | 5.05 | 10.17 | S11 | 24 |
| HNF363S, SS, SSW, SW also HNF263S | 21.96 | 23.16 | — | 9.65 | 12.02 | 5.34 | 10.46 | — | 24 |
| HNF364, PV, PVPG | 29.9 | 31.07 | — | 14.62 | 16.98 | 6.36 | 12.33 | S12 | 46 |
| HNF364J, JW | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 47 |
| HNF364R, RPV, RPVPG | 29.9 | — | 31.42 | 14.61 | 16.99 | 6.36 | 12.33 | S13 | 47 |

*For inches / millimeters conversion, multiply inches by 25.4.

① Knocks not provided on Type 4 / 4X and 12 or in 800 & 1200A switches.

Safety Switches

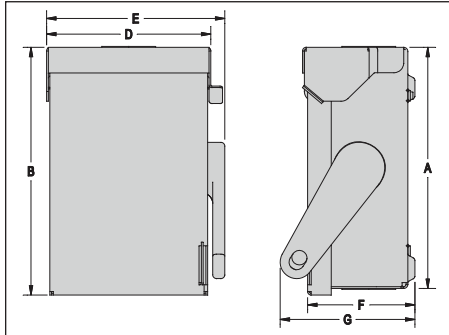
General and Heavy Duty Safety Switches

Dimensions

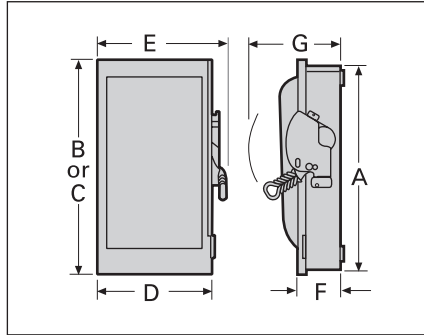
Safety Switch Dimensions (Inches)* & Shipping Weights

| Catalog Number | Height | | | Width | | Depth | | Knockout Diagram ^① | Shipping Weight (lbs.) |
|---------------------|--------|-------------|------------------|-------|---------------|-------|---------------|-------------------------------|------------------------|
| | Box A | With Door B | With Rain Shed C | Box D | With Handle E | Box F | With Handle G | | |
| HN364S, SS, SSW, SW | 29.96 | 31.07 | — | 14.62 | 16.95 | 6.63 | 12.58 | — | 47 |
| HN365JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 75 |
| HN365JWA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 75 |
| HN365RA | 33.47 | 33.96 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 75 |
| HN365SA, HN365SWA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 75 |
| HN365SSA, HN365SSWA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 75 |
| HN366JA | 45.32 | 45.81 | — | 22.4 | 23.404 | 6.97 | 10.05 | — | 77 |
| HN366RA | 33.47 | 33.96 | — | 22.4 | 23.404 | 6.94 | 9.93 | S19 | 77 |
| HN366SA | 33.47 | 33.96 | — | 22.4 | 23.404 | 7.34 | 10.347 | — | 77 |
| HN367, J | 54.67 | 55.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 302 |
| HN367R | 54.67 | — | 55.7 | 38.4 | 40.25 | 9.24 | 14.68 | — | 304 |
| HN367S | 54.67 | 55.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 302 |
| HN368, J, S | 54.67 | 55.16 | — | 38.4 | 39.96 | 9.24 | 14.68 | — | 305 |
| HN368R | 54.67 | 55.16 | — | 38.4 | 40.25 | 9.24 | 14.68 | — | 307 |
| LF111N | 7.97 | 8.13 | — | 5.5 | 5.94 | 3 | 5.38 | S2 | 35 (10) |
| LF111NR | 8.07 | — | 8.16 | 5.16 | 5.94 | 3.13 | 5.38 | S3 | 35 (10) |
| LF211N | 7.97 | 8.13 | — | 5.5 | 5.94 | 3 | 5.38 | S1 | 35 (10) |
| LF211NR | 8.07 | — | 8.16 | 5.16 | 5.94 | 3.13 | 5.38 | S3 | 35 (10) |
| US2:HF361PV | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| US2:HF361PVPG | 14.26 | 14.6 | — | 6.64 | 7.75 | 4.71 | 8.89 | S6 | 13 |
| US2:HF361RPV | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| US2:HF361RPVPG | 14.34 | — | 14.91 | 6.64 | 7.88 | 5 | 9.18 | S8 | 14 |
| US2:HF362PV | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| US2:HF362PVPG | 16.26 | 16.62 | — | 9.16 | 10.37 | 4.71 | 8.67 | S16 | 18 |
| US2:HF362RPV | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| US2:HF362RPVPG | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.21 | S17 | 19 |
| US2:HN361PV | 11.11 | 11.45 | — | 6.64 | 7.72 | 4.7 | 9.15 | S7 | 11 |
| US2:HN361PVPG | 11.11 | 11.45 | — | 6.64 | 7.72 | 4.7 | 9.15 | S7 | 11 |
| US2:HN361RPV | 11.09 | — | 11.76 | 6.64 | 7.88 | 5 | 8.91 | S9 | 12 |
| US2:HN361RPVPG | 11.09 | — | 11.76 | 6.64 | 7.88 | 5 | 8.91 | S9 | 12 |
| US2:HN362PV | 16.26 | 16.62 | — | 9.16 | 10.26 | 4.71 | 9.04 | S16 | 17 |
| US2:HN362PVPG | 16.26 | 16.62 | — | 9.16 | 10.26 | 4.71 | 9.04 | S16 | 17 |
| US2:HN362RPV | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.14 | S17 | 18 |
| US2:HN362RPVPG | 16.26 | — | 16.93 | 9.16 | 10.41 | 5.05 | 9.14 | S17 | 18 |

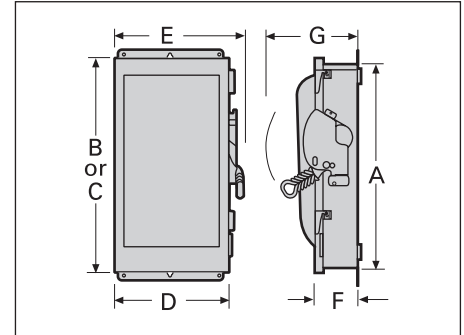
**Type 1 or 3R
30-60A GD**



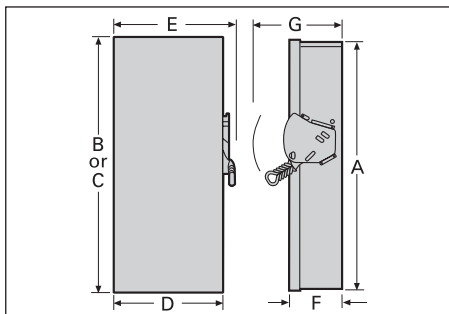
**Type 1 or 3R
100-200A GD, 30-200A HD Type VBII**



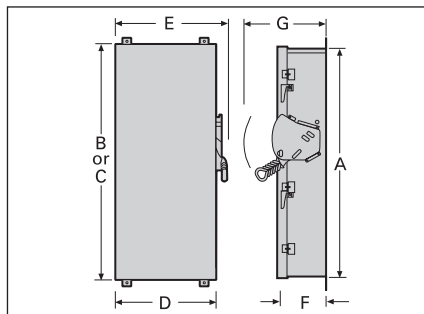
**Type 4/4X or 12
30-200A HD Type VBII**



**Type 1 or 3R
400-1200A Type VBII (GD & HD)**



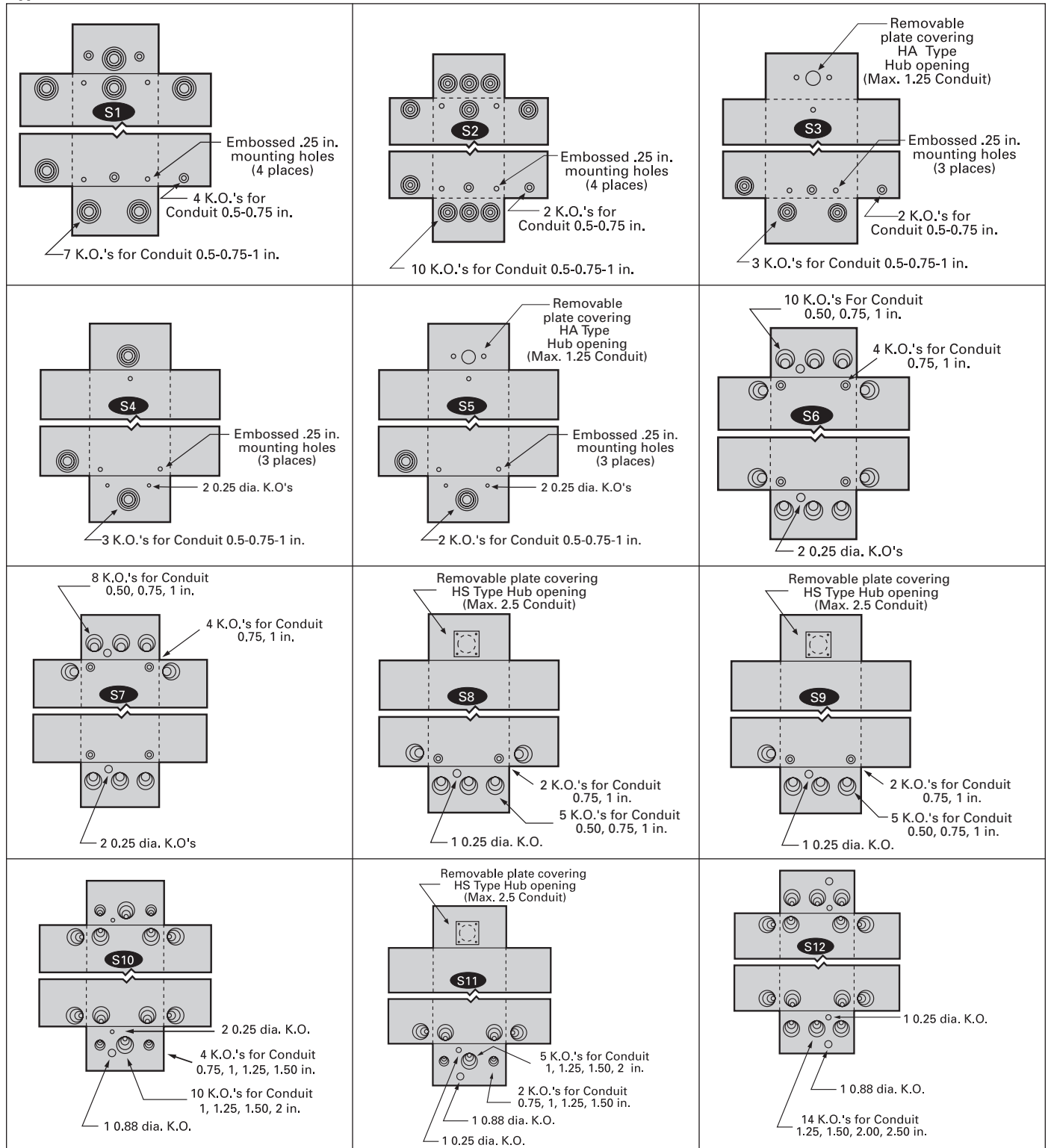
**Type 4/4X or 12
400-1200A HD Type VBII**



*For inches / millimeters conversion, multiply inches by 25.4.

① Knocks not provided on Type 4 / 4X and 12 or in 800 & 1200A switches.

Type 1 & 3R Enclosures



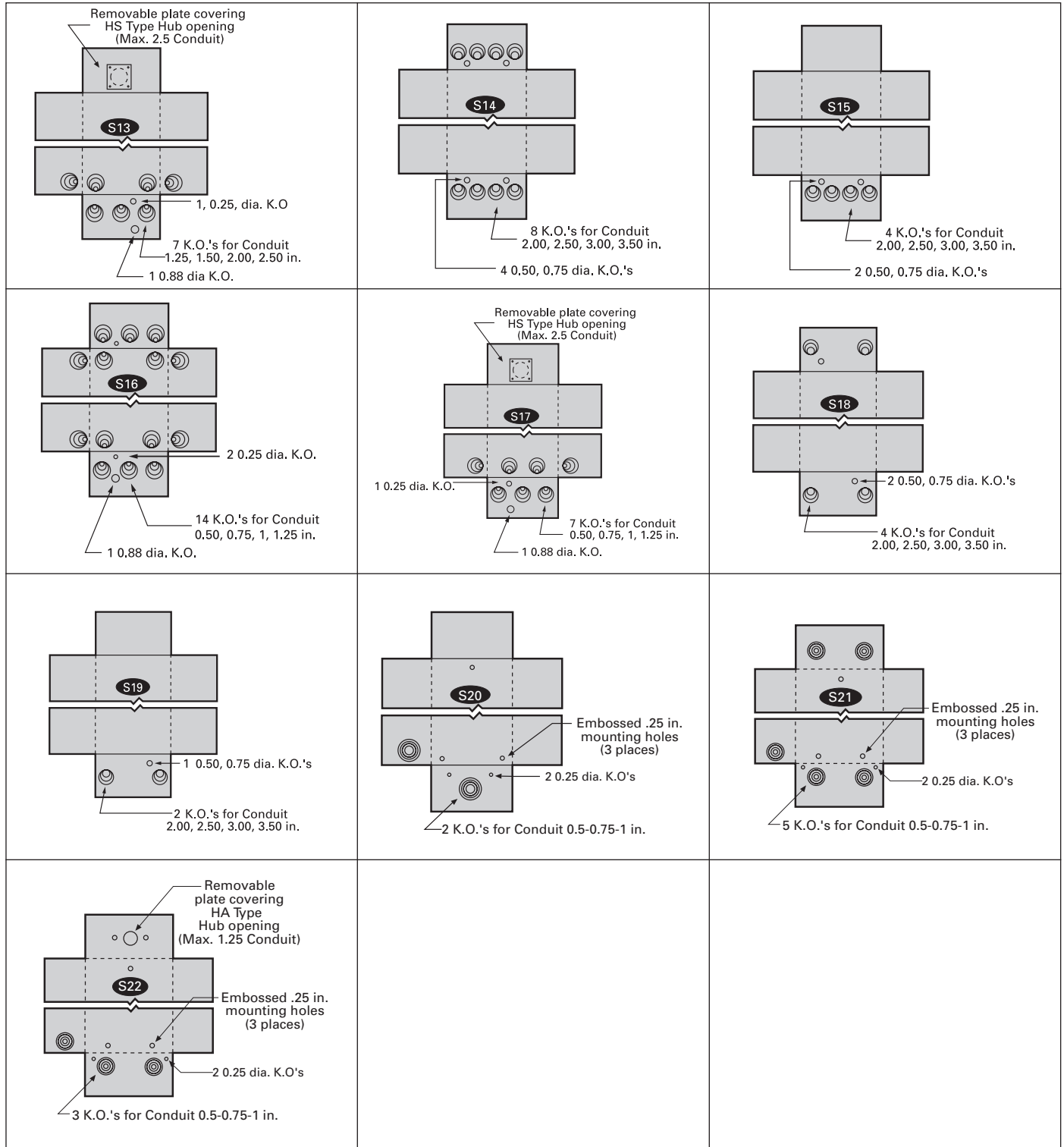
*For inches / millimeters conversion, multiply inches by 25.4.

Safety Switches

General and Heavy Duty Safety Switches

Knockout Diagrams

Type 1 & 3R Enclosures

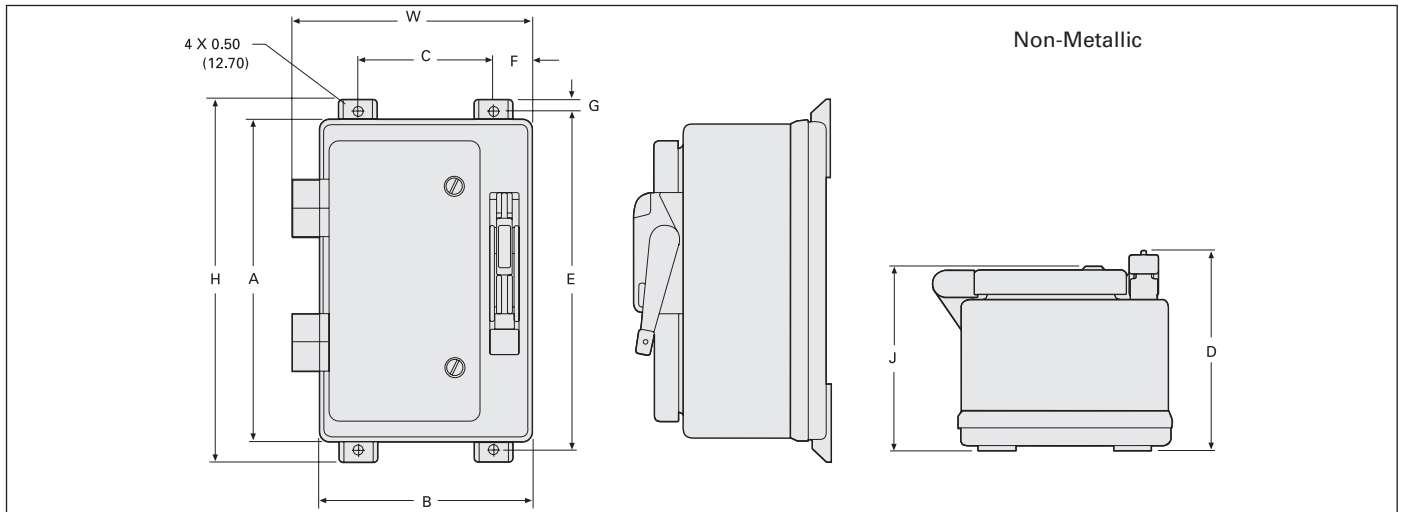


*For inches / millimeters conversion, multiply inches by 25.4.

Safety Switches

Special Application: Non-Metallic

Dimensions



| Catalog Number | Dimensions (Inches) Non-Metallic | | | | | | | | | |
|----------------------|----------------------------------|-------|-------|-------|-------|-------|-------|------|-----|-------|
| | H | W | D | A | B | C | E | F | G | J |
| HF321NX | 18.75 | 12.11 | 10.25 | 16.59 | 10.97 | 7.00 | 17.50 | 1.98 | .46 | 9.20 |
| HF322NX | 18.75 | 12.11 | 10.25 | 16.59 | 10.97 | 7.00 | 17.50 | 1.98 | .46 | 9.20 |
| HF361NX [Ⓞ] | 18.75 | 12.11 | 10.25 | 16.59 | 10.97 | 7.00 | 17.50 | 1.98 | .46 | 9.20 |
| HF362NX [Ⓞ] | 18.75 | 12.11 | 10.25 | 16.59 | 10.97 | 7.00 | 17.50 | 1.98 | .46 | 9.20 |
| HF363NX [Ⓞ] | 26.95 | 14.87 | 13.25 | 24.84 | 13.72 | 6.25 | 25.75 | 3.75 | .46 | 12.15 |
| HF364NX [Ⓞ] | 33.41 | 27.47 | 13.19 | 31.31 | 26.31 | 18.50 | 32.25 | 3.91 | .47 | 12.10 |
| HNF361X [Ⓞ] | 18.75 | 12.11 | 10.25 | 16.59 | 10.97 | 7.00 | 17.50 | 1.98 | .46 | 9.20 |
| HNF362X [Ⓞ] | 18.75 | 12.11 | 10.25 | 16.59 | 10.97 | 7.00 | 17.50 | 1.98 | .46 | 9.20 |
| HNF363X [Ⓞ] | 26.95 | 14.87 | 13.25 | 24.84 | 13.72 | 6.25 | 25.75 | 3.75 | .46 | 12.15 |
| HNF364X [Ⓞ] | 33.41 | 27.47 | 13.19 | 31.31 | 26.31 | 18.50 | 32.25 | 3.91 | .47 | 12.10 |

VBI Interlocked Receptacle Switches

| Ampere Rating | Dimensions (Inches) | | | | | | |
|---------------|---------------------|---|---|---|---|---|---|
| | A | B | C | D | E | F | G |

Cr-H Type Fusible (240 & 600V)

| | | | | | | | |
|-----|-------|------|-------|------|------|-----|-----|
| 30 | 14.27 | 7.42 | 9.02 | 6.22 | 1.52 | 6.1 | 6.0 |
| 60 | 16.27 | 9.17 | 11.47 | 6.34 | 1.52 | 6.4 | 7.4 |
| 100 | 21.96 | 9.65 | 12.02 | 6.80 | 1.52 | 6.5 | 7.6 |

Cr-H Type Non-Fusible (600V max.)

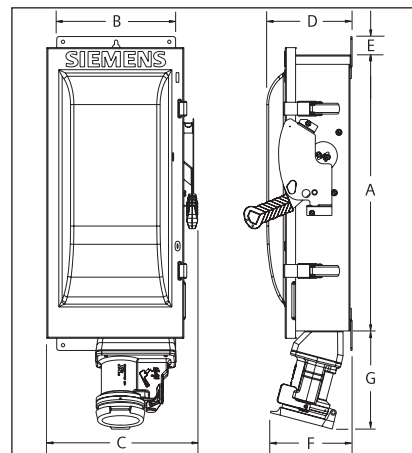
| | | | | | | | |
|-----|-------|------|-------|------|------|-----|-----|
| 30 | 14.27 | 7.42 | 9.02 | 6.22 | 1.52 | 6.1 | 6.0 |
| 60 | 16.27 | 9.17 | 11.47 | 6.34 | 1.52 | 6.4 | 7.4 |
| 100 | 21.96 | 9.65 | 12.02 | 6.80 | 1.52 | 6.5 | 7.6 |

Pyle-National Type Fusible (240 & 600V)

| | | | | | | | |
|----|-------|------|-------|------|------|-----|-----|
| 30 | 14.27 | 7.42 | 9.02 | 6.22 | 1.52 | 3.5 | 3.0 |
| 60 | 16.27 | 9.17 | 11.47 | 6.34 | 1.52 | 5.0 | 4.5 |

Pyle-National Type Non-Fusible (600V max.)

| | | | | | | | |
|----|-------|------|--------------------|------|------|-----|-----|
| 30 | 14.27 | 7.42 | 9.02 [Ⓞ] | 6.22 | 1.52 | 3.5 | 3.0 |
| 60 | 16.27 | 9.17 | 11.47 [Ⓞ] | 6.34 | 1.52 | 5.0 | 4.5 |



*For inches / millimeters conversion, multiply inches by 25.4.

[Ⓞ] Dimensions also apply to "L" suffix switches (less lugs).

4 & 6-Pole Safety Switch Dimensions – Inches (mm)

| Catalog Number | Enclosure | | | Mounting | | |
|----------------|-----------|---|---|----------|---|---|
| | A | B | C | D | E | F |

Figure 1, 4-Pole Fusible and Non-fusible, Type 1

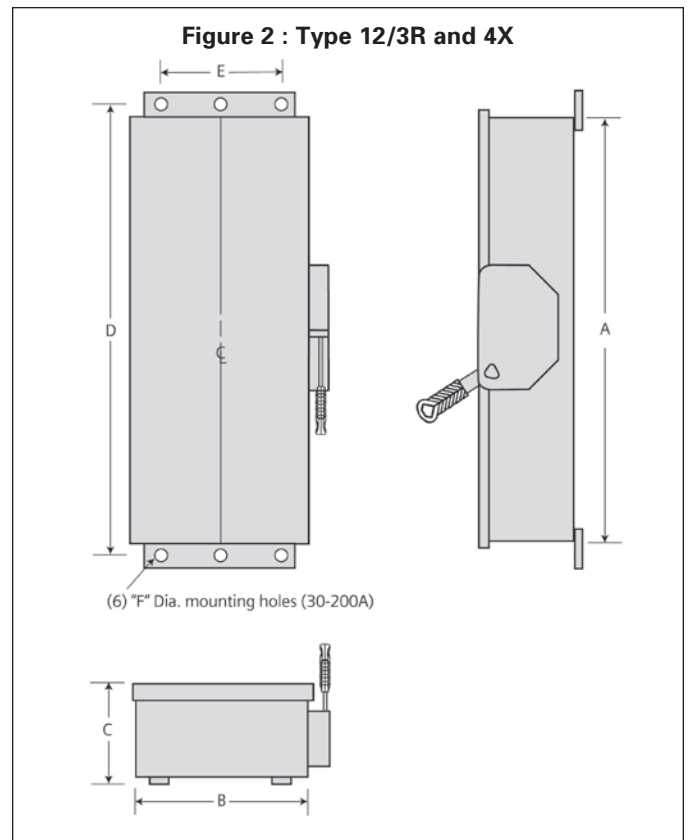
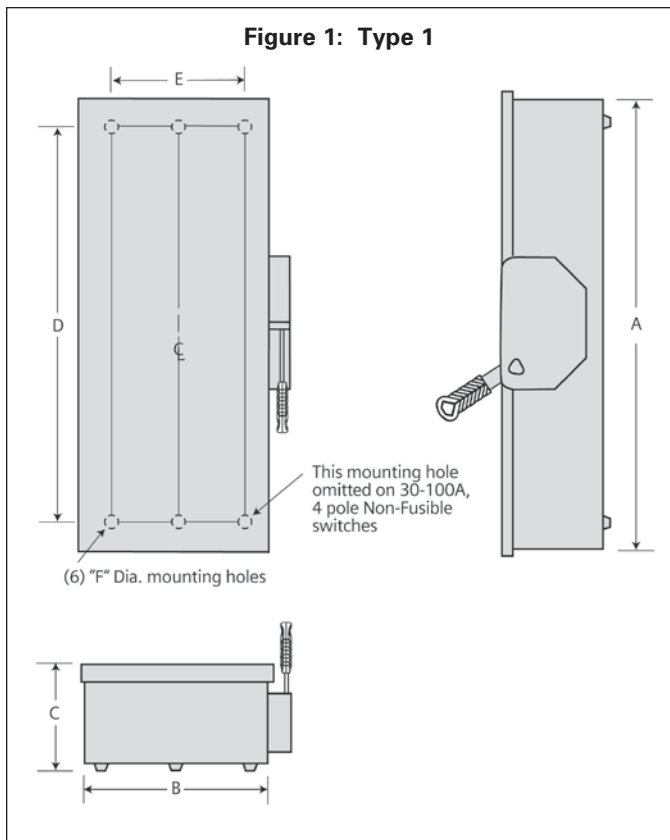
| | | | | | | |
|--------|--------------|-------------|------------|--------------|-------------|-----------|
| HNF461 | 24.50 (622) | 9.53 (242) | 6.09 (155) | 19.00 (483) | 6.75 (171) | 0.268 (7) |
| HF461 | 29.12 (740) | 9.53 (242) | 6.09 (155) | 23.50 (597) | 6.75 (171) | 0.268 (7) |
| HNF462 | 24.88 (632) | 11.50 (292) | 6.09 (155) | 19.00 (483) | 9.38 (238) | 0.268 (7) |
| HF462 | 33.53 (852) | 11.50 (292) | 6.09 (155) | 27.50 (699) | 9.38 (238) | 0.268 (7) |
| HNF463 | 27.62 (702) | 12.18 (309) | 6.09 (155) | 19.36 (492) | 8.00 (203) | 0.268 (7) |
| HF463 | 36.44 (926) | 12.18 (309) | 6.09 (155) | 28.11 (714) | 8.00 (203) | 0.268 (7) |
| HNF464 | 36.00 (914) | 19.12 (486) | 6.42 (163) | 30.88 (784) | 15.00 (381) | 0.44 (11) |
| HF464 | 49.48 (1257) | 19.12 (486) | 6.42 (163) | 45.50 (1130) | 15.00 (381) | 0.44 (11) |

Figure 2, 4 & 6-Pole Fusible Type 12/3R and 4X

| | | | | | | |
|---------------------------|--------------|-------------|------------|--------------|-------------|----------|
| HF461J, HF661J, HF661S | 29.50 (622) | 9.53 (242) | 6.48 (165) | 31.65 (804) | 5.47 (139) | 0.27 (7) |
| HF462J, HF662J, HF662S | 33.53 (852) | 11.50 (292) | 6.48 (165) | 35.69 (907) | 8.00 (203) | 0.27 (7) |
| HF463J, HF663J, HF663S | 36.44 (926) | 12.18 (309) | 6.48 (165) | 38.67 (982) | 8.47 (215) | 0.27 (7) |
| HF464J, HF664J, HF664S | 49.48 (1257) | 19.12 (486) | 6.78 (172) | 51.64 (1312) | 13.44 (341) | 0.33 (8) |

Figure 2, 4 & 6-Pole Non-fusible Type 12/3R and 4X

| | | | | | | |
|------------------------------|-------------|-------------|------------|-------------|-------------|----------|
| HNF461J, HNF661J, HNF661S | 24.50 (622) | 9.53 (242) | 6.48 (165) | 26.65 (667) | 5.47 (139) | 0.27 (7) |
| HNF462J, HNF662J, HNF662S | 24.88 (632) | 11.50 (292) | 6.48 (165) | 27.03 (687) | 8.00 (203) | 0.27 (7) |
| HNF463J, HNF663J, HNF663S | 27.54 (700) | 12.18 (309) | 6.48 (165) | 29.77 (756) | 8.47 (215) | 0.27 (7) |
| HNF464J, HNF664J, HNF664S | 36.00 (914) | 19.12 (486) | 6.78 (172) | 38.16 (969) | 13.44 (341) | 0.33 (8) |



Double Throw

Description and Selection

Description

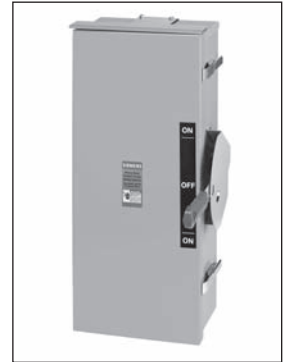
Double throw switches are intended to transfer loads from one power source to another. All 2 & 3-pole double throw switches are suitable for use as service equipment including non-fusible versions when used in combination with a UL listed circuit breaker or fusible switch. All are UL Listed and both horsepower and load break rated. Switches are rated for use on systems up to 10,000A when protected with Class H fuses or 100,000A when protected with Class R or Class T fuses^②. They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible

switches so that the fuses are on the load side of the switching mechanism.

A cover interlock is provided on all ampere ratings. The operating handle may be padlocked in the off position.

Fuse Capabilities of Fusible DTF Switches

| Amp Rating | Fuse Type | | | |
|------------------|-----------|-----------|------------------|------------------|
| | H | R | T | J |
| 30 & 60A, 240V | Std | Yes (kit) | No | No |
| 30 & 60A, 600V | Std | Yes (kit) | No | Yes ^③ |
| 100 & 200A | Std | Yes (kit) | Yes (kit) | Yes ^③ |
| 400 & 600A (DTF) | No | No | Yes ^③ | Std |



Double Throw Switches

| System | Voltage | Number of Poles | Amps | Type 1 — Indoor | Type 3R — Outdoor ^① | Type 12/3R — Industrial | Type 4X — Stainless Steel |
|--------|---------|-----------------|------|-----------------|--------------------------------|-------------------------|---------------------------|
| | | | | Catalog Number | Catalog Number | Catalog Number | Catalog Number |

Heavy Duty Fusible (30-200A) with Class H fuse spacings —Less Neutral^②

| | | | | | | | |
|--|----------------------------|-----|---------|-------------------------|-------------------------|--------------------------|---|
| | 240 Volt AC or 250 Volt DC | 2 | 200 | DTF224▲ | DTF224R | — | — |
| | | | 30 | DTF321 | DTF321R▲ | — | — |
| | | 3 | 60 | DTF322 | DTF322R▲ | — | — |
| | | | 100 | DTF323▲ | DTF323R | — | — |
| | | | 200 | DTF324 | DTF324R | — | — |
| | | | 400 | DTF325 | FR325DTK ^④ ▲ | — | — |
| | 600 Volt AC, 250 Volt DC | 3 | 600 | DTF326▲ | FR326DTK ^④ ▲ | — | — |
| | | | 30 | DTF361 | — | — | — |
| | | 60 | DTF362▲ | — | — | — | |
| | | 100 | DTF363 | DTF363R | — | F353SSDTK ^⑤ ▲ | |
| | | 200 | DTF364 | DTF364R | — | F354SSDTK ^⑤ ▲ | |
| | | 400 | DTF365 | FR355DTK ^④ ▲ | — | F355SSDTK ^④ ▲ | |

Heavy Duty Non-Fusible —Less Neutral^②

| | | | | | | | | |
|-----|----------------------------|-----------------------------|------|-----------|------------|-----------|-------------|----------|
| | 240 Volt AC or 250 Volt DC | 2 | 30 | DTNF221 | — | — | — | |
| | | | 60 | DTNF222 | — | — | — | |
| | | | 100 | DTNF223 | — | — | — | |
| | | | 3 | 200 | DTNF224 | DTNF224R | — | — |
| | | | | 400 | DTNF225 | DTNF225R | — | — |
| | | | | 30 | DTNF321 | — | — | — |
| | | 60 | | DTNF322 | — | — | — | |
| | | 600 Volt AC, or 250 Volt DC | 3 | 100 | DTNF323 | DTNF323R | — | — |
| | | | | 200 | DTNF324 | DTNF324R | — | — |
| | | | 400 | DTNF325 | — | — | — | |
| | | | 600 | DTNF326 | — | — | — | |
| | | | 800 | DTNF327▲ | — | — | — | |
| | 3 | | 30 | 60 | DTNF361 | DTNF361R | DTNF361J | DTNF361S |
| | | 100 | | DTNF362 | DTNF362R | DTNF362J | DTNF362S | |
| | | 200 | | DTNF363 | DTNF363R | DTNF363J | DTNF363S | |
| | | 400 | | DTNF364 | DTNF364R | DTNF364J▲ | DTNF364S | |
| | | 600 | | DTNF365 | DTNF365R | NF355HDTK | NF355SSDTK | |
| | | 800 | | DTNF366 | DTNF366R | — | — | |
| | | 4 ^⑤ | 1200 | DTNF367 | DTNF367R | — | — | |
| | | | 30 | — | NFR451DTK▲ | — | — | |
| | | | 60 | — | NFR452DTK▲ | — | — | |
| | | | 100 | — | NFR453DTK▲ | — | — | |
| | | | 200 | NF454DTK | NFR454DTK▲ | — | NF454SSDTK▲ | |
| | | | 400 | NF455DTK▲ | NFR455DTK▲ | — | — | |
| 600 | NF456DTK▲ | NFR456DTK▲ | — | — | | | | |
| 800 | NF457DTK▲ | NFR457DTK▲ | — | — | | | | |

General Duty Non-Fusible

| | Voltage | Number of Poles | Amps | Type 3R — Outdoor ^① Less Neutral | Type 3R — Outdoor ^① With Neutral | Type 3R — Outdoor General Duty With Neutral ^② |
|--|-------------|-----------------|-----------|--|--|---|
| | | | | Catalog Number | Catalog Number | Catalog Number |
| | 240 Volt AC | 2 | 100 | DTGNF223R | DTGNF223NR | DTLNF213NR |
| | | | 200 | DTGNF224R | DTGNF224NR | — |
| | 3 | 100 | DTGNF323R | DTGNF323NR | — | |
| | | 200 | DTGNF324R | DTGNF324NR | — | |

▲ Built to order. Allow 3-4 weeks for delivery.

① Use HS Type hubs for 30-200A switches. 400A and larger switches do not have hub provisions.
 ② All Heavy Duty double throw switches with a catalog number starting with "DT" are rated 200,000 AIC max.

when protected by Class R, J or T fuses. Fuse ampere rating must not exceed switch ampere rating.
 ③ Move load base.
 ④ Will accept class T Fuses only.
 ⑤ 4-pole switches are not approved for service entrance.

⑥ Will accept class H fuses only.
 ⑦ General duty Stand-by Power Panel catalog number DTLNF213NR contains (2) 100A, 2P circuit breakers rated 120/240V AC & 10,000 AIC.

Accessories, Lug Data and Horsepower Ratings

Accessories – 2 and 3-Pole Switches Type “DT” Only[Ⓞ]

| Description | Catalog Number |
|---|--|
| Neutral Kits 30A 60 & 100A 200A 400 & 600A 800 & 1200A | HNC612 HN263 HNC264 HN678 HND678 |
| Equipment Ground Kit 30-200A (2) #14-4 AWG 400 & 600A (4) #14-2/0 800-1200A (8) #6-350 Kcmil | HG61234 HG656 HG678 |
| Auxiliary Contacts (HD only) (two required per switch)[Ⓞ] 30-200A with (1) NO & (1) NC contact 30-200A with (2) NO & (2) NC contacts 400-1200A with (1) NO & (1) NC contact 400-1200A with (2) NO & (2) NC contacts | HA161234 HA261234 HA165678 HA265678 |
| Class R Fuse Clip Kits (two required per switch) 30A, 240V Kit 30A, 600V Kit/60A, 240V Kit 60A, 600V Kit 100A Kit 200A Kit | HR21 HR612 HR62 HR63 HR64 |
| Class T Fuse Adapter Kits (two required per pole) 100A, 240V Kit 100A, 600V Kit 200A, 240V Kit 200A, 600V Kit | HT23 HT63 HT24 HT64 |
| Type 3R Hubs (30-200A) For ¾" Conduit For 1" Conduit For 1 ½" Conduit For 2" Conduit For 2 ½" Conduit | ECHS075 ECHS100 ECHS125 ECHS150 ECHS200 ECHS250 |

Accessories – 4-Pole and Type “F” & “NF” 3-Pole Switches Only[Ⓞ]

| Description | Catalog Number |
|---|--|
| Auxiliary Switch (two required per switch) 30-800A (1) NO, (1) NC [Ⓞ] (2) NO, (2) NC [Ⓞ] | DS200EK1 DS200EK2 |
| Ground Lug Kit[Ⓞ] 30-60-100A 200A 400-600-800A | DS100GK DS200GK DS468GK |
| Hubs 30-60-100A Use Type HR Hubs 200-400A Use Type SSH 4, 4X Hubs 600-800A Use Type SSH 4, 4X Hubs | |
| Neutrals (3-pole only) 30-60-100A 200A 400 & 600A Fusible 400A 3P Non-Fusible | DT100NK DT200NK DS800NK DT600NK |

Maximum Horsepower Ratings

Fused

| Ampere Rating | 1-Phase AC | | 3-Phase AC | | | 250V DC |
|---------------|------------|------|------------|------|------|---------|
| | 240V | 240V | 240V | 480V | 600V | |
| 30 | 3 | 7½ | 15 | 20 | 5 | |
| 60 | 10 | 15 | 30 | 50 | 10 | |
| 100 | 15 | 30 | 60 | 75 | 20 | |
| 200 | 15 | 60 | 125 | 150 | 40 | |
| 400 | — | 125 | 125 | 125 | 50 | |
| 600 | — | 125 | — | — | 50 | |

Non-Fused

| | | | | | |
|---------|----|-----|-----|-----|----|
| 30 | 5 | 10 | 20 | 30 | 5 |
| 60 | 10 | 20 | 50 | 60 | 10 |
| 100 | 15 | 40 | 75 | 100 | 20 |
| 200 | 15 | 60 | 125 | 150 | 40 |
| 400-800 | — | 125 | 250 | 350 | 50 |

▲ Built to order. Allow 6-8 weeks for delivery.

Ⓞ For “DT” VBII Type switches only.

Ⓞ Also for fusible stainless & 400A Type 12 & 4x switches.

Ⓞ The following ground lugs are provided as standard in 200A and larger switches 200-(1) #14-4 Cu/Al 400-800A-(3) #6-250MCM Cu/Al.

Ⓞ One aux. required for normal and one required for emergency switch line base.

Wire Ranges (Line, Load and Neutral) per NEC Requirements

30-200A – 2, 3 & 4-Pole Switches

| Switch Ampere Rating | Wire Range (Cu/Al) New VBII Design Line, Load and Neutral |
|----------------------|---|
| 30 | (1) #14-6 |
| 60 | (1) #14-2 |
| 100 | (1) #14-1/0 AWG |
| 100 | (1) #14-1/0 AWG |
| 200 | (1) #6-250 kcmil |

400-1200A – 2 & 3-Pole Switches

| Switch Ampere Rating | Wire Range (Cu/Al) New VBII Design Line, Load and Neutral |
|----------------------|---|
| 400 | (1) 1/0 AWG-750 kcmil or (2) 1/0 AWG-250 kcmil |
| 600 | (2) 1/0 AWG-500 kcmil |
| 800 | (2) 1/0 AWG-750 kcmil or (3) 1/0 AWG-500 kcmil |
| 1200 | (3) 1/0 AWG-600 kcmil or (4) 1/0 AWG-500 kcmil |

400-800A – 4-Pole switches

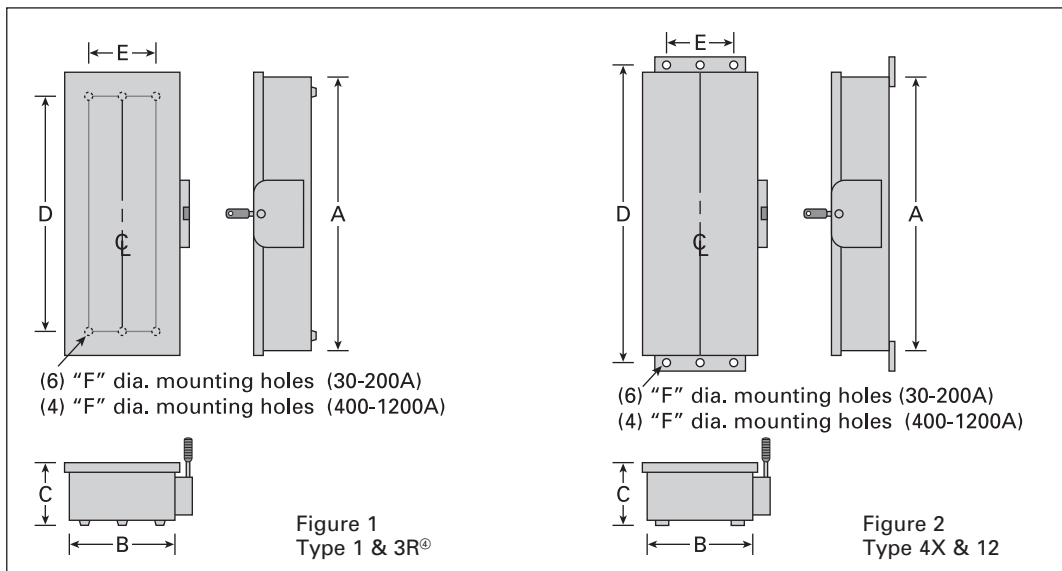
| Switch Ampere Rating | Wire Range (Cu/Al) New VBII Design Line, Load and Neutral |
|----------------------|---|
| 400 | (2) 1/0 AWG-300 kcmil or (1) 1/0 AWG-750 kcmil |
| 600 | (2) 250-500 Kcmil |
| 800 | (3) 250-500 Kcmil |

Replacement Parts – 2 and 3-Pole Switches Only[Ⓞ]

| Description | Catalog Number |
|------------------------------------|-------------------|
| Type 1, 3R & 12 Replacement Handle | 30-200A HHD61234 |
| Type 4X Replacement Handle | 30-200A HHD61234S |
| Replacement Handle | 400-1200A HHD656 |

VIII Design Double Throw Dimensions (Inches)

| Catalog Number | Enclosure | | | Mounting | | |
|--|-----------|-------|------|----------|--------------------|-------------------|
| | A | B | C | D | E | F |
| Figure 1 (30-1200A Type 1 & 3R) | | | | | | |
| DTNF221, DTNF321, DTNF361, DTNF361R | 24.50 | 9.53 | 6.09 | 19.00 | 6.75 | 0.268 |
| DTF321, DTF321R, DTF361 | 29.12 | 9.53 | 6.09 | 23.50 | 6.75 | 0.268 |
| DTNF222, DTNF322, DTNF362, DTNF362R | 24.88 | 11.50 | 6.09 | 19.00 | 9.38 | 0.268 |
| DTF322, DTF322R, DTF362 | 33.45 | 11.50 | 6.09 | 27.50 | 9.38 | 0.268 |
| DTNF223, DTNF323, DTNF323R, DTNF363, DTNF363R, DTGNF223R, DTGNF223NR, DTGNF323R, DTGNF323NR | 27.62 | 12.18 | 6.09 | 19.36 | 8.00 | 0.268 |
| DTF323, DTF323R, DTF363, DTF363R | 36.44 | 12.18 | 6.09 | 28.11 | 8.00 | 0.268 |
| DTNF224, DTNF224R, DTNF324, DTNF324R, DTNF364, DTNF364R, DTGNF224R, DTGNF224NR, DTGNF324R, DTGNF324NR | 36.00 | 19.12 | 6.42 | 31.00 | 15.00 | 0.44 |
| DTF224, DTF224R, DTF324, DTF324R, DTF364, DTF364R | 49.44 | 19.12 | 6.42 | 44.50 | 15.00 | 0.44 |
| DTF325, DTF326, DTF365 | 73.54 | 28.22 | 9.44 | 65.50 | 16.00 | 0.56 |
| DTNF225, DTNF225R, DTNF325, DTNF365, DTNF365R | 57.71 | 28.22 | 9.44 | 49.75 | 16.00 | 0.56 |
| DTNF326, DTNF366, DTNF366R | 57.71 | 28.22 | 9.44 | 49.75 | 16.00 | 0.56 |
| DTNF327, DTNF367, DTNF367R | 71.65 | 41.60 | 9.44 | 63.70 | 32.00 | 0.56 |
| DTNF368, DTNF368R | 71.65 | 41.60 | 9.44 | 63.70 | 32.00 | 0.56 |
| FR325DTK [Ⓞ] , FR355DTK [Ⓞ] | 74.31 | 24.90 | 8.88 | 69.50 | 20.25 | 0.56 |
| FR326DTK [Ⓞ] | 85.65 | 27.00 | 8.88 | 80.75 | 22.25 | 0.56 |
| NFR451DTK [Ⓞ] , NFR452DTK [Ⓞ] , NFR453DTK [Ⓞ] | 24.63 | 17.34 | 4.78 | 21.50 | 14.97 [Ⓛ] | 0.27 [Ⓛ] |
| NF454DTK [Ⓞ] , NFR454DTK [Ⓞ] | 37.25 | 19.19 | 6.32 | 33.50 | 16.00 [Ⓜ] | 0.56 [Ⓜ] |
| NF455DTK [Ⓞ] , NF456DTK [Ⓞ] , NF457DTK [Ⓞ] , NFR455DTK [Ⓞ] , NFR456DTK [Ⓞ] , NFR457DTK [Ⓞ] | 63.31 | 27.00 | 8.88 | 58.50 | 22.25 [Ⓜ] | 0.56 [Ⓜ] |
| Figure 2 (30-200A Type 12 & 4X) | | | | | | |
| DTNF361J, DTNF361S | 24.42 | 9.65 | 6.48 | 26.65 | 5.47 | 0.27 |
| DTNF362J, DTNF362S | 24.80 | 11.61 | 6.48 | 27.03 | 8.00 | 0.27 |
| DTNF363J, DTNF363S | 27.54 | 12.29 | 6.48 | 29.77 | 8.47 | 0.27 |
| DTNF364J, DTNF364S | 35.93 | 19.24 | 6.78 | 38.16 | 13.44 | 0.33 |
| NF355HDTK [Ⓞ] , NF355SSDTK [Ⓞ] | 53.82 | 22.66 | 7.25 | 56.20 | 18.00 | 0.56 |
| NF454SSDTK [Ⓞ] | 37.47 | 19.16 | 6.48 | 39.75 | 15.75 | 0.50 [Ⓜ] |
| F353SSDTK [Ⓞ] | 37.00 | 11.62 | 5.50 | 38.50 | 9.00 | 0.26 |
| F354SSDTK [Ⓞ] | 50.90 | 19.16 | 6.46 | 53.27 | 16.12 | 0.50 |
| F355SSDTK [Ⓞ] | 74.50 | 25.00 | 8.92 | 76.69 | 20.25 | 0.56 |



*For inches / millimeters conversion, multiply inches by 25.4.

Ⓞ (3) Mounting holes supplied (1 at top).
 Ⓞ (4) Mounting holes provided.

Ⓞ These switches are not Type VIII design.
 Ⓞ Drip hood not shown but provided on Type 3R enclosures.

Safety Switches

Enclosed Bolted Pressure Switches & Safety Switch

Replacement Parts

For enclosed bolted pressure contact switches order as lug-in/lug-out single section BPS main switchboards using either the SPACE 2000 Switchboard EPM or COMPAS.

VBII Safety Switch Replacement Parts

| Ampere Rating | Line Base Catalog Number | Load Base Catalog Number | Handle / Handle Guard | |
|---------------|-----------------------------|-----------------------------|--------------------------------|------------------------------|
| | | | General Duty Catalog Number | Heavy Duty Catalog Number |

Fusible 2- and 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

| | | | | |
|------------|----------------------|----------------------|---------|----------------------|
| 30 HD 240V | HFB21 ^② | HBB21 ^② | — | HH6123 ^② |
| 60 GD | HFB612 ^② | HBB612 ^② | GH223 | — |
| 60 HD 240V | HFB22 ^② | HBB22 ^② | — | HH6123 ^② |
| 30 600V | HFB612 ^② | HBB612 ^② | — | HH6123 ^② |
| 60 600V | HFB62 ^② | HBB62 ^② | — | HH6123 ^② |
| 100 | HFB63 ^② | HBB63 ^② | GH223 | HH6123 ^② |
| 200 | HFB64 ^② | HBB64 ^② | GH24 | HH64 ^② |
| 400 | HFB65 ^{③④} | HBB656 ^{③④} | HH65678 | HH65678 ^② |
| 600 | HFB66 ^{③④} | HBB656 ^{③④} | HH65678 | HH65678 ^② |
| 800 | HFB67A ^{②④} | HBB67A ^{②④} | — | HH65678 ^② |
| 1200 | HFB68 ^{②④} | HBB68 ^{②④} | — | HH68 ^② |

Non-Fusible 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

| | | | | |
|-------|----------------------|---|---------|----------------------|
| 30 HD | HNB612 ^② | — | — | HH6123 ^② |
| 60 GD | HNB612 ^② | — | GH223 | — |
| 60 HD | HNB623 ^② | — | — | HH6123 ^② |
| 100 | HNB623 ^② | — | GH223 | HH6123 ^② |
| 200 | HNB64 ^② | — | GH24 | HH64 ^② |
| 400 | HNB65 ^{③④} | — | HH65678 | HH65678 ^② |
| 600 | HNB66 ^{③④} | — | HH65678 | HH65678 ^② |
| 800 | HNB67A ^{②④} | — | — | HH65678 ^② |
| 1200 | HNB678 ^② | — | — | HH68 ^② |

| Ampere Rating | Mechanism Assembly Catalog Number | Line & Load Lugs Catalog Number |
|---------------|-----------------------------------|---------------------------------|
|---------------|-----------------------------------|---------------------------------|

Fusible 2- and 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

| | | |
|----------------|---------------------|----------------------|
| 30 HD 240V | HM6123 ^② | HL612 ^① |
| 60 GD | HM6123 | HL612 ^① |
| 60 HD 240V | HM6123 ^② | HL612 ^① |
| 30 600V | HM6123 ^② | HL612 ^① |
| 60 600V | HM6123 ^② | HL612 ^① |
| 100 | HM6123 ^② | HL63 ^① |
| 200 | HM64 ^② | HL64 ^① |
| 400 (Legacy) | HM65 | HL65678 ^④ |
| 400 (series-A) | HM656A | HL656A ^⑩ |
| 600 (Legacy) | HM66 | HL65678 ^④ |
| 600 (series-A) | HM656A | HL66A ^⑩ |
| 800 | HM67A | HL67A ^{④⑨} |
| 1200 | HM678 | ⑨ |

Non-Fusible 3-Pole 60-600A General Duty & 30-1200A Heavy Duty^{⑤⑧}

| | | |
|----------------|---------------------|----------------------|
| 30 HD | HM6123 ^② | HL612 ^① |
| 60 GD | HM6123 | HL612 ^① |
| 60 HD | HM6123 ^② | HL612 ^① |
| 100 | HM6123 ^② | HL63 ^① |
| 200 | HM64 ^② | HL64 ^① |
| 400 (Legacy) | HM65 | HL65678 ^④ |
| 400 (series-A) | HM656A | HL656A ^⑩ |
| 600 (Legacy) | HM66 | HL65678 ^④ |
| 600 (series-A) | HM656A | HL656A ^⑩ |
| 800 | HM67A | HL67A ^{④⑨} |
| 1200 | HM678 | ⑨ |

- ① Three lugs included in kit.
- ② Includes lugs.
- ③ Lugs not included.
- ④ One lug per kit.
- ⑤ One per switch required unless otherwise noted.

- ⑥ One required per pole.
- ⑦ For type 4/4X stainless steel switches add "S" to end of catalog number.
- ⑧ For replacement door for heavy duty switches add "DOOR" to end of switch catalog number.

- ⑨ Lugs included with line and load bases.
- ⑩ Not for use with Non-metallic safety switches
- ⑪ Lug caps only—2 line side caps and 2 load side caps per kit

Internal Shield Kits

These kits provide an inner door on safety switches to prevent accidental contact with live parts. All kits are constructed from clear plastic, provide test probe holes and allow replacement of fuses without the removal of the kit.

| Catalog Number | Switch Ampere Rating | UPC Code 040892_ _ _ _ |
|----------------|----------------------|---------------------------|
|----------------|----------------------|---------------------------|

For use with Fusible Type 1, 3R, 12 and 4X Stainless Steel Enclosed Safety Switches^⑩

| | | |
|----------|-----|-------|
| HSK61SSW | 30 | 79020 |
| HSK62SSW | 60 | 79021 |
| HSK63SSW | 100 | 79002 |
| HSK64SSW | 200 | 79023 |

For use with Fusible Type VBII Disconnect Switches

| | | |
|--------|----------|-------|
| HSK61 | 30 | 79024 |
| HSK623 | 60 & 100 | 79025 |
| HSK64 | 200 | 79026 |



HF362 with HSK62SSW installed



VBFS361F with HSK61 Installed

Load switching devices for all applications

Fuseless switch disconnectors



| | Type | 3LD3 new | 3LD2 | 3LD5 UL new |
|--|---|-----------------|--------------------|--------------------|
| | Rated current I_n | 16 ... 63 A | 16 ... 250 A | 30 ... 160 A |
| | Short-circuit current max. | 6 kA | 50 kA | 50 kA |
| Selection acc. to utilization category | AC max. | AC-3 | AC-3 | AC-3 |
| | DC max. | - | DC-22A | - |
| | Suitable fuses | - | - | - |
| Types of mounting | Panel mounting | ■ | ■ | ■ |
| | Mounting on a standard mounting rail | ■ | ■ (up to 125 A) | ■ (up to 63 A) |
| | Front mounting | ■ | ■ | ■ |
| | Mounting on busbar systems (spacing of the busbars) | - | - | - |
| | Draw-out technology | - | - | - |
| Methods of operation | Manual from the front | ■ | ■ | ■ |
| | Manual from the side | - | - | - |
| | Remote-controllable | - | - | - |
| Number of poles | 1-pole | - | - | - |
| | 2-pole | - | - | - |
| | 3-pole | ■ | ■ | ■ |
| | 4-pole | ■ | ■ | ■ |
| | 6-pole | - | ■ | - |
| Switching function | All poles | ■ | ■ | ■ |
| | Individual poles switchable | - | - | - |

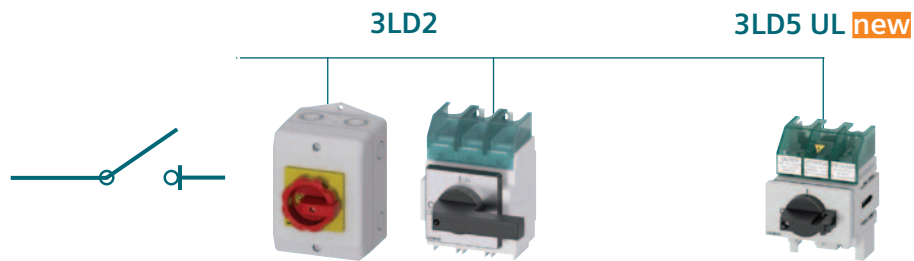
Disconnect Switches

3LD switch disconnectors

Quick select guide



| Type | | | 3LD30 | 3LD31 | 3LD32 | 3LD33 | 3LD34 | 3LD20 | 3LD21 | 3LD22 | 3LD25 | 3LD27 |
|---|---------------------|----|--------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| General technical specifications acc. to UL | | | | | | | | | | | | |
| General technical specifications | | | | | | | | | | | | |
| Certification according to UL standard | | | UL 508 | | | | | UL 508 | | | | |
| I_n acc. to UL 508/UL60947-4-1 UL489 | A | | 16 – | 25 – | 32 – | 40 – | 63 – | 16 – | 25 – | 32 – | 63 – | 100 – |
| U_e acc. to UL 508/UL60947-4-1 UL489 | V AC | | 600 – | | | | | 600 – | | | | |
| Operating and short-circuit behavior | | | | | | | | | | | | |
| Operational power, 3-phase | At 480 V | hp | 7.5 | 10 | 20 | 20 | 25 | 7.5 | 10 | 20 | 40 | 60 |
| | At 600 V | hp | 10 | 15 | 20 | 20 | 30 | 10 | 15 | 20 | 50 | 75 |
| Short circuit current rating (SCCR) | At 480 V at 600 V | kA | 5 5 | | | | | 5 5 | 5 5 | 5 5 | 5 5 | 10 10 |
| Upstream fuse according to UL | | | RK5 | | | | | RK5 | | | | |
| For IEC ratings, reference document in Industry Mall or Global LV10 catalog | | | | | | | | | | | | |



| Type | | | 3LD28 | 3LD23 | 3LD24 | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---------------------|----|--------|-------|-------|---------------------|-------|---------|---------|---------|
| General technical specifications acc. to UL | | | | | | | | | | |
| General technical specifications | | | | | | | | | | |
| Certification according to UL standard | | | UL 508 | | | UL60947-4-1 / UL489 | | | | |
| I_n acc. to UL 508/UL60947-4-1 UL489 | A | | 125 – | 160 – | 250 – | 30 30 | 60 60 | 100 100 | 125 125 | 150 150 |
| U_e acc. to UL 508/UL60947-4-1 UL489 | V AC | | 600 – | | | 480 480 | | | | |
| Operating and short-circuit behavior | | | | | | | | | | |
| Operational power, 3-phase | At 480 V | hp | 75 | 75 | 100 | 20 | 30 | 60 | 75 | 100 |
| | At 600 V | hp | 100 | 50 | 75 | – | – | – | – | – |
| Short circuit current rating (SCCR) | At 480 V at 600 V | kA | 10 10 | 10 10 | 10 10 | 50 – | 65 – | 65 – | 65 – | 50 – |
| Upstream fuse according to UL | | | RK5 | | | J CC | J | J | J | J |
| For IEC ratings, reference document in Industry Mall or Global LV10 catalog | | | | | | | | | | |

Disconnect Switches

3LD switch disconnectors

System overview of 3LD3 main control and EMERGENCY-STOP switches

Basic units for front mounting



3P rotary operating mechanisms



3P knob-operated mechanisms



3P+N rotary operating mechanisms



3P+N knob-operated mechanisms

Basic units for panel mounting



3P rotary operating mechanisms



3P knob-operated mechanisms



3P+N rotary operating mechanisms



3P+N knob-operated mechanisms

Basic units for installation in distribution boards



3P knob-operated mechanisms



3P basic switches without knob-operated mechanism



3P+N knob-operated mechanisms



3P+N basic switches without knob-operated mechanism

Additional poles and auxiliary switches



N switching contacts



N/PE terminals



Auxiliary switches

Operating mechanisms



Rotary operating mechanisms for front or panel mounting (center hole)



Knob-operated mechanisms for front or panel mounting (center hole)



Door-coupling rotary operating mechanisms

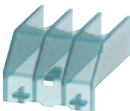


Door-coupling knob-operated mechanisms

Other accessories



Terminal covers, 1 and 3-pole



Inscription labels



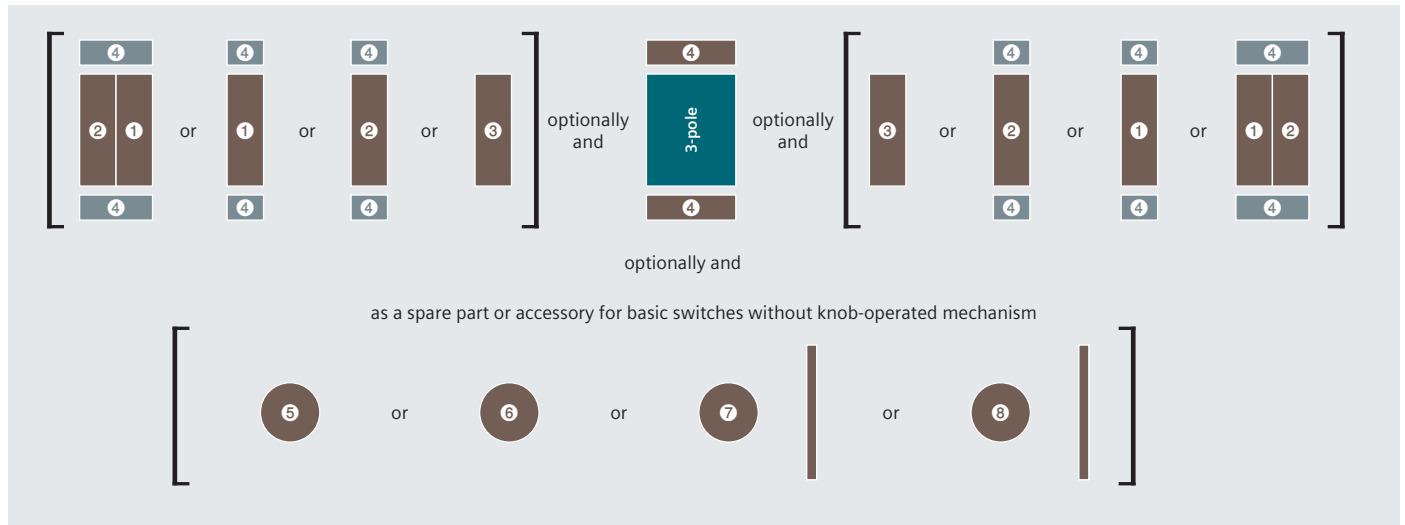
Note: You will find a detailed range of accessories with the basic units.

Disconnect Switches

3LD switch disconnectors

3LD3 mounting and accessories

Mounting concept and accessories



Legend

- ① N switching contact ¹⁾
- ② N/PE terminal
- ③ Auxiliary switch
- ④ Terminal cover
- ⑤ Rotary operating mechanism, center-hole mounting
- ⑥ Knob-operated mechanism, center-hole mounting
- ⑦ Door-coupling rotary operating mechanism, center-hole mounting
- ⑧ Door-coupling knob-operated mechanism, center-hole mounting

¹⁾ The N switching contact ① first has to be mounted on the basic unit



Mounting types

You will find further information in the configuration manual: sie.ag/2UlrAvy



Front mounting



The switches for front mounting are mounted on the inside of covers, side panels or, if applicable, control cabinet doors (depending on the applicable standard and switching function). The switches are mounted via the 22.5 mm diameter center hole.

Panel mounting



The switches for panel mounting are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. They have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers. The selector switches can be locked in their OFF position with no more than one padlock with a hasp thickness of 4 to 6 mm.

Basic switches without knob-operated mechanism



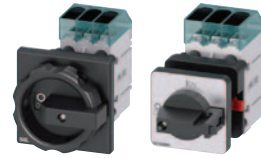
For the basic switch variant without knob-operated mechanism, the appropriate door-coupling rotary operating mechanism can be ordered separately.

Disconnect Switches

3LD switch disconnectors

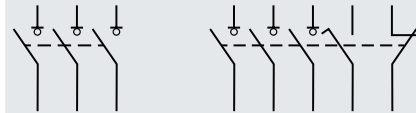
3LD3 main control and EMERGENCY-STOP switches, front mounting, 6 kA_{rms}

3LD3 main control and EMERGENCY-STOP switches, front mounting



Operating mechanisms, black

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC |
|--|---|---|-----------------------------|---------------|
| Rotary operating mechanisms | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3054-0TK51 | 3LD3054-1TK51 |
| 25 A | 9 kW | 7.5 kW | 3LD3154-0TK51 | 3LD3154-1TK51 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3254-0TK51 | 3LD3254-1TK51 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3354-0TK51 | 3LD3354-1TK51 |
| 63 A | 22 kW | 18.5 kW | 3LD3454-0TK51 | 3LD3454-1TK51 |
| Knob-operated mechanisms | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3050-0TK11 | 3LD3050-1TK11 |
| 25 A | 9 kW | 7.5 kW | 3LD3150-0TK11 | 3LD3150-1TK11 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3250-0TK11 | 3LD3250-1TK11 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3350-0TK11 | 3LD3350-1TK11 |
| 63 A | 22 kW | 18.5 kW | 3LD3450-0TK11 | 3LD3450-1TK11 |

Scope of supply:

- Including terminal covers for the infeed side

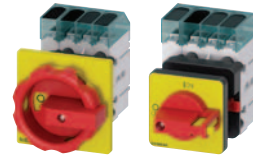
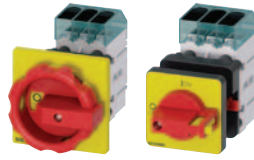
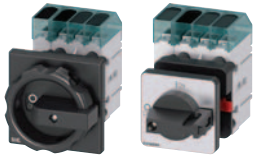
Accessories

| | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) | |
|------------------------------------|---|---------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|---|
| Additional poles | | | | | | | | |
| | Variant | Contacts | Catalog No. | | | | | |
| | Switching contact for N conductor (4th contact) | Leading switch-on, lagging switch-off | 3LD9340-0B | ■ | ■ | ■ | ■ | ■ |
| | N terminal | Through-type | 3LD9340-2B | ■ | ■ | ■ | ■ | ■ |
| | PE terminal | Through-type | 3LD9340-3B | ■ | ■ | ■ | ■ | ■ |
| Auxiliary switches | | | | | | | | |
| | | Contacts | Catalog No. | | | | | |
| | | 1 NO + 1 NC | 3LD9340-6B | ■ | ■ | ■ | ■ | ■ |
| Rotary operating mechanisms | | | | | | | | |
| | | Color | Catalog No. | | | | | |
| | | Black | 3LD9344-4C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9344-5C | ■ | ■ | ■ | ■ | ■ |
| Knob-operated mechanisms | | | | | | | | |
| | | Color | Catalog No. | | | | | |
| | | Black | 3LD9343-6C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-7C | ■ | ■ | ■ | ■ | ■ |

Disconnect Switches

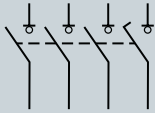
3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, front mounting, 6 kA_{rms}

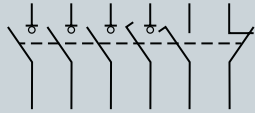


Operating mechanisms, red/yellow

3P+N

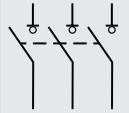


Without auxiliary switch

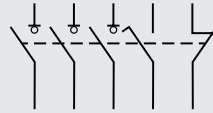


1 NO + 1 NC

3P

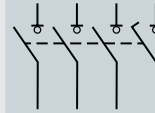


Without auxiliary switch

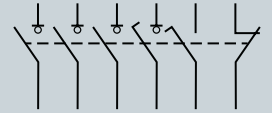


1 NO + 1 NC

3P+N



Without auxiliary switch



1 NO + 1 NC

| | | | | | |
|---------------|---------------|---------------|---------------|---------------|---------------|
| 3LD3054-0TL51 | 3LD3054-1TL51 | 3LD3054-0TK53 | 3LD3054-1TK53 | 3LD3054-0TL53 | 3LD3054-1TL53 |
| 3LD3154-0TL51 | 3LD3154-1TL51 | 3LD3154-0TK53 | 3LD3154-1TK53 | 3LD3154-0TL53 | 3LD3154-1TL53 |
| 3LD3254-0TL51 | 3LD3254-1TL51 | 3LD3254-0TK53 | 3LD3254-1TK53 | 3LD3254-0TL53 | 3LD3254-1TL53 |
| 3LD3354-0TL51 | 3LD3354-1TL51 | 3LD3354-0TK53 | 3LD3354-1TK53 | 3LD3354-0TL53 | 3LD3354-1TL53 |
| 3LD3454-0TL51 | 3LD3454-1TL51 | 3LD3454-0TK53 | 3LD3454-1TK53 | 3LD3454-0TL53 | 3LD3454-1TL53 |
| 3LD3050-0TL11 | 3LD3050-1TL11 | 3LD3050-0TK13 | 3LD3050-1TK13 | 3LD3050-0TL13 | 3LD3050-1TL13 |
| 3LD3150-0TL11 | 3LD3150-1TL11 | 3LD3150-0TK13 | 3LD3150-1TK13 | 3LD3150-0TL13 | 3LD3150-1TL13 |
| 3LD3250-0TL11 | 3LD3250-1TL11 | 3LD3250-0TK13 | 3LD3250-1TK13 | 3LD3250-0TL13 | 3LD3250-1TL13 |
| 3LD3350-0TL11 | 3LD3350-1TL11 | 3LD3350-0TK13 | 3LD3350-1TK13 | 3LD3350-0TL13 | 3LD3350-1TL13 |
| 3LD3450-0TL11 | 3LD3450-1TL11 | 3LD3450-0TK13 | 3LD3450-1TK13 | 3LD3450-0TL13 | 3LD3450-1TL13 |

| | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|
|--|-----------------|-----------------|-----------------|-----------------|-----------------|

Terminal covers

- Pack of 4 units

Version

For N switching contacts, N terminals or PE terminals

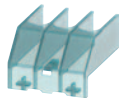
Catalog No.

3LD9341-2A



For 3-pole 3LD3 switch disconnectors

3LD9341-0A



Inscription labels

- Pack of 10 units

Inscription

German / English (Hauptschalter / Main Switch)

French / Spanish (Interrupteur Principal / Interruptor Principal)

Without inscription

Catalog No.

3LD9346-1A

3LD9346-2A

3LD9346-3A



18

SWITCHES

Disconnect Switches

3LD switch disconnectors

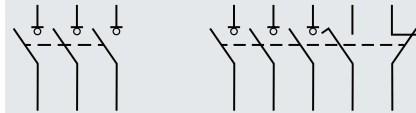
3LD3 main control and EMERGENCY-STOP switches, panel mounting, 6 kA_{rms}

3LD3 main control and EMERGENCY-STOP switches, panel mounting



Operating mechanisms, black

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC |
|--|---|---|-----------------------------|---------------|
| Rotary operating mechanisms | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3048-0TK51 | 3LD3048-1TK51 |
| 25 A | 9 kW | 7.5 kW | 3LD3148-0TK51 | 3LD3148-1TK51 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3248-0TK51 | 3LD3248-1TK51 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3348-0TK51 | 3LD3348-1TK51 |
| 63 A | 22 kW | 18.5 kW | 3LD3448-0TK51 | 3LD3448-1TK51 |
| Knob-operated mechanisms | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3040-0TK11 | 3LD3040-1TK11 |
| 25 A | 9 kW | 7.5 kW | 3LD3140-0TK11 | 3LD3140-1TK11 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3240-0TK11 | 3LD3240-1TK11 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3340-0TK11 | 3LD3340-1TK11 |
| 63 A | 22 kW | 18.5 kW | 3LD3440-0TK11 | 3LD3440-1TK11 |

Scope of supply:

- Including terminal covers for the infeed side

Mounting:

- Using screws or snap-on mounting on 35 mm mounting rails

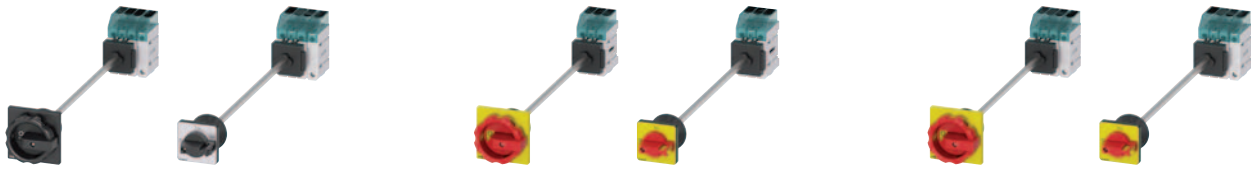
Accessories

| | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) | |
|------------------------------------|---|---------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|---|
| Additional poles | | | | | | | | |
| | Variant | Contacts | Catalog No. | | | | | |
| | Switching contact for N conductor (4th contact) | Leading switch-on, lagging switch-off | 3LD9340-0C | ■ | ■ | ■ | ■ | ■ |
| | N terminal | Through-type | 3LD9340-2C | ■ | ■ | ■ | ■ | ■ |
| | PE terminal | Through-type | 3LD9340-3C | ■ | ■ | ■ | ■ | ■ |
| Auxiliary switches | | | | | | | | |
| | | Contacts | Catalog No. | | | | | |
| | | 1 NO + 1 NC | 3LD9340-6C | ■ | ■ | ■ | ■ | ■ |
| Rotary operating mechanisms | | | | | | | | |
| | Version | Color | Catalog No. | | | | | |
| | Incl. funnel | Black | 3LD9344-2C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9344-3C | ■ | ■ | ■ | ■ | ■ |
| Knob-operated mechanisms | | | | | | | | |
| | Version | Color | Catalog No. | | | | | |
| | Incl. funnel | Black | 3LD9343-4C | ■ | ■ | ■ | ■ | ■ |
| | | Red/yellow | 3LD9343-5C | ■ | ■ | ■ | ■ | ■ |

Disconnect Switches



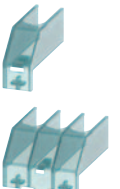

3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, panel mounting, 6 kA_{rms}



Operating mechanisms, red/yellow

| 3P+N | | 3P | | 3P+N | |
|--------------------------|---------------|--------------------------|---------------|--------------------------|---------------|
| Without auxiliary switch | 1 NO + 1 NC | Without auxiliary switch | 1 NO + 1 NC | Without auxiliary switch | 1 NO + 1 NC |
| 3LD3048-0TL51 | 3LD3048-1TL51 | 3LD3048-0TK53 | 3LD3048-1TK53 | 3LD3048-0TL53 | 3LD3048-1TL53 |
| 3LD3148-0TL51 | 3LD3148-1TL51 | 3LD3148-0TK53 | 3LD3148-1TK53 | 3LD3148-0TL53 | 3LD3148-1TL53 |
| 3LD3248-0TL51 | 3LD3248-1TL51 | 3LD3248-0TK53 | 3LD3248-1TK53 | 3LD3248-0TL53 | 3LD3248-1TL53 |
| 3LD3348-0TL51 | 3LD3348-1TL51 | 3LD3348-0TK53 | 3LD3348-1TK53 | 3LD3348-0TL53 | 3LD3348-1TL53 |
| 3LD3448-0TL51 | 3LD3448-1TL51 | 3LD3448-0TK53 | 3LD3448-1TK53 | 3LD3448-0TL53 | 3LD3448-1TL53 |
| 3LD3040-0TL11 | 3LD3040-1TL11 | 3LD3040-0TK13 | 3LD3040-1TK13 | 3LD3040-0TL13 | 3LD3040-1TL13 |
| 3LD3140-0TL11 | 3LD3140-1TL11 | 3LD3140-0TK13 | 3LD3140-1TK13 | 3LD3140-0TL13 | 3LD3140-1TL13 |
| 3LD3240-0TL11 | 3LD3240-1TL11 | 3LD3240-0TK13 | 3LD3240-1TK13 | 3LD3240-0TL13 | 3LD3240-1TL13 |
| 3LD3340-0TL11 | 3LD3340-1TL11 | 3LD3340-0TK13 | 3LD3340-1TK13 | 3LD3340-0TL13 | 3LD3340-1TL13 |
| 3LD3440-0TL11 | 3LD3440-1TL11 | 3LD3440-0TK13 | 3LD3440-1TK13 | 3LD3440-0TL13 | 3LD3440-1TL13 |

| | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|-------------------------------------|--|-----------------|-----------------|-----------------|
| Switching shafts | | | | | | |
|  | Cross-section 6 × 6 mm | Length 600 mm | Catalog No. 3LD93451C | ■ | ■ | ■ |
| Door-coupling rotary operating mechanisms | | | | | | |
|  | Variant Rotary operating mechanisms 66 × 66 mm | Color Black Red/yellow | Catalog No. 3LD9344-2CA 3LD9344-3CA | ■ | ■ | ■ |
| | Variant Knob-operated mechanisms 48 × 48 mm | Color Black Red/yellow | Catalog No. 3LD9343-4CA 3LD9343-5CA | ■ | ■ | ■ |
| Terminal covers | | | | | | |
|  | • Pack of 4 units | | | | | |
| | Version For N switching contacts, N terminals or PE terminals | Catalog No. 3LD9341-2A | ■ | ■ | ■ | ■ |
| | For 3LD3 3-pole switch disconnectors | Catalog No. 3LD9341-0A | ■ | ■ | ■ | ■ |
| Inscription labels | | | | | | |
|  | • Pack of 10 units | | | | | |
| | Inscription German / English (Hauptschalter / Main Switch) | Catalog No. 3LD9346-1A | ■ | ■ | ■ | ■ |
| | French / Spanish (Interrupteur Principal / Interruptor Principal) | Catalog No. 3LD9346-2A | ■ | ■ | ■ | ■ |
| | Without inscription | Catalog No. 3LD9346-3A | ■ | ■ | ■ | ■ |

Disconnect Switches

3LD switch disconnectors

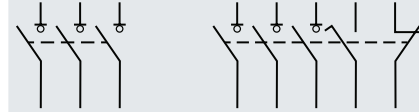
3LD3 main control and EMERGENCY-STOP switches, distribution boards and without direct operating mechanism, 6 kA_{rms}

3LD3 main control and EMERGENCY-STOP switches, installation in distribution boards and basic switches without direct operating mechanism



Operating mechanisms, black

Number of poles 3P



| Uninterrupted current I _U At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC |
|--|---|---|-----------------------------|---------------|
| Basic switch with masking plate and selector knob, standard rail mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3030-0TK11 | 3LD3030-1TK11 |
| 25 A | 9 kW | 7.5 kW | 3LD3130-0TK11 | 3LD3130-1TK11 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3230-0TK11 | 3LD3230-1TK11 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3330-0TK11 | 3LD3330-1TK11 |
| 63 A | 22 kW | 18.5 kW | 3LD3430-0TK11 | 3LD3430-1TK11 |
| Basic switches without knob-operated mechanism | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD3010-0TK05 | 3LD3010-1TK05 |
| 25 A | 9 kW | 7.5 kW | 3LD3110-0TK05 | 3LD3110-1TK05 |
| 32 A | 11.5 kW | 9.5 kW | 3LD3210-0TK05 | 3LD3210-1TK05 |
| 40 A | 18.5 kW | 11.5 kW | 3LD3310-0TK05 | 3LD3310-1TK05 |
| 63 A | 22 kW | 18.5 kW | 3LD3410-0TK05 | 3LD3410-1TK05 |

Scope of supply:

- Basic switches without direct operating mechanism, incl. terminal covers for the infeed side

Mounting:

- Using screws or snap-on mounting on 35 mm mounting rails

Accessories for switches for installation in distribution boards and basic switches without knob-operated mechanism

| | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) | |
|---------------------------|---|---------------------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|---|
| Additional poles | | | | | | | | |
| | Variant | Contacts | Catalog No. | | | | | |
| | Switching contact for N conductor (4th contact) | Leading switch-on, lagging switch-off | 3LD9340-0C | ■ | ■ | ■ | ■ | ■ |
| | N terminal | Through-type | 3LD9340-2C | ■ | ■ | ■ | ■ | ■ |
| | PE terminal | Through-type | 3LD9340-3C | ■ | ■ | ■ | ■ | ■ |
| Auxiliary switches | | | | | | | | |
| | | Contacts | Catalog No. | | | | | |
| | | 1 NO + 1 NC | 3LD9340-6C | ■ | ■ | ■ | ■ | ■ |
| Terminal covers | | | | | | | | |
| | | • Pack of 4 units | | | | | | |
| | Version | Catalog No. | | | | | | |
| | For N switching contacts, N terminals or PE terminals | 3LD9341-2A | ■ | ■ | ■ | ■ | ■ | |
| | | | | | | | | |
| | For 3LD3 3-pole switch disconnectors | 3LD9341-0A | ■ | ■ | ■ | ■ | ■ | |
| Switching shafts | | | | | | | | |
| | Cross-section | Length | Catalog No. | | | | | |
| | 6 × 6 mm | 600 mm | 3LD93451C | ■ | ■ | ■ | ■ | ■ |

Disconnect Switches

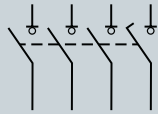
3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, distribution boards and without direct operating mechanism, 6 kA_{rms}

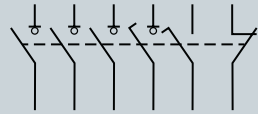


Operating mechanisms, red/yellow

3P+N

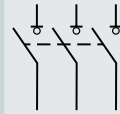


Without auxiliary switch

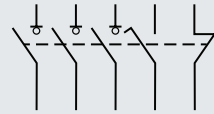


1 NO + 1 NC

3P

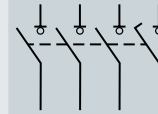


Without auxiliary switch

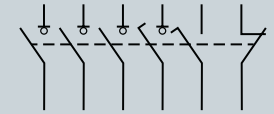


1 NO + 1 NC

3P+N



Without auxiliary switch



1 NO + 1 NC

| | | | | | |
|---------------|---------------|---------------|---------------|---------------|---------------|
| 3LD3030-OTL11 | 3LD3030-1TL11 | 3LD3030-OTK13 | 3LD3030-1TK13 | 3LD3030-OTL13 | 3LD3030-1TL13 |
| 3LD3130-OTL11 | 3LD3130-1TL11 | 3LD3130-OTK13 | 3LD3130-1TK13 | 3LD3130-OTL13 | 3LD3130-1TL13 |
| 3LD3230-OTL11 | 3LD3230-1TL11 | 3LD3230-OTK13 | 3LD3230-1TK13 | 3LD3230-OTL13 | 3LD3230-1TL13 |
| 3LD3330-OTL11 | 3LD3330-1TL11 | 3LD3330-OTK13 | 3LD3330-1TK13 | 3LD3330-OTL13 | 3LD3330-1TL13 |
| 3LD3430-OTL11 | 3LD3430-1TL11 | 3LD3430-OTK13 | 3LD3430-1TK13 | 3LD3430-OTL13 | 3LD3430-1TL13 |

| | | | | | |
|---------------|---------------|---|---|---|---|
| 3LD3010-OTL05 | 3LD3010-1TL05 | - | - | - | - |
| 3LD3110-OTL05 | 3LD3110-1TL05 | - | - | - | - |
| 3LD3210-OTL05 | 3LD3210-1TL05 | - | - | - | - |
| 3LD3310-OTL05 | 3LD3310-1TL05 | - | - | - | - |
| 3LD3410-OTL05 | 3LD3410-1TL05 | - | - | - | - |

Accessories for basic switches without operating mechanism

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

Rotary operating mechanisms



| Version | Color | Catalog No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|--------------|------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Incl. funnel | Black | 3LD9344-2C | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9344-3C | ■ | ■ | ■ | ■ | ■ |

Knob-operated mechanisms



| Version | Color | Catalog No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|--------------|------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Incl. funnel | Black | 3LD9343-4C | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9343-5C | ■ | ■ | ■ | ■ | ■ |

Door-coupling rotary operating mechanisms



| Variant | Color | Catalog No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|--|------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Rotary operating mechanisms 66 × 66 mm | Black | 3LD9344-2CA | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9344-3CA | ■ | ■ | ■ | ■ | ■ |



| | | | | | | | |
|-------------------------------------|------------|-------------|---|---|---|---|---|
| Knob-operated mechanisms 48 × 48 mm | Black | 3LD9343-4CA | ■ | ■ | ■ | ■ | ■ |
| | Red/yellow | 3LD9343-5CA | ■ | ■ | ■ | ■ | ■ |

Switching shafts



| Cross-section | Length | Catalog No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---------------|--------|-------------|--------------|--------------|--------------|--------------|--------------|
| 6 × 6 mm | 600 mm | 3LD93451C | ■ | ■ | ■ | ■ | ■ |

Inscription labels










| • Pack of 10 units | | | | | | | |
|---|-------------|--------------|--------------|--------------|--------------|--------------|--|
| Inscription | Catalog No. | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) | |
| German / English (Hauptschalter / Main Switch) | 3LD9346-1A | ■ | ■ | ■ | ■ | ■ | |
| French / Spanish (Interrupteur Principal / Interruptor Principal) | 3LD9346-2A | ■ | ■ | ■ | ■ | ■ | |
| Without inscription | 3LD9346-3A | ■ | ■ | ■ | ■ | ■ | |

Disconnect Switches

3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, accessories

3LD3 main control and EMERGENCY-STOP switches, accessories








| | | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) |
|---|---|---|----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Switching contacts for N conductor (4th contact) | | | | | | | | |
|  | Version For front mounting | Contacts Leading switch-on, lagging switch-off | Catalog No. 3LD9340-0B | ■ | ■ | ■ | ■ | ■ |
|  | For panel mounting, installation in distribution boards and basic switches without knob-operated mechanism | Leading switch-on, lagging switch-off | 3LD9340-0C | ■ | ■ | ■ | ■ | ■ |
| N terminals | | | | | | | | |
|  | Version For front mounting | Contacts Through-type | Catalog No. 3LD9340-2B | ■ | ■ | ■ | ■ | ■ |
|  | For panel mounting, installation in distribution boards and basic switches without knob-operated mechanism | Through-type | 3LD9340-2C | ■ | ■ | ■ | ■ | ■ |
| PE terminals | | | | | | | | |
|  | Version For front mounting | Contacts Through-type | Catalog No. 3LD9340-3B | ■ | ■ | ■ | ■ | ■ |
|  | For panel mounting, installation in distribution boards and basic switches without knob-operated mechanism | Through-type | 3LD9340-3C | ■ | ■ | ■ | ■ | ■ |
| Auxiliary switches | | | | | | | | |
|  | Version For front mounting | Contacts 1 NO + 1 NC | Catalog No. 3LD9340-6B | ■ | ■ | ■ | ■ | ■ |
| | For panel mounting, installation in distribution boards and basic switches without knob-operated mechanism | 1 NO + 1 NC | 3LD9340-6C | ■ | ■ | ■ | ■ | ■ |

Disconnect Switches

3LD switch disconnectors

3LD3 main control and EMERGENCY-STOP switches, accessories

3LD3 main control and EMERGENCY-STOP switches, accessories

| | | | | 3LD30 (16 A) | 3LD31 (25 A) | 3LD32 (32 A) | 3LD33 (40 A) | 3LD34 (63 A) | | | | | | | | | | |
|---|--|--|--|---|-----------------|-----------------|-----------------|-----------------|--------------------|---|---|---|---|--------------------|---|---|---|---|
| Rotary operating mechanisms | | | | | | | | | | | | | | | | | | |
| Version | | | | Color | | | | | Catalog No. | | | | | | | | | |
|  | For front mounting, without funnel | | | Black | 3LD9344-4C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| | | | | Red/ yellow | 3LD9344-5C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
|  | For panel mounting and basic switches without knob-operated mechanism, with funnel | | | Black | 3LD9344-2C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| | | | | Red/ yellow | 3LD9344-3C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| Knob-operated mechanisms | | | | | | | | | | | | | | | | | | |
| Version | | | | Color | | | | | Catalog No. | | | | | | | | | |
|  | For front mounting, without funnel | | | Black | 3LD9343-6C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| | | | | Red/ yellow | 3LD9343-7C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
|  | For panel mounting and basic switches without knob-operated mechanism, with funnel | | | Black | 3LD9343-4C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| | | | | Red/ yellow | 3LD9343-5C | ■ | ■ | ■ | ■ | ■ | | | | | | | | |
| Door-coupling rotary operating mechanisms | | | | | | | | | | | | | | | | | | |
| Version | | | | Variant | | | | | Color | | | | | Catalog No. | | | | |
|  | For panel mounting and basic switches without knob-operated mechanism | | | Rotary operating mechanisms 66 × 66 mm | | | Black | 3LD9344-2CA | ■ | ■ | ■ | ■ | ■ | | | | | |
| | | | | | | | Red/ yellow | 3LD9344-3CA | ■ | ■ | ■ | ■ | ■ | | | | | |
| | | | | Knob-operated mechanisms 48 × 48 mm | | | Black | 3LD9343-4CA | ■ | ■ | ■ | ■ | ■ | | | | | |
| | | | | | | | Red/ yellow | 3LD9343-5CA | ■ | ■ | ■ | ■ | ■ | | | | | |
| Terminal covers | | | | | | | | | | | | | | | | | | |
| | | | | <ul style="list-style-type: none"> For front mounting, panel mounting, installation in distribution boards and basic switches without knob-operated mechanism Pack of 4 units | | | | | | | | | | | | | | |
| Number of poles | | | | Catalog No. | | | | | | | | | | | | | | |
|  | 1-pole | | | 3LD9341-2A | | | | | ■ | ■ | ■ | ■ | ■ | | | | | |
| | 3-pole | | | 3LD9341-0A | | | | | ■ | ■ | ■ | ■ | ■ | | | | | |
| Switching shafts | | | | | | | | | | | | | | | | | | |
| Cross-section | | | | Length | | | | | Catalog No. | | | | | | | | | |
| 6 × 6 mm | | | | 600 mm | | | | | 3LD93451C | | | | | ■ | ■ | ■ | ■ | ■ |
| Inscription labels | | | | | | | | | | | | | | | | | | |
| | | | | <ul style="list-style-type: none"> Pack of 10 units Not for installation in distribution boards | | | | | | | | | | | | | | |
| Inscription | | | | Catalog No. | | | | | | | | | | | | | | |
|  | German / English (Hauptschalter / Main Switch) | | | 3LD9346-1A | | | | | ■ | ■ | ■ | ■ | ■ | | | | | |
| | French / Spanish (Interrupteur Principal / Interruptor Principal) | | | 3LD9346-2A | | | | | ■ | ■ | ■ | ■ | ■ | | | | | |
| | Without inscription | | | 3LD9346-3A | | | | | ■ | ■ | ■ | ■ | ■ | | | | | |

Disconnect Switches

3LD switch disconnectors

System overview of 3LD2 switch disconnectors

Basic units for front mounting



3P rotary operating mechanisms



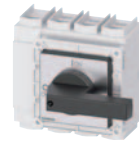
3P knob-operated mechanisms (3LD23/3LD24)



3P knob-operated mechanisms



3P+N rotary operating mechanisms



3P+N knob-operated mechanisms (3LD23/3LD24)



3P+N knob-operated mechanisms



6P rotary operating mechanisms

Basic units for panel mounting



3P rotary operating mechanisms



3P knob-operated mechanisms (3LD23/3LD24)



3P knob-operated mechanisms, defeatable



3P+N rotary operating mechanisms



3P+N knob-operated mechanisms (3LD23/3LD24)



3P+N knob-operated mechanisms, defeatable



6P rotary operating mechanisms

Basic units for installation in distribution boards/enclosures, DC



3P knob-operated mechanisms



3P+N knob-operated mechanisms



8P DC isolators

Additional poles and auxiliary switches



N switching contacts



N/PE terminals (through-type)



Auxiliary switches (standard version)



Auxiliary switch for mounting on the front **new**

Operating mechanisms



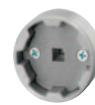
Rotary operating mechanisms for 4-hole and center-hole mounting



Knob-operated mechanisms (3LD23/3LD24)



Switching shafts



Coupling pieces without ON-lock



Assembly tools for center-hole mounting

Other accessories



Terminal covers, 1-pole



Terminal covers, 3 and 4-pole

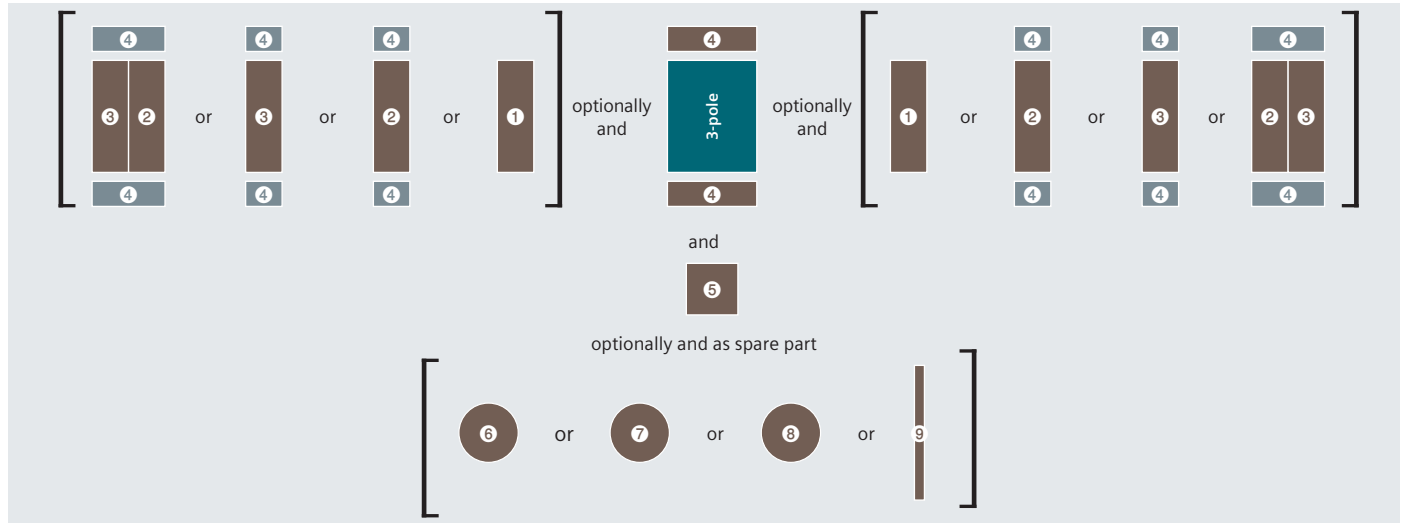


Inscription labels (with and without inscription)

Note:

You will find a detailed range of accessories with the basic units.

Mounting concept and accessories



Legend

- 1 Auxiliary switch
- 2 N switching contact ¹⁾
- 3 N/PE terminal
- 4 Terminal cover
- 5 Auxiliary switch for mounting on the front ²⁾
- 6 Rotary operating mechanism, center-hole mounting
- 7 Rotary operating mechanism, four-hole mounting
- 8 Knob-operated mechanism, four-hole mounting
- 9 Switching shaft (300 or 600)

¹⁾ The N switching contact 2 first has to be mounted on the basic unit
²⁾ Can only be used with four-hole front mounting and panel mounting

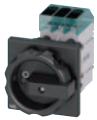


Mounting types

You will find further information in the configuration manual: sie.ag/2UlrAvy



Front mounting



The switches for front mounting are mounted on the inside of covers, side panels or, if applicable, control cabinet doors (depending on the applicable standard and switching function). In addition to the 4-hole fastening of the handle, up to 63 A (3LD25) fastening with the 22.5 mm diameter center hole can also be chosen.

Panel mounting



The switches for panel mounting up to 125 A (3LD28) are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 160 and 250 A (3LD23/3LD24) are exclusively screwed onto mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. Up to 125 A (3LD28), they have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers.

DC isolators



The DC isolators in the enclosure are suitable for disconnecting loads of up to 800 V DC due to their 8-pole design. To provide additional safety, the isolators can be locked in the 0 position.

Disconnect Switches

3LD switch disconnectors

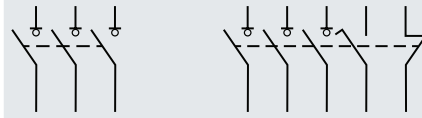
3LD2 main control switches, front mounting, 25 ... 50 kA_{eff}

3LD2 main control switches, front mounting



Operating mechanisms, black

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|--|-----------------------------|-----------------------------------|
| Rotary operating mechanism, four-hole mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2003-0TK51 | 3LD2003-1TP51 |
| 25 A | 9.5 kW | 7.5 kW | 3LD2103-0TK51 | 3LD2103-1TP51 |
| 32 A | 11.5 kW | 9.5 kW | 3LD2203-0TK51 | 3LD2203-1TP51 |
| 63 A | 22 kW | 18.5 kW | 3LD2504-0TK51 | 3LD2504-1TP51 |
| 100 A | 37 kW | 30 kW | 3LD2704-0TK51 | 3LD2704-1TP51 |
| 125 A | 45 kW | 37 kW | 3LD2804-0TK51 | 3LD2804-1TP51 |
| 160 A | 75 kW | 50 kW | 3LD2305-0TK11 | 3LD2305-0TK11 + 3LD9200-5B |
| 250 A | 132 kW | 110 kW | 3LD2405-0TK11 | 3LD2405-0TK11 + 3LD9200-5B |
| Rotary operating mechanism, center-hole mounting Ø 22.5 mm | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2054-0TK51 | 3LD2054-1TP51 |
| 25 A | 9.5 kW | 7.5 kW | 3LD2154-0TK51 | 3LD2154-1TP51 |
| 32 A | 11.5 kW | 9.5 kW | 3LD2254-0TK51 | 3LD2254-0TK51 + 3LD9200-5B |
| 63 A | 22 kW | 18.5 kW | 3LD2555-0TK51 | 3LD2555-0TK51 + 3LD9200-5B |
| Knob-operated mechanism, four-hole mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2022-0TK11 | 3LD2022-0TK11 + 3LD9200-5B |
| 25 A | 9.5 kW | 7.5 kW | 3LD2122-0TK11 | 3LD2122-0TK11 + 3LD9200-5B |
| 32 A | 11.5 kW | 9.5 kW | 3LD2222-0TK11 | 3LD2222-0TK11 + 3LD9200-5B |
| Knob-operated mechanism, center-hole mounting Ø 22.5 mm | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2050-0TK11 | 3LD2050-0TK11 + 3LD9200-5B |
| 25 A | 9.5 kW | 7.5 kW | 3LD2150-0TK11 | 3LD2150-0TK11 + 3LD9200-5B |
| 32 A | 11.5 kW | 9.5 kW | 3LD2250-0TK11 | 3LD2250-0TK11 + 3LD9200-5B |

Scope of supply:

- Including terminal covers for the infeed side

Accessories, see pages 18/54 to 18/55

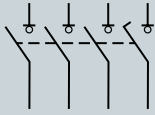
Disconnect Switches

3LD switch disconnectors

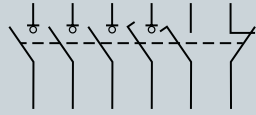
3LD2 main control switches, front mounting, 25 ... 50 kA_{eff}



3P+N

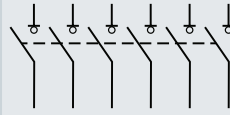


Without auxiliary switch

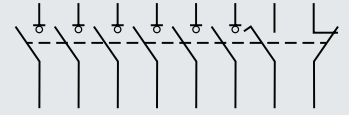


1 NO + 1 NC (standard version)

6P



Without auxiliary switch



1 NO + 1 NC (standard version)

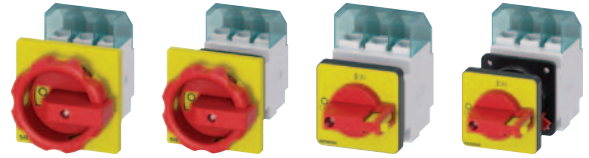
| | | | |
|-----------------------------|--|---------------|----------------------------|
| 3LD2003-1TL51 | 3LD2003-2EP51 | - | - |
| 3LD2103-1TL51 | 3LD2103-2EP51 | 3LD2103-3VK51 | 3LD2103-4VP51 |
| 3LD2203-1TL51 | 3LD2203-1TL51 + 3LD9200-5B | 3LD2203-3VK51 | 3LD2203-3VK51 + 3LD9200-5B |
| 3LD2504-1TL51 | 3LD2504-1TP51 + 3LD9250-0BA | 3LD2504-3VK51 | 3LD2504-3VK51 + 3LD9200-5B |
| 3LD2704-0TK51 + 3LD9280-0B | 3LD2704-0TK51 + 3LD9280-0B + 3LD9200-5B | - | - |
| 3LD2804-0TK51 + 3LD9280-0B | 3LD2804-0TK51 + 3LD9280-0B + 3LD9200-5B | - | - |
| 3LD2305-1TL11 | 3LD2305-1TL11 + 3LD9200-5B | 3LD2305-3VK11 | 3LD2305-3VK11 + 3LD9200-5B |
| 3LD2405-1TL11 | 3LD2405-1TL11 + 3LD9200-5B | 3LD2405-3VK11 | 3LD2405-3VK11 + 3LD9200-5B |
| 3LD2054-1TL51 | 3LD2054-2EP51 | - | - |
| 3LD2154-1TL51 | 3LD2154-2EP51 | - | - |
| 3LD2254-1TL51 | 3LD2254-1TL51 + 3LD9200-5B | - | - |
| 3LD2555-0TK51 + 3LD9250-0BA | 3LD2555-0TK51 + 3LD9250-0BA + 3LD9200-5B | - | - |
| 3LD2022-1TL11 | 3LD2022-1TL11 + 3LD9200-5B | - | - |
| 3LD2122-1TL11 | 3LD2122-1TL11 + 3LD9200-5B | - | - |
| 3LD2222-0TK11 + 3LD9220-0B | 3LD2222-0TK11 + 3LD9220-0B + 3LD9200-5B | - | - |
| 3LD2050-1TL11 | 3LD2050-1TL11 + 3LD9200-5B | - | - |
| 3LD2150-0TK11 + 3LD9220-0B | 3LD2150-0TK11 + 3LD9220-0B + 3LD9200-5B | - | - |
| 3LD2250-0TK11 + 3LD9220-0B | 3LD2250-0TK11 + 3LD9220-0B + 3LD9200-5B | - | - |

Disconnect Switches

3LD switch disconnectors

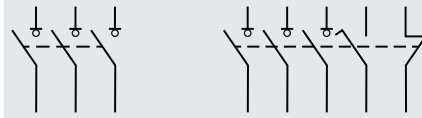
3LD2 EMERGENCY-STOP switches, front mounting, 25 ... 50 kA_{eff}

3LD2 EMERGENCY-STOP switches, front mounting



Operating mechanisms, red/yellow

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|--|-----------------------------|-----------------------------------|
| Rotary operating mechanism, four-hole mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2003-0TK53 | 3LD2003-1TP53 |
| 25 A | 9.5 kW | 7.5 kW | 3LD2103-0TK53 | 3LD2103-1TP53 |
| 32 A | 11.5 kW | 9.5 kW | 3LD2203-0TK53 | 3LD2203-1TP53 |
| 63 A | 22 kW | 18.5 kW | 3LD2504-0TK53 | 3LD2504-1TP53 |
| 100 A | 37 kW | 30 kW | 3LD2704-0TK53 | 3LD2704-1TP53 |
| 125 A | 45 kW | 37 kW | 3LD2804-0TK53 | 3LD2804-1TP53 |
| 160 A | 75 kW | 50 kW | 3LD2305-0TK13 | 3LD2305-0TK13 + 3LD9200-5B |
| 250 A | 132 kW | 110 kW | 3LD2405-0TK13 | 3LD2405-0TK13 + 3LD9200-5B |
| Rotary operating mechanism, center-hole mounting Ø 22.5 mm | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2054-0TK53 | 3LD2054-1TP53 |
| 25 A | 9.5 kW | 7.5 kW | 3LD2154-0TK53 | 3LD2154-1TP53 |
| 32 A | 11.5 kW | 9.5 kW | 3LD2254-0TK53 | 3LD2254-0TK53 + 3LD9200-5B |
| 63 A | 22 kW | 18.5 kW | 3LD2555-0TK53 | 3LD2555-0TK53 + 3LD9200-5B |
| Knob-operated mechanism, four-hole mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2022-0TK13 | 3LD2022-0TK13 + 3LD9200-5B |
| 25 A | 9.5 kW | 7.5 kW | 3LD2122-0TK13 | 3LD2122-0TK13 + 3LD9200-5B |
| 32 A | 11.5 kW | 9.5 kW | 3LD2222-0TK13 | 3LD2222-0TK13 + 3LD9200-5B |
| Knob-operated mechanism, center-hole mounting Ø 22.5 mm | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2050-0TK13 | 3LD2050-0TK13 + 3LD9200-5B |
| 25 A | 9.5 kW | 7.5 kW | 3LD2150-0TK13 | 3LD2150-0TK13 + 3LD9200-5B |
| 32 A | 11.5 kW | 9.5 kW | 3LD2250-0TK13 | 3LD2250-0TK13 + 3LD9200-5B |

Scope of supply:

- Including terminal covers for the infeed side

Accessories, see pages 18/54 to 18/55

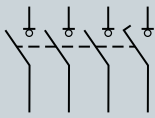
Disconnect Switches

3LD switch disconnectors

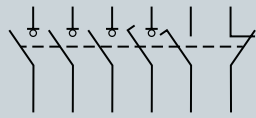
3LD2 EMERGENCY-STOP switches, front mounting, 25 ... 50 kA_{eff}



3+N

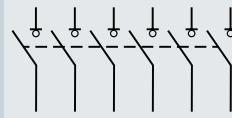


Without auxiliary switch

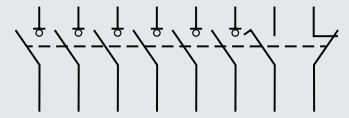


1 NO + 1 NC (standard version)

6P



Without auxiliary switch



1 NO + 1 NC (standard version)






| | | | |
|-----------------------------|--|---------------|----------------------------|
| 3LD2003-1TL53 | 3LD2003-2EP53 | - | - |
| 3LD2103-1TL53 | 3LD2103-2EP53 | 3LD2103-3VK53 | 3LD2103-4VP53 |
| 3LD2203-1TL53 | 3LD2203-1TL53 | 3LD2203-3VK53 | 3LD2203-3VK53 + 3LD9200-5B |
| 3LD2504-1TL53 | 3LD2504-1TP53 + 3LD9250-0BA | 3LD2504-3VK53 | 3LD2504-3VK53 + 3LD9200-5B |
| 3LD2704-0TK53 + 3LD9280-0B | 3LD2704-0TK53 + 3LD9280-0B + 3LD9200-5B | - | - |
| 3LD2804-0TK53 + 3LD9280-0B | 3LD2804-0TK53 + 3LD9280-0B + 3LD9200-5B | - | - |
| 3LD2305-1TL13 | 3LD2305-1TL13 + 3LD9200-5B | 3LD2305-3VK13 | 3LD2305-3VK13 + 3LD9200-5B |
| 3LD2405-1TL13 | 3LD2405-1TL13 + 3LD9200-5B | 3LD2405-3VK13 | 3LD2405-3VK13 + 3LD9200-5B |
| 3LD2054-1TL53 | 3LD2054-2EP53 | - | - |
| 3LD2154-1TL53 | 3LD2154-2EP53 | - | - |
| 3LD2254-1TL53 | 3LD2254-1TL53 + 3LD9200-5B | - | - |
| 3LD2555-0TK53 + 3LD9250-0BA | 3LD2555-0TK53 + 3LD9250-0BA + 3LD9200-5B | - | - |
| 3LD2022-1TL13 | 3LD2022-1TL13 + 3LD9200-5B | - | - |
| 3LD2122-1TL13 | 3LD2122-1TL13 + 3LD9200-5B | - | - |
| 3LD2222-0TK13 + 3LD9220-0B | 3LD2222-0TK13 + 3LD9220-0B + 3LD9200-5B | - | - |
| 3LD2050-1TL13 | 3LD2050-1TL13 + 3LD9200-5B | - | - |
| 3LD2150-0TK13 + 3LD9220-0B | 3LD2150-0TK13 + 3LD9220-0B + 3LD9200-5B | - | - |
| 3LD2250-0TK13 + 3LD9220-0B | 3LD2250-0TK13 + 3LD9220-0B + 3LD9200-5B | - | - |

Disconnect Switches

3LD switch disconnectors

3LD2 accessories for front mounting

Accessories for front mounting


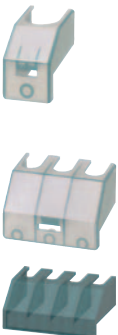


| | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | | |
|---|--|------------------------|-----------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|--|
| Switching contacts for N conductor (4th contact) | | | | | | | | | | | | |
|  | Contacts | Catalog No. | | | | | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0B | | ■ | ■ | | | | | | | |
| | | 3LD9250-0BA | | | | ■ | | | | | | |
| | | 3LD9280-0B | | | | | ■ | ■ | | | | |
| | | 3LD9240-0B | | | | | | | ■ | ■ | | |
| N/PE terminals | | | | | | | | | | | | |
|  | Contacts | Catalog No. | | | | | | | | | | |
| | Through-type | 3LD9200-2B | | ■ | | | | | | | | |
| | | 3LD9220-2B | | | ■ | ■ | | | | | | |
| | | 3LD9250-2BA | | | | | ■ | | | | | |
| | | 3LD9280-2B | | | | | | ■ | ■ | | | |
| | | 3LD9240-2B | | | | | | | | ■ | ■ | |
| Auxiliary switches (standard version) | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off | | | | | | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5B | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Gold-plated | | 3LD9200-5BF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Auxiliary switch for mounting on the front | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Mounted on the switch shaft For four-hole front mounting and panel mounting only For long leading times (20 ... 150 m) Not for 6-pole 3LD23 (160 A) and 3LD24 (250 A) | | | | | | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | |
| | | | 3LD9240-5D new | | | | | | | | ■ | |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | ■ | ■ | ■ | ■ | | ■ | |
| 3LD9240-5DF | | | | | | | | | | ■ | | |
| Rotary operating mechanisms | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks | | | | | | | | | | | |
| | Version | Mounting | Catalog No. | | | | | | | | | |
| | For main control switches | Center-hole mounting | 3LD9224-1D | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-1D | | | | ■ | | | | | |
| | | Four-hole mounting | 3LD9224-1B | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-1B | | | | ■ | ■ | ■ | | | |
| | For EMERGENCY-STOP switches | Center-hole mounting | 3LD9224-3D | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-3D | | | | ■ | | | | | |
| | | Four-hole mounting | 3LD9224-3B | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-3B | | | | ■ | ■ | ■ | | | |

Disconnect Switches

3LD switch disconnectors

3LD2 accessories for front mounting

Accessories for front mounting

| | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | |
|---|--|--------------------|--------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|
| Knob-operated mechanisms | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks | | | | | | | | | |
| | Version | Mounting | Catalog No. | | | | | | | |
| | For main control switches | Four-hole mounting | 3LD9243-1B | | | | | | ■ | ■ |
| | For EMERGENCY-STOP switches | Four-hole mounting | 3LD9243-3B | | | | | | ■ | ■ |
| Terminal covers | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 4 units | | | | | | | | | |
| | Number of poles | Catalog No. | | | | | | | | |
| | 1-pole | 3LD9201-2A | ■ | | | | | | | |
| | | 3LD9221-2A | | ■ | ■ | | | | | |
| | | 3LD9251-2A | | | | ■ | | | | |
| | | 3LD9281-2A | | | | | ■ | ■ | | |
| | | 3LD9241-2A | | | | | | | ■ | ■ |
| | 3-pole | 3LD9221-0A | | ■ | ■ | | | | | |
| | | 3LD9251-0A | | | | ■ | | | | |
| | 4-pole | 3LD9201-1A | ■ | | | | | | | |
| Inscription labels | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 10 units | | | | | | | | | |
| | Inscription | Catalog No. | | | | | | | | |
| | German / English (Hauptschalter / Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| Assembly tools | | | | | | | | | | |
|  | <ul style="list-style-type: none"> For center-hole mounting with nut Pack of 5 units | | | | | | | | | |
| | Version | Catalog No. | | | | | | | | |
| | For main control switches and EMERGENCY-STOP switches | 3LD9256-0A | ■ | ■ | ■ | ■ | | | | |

Disconnect Switches

3LD switch disconnectors

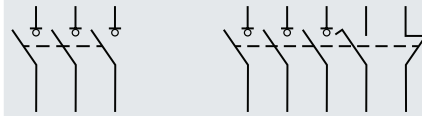
3LD2 main control switches, panel mounting, 25 ... 50 kA_{eff}

3LD2 main control switches, panel mounting



Operating mechanisms, black

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|--|-----------------------------|-----------------------------------|
| Door-coupling rotary operating mechanism, four-hole mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2013-0TK51 | 3LD2013-0TK51 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2113-0TK51 | 3LD2113-0TK51 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2213-0TK51 | 3LD2213-0TK51 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2514-0TK51 | 3LD2514-0TK51 + 3LD9200-5C |
| 100 A | 37 kW | 30 kW | 3LD2714-0TK51 | 3LD2714-0TK51 + 3LD9200-5C |
| 125 A | 45 kW | 37 kW | 3LD2814-0TK51 | 3LD2814-0TK51 + 3LD9200-5C |
| 160 A | 75 kW | 50 kW | 3LD2318-0TK11 | 3LD2318-0TK11 + 3LD9200-5C |
| 250 A | 132 kW | 110 kW | 3LD2418-0TK11 | 3LD2418-0TK11 + 3LD9200-5C |
| Door-coupling rotary operating mechanism, center-hole mounting Ø 22.5 mm | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2044-0TK51 | 3LD2044-0TK51 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2144-0TK51 | 3LD2144-0TK51 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2244-0TK51 | 3LD2244-0TK51 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2545-0TK51 | 3LD2545-0TK51 + 3LD9200-5C |
| Defeatable door-coupling knob-operated mechanism, four-hole mounting | | | | |
| 16 A | 7,5 kW | 5,5 kW | 3LD2017-0TK11 | 3LD2017-0TK11 + 3LD9200-5C |
| 32 A | 11,5 kW | 9,5 kW | 3LD2217-0TK11 | 3LD2217-0TK11 + 3LD9200-5C |
| 63 A | 22 kW | 18,5 kW | 3LD2517-0TK11 | 3LD2517-0TK11 + 3LD9200-5C |

Scope of supply:

- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

Accessories, see pages 18/60 to 18/61

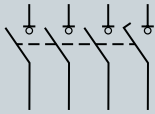
Disconnect Switches

3LD switch disconnectors

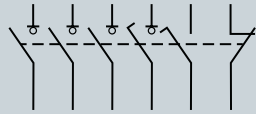
3LD2 main control switches, panel mounting, 25 ... 50 kA_{eff}



3P+N

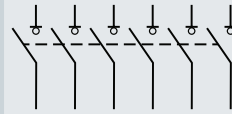


Without auxiliary switch

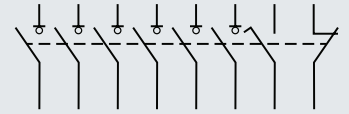


1 NO + 1 NC (standard version)

6P



Without auxiliary switch



1 NO + 1 NC (standard version)

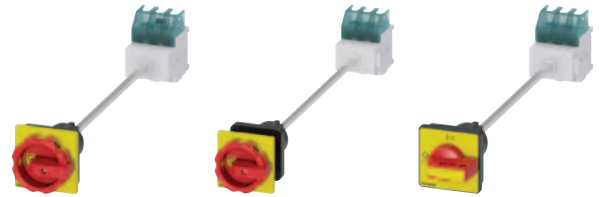
| | | | | |
|-----------------------------|-----------------------------|--------------|---------------|----------------------------|
| 3LD2013-1TL51 | 3LD2013-1TL51 | + 3LD9200-5C | - | - |
| 3LD2113-1TL51 | 3LD2113-1TL51 | + 3LD9200-5C | 3LD2113-3VK51 | 3LD2113-4VP51 |
| 3LD2213-1TL51 | 3LD2213-1TL51 | + 3LD9200-5C | - | - |
| 3LD2514-1TL51 | 3LD2514-1TL51 | + 3LD9200-5C | - | - |
| 3LD2714-0TK51 + 3LD9280-0C | 3LD2714-0TK51 + 3LD9280-0C | + 3LD9200-5C | - | - |
| 3LD2814-0TK51 + 3LD9280-0C | 3LD2814-0TK51 + 3LD9280-0C | + 3LD9200-5C | - | - |
| 3LD2318-1TL11 | 3LD2318-1TL11 | + 3LD9200-5C | 3LD2318-3VK11 | 3LD2318-3VK11 + 3LD9200-5C |
| 3LD2418-1TL11 | 3LD2418-1TL11 | + 3LD9200-5C | 3LD2418-3VK11 | 3LD2418-3VK11 + 3LD9200-5C |
| 3LD2044-1TL51 | 3LD2044-1TL51 | + 3LD9200-5C | - | - |
| 3LD2144-1TL51 | 3LD2144-1TL51 | + 3LD9200-5C | - | - |
| 3LD2244-1TL51 | 3LD2244-1TL51 | + 3LD9200-5C | - | - |
| 3LD2545-0TK51 + 3LD9250-0CA | 3LD2545-0TK51 + 3LD9250-0CA | + 3LD9200-5C | - | - |
| 3LD2017-1TL11 | 3LD2017-1TL11 + 3LD9200-5C | | - | - |
| 3LD2217-1TL11 | 3LD2217-1TL11 + 3LD9200-5C | | - | - |
| 3LD2517-1TL11 | 3LD2517-1TL11 + 3LD9200-5C | | - | - |

Disconnect Switches

3LD switch disconnectors

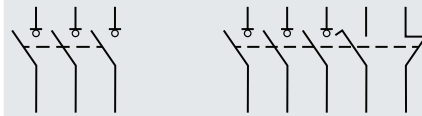
3LD2 EMERGENCY-STOP switches, panel mounting, 25 ... 50 kA_{eff}

3LD2 EMERGENCY-STOP switches, panel mounting



Operating mechanisms, red/yellow

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|---|---|--|-----------------------------|-----------------------------------|
| Door-coupling rotary operating mechanism, four-hole mounting | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2013-0TK53 | 3LD2013-0TK53 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2113-0TK53 | 3LD2113-0TK53 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2213-0TK53 | 3LD2213-0TK53 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2514-0TK53 | 3LD2514-0TK53 + 3LD9200-5C |
| 100 A | 37 kW | 30 kW | 3LD2714-0TK53 | 3LD2714-0TK53 + 3LD9200-5C |
| 125 A | 45 kW | 37 kW | 3LD2814-0TK53 | 3LD2814-0TK53 + 3LD9200-5C |
| 160 A | 75 kW | 50 kW | 3LD2318-0TK13 | 3LD2318-0TK13 + 3LD9200-5C |
| 250 A | 132 kW | 110 kW | 3LD2418-0TK13 | 3LD2418-0TK13 + 3LD9200-5C |
| Door-coupling rotary operating mechanism, center-hole mounting Ø 22.5 mm | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2044-0TK53 | 3LD2044-0TK53 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2144-0TK53 | 3LD2144-0TK53 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2244-0TK53 | 3LD2244-0TK53 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2545-0TK53 | 3LD2545-0TK53 + 3LD9200-5C |
| Defeatable door-coupling knob-operated mechanism, four-hole mounting | | | | |
| 16 A | 7,5 kW | 5,5 kW | 3LD2017-0TK13 | 3LD2017-0TK13 + 3LD9200-5C |
| 32 A | 11,5 kW | 9,5 kW | 3LD2217-0TK13 | 3LD2217-0TK13 + 3LD9200-5C |
| 63 A | 22 kW | 18,5 kW | 3LD2517-0TK13 | 3LD2517-1TL13 + 3LD9200-5C |

Scope of supply:

- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

Accessories, see pages 18/60 to 18/61

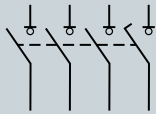
Disconnect Switches

3LD switch disconnectors

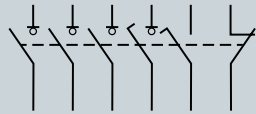
3LD2 EMERGENCY-STOP switches, panel mounting, 25 ... 50 kA_{eff}



3P+N

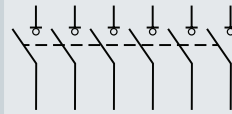


Without auxiliary switch

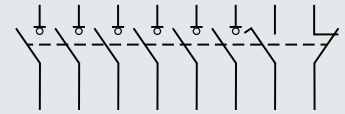


1 NO + 1 NC (standard version)

6P



Without auxiliary switch



1 NO + 1 NC (standard version)







| | | | | |
|-----------------------------|-----------------------------|--------------|---------------|----------------------------|
| 3LD2013-1TL53 | 3LD2013-1TL53 | + 3LD9200-5C | - | - |
| 3LD2113-1TL53 | 3LD2113-1TL53 | + 3LD9200-5C | 3LD2113-3VK53 | 3LD2113-4VP53 |
| 3LD2213-1TL53 | 3LD2213-1TL53 | + 3LD9200-5C | - | - |
| 3LD2514-1TL53 | 3LD2514-1TL53 | + 3LD9200-5C | - | - |
| 3LD2714-0TK53 + 3LD9280-0C | 3LD2714-0TK53 + 3LD9280-0C | + 3LD9200-5C | - | - |
| 3LD2814-0TK53 + 3LD9280-0C | 3LD2814-0TK53 + 3LD9280-0C | + 3LD9200-5C | - | - |
| 3LD2318-1TL13 | 3LD2318-1TL13 | + 3LD9200-5C | 3LD2318-3VK13 | 3LD2318-3VK13 + 3LD9200-5C |
| 3LD2418-1TL13 | 3LD2418-1TL13 | + 3LD9200-5C | 3LD2418-3VK13 | 3LD2418-3VK13 + 3LD9200-5C |
| 3LD2044-1TL53 | 3LD2044-1TL53 | + 3LD9200-5C | - | - |
| 3LD2144-1TL53 | 3LD2144-1TL53 | + 3LD9200-5C | - | - |
| 3LD2244-1TL53 | 3LD2244-1TL53 | + 3LD9200-5C | - | - |
| 3LD2545-0TK53 + 3LD9250-0CA | 3LD2545-0TK53 + 3LD9250-0CA | + 3LD9200-5C | - | - |
| 3LD2017-1TL13 | 3LD2017-1TL13 + 3LD9200-5C | | - | - |
| 3LD2217-1TL13 | 3LD2217-0TK13 + 3LD9200-5C | | - | - |
| 3LD2517-1TL13 | 3LD2517-1TL13 + 3LD9200-5C | | - | - |

Disconnect Switches

3LD switch disconnectors

3LD2 accessories for panel mounting

Accessories for panel mounting





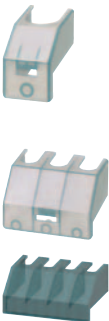


| | | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | |
|--|--|------------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|
| Switching contacts for N conductor (4th contact) | | | | | | | | | | | | |
|  | Contacts | Catalog No. | | | | | | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9220-0C | | | ■ | ■ | | | | | | |
| | | 3LD9250-0CA | | | | | ■ | | | | | |
| | | 3LD9280-0C | | | | | | ■ | ■ | | | |
| | | 3LD9240-0C | | | | | | | | | ■ | ■ |
| N/PE terminals | | | | | | | | | | | | |
|  | Contacts | Catalog No. | | | | | | | | | | |
| | Through-type | 3LD9200-2C | | ■ | | | | | | | | |
| | | 3LD9220-2C | | | ■ | ■ | | | | | | |
| | | 3LD9250-2CA | | | | | ■ | | | | | |
| | | 3LD9280-2C | | | | | | ■ | ■ | | | |
| 3LD9240-2C | | | | | | | | | ■ | ■ | | |
| Auxiliary switches (standard version) | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off | | | | | | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | 2 NO | Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Auxiliary switch for mounting on the front | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Mounted on the switch shaft For long leading times (20 ... 150 ms) | | | | | | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | | | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | | | 3LD9240-5D | | | | | | | | ■ | ■ |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| 3LD9240-5DF | | | | | | | | | | ■ | ■ | |
| Rotary operating mechanisms | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks | | | | | | | | | | | | |
|  | Version | Mounting | Catalog No. | | | | | | | | | |
| | For main control switches | Center-hole mounting | 3LD9224-1D | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-1D | | | | ■ | | | | | |
| | | Four-hole mounting | 3LD9224-1B | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-1B | | | | ■ | ■ | ■ | | | |
| | For EMERGENCY-STOP switches | Center-hole mounting | 3LD9224-3D | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-3D | | | | ■ | | | | | |
| | | Four-hole mounting | 3LD9224-3B | ■ | ■ | ■ | | | | | | |
| 3LD9284-3B | | | | | | ■ | ■ | ■ | | | | |
| Knob-operated mechanisms | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks | | | | | | | | | | | | |
|  | Version | Mounting | Catalog No. | | | | | | | | | |
| | For main control switches | Four-hole mounting | 3LD9243-1B | | | | | | | ■ | ■ | |
| | For EMERGENCY-STOP switches | Four-hole mounting | 3LD9243-3B | | | | | | | ■ | ■ | |

Disconnect Switches

3LD switch disconnectors

3LD2 accessories for panel mounting

Accessories for panel mounting

| | | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | |
|---|--|--------------------|--------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|
| 8UC7.. door-coupling rotary operating mechanisms | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> To achieve defeatability from 3LD27 (100 A) to 3LD24 (250 A) | | | | | | | | | | | |
| | Type | Version | Catalog No. | | | | | | | | | |
| | 8UC71 | Standard | 8UC7110-1BB | | | | | ■ | ■ | | | |
| | | EMERGENCY-STOP | 8UC7120-3BB | | | | | ■ | ■ | | | |
| 8UC72 | Standard | 8UC7210-1BB | | | | | | | | ■ | ■ | |
| | EMERGENCY-STOP | 8UC7220-3BB | | | | | | | | ■ | ■ | |
| Coupling drivers | | | | | | | | | | | | |
|  | Version | Catalog No. | | | | | | | | | | |
| | For 8UC71 door-coupling rotary operating mechanisms | 8UC6011 | | | | | | ■ | ■ | | | |
| | For 8UC72 door-coupling rotary operating mechanisms | 8UC6012 | | | | | | | | ■ | ■ | |
| Switching shafts | | | | | | | | | | | | |
|  | Cross-section | Length | Catalog No. | | | | | | | | | |
| | 6 × 6 mm | 300 mm | 3LD9205-0C | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | | 600 mm | 3LD9205-2C | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | 8 × 8 mm | 300 mm | 3LD9245-0C | | | | | | | | ■ | ■ |
| 600 mm | | 3LD9245-2C | | | | | | | | ■ | ■ | |
| Coupling pieces | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Without ON-lock | | | | | | | | | | | |
| | Catalog No. | | | | | | | | | | | |
| | | 3LD9242-4F | | | | | | | | ■ | ■ | |
| Terminal covers | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 4 units | | | | | | | | | | | |
| | Number of poles | Catalog No. | | | | | | | | | | |
| | 1-pole | 3LD9201-2A | ■ | | | | | | | | | |
| | | 3LD9221-2A | | ■ | ■ | | | | | | | |
| | | 3LD9251-2A | | | | ■ | | | | | | |
| | | 3LD9281-2A | | | | | ■ | ■ | | | | |
| | | 3LD9241-2A | | | | | | | | | ■ | ■ |
| | 3-pole | 3LD9221-0A | | ■ | ■ | | | | | | | |
| | | 3LD9251-0A | | | | ■ | | | | | | |
| | 4-pole | 3LD9201-1A | ■ | | | | | | | | | |
| Inscription labels | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 10 units Cannot be used with defeatable 3LD2.17 door-coupling rotary operating mechanisms | | | | | | | | | | | |
| | Inscription | Catalog No. | | | | | | | | | | |
| | German / English (Hauptschalter / Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| Assembly tools | | | | | | | | | | | | |
|  | <ul style="list-style-type: none"> For center-hole mounting with nut Pack of 5 units | | | | | | | | | | | |
| | Version | Catalog No. | | | | | | | | | | |
| | For main control switches and EMERGENCY-STOP switches | 3LD9256-0A | ■ | ■ | ■ | ■ | | | | | | |

Disconnect Switches

3LD switch disconnectors

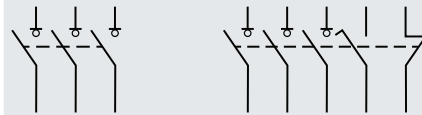
3LD2 main control switches, installation in distribution boards, 25 ... 50 kA_{eff}

3LD2 main control switches, installation in distribution boards



Operating mechanisms, black

Number of poles 3P



| Uninterrupted current I _U At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|--|---|--|-----------------------------|-----------------------------------|
| Knob-operated mechanisms with masking plate | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2030-0TK11 | 3LD2030-0TK11 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2130-0TK11 | 3LD2130-0TK11 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2230-0TK11 | 3LD2230-0TK11 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2530-0TK11 | 3LD2530-0TK11 + 3LD9200-5C |
| 100 A | 37 kW | 30 kW | 3LD2730-0TK11 | 3LD2730-0TK11 + 3LD9200-5C |
| 125 A | 45 kW | 37 kW | 3LD2830-0TK11 | 3LD2830-0TK11 + 3LD9200-5C |
| 160 A | 75 kW | 50 kW | 3LD2330-0TK11 | 3LD2330-0TK11 + 3LD9200-5C |
| 250 A | 132 kW | 110 kW | 3LD2430-0TK11 | 3LD2430-0TK11 + 3LD9200-5C |

Scope of supply:

- 3LD23/3LD24 including terminal covers for the infeed side

Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

Accessories

| | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|--|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
|--|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|

Switching contacts for N conductor (4th contact)

| Contacts | Catalog No. | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|--|-------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| Leading switch-on, lagging switch-off | 3LD9220-0C | | ■ | ■ | | | | | |
| | 3LD9250-0CA | | | | ■ | | | | |
| | 3LD9280-0C | | | | | ■ | ■ | | |
| | 3LD9240-0C | | | | | | | ■ | ■ |

N/PE terminals

| Contacts | Catalog No. | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|--------------|-------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| Through-type | 3LD9200-2C | ■ | | | | | | | |
| | 3LD9220-2C | | ■ | ■ | | | | | |
| | 3LD9250-2CA | | | | ■ | | | | |
| | 3LD9280-2C | | | | | ■ | ■ | | |
| | 3LD9240-2C | | | | | | | ■ | ■ |

Auxiliary switches (standard version)

| Contacts | Contact surface | Catalog No. | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|-------------|-----------------|-------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 2 NO | Standard | 3LD9200-6C | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |

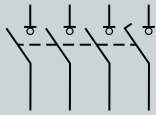
Disconnect Switches

3LD switch disconnectors

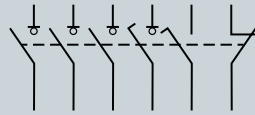
3LD2 main control switches, installation in distribution boards, 25 ... 50 kA_{eff}



3P+N


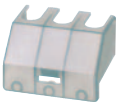
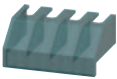


Without auxiliary switch



1 NO + 1 NC (standard version)

| | | |
|-----------------------------|-----------------------------|--------------|
| 3LD2030-1TL11 | 3LD2030-1TL11 | + 3LD9200-5C |
| 3LD2130-0TK11 + 3LD9220-0C | 3LD2130-0TK11 + 3LD9220-0C | + 3LD9200-5C |
| 3LD2230-0TK11 + 3LD9220-0C | 3LD2230-0TK11 + 3LD9220-0C | + 3LD9200-5C |
| 3LD2530-0TK11 + 3LD9250-0CA | 3LD2530-0TK11 + 3LD9250-0CA | + 3LD9200-5C |
| 3LD2730-0TK11 + 3LD9280-0C | 3LD2730-0TK11 + 3LD9280-0C | + 3LD9200-5C |
| 3LD2830-0TK11 + 3LD9280-0C | 3LD2830-0TK11 + 3LD9280-0C | + 3LD9200-5C |
| 3LD2330-0TK11 + 3LD9240-0C | 3LD2330-0TK11 + 3LD9240-0C | + 3LD9200-5C |
| 3LD2430-0TK11 + 3LD9240-0C | 3LD2430-0TK11 + 3LD9240-0C | + 3LD9200-5C |

| | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|---|------------|--------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
| Terminal covers | | | | | | | | | |
| • Pack of 4 units | | | | | | | | | |
| Number of poles | | Catalog No. | | | | | | | |
|  1-pole | 3LD9201-2A | ■ | | | | | | | |
| | 3LD9221-2A | | ■ | ■ | | | | | |
| | 3LD9251-2A | | | | ■ | | | | |
| | 3LD9281-2A | | | | | ■ | ■ | | |
| | 3LD9241-2A | | | | | | | ■ | ■ |
|  3-pole | 3LD9221-0A | | ■ | ■ | | | | | |
| | 3LD9251-0A | | | | ■ | | | | |
|  4-pole | 3LD9201-1A | ■ | | | | | | | |

18

SWITCHES

Disconnect Switches

3LD switch disconnectors

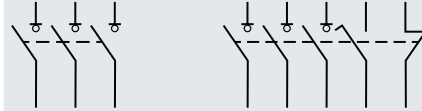
3LD2 EMERGENCY-STOP switches, installation in distribution boards, 25 ... 50 kA_{eff}

3LD2 EMERGENCY-STOP switches, installation in distribution boards



Operating mechanisms, red/yellow

Number of poles 3P



| Uninterrupted current I _u At AC-21A, 380 ... 440 V | Operational power P At AC-23A, 380 ... 440 V | Operational power P At AC-3A, 380 ... 440 V | Without auxiliary switch | 1 NO + 1 NC (standard version) |
|--|---|--|-----------------------------|-----------------------------------|
| Knob-operated mechanisms with masking plate | | | | |
| 16 A | 7.5 kW | 5.5 kW | 3LD2030-0TK13 | 3LD2030-0TK13 + 3LD9200-5C |
| 25 A | 9.5 kW | 7.5 kW | 3LD2130-0TK13 | 3LD2130-0TK13 + 3LD9200-5C |
| 32 A | 11.5 kW | 9.5 kW | 3LD2230-0TK13 | 3LD2230-0TK13 + 3LD9200-5C |
| 63 A | 22 kW | 18.5 kW | 3LD2530-0TK13 | 3LD2530-0TK13 + 3LD9200-5C |
| 100 A | 37 kW | 30 kW | 3LD2730-0TK13 | 3LD2730-0TK13 + 3LD9200-5C |
| 125 A | 45 kW | 37 kW | 3LD2830-0TK13 | 3LD2830-0TK13 + 3LD9200-5C |
| 160 A | 75 kW | 50 kW | 3LD2330-0TK13 | 3LD2330-0TK13 + 3LD9200-5C |
| 250 A | 132 kW | 110 kW | 3LD2430-0TK13 | 3LD2430-0TK13 + 3LD9200-5C |

Scope of supply:

- 3LD23/3LD24 including terminal covers for the infeed side

Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

Accessories

| 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) |
|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|
|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|

Switching contacts for N conductor (4th contact)

| Contacts | Catalog No. | | | | | | | | |
|--|-------------|-------------|------------|------------|---|---|---|---|--|
| | 3LD9220-0C | 3LD9250-0CA | 3LD9280-0C | 3LD9240-0C | | | | | |
| Leading switch-on, lagging switch-off | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |

N/PE terminals

| Contacts | Catalog No. | | | | | | | | |
|--------------|-------------|-------------|------------|------------|---|---|---|---|--|
| | 3LD9200-2C | 3LD9250-2CA | 3LD9280-2C | 3LD9240-2C | | | | | |
| Through-type | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |

Auxiliary switches (standard version)

| Contacts | Contact surface | Catalog No. | | | | | | | | |
|-------------|-----------------|-------------|-------------|------------|---|---|---|---|---|--|
| | | 3LD9200-5C | 3LD9200-5CF | 3LD9200-6C | | | | | | |
| 1 NO + 1 NC | Standard | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| | Gold-plated | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| 2 NO | Standard | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |

Terminal covers

| Number of poles | Catalog No. | | | | | | | | |
|-----------------|-------------|------------|------------|------------|------------|------------|------------|------------|--|
| | 3LD9201-2A | 3LD9221-2A | 3LD9251-2A | 3LD9281-2A | 3LD9241-2A | 3LD9221-0A | 3LD9251-0A | 3LD9201-1A | |
| 1-pole | 3LD9201-2A | ■ | | | | | | | |
| | 3LD9221-2A | | ■ | ■ | | | | | |
| | 3LD9251-2A | | | | ■ | | | | |
| | 3LD9281-2A | | | | | ■ | ■ | | |
| | 3LD9241-2A | | | | | | | ■ | |
| 3-pole | 3LD9221-0A | | ■ | ■ | | | | | |
| | 3LD9251-0A | | | | ■ | | | | |
| 4-pole | 3LD9201-1A | ■ | | | | | | | |

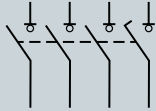
Disconnect Switches

3LD switch disconnectors

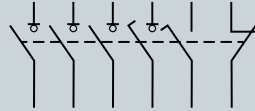
3LD2 EMERGENCY-STOP switches, installation in distribution boards, 25 ... 50 kA_{eff}



3+N



Without auxiliary switch



1 NO + 1 NC (standard version)

| | | |
|-----------------------------|-----------------------------|--------------|
| 3LD2030-1TL13 | 3LD2030-1TL13 | + 3LD9200-5C |
| 3LD2130-0TK13 + 3LD9220-0C | 3LD2130-0TK13 + 3LD9220-0C | + 3LD9200-5C |
| 3LD2230-0TK13 + 3LD9220-0C | 3LD2230-0TK13 + 3LD9220-0C | + 3LD9200-5C |
| 3LD2530-0TK13 + 3LD9250-0CA | 3LD2530-0TK13 + 3LD9250-0CA | + 3LD9200-5C |
| 3LD2730-0TK13 + 3LD9280-0C | 3LD2730-0TK13 + 3LD9280-0C | + 3LD9200-5C |
| 3LD2830-0TK13 + 3LD9280-0C | 3LD2830-0TK13 + 3LD9280-0C | + 3LD9200-5C |
| 3LD2330-0TK13 + 3LD9240-0C | 3LD2330-0TK13 + 3LD9240-0C | + 3LD9200-5C |
| 3LD2430-0TK13 + 3LD9240-0C | 3LD2430-0TK13 + 3LD9240-0C | + 3LD9200-5C |

Disconnect Switches

3LD switch disconnectors

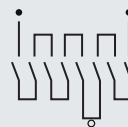
DC isolators, 50 kA_{rms}

DC isolators



Operating mechanisms, black

Number of poles 8P



| Mains voltage | Rated operational current I _e At DC-21A, 800 V DC | Rated operational current I _e At DC-22A, 800 V DC | Without auxiliary switch |
|---------------|---|---|--------------------------|
| 800 V DC | 32 A | 16 A | 3LD2230-8VQ11-0AF6 |

Knob-operated mechanisms

18

SWITCHES








Disconnect Switches

3LD switch disconnectors

Accessories for 3LD2 main control and EMERGENCY-STOP switches

Accessories for 3LD2 main control and EMERGENCY-STOP switches

Additional poles





| | | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | | |
|---|---|--|--------------------|-----------------|--------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|---|
| Switching contacts for N conductor (4th contact) | | | | | | | | | | | | | |
|  | Version | Contacts | Catalog No. | | | | | | | | | | |
| | For front mounting | Leading switch-on, lagging switch-off | 3LD9220-0B | | ■ | ■ | | | | | | | |
| | | | 3LD9250-0BA | | | ■ | | | | | | | |
| | | | 3LD9280-0B | | | | ■ | ■ | | | | | |
| 3LD9240-0B | | | | | | | ■ | ■ | | ■ | | | |
|  | For panel mounting, installation in distribution boards | Leading switch-on, lagging switch-off | 3LD9220-0C | | ■ | ■ | | | | | | | |
| | | | 3LD9250-0CA | | | ■ | | | | | | | |
| | | | 3LD9280-0C | | | | ■ | ■ | | | | | |
| | | | 3LD9240-0C | | | | | | | ■ | ■ | | ■ |
| N/PE terminals | | | | | | | | | | | | | |
|  | For front mounting | Through-type | Version | Contacts | Catalog No. | | | | | | | | |
| | | | 3LD9200-2B | | ■ | | | | | | | | |
| | | | 3LD9220-2B | | | ■ | ■ | | | | | | |
| | | | 3LD9250-2BA | | | | ■ | | | | | | |
| | | | 3LD9280-2B | | | | | ■ | ■ | | | | |
| 3LD9240-2B | | | | | | | | | | ■ | ■ | | |
|  | For panel mounting, installation in distribution boards | Through-type | Version | Contacts | Catalog No. | | | | | | | | |
| | | | 3LD9200-2C | | ■ | | | | | | | | |
| | | | 3LD9220-2C | | | ■ | ■ | | | | | | |
| | | | 3LD9250-2CA | | | | ■ | | | | | | |
| | | | 3LD9280-2C | | | | | ■ | ■ | | | | |
| 3LD9240-2C | | | | | | | | | | ■ | ■ | | |
| Auxiliary switches (standard version) | | | | | | | | | | | | | |
|  | For front mounting | 1 NO + 1 NC, standard 1 NO + 1 NC, gold-plated | Version | Contacts | Catalog No. | | | | | | | | |
| | | | 3LD9200-5B | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | | | 3LD9200-5BF | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
|  | For panel mounting, installation in distribution boards | 1 NO + 1 NC, standard 1 NO + 1 NC, gold-plated 2 NO, standard | Version | Contacts | Catalog No. | | | | | | | | |
| | | | 3LD9200-5C | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| | | | 3LD9200-5CF | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| 3LD9200-6C | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Auxiliary switch for mounting on the front | | | | | | | | | | | | | |
|  | 1 NO + 1 NC | Standard Gold-plated | Version | Contacts | Catalog No. | | | | | | | | |
| | | | 3LD9280-5D | | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | | | 3LD9240-5D | | | | | | | | | ■ | ■ |
| | | | 3LD9280-5DF | | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| 3LD9240-5DF | | | | | | | | | | ■ | ■ | | |

Disconnect Switches

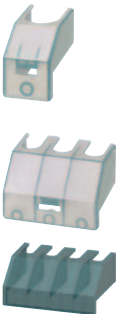


3LD switch disconnectors

Accessories for 3LD2 main control and EMERGENCY-STOP switches

Operating mechanisms

| | | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | |
|--|-----------------------------|-----------------------------|----------------------|--------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|
| Rotary operating mechanisms | | | | | | | | | | | | |
|  <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks Center-hole mounting, including seal and nut Four-hole mounting, including seal | Switch | Mounting | Catalog No. | | | | | | | | | |
| | For main control switches | Center-hole mounting | 3LD9224-1D | ■ | ■ | ■ | | | | | | |
| | | Four-hole mounting | 3LD9224-1B | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | | | 3LD9284-1B | | | | ■ | ■ | ■ | | | |
| | | For EMERGENCY-STOP switches | Center-hole mounting | 3LD9224-3D | ■ | ■ | ■ | | | | | |
| | Four-hole mounting | | 3LD9284-3D | | | | ■ | ■ | ■ | | | |
| | | | 3LD9224-3B | ■ | ■ | ■ | | | | | | |
| | | | 3LD9284-3B | | | | ■ | ■ | ■ | | | |
| Knob-operated mechanisms | | | | | | | | | | | | |
|  <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks Including seal | Switch | Mounting | Catalog No. | | | | | | | | | |
| | For main control switches | Four-hole mounting | 3LD9243-1B | | | | | | | ■ | ■ | |
| | For EMERGENCY-STOP switches | Four-hole mounting | 3LD9243-3B | | | | | | | ■ | ■ | |
| Switching shafts | | | | | | | | | | | | |
|  | Version | Cross-section | Length | Catalog No. | | | | | | | | |
| | For panel mounting | 6 × 6 mm | 300 mm | 3LD9205-0C | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | | 600 mm | 3LD9205-2C | ■ | ■ | ■ | ■ | ■ | ■ | | |
| | | 8 × 8 mm | 300 mm | 3LD9245-0C | | | | | | | ■ | ■ |
| | | | 600 mm | 3LD9245-2C | | | | | | | ■ | ■ |
| Coupling pieces | | | | | | | | | | | | |
|  <ul style="list-style-type: none"> Without ON-lock | Version | Catalog No. | | | | | | | | | | |
| | For panel mounting | 3LD9242-4F | | | | | | | | ■ | ■ | |

Other accessories

| | | | | 3LD20 (16 A) | 3LD21 (25 A) | 3LD22 (32 A) | 3LD25 (63 A) | 3LD27 (100 A) | 3LD28 (125 A) | 3LD23 (160 A) | 3LD24 (250 A) | |
|--|---|--------------------|---|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|---|
| Terminal covers | | | | | | | | | | | | |
|  <ul style="list-style-type: none"> Pack of 4 units | Number of poles | Catalog No. | | | | | | | | | | |
| | 1-pole | 3LD9201-2A | ■ | | | | | | | | | |
| | | 3LD9221-2A | | ■ | ■ | | | | | | | |
| | | 3LD9251-2A | | | | ■ | | | | | | |
| | | 3LD9281-2A | | | | | ■ | ■ | | | | |
| | | 3LD9241-2A | | | | | | | | | ■ | ■ |
| | 3-pole | 3LD9221-0A | | ■ | ■ | | | | | | | |
| | | 3LD9251-0A | | | | ■ | | | | | | |
| | 4-pole | 3LD9201-1A | ■ | | | | | | | | | |
| | Inscription labels | | | | | | | | | | | |
|  <ul style="list-style-type: none"> Pack of 10 units | Inscription | Catalog No. | | | | | | | | | | |
| | German / English (Hauptschalter / Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| | Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ | ■ | ■ | | | |
| Assembly tools | | | | | | | | | | | | |
|  <ul style="list-style-type: none"> For center-hole mounting with nut Pack of 5 units | Switch | Catalog No. | | | | | | | | | | |
| | For main control switches and EMERGENCY-STOP switches | 3LD9256-0A | ■ | ■ | ■ | ■ | | | | | | |

Disconnect Switches

3LD switch disconnectors

System overview of 3LD5 UL main control and EMERGENCY-STOP switches

Basic units for front mounting



3LD5020 (3-pole)



3LD5020 (4-pole)



3LD5420 (3-pole)



3LD5420 (4-pole)

Basic units, panel mounting with direct operating mechanism



3LD5000 (3-pole)



3LD5000 (4-pole)



3LD5400 (3-pole)



3LD5400 (4-pole)

Basic units, panel mounting with door-coupling rotary operating mechanism



3LD5010 (3-pole)



3LD5010 (4-pole)



3LD5410 (3-pole)



3LD5410 (4-pole)

Additional poles and auxiliary switches



N switching contact



N/PE terminals (through-type)



Auxiliary switches (standard version)

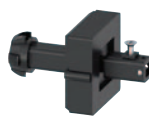


Auxiliary switch for mounting on the front

Operating mechanisms



Rotary operators for four-hole mounting



Coupling heads with and without tolerance compensation



Supplementary handles for UL508A/NFPA79

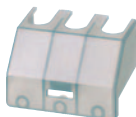


Switching shafts for UL508A/NFPA79

Other accessories



Terminal covers, 1-pole



Terminal covers, 3 and 4-pole

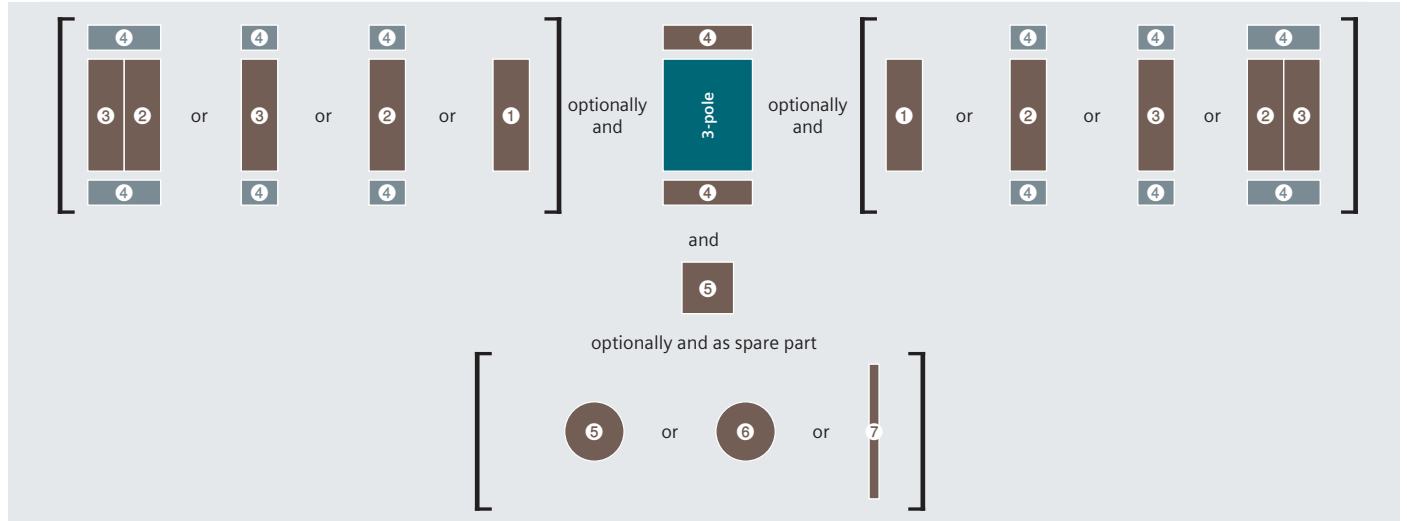


Inscription labels (with and without inscription)

Note:

You will find a detailed range of accessories with the basic units.

Mounting concept and accessories



Legend

- 1 Auxiliary switch
- 2 N switching contact ¹⁾
- 3 N/PE terminal
- 4 Terminal cover
- 5 Rotary operating mechanism, four-hole mounting
- 6 Knob-operated mechanism, four-hole mounting
- 7 Switching shaft (300 oder 600 mm)

¹⁾ The N switching contact 2 first has to be mounted on the basic unit



Main control switches acc. to UL

The certification according to UL489 makes the 3LD5 UL ideal for use as a main control switch for machinery and plants for export to the NAFTA states. The variety of accessories makes it especially suitable as a main disconnect switch for industrial machinery. The switch is also certified according to UL508 and can also be used as a manual motor controller.

Mounting types

Front mounting of basic units



The switches for front mounting are mounted on the inside of covers, side panels or, if applicable, control cabinet doors (depending on the applicable standard and switching function). Installation is achieved by 4-hole mounting of the handle. This switch is especially suitable when door interlocking is not required or is implemented in a different way.

Panel mounting with direct operating mechanism



The switches for panel mounting with direct operating mechanism up to 30 A are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 100 to 160 A (3LD54 ... 3LD58) are exclusively screwed onto mounting panels.

Basic units, panel mounting with door-coupling rotary operating mechanism



The switches for panel mounting up to 30 A (3LD50) are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 100 to 160 A (3LD54 ... 3LD58) are exclusively screwed onto mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. The rotary operating mechanisms are also defeatable, i.e. it is possible to open the control cabinet door with a deliberate action while the switch is in the ON position. To meet the requirement acc. to UL508A/NFPA79, a supplementary handle can be mounted on the switch. Combined with the intermediate handle, the shaft can no longer be removed.

Disconnect Switches

3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, front mounting, SCCR 50 - 65 kA

3LD5 UL main control and EMERGENCY-STOP switches, front mounting

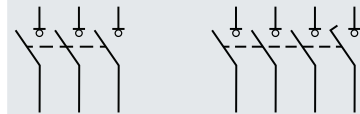


Operating mechanisms, black

Number of poles

3P

3P+N



| Uninterrupted current I_U At AC-21A, 380 ... 440 V | General use acc. UL489/60947-4-1 | Operational power P At AC-23A, 380 ... 440 V | Operating mechanisms, black | |
|---|-------------------------------------|---|-----------------------------|---------------|
| Rotary operating mechanism, four-hole mounting | | | | |
| 32 | 30 | 15 | 3LD5020-0TK11 | 3LD5020-0TL11 |
| 63 | 60 | 30 | 3LD5220-0TK11 | 3LD5220-0TL11 |
| 100 | 100 | 45 | 3LD5420-0TK11 | 3LD5420-0TL11 |
| 125 | 125 | 55 | 3LD5620-0TK11 | 3LD5620-0TL11 |
| 160 | 150 | 75 | 3LD5820-0TK11 | 3LD5820-0TL11 |

Scope of supply:

- Including terminal covers for the infeed side

Accessories for front mounting

| | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 | |
|---|---|------------------------|--------------------|-------|-------|-------|---|
| Switching contacts for N conductor (4th contact) | | | | | | | |
| | Contacts | Catalog No. | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9250-0BA | ■ | | | | |
| | | 3LD9280-0B | | ■ | | | |
| | | 3LD9240-0B | | | ■ | ■ | |
| N/PE terminals | | | | | | | |
| | Contacts | Catalog No. | | | | | |
| | Through-type | 3LD9250-2BA | ■ | | | | |
| | | 3LD9280-2B | | ■ | | | |
| | | 3LD9240-2B | | | ■ | ■ | |
| Auxiliary switches (standard version) | | | | | | | |
| | <ul style="list-style-type: none"> • For mounting on the left and/or right • Lagging switch-on, leading switch-off | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5B | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5BF | ■ | ■ | ■ | ■ |
| Auxiliary switch for mounting on the front | | | | | | | |
| | <ul style="list-style-type: none"> • Mounted on the front of the switch shaft • For long leading times (20 ... 150ms) | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | |
| | 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | | |
| | | | 3LD9240-5D | | | ■ | ■ |
| | | Gold-plated | 3LD9280-5DF | ■ | ■ | | |
| | | 3LD9240-5DF | | | ■ | ■ | |
| Rotary operating mechanisms | | | | | | | |
| | <ul style="list-style-type: none"> • Auxiliary switch for mounting on the front | | | | | | |
| | Version | Catalog No. | | | | | |
| | For main control switches | 3LD9284-1B | ■ | ■ | | | |
| For EMERGENCY-STOP switches | 3LD9284-3B | ■ | ■ | | | | |

Disconnect Switches

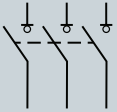
3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, front mounting, SCCR 50 - 65 kA

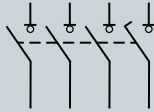


Operating mechanisms, red/yellow

3P



3P+N



| | |
|---------------|---------------|
| 3LD5020-OTK13 | 3LD5020-OTL13 |
| 3LD5220-OTK13 | 3LD5220-OTL13 |
| 3LD5420-OTK13 | 3LD5420-OTL13 |
| 3LD5620-OTK13 | 3LD5620-OTL13 |
| 3LD5820-OTK13 | 3LD5820-OTL13 |

3LD50 3LD52 3LD54 3LD56 3LD58

Knob-operated mechanisms



- Lockable in 0 position with up to 3 padlocks

Version

For main control switches

For EMERGENCY-STOP switches

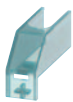
Catalog No.

3LD9243-1B

3LD9284-3B

Terminal covers

- Pack of 4 units



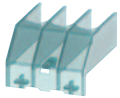
Number of poles

1-pole

3LD9251-2A

3LD9281-2A

3LD9241-2A



3-pole

3LD9251-0A

Inscription labels



- Pack of 10 units

Inscription

German / English (Hauptschalter / Main Switch)

Without inscription

Catalog No.

3LD9286-1A

3LD9286-4A

Disconnect Switches

3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, panel mounting, direct operating mechanism, SCCR 50 ... 65 kA

3LD5 UL main control and EMERGENCY-STOP switches, panel mounting with direct operating mechanism

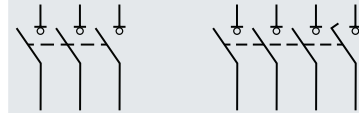


Operating mechanisms, black

Number of poles

3P

3P+N



| Uninterrupted current I_{U} At AC-21A, 380 ... 440 V | General use acc. UL489/508 | Operational power P At AC-23A, 380 ... 440 V | Operating mechanisms, black | |
|--|-------------------------------|---|-----------------------------|---------------|
| Rotary operating mechanism, four-hole mounting | | | | |
| 32 | 30 | 15 | 3LD5000-0TK11 | 3LD5000-0TL11 |
| 63 | 60 | 30 | 3LD5200-0TK11 | 3LD5200-0TL11 |
| 100 | 100 | 45 | 3LD5400-0TK11 | 3LD5400-0TL11 |
| 125 | 125 | 55 | 3LD5600-0TK11 | 3LD5600-0TL11 |
| 160 | 150 | 75 | 3LD5800-0TK11 | 3LD5800-0TL11 |

Scope of supply:

- Including terminal covers for the infeed side

Accessories for panel mounting with direct operating mechanisms

3LD50 3LD52 3LD54 3LD56 3LD58

| Switching contacts for N conductor (4th contact) | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|--|--|------------------------|--------------------|-------|-------|-------|-------|
| | Contacts | Catalog No. | | | | | |
| | Leading switch-on, lagging switch-off | 3LD9250-OCA | ■ | | | | |
| | | 3LD9280-0C | | ■ | | | |
| | | 3LD9240-0C | | | ■ | ■ | ■ |
| N/PE terminals | | | | | | | |
| | Contacts | Catalog No. | | | | | |
| | Through-type | 3LD9250-2CA | ■ | | | | |
| | | 3LD9280-2C | | ■ | | | |
| | | 3LD9240-2C | | | ■ | ■ | ■ |
| Auxiliary switches | | | | | | | |
| | <ul style="list-style-type: none"> • For mounting on the left and/or right • Lagging switch-on, leading switch-off | | | | | | |
| | Contacts | Contact surface | Catalog No. | | | | |
| | 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ |
| | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ |
| Terminal covers | | | | | | | |
| | <ul style="list-style-type: none"> • Pack of 4 units | | | | | | |
| | Number of poles | Catalog No. | | | | | |
| | 1-pole | 3LD9251-2A | ■ | | | | |
| | | 3LD9281-2A | | ■ | | | |
| | | 3LD9241-2A | | | ■ | ■ | ■ |
| | 3-pole | 3LD9251-0A | ■ | | | | |

Disconnect Switches

3LD switch disconnectors

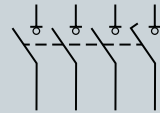
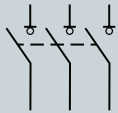
3LD5 UL main control and EMERGENCY-STOP switches, panel mounting, direct operating mechanism, SCCR 50 ... 65 kA



Operating mechanisms, red/yellow

3P

3P+N



3LD5000-0TK13

3LD5000-0TL13

3LD5200-0TK13

3LD5200-0TL13

3LD5400-0TK13

3LD5400-0TL13

3LD5600-0TK13

3LD5600-0TL13

3LD5800-0TK13

3LD5800-0TL13

Disconnect Switches

3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, panel mounting, door-coupling rotary operating mechanism, SCCR 50 ... 65 kA

3LD5 UL main control and EMERGENCY-STOP switches, panel mounting with door-coupling rotary operating mechanism

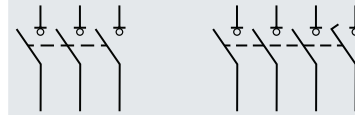


Operating mechanisms, black

Number of poles

3P

3P+N



| Uninterrupted current I_{cu} At AC-21A, 380 ... 440 V | General use acc. UL489/508 | Operational power P At AC-23A, 380 ... 440 V | | |
|--|-------------------------------|---|---------------|---------------|
| Rotary operating mechanism, four-hole mounting | | | | |
| 32 | 30 | 15 | 3LD5010-0TK11 | 3LD5010-0TL11 |
| 63 | 60 | 30 | 3LD5210-0TK11 | 3LD5210-0TL11 |
| 100 | 100 | 45 | 3LD5410-0TK11 | 3LD5410-0TL11 |
| 125 | 125 | 55 | 3LD5610-0TK11 | 3LD5610-0TL11 |
| 160 | 150 | 75 | 3LD5810-0TK11 | 3LD5810-0TL11 |

Scope of supply:

- Including terminal covers for the infeed side
- Defeatable door-coupling rotary operating mechanisms
- Without tolerance compensation

Accessories for panel mounting with door mounted rotary operator

3LD50 3LD52 3LD54 3LD56 3LD58

Switching contacts for N conductor (4th contact)



| Contacts | Catalog No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---------------------------------------|-------------|-------|-------|-------|-------|-------|
| Leading switch-on, lagging switch-off | 3LD9250-0CA | ■ | | | | |
| | 3LD9280-0C | | ■ | | | |
| | 3LD9240-0C | | | ■ | ■ | ■ |

N/PE terminals



| Contacts | Catalog No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|--------------|-------------|-------|-------|-------|-------|-------|
| Through-type | 3LD9250-2CA | ■ | | | | |
| | 3LD9280-2C | | ■ | | | |
| | 3LD9240-2C | | | ■ | ■ | ■ |

Auxiliary switches (standard version)



- For mounting on the left and/or right
- Lagging switch-on, leading switch-off

| Contacts | Contact surface | Catalog No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|-------------|-----------------|-------------|-------|-------|-------|-------|-------|
| 1 NO + 1 NC | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ | ■ |
| | Vergoldet | 3LD9200-5CF | ■ | ■ | ■ | ■ | ■ |

Auxiliary switch for mounting on the front



- Mounted on the front of the switch shaft
- For long leading times (20 ... 150ms)

| Contacts | Contact surface | Catalog No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|-------------|-----------------|-------------|-------|-------|-------|-------|-------|
| 1 NO + 1 NC | Standard | 3LD9280-5D | ■ | ■ | | | |
| | | 3LD9240-5D | | | ■ | ■ | ■ |
| | Gold-plated | 3LD9280-5DF | ■ | ■ | | | |
| | | 3LD9240-5DF | | | ■ | ■ | ■ |

Handles



- Supplied with a masking frame, but without an extension shaft or coupling driver
- Can be locked with up to 3 padlocks

| Labeling | Color | Catalog No. | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|----------|------------|---------------|-------|-------|-------|-------|-------|
| O-I | Gray | 8UD1771-2AD01 | ■ | ■ | | | |
| | | 8UD1731-2AD01 | | | ■ | ■ | ■ |
| | Red/yellow | 8UD1771-2AD05 | ■ | ■ | | | |
| | | 8UD1731-2AD05 | | | ■ | ■ | ■ |

Disconnect Switches

3LD switch disconnectors

3LD5 UL main control and EMERGENCY-STOP switches, panel mounting, direct operating mechanism, SCCR 50 ... 65 kA





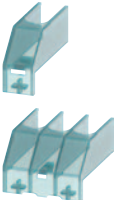


Operating mechanisms, red/yellow

3P

3P+N










| | |
|---------------|---------------|
| 3LD5010-0TK13 | 3LD5010-0TL13 |
| 3LD5210-0TK13 | 3LD5210-0TL13 |
| 3LD5410-0TK13 | 3LD5410-0TL13 |
| 3LD5610-0TK13 | 3LD5610-0TL13 |
| 3LD5810-0TK13 | 3LD5810-0TL13 |

| | | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 | |
|---|--|--------------------|--------------------|-------|-------|-------|-------|-------|---|
| Supplementary handles for door-coupling rotary operating mechanism | | | | | | | | | |
|  | <ul style="list-style-type: none"> For requirements according to UL508A/NFPA79 Can be locked with up to 1 padlocks in 0 position Can only be switched on by deliberate action | | | | | | | | |
| | Labeling | Color | Catalog No. | | | | | | |
| | O-I | Gray | 3LD9287-1C | ■ | ■ | | | | |
| | | Red/yellow | 3LD9247-1C | | | ■ | ■ | | ■ |
| | | 3LD9287-3C | ■ | ■ | | | | | |
| | | 3LD9247-3C | | | ■ | ■ | | ■ | |
| Coupling drivers | | | | | | | | | |
|  | Version | Catalog No. | | | | | | | |
| | With tolerance compensation | 8UD1900-1GA00 | ■ | ■ | | | | | |
| | | 8UD1900-2GA00 | | | ■ | ■ | | ■ | |
| | Without tolerance compensation | 8UD1900-1HA00 | ■ | ■ | | | | | |
| | | 8UD1900-2HA00 | | | ■ | ■ | | ■ | |
| Terminal covers | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 4 units | | | | | | | | |
| | Number of poles | Catalog No. | | | | | | | |
| | 1-pole | 3LD9251-2A | ■ | | | | | | |
| | | 3LD9281-2A | | ■ | | | | | |
| | | 3LD9241-2A | | | ■ | ■ | | ■ | |
| 3-pole | 3LD9251-0A | ■ | | | | | | | |
| Inscription labels | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 10 units | | | | | | | | |
| | Inscription | Catalog No. | | | | | | | |
| | German / English (Hauptschalter / Main Switch) | 3LD9286-1A | ■ | ■ | ■ | ■ | ■ | ■ | |
| | Without inscription | 3LD9286-4A | ■ | ■ | ■ | ■ | ■ | | |
| Switching shafts | | | | | | | | | |
|  | section | Length | Catalog No. | | | | | | |
| | 6 × 6 mm | 300 mm | 3LD9205-0C | ■ | ■ | | | | |
| | | 600 mm | 3LD9205-2C | ■ | ■ | | | | |
| | 8 × 8 mm | 300 mm | 3LD9245-0C | | | ■ | ■ | ■ | |
| | | 600 mm | 3LD9245-2C | | | ■ | ■ | ■ | |

Disconnect Switches

3LD switch disconnectors



Accessories for 3LD5 UL main control and EMERGENCY-STOP switches

| | | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|---|---|--|------------------------|--------------------|-------|-------|-------|-------|
| Additional poles | | | | | | | | |
| Switching contacts for N conductor (4th contact) for front mounting | | | | | | | | |
|  | Contacts | | Catalog No. | | | | | |
| | Leading switch-on, lagging switch-off | | 3LD9250-0BA | ■ | | | | |
| | | | 3LD9280-0B | | ■ | | | |
| | | | 3LD9240-0B | | | ■ | ■ | ■ |
| Switching contacts for N conductor (4th contact) for panel mounting | | | | | | | | |
|  | Contacts | | Catalog No. | | | | | |
| | Leading switch-on, lagging switch-off | | 3LD9250-0CA | ■ | | | | |
| | | | 3LD9280-0C | | ■ | | | |
| | | | 3LD9240-0C | | | ■ | ■ | ■ |
| N/PE terminals for front mounting | | | | | | | | |
|  | Contacts | | Catalog No. | | | | | |
| | Through-type | | 3LD9250-2BA | ■ | | | | |
| | | | 3LD9280-2B | | ■ | | | |
| | | | 3LD9240-2B | | | ■ | ■ | ■ |
| N/PE terminals for panel mounting | | | | | | | | |
|  | Contacts | | Catalog No. | | | | | |
| | Through-type | | 3LD9250-2CA | ■ | | | | |
| | | | 3LD9280-2C | | ■ | | | |
| | | | 3LD9240-2C | | | ■ | ■ | ■ |
| Auxiliary switches (standard version) for front mounting | | | | | | | | |
|  | <ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off | | | | | | | |
| | Contacts | | Contact surface | Catalog No. | | | | |
| | 1 NO + 1 NC | | Standard | 3LD9200-5B | ■ | ■ | ■ | ■ |
| | | | Gold-plated | 3LD9200-5BF | ■ | ■ | ■ | ■ |
| Auxiliary switches (standard version) for panel mounting | | | | | | | | |
|  | <ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off | | | | | | | |
| | Contacts | | Contact surface | Catalog No. | | | | |
| | 1 NO + 1 NC | | Standard | 3LD9200-5C | ■ | ■ | ■ | ■ |
| | | | Gold-plated | 3LD9200-5CF | ■ | ■ | ■ | ■ |
| Auxiliary switch for mounting on the front | | | | | | | | |
|  | <ul style="list-style-type: none"> Mounted on the front of the switch shaft For long leading times (20 ... 150ms) | | | | | | | |
| | Contacts | | Contact surface | Catalog No. | | | | |
| | 1 NO + 1 NC | | Standard | 3LD9280-5D | ■ | ■ | | |
| | | | Gold-plated | 3LD9240-5D | | | ■ | ■ |
| | | | 3LD9280-5DF | ■ | ■ | | | |
| | | | 3LD9240-5DF | | | ■ | ■ | |

Disconnect Switches

3LD switch disconnectors

Accessories for 3LD5 UL main control and EMERGENCY-STOP switches

| Operating mechanisms | | | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
|--|--|--------------------|--------------------|--|-------|-------|-------|-------|-------|
| Rotary operating mechanism for front mounting | | | | | | | | | |
|  | <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks | | | | | | | | |
| | Version | Catalog No. | | | | | | | |
| | For main control switches | 3LD9284-1B | | | ■ | ■ | | | |
| | For EMERGENCY-STOP switches | 3LD9284-3B | | | ■ | ■ | | | |
| Knob-operated mechanism for front mounting | | | | | | | | | |
|  | <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks | | | | | | | | |
| | Version | Catalog No. | | | | | | | |
| | For main control switches | 3LD9243-1B | | | | | ■ | ■ | ■ |
| | For EMERGENCY-STOP switches | 3LD9284-3B | | | | | ■ | ■ | ■ |
| Handles for panel mounting | | | | | | | | | |
|  | <ul style="list-style-type: none"> Supplied with a masking frame, but without an extension shaft or coupling driver Can be locked with up to 3 padlocks | | | | | | | | |
| | Labeling | Color | Catalog No. | | | | | | |
| | O-I | Gray | 8UD1771-2AD01 | | ■ | ■ | | | |
| | | Red/yellow | 8UD1731-2AD01 | | | | ■ | ■ | ■ |
| | | | 8UD1771-2AD05 | | ■ | ■ | | | |
| | | | 8UD1731-2AD05 | | | | ■ | ■ | ■ |
| Supplementary handles for door-coupling rotary operating mechanism | | | | | | | | | |
|  | <ul style="list-style-type: none"> For requirements according to UL508A/NFPA79 Can be locked with up to 1 padlocks in 0 position Can only be switched on by deliberate action | | | | | | | | |
| | Labeling | Color | Catalog No. | | | | | | |
| | O-I | Gray | 3LD9287-1C | | ■ | ■ | | | |
| | | Red/yellow | 3LD9247-1C | | | | ■ | ■ | ■ |
| | | | 3LD9287-3C | | ■ | ■ | | | |
| | | | 3LD9247-3C | | | | ■ | ■ | ■ |
| Coupling drivers for panel mounting with door-coupling rotary operating mechanism | | | | | | | | | |
|  | Version | Catalog No. | | | | | | | |
| | With tolerance compensation | 8UD1900-1GA00 | | | ■ | ■ | | | |
| | | 8UD1900-2GA00 | | | | | ■ | ■ | ■ |
| | Without tolerance compensation | 8UD1900-1HA00 | | | ■ | ■ | | | |
| | | 8UD1900-2HA00 | | | | | ■ | ■ | ■ |
| Other accessories | | | | | 3LD50 | 3LD52 | 3LD54 | 3LD56 | 3LD58 |
| Terminal covers | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 4 units | | | | | | | | |
| | Number of poles | Catalog No. | | | | | | | |
| | 1-pole | 3LD9251-2A | | | ■ | | | | |
| | | 3LD9281-2A | | | | ■ | | | |
| | | 3LD9241-2A | | | | | ■ | ■ | ■ |
| | 3-pole | 3LD9251-0A | | | ■ | | | | |
| Inscription labels | | | | | | | | | |
|  | <ul style="list-style-type: none"> Pack of 10 units | | | | | | | | |
| | Inscription | Catalog No. | | | | | | | |
| | German / English (Hauptschalter / Main Switch) | 3LD9286-1A | | | ■ | | ■ | ■ | ■ |
| | Without inscription | 3LD9286-4A | | | ■ | | ■ | ■ | ■ |
| Switching shafts | | | | | | | | | |
|  | section | Length | Catalog No. | | | | | | |
| | 6 × 6 mm | 300 mm | 3LD9205-0C | | ■ | ■ | | | |
| | | 600 mm | 3LD9205-2C | | ■ | ■ | | | |
| | 8 × 8 mm | 300 mm | 3LD9245-0C | | | | ■ | ■ | ■ |
| | | 600 mm | 3LD9245-2C | | | | ■ | ■ | ■ |

Disconnect Switches

3LD switch disconnectors

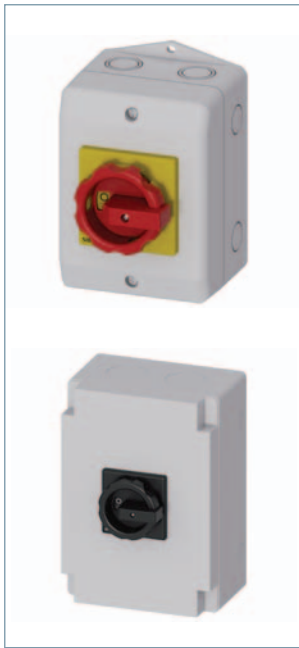
3LD2 Rotary Disconnect Switches in Non-Metallic Enclosures

Description

16–125A non-fusible switches are available in fiberglass reinforced polycarbonate enclosures which are UL approved as Type 12 & 4X and for either indoor or outdoor use. All are horsepower and load break rated. All are panel mounted and are either supplied with factory installed aux. contacts or will accept contact kits. All are compact in size while providing ample wiring space for copper line & load conductors.

Siemens Enclosed Rotary Disconnect Switches

- 16–125A, Non-Fusible
- 600VAC max. rated
- Available in both Type 12 and 4X non-metallic enclosures
- Listed and marked “suitable for use as motor disconnect” per NEC Section 430-109
- Switches are UL listed under File No. E47705 and are CSA certified under File No. 203576
- IEC 60947-3 rated and CE marked (enclosures are IP65 rated)
- HP rated
- 16–63A switches have factory installed ground bars.
- Switches are provided with knockouts
- Padlockable in OFF position with up to (3) padlocks
- Enclosures are constructed from Makrolon 9425.



| Amp Rating | Catalog Number | | Shipping Weight ^① | Horsepower Ratings | | | |
|------------|----------------|--|------------------------------|--------------------|---------|---------|---------|
| | 3 Pole, 3 Wire | 3 Pole, 3 Wire with (1) NO & (1) NC Aux. Contact ^{②③} | | 240V AC | | 480V AC | 600V AC |
| | | | | 1 Phase | 3 Phase | 3 Phase | 3 Phase |

Non-Fusible, Type 1, 4X & 12K[®] with Black Rotary Handle 600V AC Max.

| | | | | | | | |
|-----|--------------------|----------------------------------|---|----|----|----|-----|
| 16 | 3LD2064-0TB51-0US2 | 3LD2064-1GP51-0US2 | 1 | 1½ | 3 | 7½ | 10 |
| 25 | 3LD2164-0TB51-0US2 | 3LD2164-1GP51-0US2 | 1 | 3 | 7½ | 10 | 15 |
| 30 | 3LD2264-0TB51-0US2 | 3LD2264-1GP51-0US2 | 1 | 3 | 7½ | 15 | 20 |
| 30 | — | 3LD2264-1TS51-0US2 ^{④▲} | 1 | 3 | 7½ | 15 | 20 |
| 30 | — | 3LD2264-2TW51-0US2 ^{④▲} | 1 | 3 | 7½ | 15 | 20 |
| 63 | 3LD2565-0TB51-0US2 | 3LD2565-1GP51-0US2▲ | 3 | 10 | 15 | 40 | 50 |
| 100 | 3LD2766-0TB51-0US2 | 3LD2766-1GP51-0US2▲ | 6 | — | 30 | 60 | 75 |
| 125 | 3LD2866-0TB51-0US2 | 3LD2866-1GP51-0US2▲ | 6 | — | 40 | 75 | 100 |

Non-Fusible, Type 1, 4X & 12K[®] with Red and Yellow Rotary Handle 600V AC Max.

| | | | | | | | |
|-----|---------------------|----------------------------------|---|----|----|----|-----|
| 16 | 3LD2064-0TB53-0US2 | 3LD2064-1GP53-0US2 | 1 | 1½ | 3 | 7½ | 10 |
| 25 | 3LD2164-0TB53-0US2 | 3LD2164-1GP53-0US2 | 1 | 3 | 7½ | 10 | 15 |
| 30 | 3LD2264-0TB53-0US2 | 3LD2264-1GP53-0US2 | 1 | 3 | 7½ | 15 | 20 |
| 30 | — | 3LD2264-1TS53-0US2 ^{④▲} | 1 | 3 | 7½ | 15 | 20 |
| 30 | — | 3LD2264-2TW53-0US2 ^{④▲} | 1 | 3 | 7½ | 15 | 20 |
| 63 | 3LD2565-0TB53-0US2 | 3LD2565-1GP53-0US2▲ | 3 | 10 | 15 | 40 | 50 |
| 100 | 3LD2766-0TB53-0US2▲ | 3LD2766-1GP53-0US2▲ | 6 | — | 30 | 60 | 75 |
| 125 | 3LD2866-0TB53-0US2▲ | 3LD2866-1GP53-0US2▲ | 6 | — | 40 | 75 | 100 |

▲ Built to order. Allow 6–8 weeks for delivery.

① Carton quantity of (1). Shipping weight in pounds (lbs.).

② Approved for indoor/outdoor use. No cover interlock provided.

③ Switch is supplied with (2) NO and no NC aux. contacts.

④ Switch is supplied with (4) NO and no NC aux. contacts.

▲ Ground bar is not provided or available.

⑤ Aux. contacts break about 3 Ms before and make about 3 Ms after main switch contacts.

⑥ 6P, 25A, switch with 1 NO & 1 NC aux. contacts and a black operating handle is also available. Order catalog number 3LD2165-4VD51 (Discount Code: Pilot Devices).

Disconnect Switches

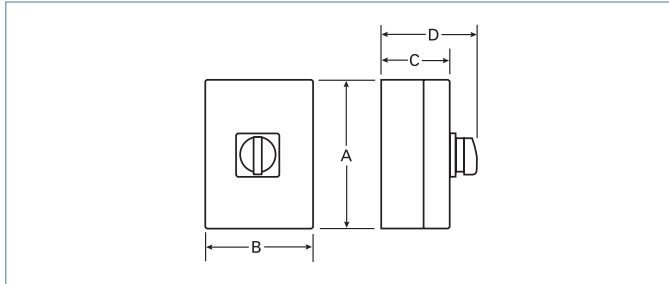
3LD switch disconnectors

3LD2 Rotary Disconnect Switches in Non-Metallic Enclosures

Enclosed Disconnect Switch Dimensions (Inches)

| Catalog Number | Ampere Rating | Dimensions | | | |
|----------------|---------------|-------------------|------|------|------|
| | | A | B | C | D |
| 3LD2064- | 16 | 5.52 ^③ | 3.94 | 3.19 | 4.57 |
| 3LD2164- | 25 | 5.52 ^③ | 3.94 | 3.19 | 4.57 |
| 3LD2264- | 30 | 5.52 ^③ | 3.94 | 3.19 | 4.57 |
| 3LD2565- | 63 | 6.93 ^③ | 5.75 | 4.10 | 5.87 |
| 3LD2766- | 100 | 11.90 | 8.35 | 5.36 | 7.13 |
| 3LD2866- | 125 | 11.90 | 8.35 | 5.36 | 7.13 |

Note: 3LD2 Type switches only have top and bottom end KOs as follows:
16-30A - 1/2" & 3/4", 63A - 3/4" & 1", 100 & 25A - 1" & 1 1/4"



UL and CUL Short Circuit Withstand Ratings^③

| Ampere Rating | Short Circuit Withstand Rating and Fuse Class | | | | |
|---------------|---|-------------------|-------------------|------------------------------------|-------------------|
| | With Line Side Fusing | | | With Load Side Fusing ^① | |
| | 5 kA at 600V Max | 10 kA at 600V Max | 18 kA at 480V Max | 5 kA at 480V Max | 18 kA at 480V Max |
| 16 | RK5 (50A Max) | — | — | — | — |
| 25 & 30 | RK5 (80A Max) | — | — | — | — |
| 63 | RK5 (175A Max) | — | — | — | — |
| 100 & 125 | — | RK5 (200A Max) | — | — | — |

^① For use as supplemental protection on the load side of the branch circuit over current protective device.
^② Factory installed ground lugs supplied as follows: 16-30A #14-10 Cu, 63A #14-8 Cu. Ground lug not provided and is not available on catalog numbers 3LD2264-2TW51-0US2 and 3LD2264-2TW53-0US2.

Wire ranges 60/75°C Cu Only^②

| | |
|--------------|----------------|
| 16 Amps | (1) #18-10 AWG |
| 25-30 Amps | (1) #14-10 AWG |
| 63 Amps | (1) #14-6 AWG |
| 100-125 Amps | (1) #12-1 AWG |

IEC Fuse and Withstand Ratings

| Ampere Rating | gG Fuse Size | Short Circuit Rating |
|---------------|--------------|----------------------|
| 16 | 20A | 5k Arms |
| 25 | 25A | 10k Arms |
| 32 | 50A | 10k Arms |
| 63 | 63A | 15k Arms |
| 100 | 100A | 20k Arms |
| 125 | 125A | 20k Arms |

Accessories^②

| Switch Ampere Rating | Catalog Number | Description |
|----------------------|----------------|-------------|
| 16-30A | 3LD9220-2C | Neutral Kit |
| 63A | 3LD9250-2CA | Neutral Kit |
| 100-125A | 3LD9280-2C | Neutral Kit |

^③ 6.38 inches high including mounting feet.

^④ 7.85 inches high including mounting feet.

^⑤ 16-63A 3LD switches are also rated 5kA at 600VAC max when protected by a 3RV type MSP of the same or lesser ampere rating.

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Features and Ordering Information

Features

- 30-600A, 600VAC and DC ratings
- 240 & 600V AC switches are UL Recognized under file number E121152, Vol. 3 and CSA certified under file number 154852
- 600V DC Photovoltaic switches are UL Recognized under file number E335018, Vol. 3 and are rated to switch 3 separate 600V DC circuits
- Visible blade quick make and break switching action
- Panel and Flange mounted assemblies facilitate installation
- Panel mounted switches are variable depth
- Short circuit rating of 10,000 AIC with class H fuse, and of 200,000 AIC with class R or J fuses. PV switches are rated 10,000 AIC at 600V DC with 600V DC rated class K, J or R fuses.
- Flange mounted handles rated as Type 1, 3R & 12 or 4X are padlockable in the off position with up to (3) padlocks with 5/16 hasps
- Meets UL98 requirements and suitable for both main and branch circuit applications
- A complete line of aux contacts are available
- Load break and horsepower rated
- Defeatable cover interlock standard with all handles
- Meets NFPA79 requirements
- Seismic qualified — complies with the 2010 California Building Code (CBC) — and with the International Building Code (IBC) — Compliance Level SDS = 1.85 g



VBFS361, VBLK1 & VBH1



VBFS363F



VBNFS365, VBLK4 & VBH2

Ordering Information

1. Determine the ratings required (amps, volts, HP, Fusible, NF), the mounting needed (Panel or Flange), and select the appropriate switch.
2. For panel mounted switches with a rigid operating shaft (30-600A), order panel mounted switch, flange mounted operating handle & rigid linkage kit based on depth required.
3. For panel mounted switches with a Max-Flex operator, order panel mounted switch, Max-Flex Handle & Adapter Kit and drive cable.
4. Select accessories if required.

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Selection

Switches—for Standard 600V Max AC or DC Applications

| Switch Ampere Rating | Max. AC Voltage Rating | Catalog Number | Horsepower Rating, Switches and 3-Phase ^④ | | | | | | 600 Volts DC (max) ^④ |
|---|------------------------|----------------|--|-------|--------------|------|--------------|------|---------------------------------|
| | | | 240 Volts AC | | 480 Volts AC | | 600 Volts AC | | |
| | | | Standard | Max. | Standard | Max. | Standard | Max. | |
| Fusible Panel Mounted Variable Depth Switches - 3-Pole^⑤ | | | | | | | | | |
| 30 | 240 | VBFS321 | 3 | 7 1/2 | — | — | — | — | — ^① |
| 60 | 240 | VBFS322 | 7 1/2 | 15 | — | — | — | — | — ^② |
| 30 | 600 | VBFS361 | — | — | 5 | 15 | 7 1/2 | 20 | 15 ^③ |
| 60 | 600 | VBFS362 | — | — | 15 | 30 | 15 | 50 | 30 ^③ |
| 100 | 600 | VBFS363 | — | — | 25 | 60 | 30 | 75 | 50 ^③ |
| 200 | 600 | VBFS364 | — | — | 50 | 125 | 60 | 150 | 50 |
| 400 | 600 | VBFS365 | — | — | 100 | 250 | 125 | 350 | — ^⑨ |
| 600 | 600 | VBFS366 | — | — | 150 | 400 | 200 | 500 | — ^⑨ |
| Non-fusible Panel Mounted Variable Depth Switches - 3-Pole^⑤ | | | | | | | | | |
| 30 | 600 | VBNS361 | — | 10 | — | 20 | — | 30 | 15 ^③ |
| 60 | 600 | VBNS362 | — | 20 | — | 50 | — | 60 | 30 ^③ |
| 100 | 600 | VBNS363 | — | 40 | — | 75 | — | 100 | 50 ^③ |
| 200 | 600 | VBNS364 | — | 60 | — | 125 | — | 150 | 50 |
| 400 | 600 | VBNS365 | — | 125 | — | 250 | — | 300 | — ^⑨ |
| 600 | 600 | VBNS366 | — | 200 | — | 400 | — | 500 | — ^⑨ |
| Fusible Flange Mounted Switches - 3-Pole^{⑥⑦} | | | | | | | | | |
| 30 | 240 | VBFS321F | 3 | 7 1/2 | — | — | — | — | — ^① |
| 60 | 240 | VBFS322F | 7 1/2 | 15 | — | — | — | — | — ^② |
| 30 | 600 | VBFS361F | — | — | 5 | 15 | 7 1/2 | 20 | 15 ^③ |
| 60 | 600 | VBFS362F | — | — | 15 | 30 | 15 | 50 | 30 ^③ |
| 100 | 600 | VBFS363F | — | — | 50 | 60 | 30 | 75 | 50 ^③ |
| 200 | 600 | VBFS364F | — | — | 100 | 125 | 60 | 150 | 50 |
| Non-fusible Flange Mounted Switches - 3-Pole^{⑥⑦} | | | | | | | | | |
| 30 | 600 | VBNS361F | — | 10 | — | 20 | — | 30 | 15 ^③ |
| 60 | 600 | VBNS362F | — | 20 | — | 50 | — | 60 | 30 ^③ |
| 100 | 600 | VBNS363F | — | 40 | — | 75 | — | 100 | 50 ^③ |
| 200 | 600 | VBNS364F | — | 60 | — | 125 | — | 150 | 50 |

Note: Fusible switches include fuse provisions for Class H Fuses. The load base can be moved to pre-drilled holes for Class J Fuses on all 600V switches. If Class R Fuses are required, add a Class R Fuse Clip Kit.

Switches—for Photovoltaic Applications, 600VDC Max.^⑦

(for use in negative ground systems only)

| Switch Ampere Rating | Catalog Number | Rated Isc per NEC Article 690 |
|--|----------------|-------------------------------|
| Fusible Panel Mounted Variable Depth Switches—3 Pole^{⑧⑨} | | |
| 30 | VBFS361PV | 19.2A |
| 60 | VBFS362PV | 38.4A |
| 100 | VBFS363PV | 64.0A |
| Non-Fusible Panel Mounted Variable Depth Switches—3 Pole^⑧ | | |
| 30 | VBNS361PV | 24.0A |
| 60 | VBNS362PV | 48.0A |
| 100 | VBNS363PV | 80.0A |
| Fusible Flange Mounted Variable Depth Switches—3 Pole (Includes Type 1, 3R and 12 Rated Operating Handle)^{⑧⑨} | | |
| 30 | VBFS361FPV | 19.2A |
| 60 | VBFS362FPV | 38.4A |
| 100 | VBFS363FPV | 64.0A |
| Non-Fusible Flange Mounted Variable Depth Switches—3 Pole (Includes Type 1, 3R and 12 Rated Operating Handle)^⑧ | | |
| 30 | VBNS361FPV | 24.0A |
| 60 | VBNS362FPV | 48.0A |
| 100 | VBNS363FPV | 80.0A |

- ① Rated 5 HP at 250V DC.
- ② Rated 10 HP at 250V DC.
- ③ 600V DC & 600V DC horsepower rating shown requires (2) poles to be connected in series.
- ④ Std. - applies when non-time delay fuses are used.
Max. - applies when time delay fuses are used.
- ⑤ Includes line base, load base, operating mechanism and line and load lugs.
Order operating handle and linkage kits from tables on pages 18/81 or 18/82.
- ⑥ Includes line base, load base, operating mechanism line and load lugs plastic operating handle and required linkage.
- ⑦ All photovoltaic switches are rated to be used with 3 separate 600V DC circuits.
- ⑧ Fusible switches accept Class K or R fuses as standard and Class J fuses by relocating the load base.
- ⑨ Rated 250V DC max and 50HP at 250V DC.
- ⑩ Please add letter "M" to the end of catalog number for metal handle.

Cable Kit

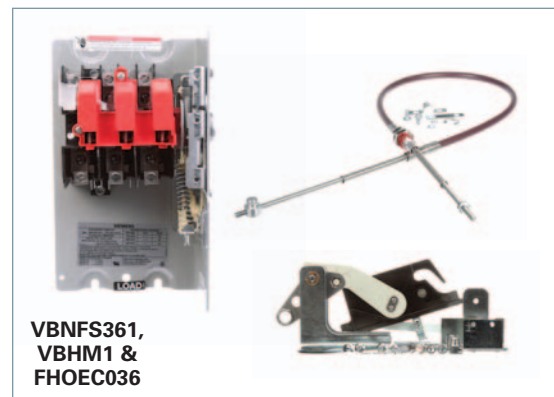
For use with 30-200A panel mounted switches and Max-Flex handle and adapter kit.

| Catalog Number | Description |
|----------------|----------------------|
| FHOEC036 | 36" long drive cable |
| FHOEC048 | 48" long drive cable |

Max-Flex™ Handle and Adapter Kit

(Type 1, 12, 3R & 4X) Use with 30-200A panel mounted switches and cable kit.

| Catalog Number | Operating Handle Description |
|------------------------|-------------------------------|
| Plastic Handles | |
| VBHM1 | 30-200A Type 1, 3R, 12 and 4X |
| Metal Handles | |
| VBHM2 | 30-200A Type 1, 3R and 12 |
| VBHM2X | 30-200A Type 4X |



Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Selection & Accessories

Flange Mounted Operating Handles

For use with Panel Mounted Switches. Plastic handle is included with Flange Mounted Switches as standard.

| Catalog Number | Operating Handle Description |
|------------------------|------------------------------|
| Plastic Handles | |
| VBH1 | 30-200A Type 1, 3R & 12 |
| VBH14X | 30-200A Type 4X |
| Metal Handles | |
| VBH112 | 30-200A Type 1, 3R & 12 |
| VBH14 | 30-200A Type 4X |
| VBH2 | 400A Type 1 & 12 |
| VBH2R | 400 & 600A Type 1, 3R & 12 |
| VBH24X | 400 & 600A Type 4X |



HR612

Class R Fuse Clip Kits

These kits prevent the installation of Class H and K fuses (one kit required per switch).

Class R Fuse Clip Kits

| Catalog Number | Description |
|----------------|-----------------------------|
| HR21 | 30A, 240V Kit (HD only) |
| HR612 | 30A, 600V Kit/60A, 240V Kit |
| HR62 | 60A, 600V Kit |
| HR63 | 100A Kit |
| HR64 | 200A Kit |
| HR656 | 400A/600A Kit |

Internal Door Latch Kits

For use with enclosures with door mounted latching bar. Required when a flange mounted switch is mounted in a Hoffmann or Rittal enclosure provided with an AB cutout.

| Catalog Number | Description |
|----------------|---|
| DKR2 | 2 point (for use with enclosures less than 40" high) |
| DKR3 | 3 point (for use with enclosures 40" or larger in height) |

Rigid Linkage Kits

For use with Panel Mounted Switches. Not required for Flange Mounted Switches.

| Catalog Number | Switch Ampere Rating | Enclosure Depth ^① | |
|----------------|----------------------|------------------------------|-------------------|
| | | Min | Max. |
| VBLK1 | 30-200 | 6.94 ^② | 6.94 ^② |
| VBLK2 | 30-200 | 6.94 ^② | 19.0 |
| VBLK3 | 400 & 600 | 9.00 | 8.75 |
| VBLK4 | 400 & 600 | 9.00 | 19.0 |



HT63

Class T Fuse Adapter Kits

100-600A fusible switches are field convertible to accept Class T fuses. 400-600A switches are field convertible to accept Class T fuses by moving the load base to a pre-drilled T fuse position.

Class T Fuse Adapter Kits^③

| Catalog Number | Description |
|----------------|----------------|
| HT23 | 100A, 240V Kit |
| HT63 | 100A, 600V Kit |
| HT24 | 200A, 240V Kit |
| HT64▲ | 200A, 600V Kit |

Class J Fuse Provisions

All 30-600A, 600V fusible switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position.

Window Kits (Type 1, 12, 3R and 4x)

Allows viewing of visible blades and of indicating fuses through 200A.

| Catalog Number | Description |
|----------------|----------------------|
| VBWK1 | 30A Window Kit |
| VBWK2 | 60 & 100A Window Kit |
| VBWK3 | 200-600A Window Kit |

NEW Quick Connects

They provide two point control power take-off capability and are normally used on two poles on the line side when it is required to have control power available when the switch is in the OFF position. They provide a mounting provision for standard 1/4" quick connect terminal. Installed in the line or load side. 30A VBII switches have lugs UL listed to accept (2) wires per pole as standard so a 30A kit is not required.

| Catalog Number | Description |
|----------------|-------------------------------|
| HCQ62 | 60A 2 wire quick connect kit |
| HCQ63 | 100A 2 wire quick connect kit |
| HCQ64 | 200A 2 wire quick connect kit |



HN612

Neutral Kits^④

Standard Neutral Kits can be field installed in 30-100A switches.

Neutral Kits

| Switch Ampere Rating | Kit Catalog Number |
|----------------------|--------------------|
| 30A 600V, 60A 240V | HN612 |
| 60A, 600V & 100A | HN623 |

200% Neutral Kits^④

UL listed 200% Neutrals are available on 60 & 100A switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

200% Neutral Kits

| Switch Ampere Rating | Kit Catalog Number | Wire Range Line & Load Lugs (Cu/Al) |
|----------------------|--------------------|-------------------------------------|
| 60 & 100A | HN263 | (2) #14-1/0 AWG |

▲ Built to order. Allow 6-8 weeks for delivery.
 ① Dimensions (min. & max.) from enclosure mounting pan to outside surface of enclosure handle mounting flange.

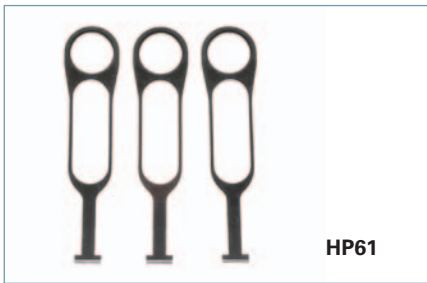
② 7.12 for 200A switches.
 ③ One kit per pole required.

④ UL approved (not CSA certified).

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Accessories



Auxiliary Contacts

The auxiliary contacts are available in 1 normally open and 1 normally closed or 2 normally open and 2 normally closed configurations. Siemens offers a PLC Auxiliary Switch (30-200A) that has very low resistance for low voltage and current typical in PLC circuits. All auxiliary contacts make after and break before main switch contacts.

| Switch Ampere Rating | Aux. Switch Catalog Number | Kit Ampere Rating | | | Kit Horsepower Rating | | |
|----------------------|----------------------------|-------------------|--------------|-------------|-----------------------|--------------|-------------|
| | | 125V AC Max. | 250V AC Max. | 28V DC Max. | 125V AC Max. | 250V AC Max. | 28V DC Max. |

With 1 NO & 1 NC Isolated Contacts

| | | | | | | | |
|---------|----------|----|----|---|-----|-----|---|
| 30-200 | HA161234 | 10 | 10 | — | 1/2 | 3/4 | — |
| 400-600 | HA165678 | 10 | 10 | — | 1/2 | 3/4 | — |

With 2 NO & 2 NC Isolated Contacts

| | | | | | | | |
|---------|----------|----|----|---|-----|-----|---|
| 30-200 | HA261234 | 10 | 10 | 7 | 1/2 | 3/4 | — |
| 400-600 | HA265678 | 10 | 10 | 7 | 1/2 | 3/4 | — |

Low Current PLC Type with 1 NO & 1 NC Gold Plated Contacts

| | | | | | | | |
|---------|----------|----|----|---|-----|-----|---|
| 30-200 | HA361234 | 10 | 10 | — | 1/2 | 3/4 | — |
| 400-600 | HA365678 | 10 | 10 | — | 1/2 | 3/4 | — |

Fuse Puller Kits

Fuse Puller Kits are field installable in 30-100A Type VBII Heavy Duty Switches (one kit required per 3-pole switch).

| Switch Ampere Rating | Fuse Puller Kit Catalog Number |
|----------------------|--------------------------------|
| 30 | HP61 |
| 60 | HP62▲ |
| 100 | HP63▲ |

Copper Lug Kits

All switches are UL approved to accept field installed copper lug kits.

| Switch Ampere Rating | Copper Lug Catalog Number | Description |
|----------------------|---------------------------|------------------------------------|
| 30-60 | HLC612 | (9) Lugs/Kit #14-4 AWG Cu |
| 100 | HLC63▲ | (9) Lugs/Kit #14-1/0 AWG Cu |
| 200 | HLC64▲ | (9) Lugs/Kit #6 AWG-300 Kcmil Cu |
| 400-600A | HLC65678 | (1) Lugs/Kit #1/0 AWG-600 Kcmil Cu |

Equipment Ground Kits

Equipment Ground Lug Kits are available for all switches.

| Switch Ampere Rating | Catalog Number | Number of Terminals | Wire Range Per Terminal (Cu/Al) |
|----------------------|----------------|---------------------|---------------------------------|
| 30-200 | HG61234 | 2 | #14-4 AWG |
| 400 & 600 | HG656 | 4 | #6 AWG-250 Kcmil |

NEW Internal Shield Kits (for fusible switches)

Kits provide a "skirt" that encloses the VBII switch and also a clear plastic inner door to prevent accidental contact with live parts. Test probe holes are provided and fuses can be replaced without removal of kit.

| Switch Ampere Rating | Shield Kit Catalog Number |
|----------------------|---------------------------|
| 30A | HSK61 |
| 60-100A | HSK623 |
| 200A | HSK64 |

▲ Built to order. Allow 6-8 weeks for delivery.

Disconnect Switches

Type VBII (30-600A) with Flange Mounted Operating Handle

Lug Wire Ranges & Dimensions

Lugs

30 & 60A switches are suitable for use with 60° or 75°C wire. 100–600A switches are suitable for use with 75°C rated wire. All switches are supplied with factory installed line and load lugs.

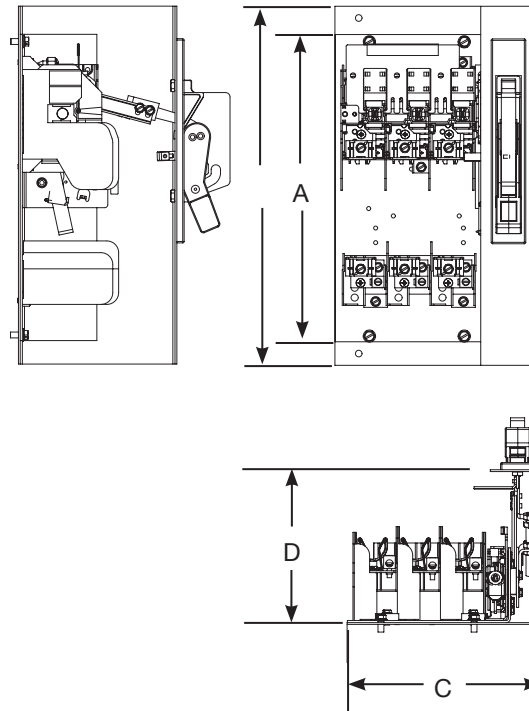
Wire Ranges (Line, Load and Standard Neutral)

| Switch Ampere Rating | UL Approved Wire Range | Lug Wire Range |
|----------------------|--|---|
| 30 | #14-6 AWG (Cu/Al) | #14-2 AWG (Cu/Al) |
| 60 | #14-2 AWG (Cu/Al) | #14-2 AWG (Cu/Al) |
| 100 | #14-1/0 AWG (Cu/Al) | #14-1/0 AWG (Cu/Al) |
| 200 | #6 AWG-300 Kcmil (Cu/Al) | #6 AWG-300 Kcmil (Cu/Al) |
| 400 | 1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al) | (1) 1/0 AWG-750 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al) |
| 600 | (2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 -250 Kcmil (Cu/Al) | (2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 AWG-250 Kcmil (Cu/Al) |

Approximate Dimensions

Mounting bracket shown with handle installed is supplied with Flange Mounted Switches only. All Panel Mounted Switches have a "L" shaped mounting pan with a line base, load base (if fusible) and mechanism installed.

| Catalog Number | Dimensions | | | | |
|------------------------------------|------------|---------------|----------------|---------|---------|
| | A | B | C [Ⓞ] | D (min) | D (max) |
| Fusible, Panel Mounted | | | | | |
| VBFS321 | 11.88 | N/A | 7.47 | 6.94 | 19 |
| VBFS322 | 13.12 | N/A | 8.50 | 6.94 | 19 |
| VBFS361, VBFS361PV | 11.88 | N/A | 7.47 | 6.94 | 19 |
| VBFS362, VBFS362PV | 13.12 | N/A | 8.50 | 6.94 | 19 |
| VBFS363, VBFS363PV | 13.12 | N/A | 8.50 | 6.94 | 19 |
| VBFS364 | 17 | N/A | 12.33 | 7.12 | 19 |
| VBFS365 | 26.25 | N/A | 16.50 | 8.63 | 19 |
| VBFS366 | 26.25 | N/A <td 16.50 | 8.63 | 19 | |
| Non-fusible, Panel Mounted | | | | | |
| VBNFS361, VBNFS361PV | 9.79 | N/A | 7.47 | 6.94 | 19 |
| VBNFS362, VBNFS362PV | 9.79 | N/A | 8.50 | 6.94 | 19 |
| VBNFS363, VBNFS363PV | 9.79 | N/A | 8.50 | 6.94 | 19 |
| VBNFS364 | 10.77 | N/A | 12.33 | 7.12 | 19 |
| VBNFS365 | 13 | N/A | 16.50 | 8.63 | 19 |
| VBNFS366 | 13 | N/A | 16.50 | 8.63 | 19 |
| Fusible, Flange Mounted | | | | | |
| VBFS321F | 11.88 | 14.08 | 7.47 | 7.27 | N/A |
| VBFS322F | 13.12 | 15.83 | 8.85 | 7.27 | N/A |
| VBFS361F, VBFS361FPV | 11.88 | 14.08 | 7.47 | 7.27 | N/A |
| VBFS362F, VBFS362FPV | 13.12 | 15.83 | 8.85 | 7.27 | N/A |
| VBFS363F, VBFS363FPV | 13.12 | 15.83 | 8.85 | 7.27 | N/A |
| VBFS364F | 17 | 18.20 | 12.68 | 7.57 | N/A |
| Non-fusible, Flange Mounted | | | | | |
| VBNFS361F, VBNFS361FPV | 9.79 | 11.78 | 7.47 | 7.27 | N/A |
| VBNFS362F, VBNFS362FPV | 9.79 | 11.78 | 8.85 | 7.27 | N/A |
| VBNFS363F, VBNFS363FPV | 9.79 | 11.78 | 8.85 | 7.27 | N/A |
| VBNFS364F | 10.77 | 11.97 | 12.68 | 7.57 | N/A |



[Ⓞ] Dimension C for panel mounted switches indicates the minimum width from the left hand edge of the switch mounting pan to the right hand inside surface of the enclosure.

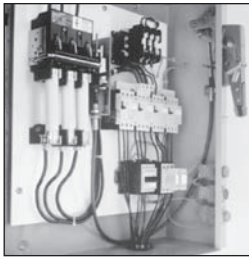
Disconnect Switches

Type MCS (30-200A) — Switches, Fuse and No Fuse Kits

Selection

Features

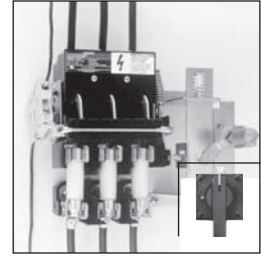
- 30, 60, 100 and 200 Ampere Switches
- UL Recognized (file # E121152 vol. 1 & 2) and CSA Certified
- Simple Mounting — with an integral switch and over center mechanism
- Horsepower & load break rated
- Compact Size
- Visible Blade Contacts
- Rugged Construction — with a short circuit current rating of 10,000 amps with Class H or 200,000 amps at 600V maximum AC, when fused with Class R or Class J fuses
- Available with three operator handle options, allowing flexible placement of switch
- Field Installable Auxiliary Contacts
- Flexible Fuse Class Configurations
- Flange mounted handles meet NFPA79 requirements



Type MCS Disconnect Switch with Max-Flex™ handle operator



Type MCS Disconnect Switch with fixed-depth, flange-mounted handle



Type MCS Disconnect Switch with rotary handle

Ordering Information

- Select the basic switch size you need (30, 60, 100 or 200 ampere).
- Check the switch selected against the maximum horsepower rating required for our application. "L" or "R" suffix on switch catalog numbers denotes left or right-handed mechanism drive.
- Choose either fuse or no fuse kit from chart below.
- Check "Minimum Dimensions" on page 18/86 for installation space requirements.
- Select from the list of handle operators, the type which best suits your application. Handle operators can be selected from the next page.

Basic Switches

| Switch Ampere Rating | Maximum Voltage Rating | Catalog Number Right Hand | Catalog Number Left Hand | Maximum Horsepower Rating, 3 Phase ^① | | | | | | 250 Volts DC (max) ^② |
|----------------------|------------------------|---------------------------|--------------------------|---|-----------------|---------------|-----------------|---------------|-----------------|---------------------------------|
| | | | | 240 Volts AC | | 480 Volts AC | | 600 Volts AC | | |
| | | | | Standard Fuse | Time Delay Fuse | Standard Fuse | Time Delay Fuse | Standard Fuse | Time Delay Fuse | |
| 30 | 600 | MCS603R | MCS603L | 3 | 7½ | 5 | 15 | 7½ | 20 | 5 |
| 60 | 600 | MCS606R | MCS606L | 7½ | 15 | 15 | 30 | 15 | 50 | 10 |
| 100 | 600 | MCS610R | MCS610L▲ | 15 | 30 | 25 | 60 | 30 | 75 | 20 |
| 200 | 600 | MCS620R | MCS620L▲ | 25 | 60 | 50 | 125 | 60 | 150 | 40 |

Fuse And No Fuse Kits (Includes load base plus line and load fuse clips)^①

| Basic Switch Ampere Rating | Switch Catalog Number | Kit Description | No Fuse Kits | | For Class H | For Class J | For Class R | Lug Wire Size | |
|----------------------------|-----------------------|-----------------|----------------|----------------------|-----------------------------|-----------------------------|-----------------------------|---------------------|---------|
| | | | Standard | Cu Only ^② | | | | | |
| | | | Catalog Number | Catalog Number | Catalog Number ^① | Catalog Number ^① | Catalog Number ^① | | |
| 30 | MCS603R or MCS603L | No Fuse | TMK606 | — | — | — | — | #14 to #4 AWG Cu/Al | |
| | | 30A, 250V | — | — | FCK203▲ | — | FCRK203 | | |
| | | 30A, 600V | — | — | FCK206 | — | FCJK603 | | FCRK206 |
| | | 60A, 250V | — | — | FCK206 | — | — | | FCRK206 |
| 60 | MCS606R or MCS606L | 60A, 600V | — | — | FCK606 | — | FCJK606 | FCRK606 | |
| | | No Fuse | TMK606 | — | — | — | — | — | |
| | | 60A, 250V | — | — | FCK206 | — | — | FCRK206 | |
| | | 60A, 600V | — | — | FCK606 | — | FCJK606 | FCRK606 | |
| 100 | MCS610R or MCS610L | 100A, 250V | — | — | OFCK661▲ | — | OFCK661▲ | ③ | |
| | | 100A, 600V | — | — | OFCK661▲ | — | OFCK661▲ | ③ | |
| | | 100A, 250V | — | — | OFCK661▲ | — | OFCK661▲ | ③ | |
| | | 200A, 250V | — | — | OFCK661▲ | — | OFCK661▲ | ③ | |
| 200 | MCS620R or MCS620L | 200A, 600V | — | — | OFCK661▲ | — | OFCK661▲ | ③ | |
| | | No Fuse | TMK620 | TMK620C▲ | — | — | — | — | |
| | | 200A, 250V | — | — | FCK620 | — | — | — | |
| | | 200A, 600V | — | — | FCK620 | — | — | — | |

▲ Built to order. Allow 6–8 weeks for delivery.

① For "copper only" connectors, order as follows:

Fusible—order standard switch, standard fuse kit and copper only no fuse kit.

Non-Fusible—order standard switch and copper only no fuse kit.

② Includes both line and load lugs.

③ For Class R fuses order Class H kit from this table and the Class R conversion kit from the next page.

④ HP ratings for time delay fuses and for 250V DC also apply to Non-fusible switches.

Disconnect Switches

Type MCS (30-200A)

Accessories

Auxiliary Switch Kits

| Switch Catalog Number | Contact Arrangement | |
|-----------------------|--------------------------|--------------------------|
| | 1 NO/1 NC Catalog Number | 2 NO/2 NC Catalog Number |
| MCS603R | MCSAKR136 | MCSAKR236 |
| MCS603L | MCSAKL136 | MCSAKL236▲ |
| MCS606R | MCSAKR136 | MCSAKR236 |
| MCS606L | MCSAKL136 | MCSAKL236▲ |
| MCS610R | MCSAK116 | MCSAK216 |
| MCS610L | MCSAK116 | MCSAK216 |
| MCS620R | MCSAK126 | MCSAK226 |
| MCS620L | MCSAK126 | MCSAK226 |

Class R Fuse Conversion Kits

| Fuse Clip Rating | Catalog Number |
|------------------|----------------|
| 100A, 600V | SSRK33 |
| 200A, 600V | SSRK34 |

Fuse Ejector Kits

| Switch Catalog Number | Fuse Ejector Kit Catalog Number |
|-----------------------|---------------------------------|
| MCS610 | FE100▲ |
| MCS620 | FE200▲ |

Handle Operators

Fixed Depth, Flange Mounted, Types 1, 3, 3R, 12^{①④}

| Switch Catalog Number | Complete Handle Mechanism | Handle Only | Switch Operator Only |
|-----------------------|---------------------------|----------------|----------------------|
| | Catalog Number | Catalog Number | Catalog Number |
| MCS603R | FDFS06R | FDH10 | FDS06R |
| MCS603L | FDFS06L | FDH10 | FDS06L |
| MCS606R | FDFS06R | FDH10 | FDS06R |
| MCS606L | FDFS06L | FDH10 | FDS06L |
| MCS610R | FDFS06R | FDH10 | FDS06R |
| MCS610L | FDFS06L | FDH10 | FDS06L |
| MCS620R | FDFS20R | FDH20 | FDS20R |
| MCS620L | FDFS20L | FDH20 | FDS20L |

Variable Depth, Flange Mounted Max-Flex™, Types 1, 3, 3R, 12^②

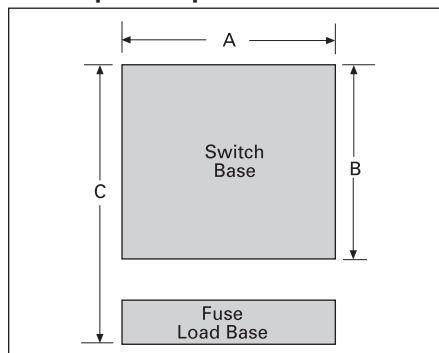
| Switch Catalog Number | Complete Handle Mechanism | Handle Only | Switch Operator Only | Cable Only ^③ |
|-----------------------|---------------------------|----------------|----------------------|-------------------------|
| | Catalog Number | Catalog Number | Catalog Number | Catalog Number |
| MCS603R | FHOS06036R | FHOHS | FHOS06R | FHOEC036 |
| MCS603L | FHOS06036L | FHOHS | FHOS06L | FHOEC036 |
| MCS606R | FHOS06036R | FHOHS | FHOS06R | FHOEC036 |
| MCS606L | FHOS06036L | FHOHS | FHOS06L | FHOEC036 |
| MCS610R | FHOS06036R | FHOHS | FHOS06R | FHOEC036 |
| MCS610L | FHOS06036L | FHOHS | FHOS06L | FHOEC036 |
| MCS620R | FHOS20036R | FHOHS | FHOS20R | FHOJC036 |
| MCS620L | FHOS20036L | FHOHS | FHOS20L | FHOJC036 |

Variable Depth Rotary, Through-The-Door-Mounted, Types 1, 12^{④⑤}

| Variable Depth | | | | Shaft Only Variable Depth |
|----------------|-----------|-------|--------|---------------------------|
| MCS603R | CRHOS06VD | CRHOH | RHOS06 | RHOSVD |
| MCS606R | CRHOS06VD | CRHOH | RHOS06 | RHOSVD |
| MCS610R | CRHOS06VD | CRHOH | RHOS06 | RHOSVD |
| MCS620R | CRHOS20VD | RHOH | RHOS20 | RHOSVD |

MCS Disconnect Switch Panel Space Requirements

Panel Space Requirements



Minimum Dimensions (inches*)

| Switch Catalog Number | Size | "A" | "B" | "C" | Fuse Class |
|-----------------------|-----------|------|------|-------|------------|
| MCS603 | 30A/240V | 6.13 | 5.52 | 8.11 | H, K, R |
| | 30A/600V | 6.13 | 5.52 | 10.11 | H, K, R |
| | 30A/600V | 6.13 | 5.52 | 8.48 | J |
| MCS606 | 60A/240V | 6.13 | 5.52 | 7.86 | H, K, R |
| | 60A/600V | 6.13 | 5.52 | 10.38 | H, K, R |
| | 60A/600V | 6.13 | 5.52 | 8.35 | J |
| MCS610 | 100A/240V | 7.38 | 7.59 | 11.85 | H, K, R |
| | 100A/600V | 7.38 | 7.59 | 13.85 | H, K, R |
| | 100A/600V | 7.38 | 7.59 | 10.6 | J |
| MCS620 | 200A/240V | 9.17 | 9.00 | 14.7 | H, K, R |
| | 200A/600V | 9.17 | 9.00 | 17.2 | H, K, R |
| | 200A/600V | 9.17 | 9.00 | 13.32 | J |

"A" – Dimension is measured from each cross bail pin.

"B" – Dimension is measured from line side barrier to load side barrier.

"C" – Dimension is measured from line side terminal of switch to load side terminal of fuse load base.

- ▲ Built to order. Allow 6-8 weeks for delivery.
- ① For Type 4 and 4X applications, order handle only Catalog Number 100A - FDH104 200A - FDH204
- ② For Type 4 and 4X applications, order handle only Catalog Number FHOHS4

- ③ Standard cable length is 36 inches. Alternate lengths are available as follows:

| Length | Amps | Cat. No. |
|--------|--------|----------|
| 48" | 30-100 | FHOEC048 |
| 60" | 30-100 | FHOEC060 |
| 48" | 200 | FHOJC048 |
| 60" | 200 | FHOJC060 |

- ④ For Type 4 and 4X applications, order handle only Catalog Number RHOSH4
- ⑤ For Type 3 and 3R applications, order handle only Catalog Number RHOH
- ⑥ Min. enclosure depth from mounting pan to handle mounting surfaces: 30-100A 6.44 inches
200A 10.93 inches
- *For millimeters multiply inches by 25.4.

Type CFS Compact Fusible Switches

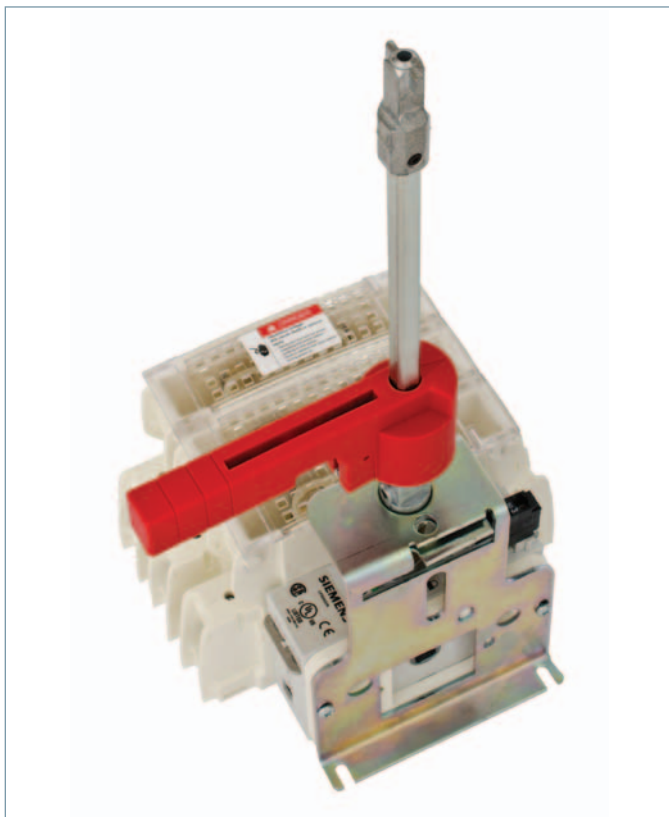
Description

Siemens Type CFS compact fusible switches meet UL 98 requirements and can be used in either service entrance or branch circuit applications. 30-800A, 3 pole switches are offered and are all rated 600V AC maximum. 30A switches are available with provisions for either Class CC or J fuses. 60A and larger switches provided with Class J fuse provisions can be used in non-fusible applications with field installable no-fuse kits.

All are open style, designed to be panel mounted and are UL listed under file number #E121152 or #E68312 and CSA certified under file number #222227. A variety of door mounted rotary operators are available with Type 1, 3R, 12 or 4/4X ratings.

NFPA79 Kits

CFSNFPA1 AND CFSNFPA2N kits provide an internal handle and padlocking means to comply with article 5.3.4.2 of the NFPA-2002 standard.



Catalog Numbering System

CFS Switches

Compact Fusible Switch

CFS 3 6 1 J 5 N

- Number of poles 3 = 3
- Max. Voltage Rating 6 = 600V
- Ampere rating
 - 1 = 30A
 - 2 = 60A
 - 3 = 100A
 - 4 = 200A
 - 5 = 400A
 - 6 = 600A
 - 7 = 800A
- Fuse provisions type
 - C = Class CC
 - J = Class J with right hand mechanism
 - JL = Class J with left hand mechanism
 - L = Class L with right hand mechanism
- Max. AIC rating
 - 5 = 100kA
 - Omit = 200kA J fused
- Version
 - N = New size reduced version
 - N1 = New 100kA 60A switch

Operating Handles

CFS type handle

CFSH 10 R 12 N

- Shaft cross section
 - 5 = 5 mm
 - 10 = 10 mm
 - 12 = 12 mm
- Handle color and length
 - B = Black & blue, short
 - R = Red & yellow, short
 - BL = Black & blue, long
 - RL = Red & yellow, long
- NEMA type
 - 12 = 1, 3R and 12
 - 4 = 1, 3R, 12 and 4/4X
- Version
 - N = New version

CFS Operating Shafts

CFS type shaft

CFSS 10 200 H N

- Shaft cross section
 - 5 = 5 mm
 - 10 = 10 mm
 - 12 = 12 mm
- Shaft length
 - 200 = 200 mm
 - 400 = 400 mm
- Switch compatibility
 - Omit = 30A, 100kA
 - H = 100 or 200 kA
- Version
 - N = New version

Disconnect Switches

Type CFS Compact Fusible Switches

Features and Ordering Information

Features

- 30 - 800A ratings
- UL Listed under file #E121152 & CSA Certified under file #222227
- Door mounted rotary handles with defeatable cover interlock
- Meets UL requirements for both main and branch circuit applications
- Compact size
- 100kA with Class CC fuses or up to 200kA with Class J fuses
- Load break and horsepower rated
- Quick make and break operation
- All handles are padlockable with up to (3) padlocks with 5/16" hasps in the OFF position
- Catalog numbers CFS361C5 & CFS361J5 can be DIN-rail mounted and can be either front or side operated with standard rotary handles..
- All CFS part numbers ending in N can be either front or side operated with standard rotary handles.
- Handles are available in Type 1, 3R, 4/4X & 12 ratings
- NFPA 79 field installed kits are available
- 30-400A, 200kA switches are provided with quick connect terminal provisions for voltage sensing or for 10A max. control circuits



Ordering information

1. Select the panel mounted switch required based on Ampere, HP and AIC requirements. Switches with a right hand mechanism are standard, 30-100A switches with a left hand mechanism are available.
2. Select handle based on environmental rating required.
3. Select operating shaft (200 or 400mm in length). For enclosure depths of 9.0" or less from panel mounting surface to inside of door use 200mm long shafts. For deeper enclosures use 400mm long shafts. 30A 100kA switches can be used in 10" deep enclosures (panel to inside of door) with 200mm shaft and CFSH5N handles.
4. Line & load lugs are provided as standard on 30-100A switches. Terminal kits are available for 200-800A switches if needed.
5. Auxiliary contact are available if needed as follows. 30A switch CFS361J5 will accept up to (2) aux contacts without an aux contact holder. If more than (2) aux contacts are required order aux contacts PLUS aux contact holder kit CFSAuxH1. All other switches will accept up to (4) aux contacts.
6. 30-100A switches are designed to prevent inadvertent contact with live parts and shields are not required. 200 & 400A switches are not supplied with terminal shields. They are available as field installed kits for both line and load terminals. 400-800A switches are supplied as standard with line shields and terminal shroud kits are available for the load side.

Note: Be sure to check shaft and handle compatibility with the switch selected by using information provided in the selection tables.

Type CFS Compact Fusible Switches

Shaft and Handle Selection

Fusible switches, 3-pole 600V AC Max. 30-100A & 600-800A switches are also rated 250V DC Max when poles are field connected in series^⑤

| Switch Ampere Rating | Catalog Number | Fuse Provisions Provided | Max Horsepower Ratings | | | | AC Short Circuit Rating |
|----------------------|----------------|--------------------------|------------------------|------------|------------|---------|-------------------------|
| | | | 240V 3Ø AC | 480V 3Ø AC | 600V 3Ø AC | 250V DC | |

Standard – With Right Hand Mounted Mechanism

| | | | | | | | |
|------------------|-----------------------|----------|-----|-----|-----|-----------------|-------|
| 30 ^① | CFS361C5 | Class CC | 7.5 | 15 | 20 | 5 ^③ | 100kA |
| 30 ^① | CFS361J5 | Class J | 7.5 | 15 | 20 | 5 ^③ | |
| 30 ^① | CFS361JN | Class J | 7.5 | 15 | 20 | 5 ^③ | |
| 60 ^① | CFS362JN1 | Class J | 15 | 30 | 50 | 10 ^③ | 100kA |
| 60 ^① | CFS362JN | Class J | 15 | 30 | 50 | 10 ^③ | 200kA |
| 100 ^① | CFS363JN | | 30 | 60 | 75 | 20 ^③ | |
| 200 ^② | CFS364JN ^④ | | 60 | 125 | 150 | — | |
| 400 ^② | CFS365JN ^④ | | 125 | 250 | 350 | — | |
| 600 ^② | CFS366J ^{③⑤} | | 200 | 400 | 500 | — | |
| 800 ^② | CFS367L ^{③⑤} | Class L | 200 | 400 | 500 | — | 200kA |

Optional – With Left Hand Mounted Mechanism^④

| | | | | | | | |
|------------------|-----------|---------|-----|----|----|-----------------|-------|
| 30 ^① | CFS361JLN | Class J | 7.5 | 15 | 20 | 5 ^③ | 200kA |
| 60 ^① | CFS362JLN | | 15 | 30 | 50 | 10 ^③ | |
| 100 ^① | CFS363JLN | | 30 | 60 | 75 | 20 ^③ | |

Operating Shafts for 30-400A Switches^⑤

| Catalog number | Shaft length in. (mm) | Switch & handle compatibility |
|----------------------------|-------------------------|--|
| CFSS5200N CFSS5400N | 7.9 (200) 15.7 (400) | 5mm x 5mm for use with CFS361C5 & CFS361J5 switches & with "CFSH5" handles only |
| CFSS5200HN CFSS5400HN | 7.9 (200) 15.7 (400) | 5mm x 5mm for use with all "CFSH10" handles & with CFS361C5 & CFS361J5 switches only |
| CFSS10200HN CFSS10400HN | 7.9 (200) 15.7 (400) | 10mm x 10mm for use with all "CFSH10" handles & with all 30-400A switches except CFS361C5 & CFS361J5 |

Compact rotary operating handles — door mounted (for use with CFS361C5 & CFS361J5 switches only)^⑤

| Catalog number | Color | UL Type | Operating shaft compatibility |
|------------------------|------------------------------|------------------|-------------------------------|
| CFSH5B12N CFSH5R12N | Blue & Black Yellow & Red | 1, 3R & 12 | CFSS5200N or CFSS5400N |
| CFSH5B4N CFSH5R4N | Blue & Black Yellow & Red | 1, 3R, 12 & 4/4X | |

Rotary Operating Handles - Door Mounted

(for use with CFSS5200HN, CFSS5400HN, CFSS10200HN & CFSS10400HN)

| Catalog number | Color | Description |
|----------------|-------|-------------|
|----------------|-------|-------------|

Type 1, 3R & 12^⑦

| | | |
|-------------|--------------|---|
| CFSH10B12N | Blue & Black | Heavy duty pistol grip (2.75" long for use with 30A switches & CFS362JN1) |
| CFSH10R12N | Yellow & Red | |
| CFSH10BL12N | Blue & Black | Heavy duty pistol grip (4.92" long for 30-400A switches) |
| CFSH10RL12N | Yellow & Red | |

Type 1, 3R, 4/4X & 12^⑦

| | | |
|------------|--------------|---|
| CFSH10B4N | Blue & Black | Heavy duty pistol grip (2.75" long for use with 30A switches & CFS362JN1) |
| CFSH10R4N | Yellow & Red | |
| CFSH10BL4N | Blue & Black | Heavy duty pistol grip (4.92" long for 30-400A switches) |
| CFSH10RL4N | Yellow & Red | |



CFS361J5



CFSS5400N



CFSH5B12N

① Line and load lugs included.

② Line and load lugs are not included.

Order from table on next page if required.

③ DC HP rating shown requires (3) poles to be connected in series.

④ CFS364JN & CFS365JN can be rotated 180° for left hand operation as standard.

⑤ Catalog numbers CFS361C5 & CFS361J5 accept 5mm x 5mm operating shafts. All other 30-400A switches accept 10mm x 10mm operating shafts.

⑥ Compact pistol grip design (2.75" long) with defeatable cover interlock. Cover can be opened when handle is padlocked in the OFF position.

⑦ Defeatable cover interlock provided. Cover cannot be opened when handle is padlocked in the OFF position.

⑧ 4 pole 600 & 800A switches, CFS466J & CFS467L are also available.

⑨ CFS366J and CFS367L are rated 250 & 600V DC when (2) poles are connected in series.

Disconnect Switches

Type CFS Compact Fusible Switches

Selection and Accessories

600 & 800A Rotary Operating Handles - Door Mounted (8.27" long)^②

| Catalog number | Color | UL Type |
|----------------|--------------|------------------|
| CFSH12BL12 | Blue & Black | 1, 3R & 12 |
| CFSH12RL12 | Yellow & Red | 1, 3R & 12 |
| CFSH12BL4 | Blue & Black | 1, 3R, 12 & 4/4X |
| CFSH12RL4 | Yellow & Red | 1, 3R, 12 & 4/4X |

600 & 800A Operating Shafts (Cross Section 12mm x 12mm)

| Catalog number | Shaft length in. (mm) | Enclosure depth (switch mounting surface to door OD) |
|----------------|-----------------------|--|
| CFSS12200H | 12.59 (320) | 10.43 – 16.68 in. |
| CFSS12400H | 15.75 (400) | 10.43 – 19.84 in. |

Type CFS Fusible Switch Accessories

| Catalog number | Description |
|----------------|-------------|
|----------------|-------------|

Terminals^①

| | |
|-----------|---|
| CFSL200 | 200A lug kit (6 lugs per kit) #6-3/0 |
| CFSL400N | 400A lug kit (6 lugs per kit) #2-600kcmil (for CFS365JN only) |
| CNFSL400D | 400A lug kit (6 lugs per kit, 2 wires per lug) #6-350kcmil |
| CFSL400 | 600-800A lug kit (6 lugs per kit, 2 wires per lug) #2-600kcmil ^② |

Shorting bars (no fuse kits)

| | |
|----------|--|
| CFSSB60 | 60A shorting bar kit (3 links per kit) |
| CFSSB100 | 100A shorting bar kit (3 links per kit) |
| CFSSB200 | 200A shorting bar kit (3 links per kit) |
| CFSSB400 | 400A shorting bar kit (3 links per kit) |
| CFSSB680 | 600 & 800A shorting bar kit (1 link per kit) |

Auxiliary contacts (NEMA ratings AC A600 DC N600)

| | |
|-----------------------|--|
| CFSAUXH1 ^② | Aux contact holder (CFS361C5 & CFS361J5) |
| CFSAUX1NO | Aux contact 1 NO (30-800A Sws) |
| CFSAUX1NC | Aux contact 1 NC (30-800A Sws) |
| CFS11AUX | 1NO, 1NC aux contact kit (side mount for 200kA switches) |
| CFS22AUX | 2NO, 2NC aux contact kit (side mount for 200kA switches) |

Terminal shrouds (line or load)

| | |
|------------------------|---|
| CFSTS200N ^③ | 200A shroud kit (line or load 3-pole kit) |
| CFSTS400N ^③ | 400A shroud kit (line or load 3-pole kit for CFS365JN only) |
| CFSTS680 ^④ | 600/800A 3-pole shroud kit |
| CFSTS6804 ^④ | 600/800A 4-pole shroud kit |

30A compact switch kits

| | |
|----------|---|
| CFSPK | Shaft padlocking kit for 30A compact switch when door is open |
| CFSH5CDM | Direct mount handle kit for CFS361C5 |
| CFSH5JDM | Direct mount handle kit for CFS361J5 |

NFPA 79 kits (if auxiliary contacts are needed, see table above)

Kits provide an operating shaft suitable for use with all heavy duty handles (not for use with CFSH5 handles). Kits also provide an internal operating handle and an internal OFF padlocking provision.

| | |
|------------------------|---|
| CFSNFPA1 ^④ | For use with CFS361C5 & CFS361J5 |
| CFSNFPA2N ^⑤ | For use with CFS361JN, CFS361CN, CFS362JN1, CFS362JN, CFS363JN & CFS364JN |
| CFSNFPA3N ^⑤ | For use with CFS365JN only |



① Supplied as standard on 30-100A switches
 ② CFS361C5 will accept (4) aux contacts without an aux contact holder. CFS361J5 will accept (2) aux contacts without an aux contact holder.
 ③ Supplied as standard on all but 30A, 100kA compact switches.

④ 12.6 in. (320 mm) long operating shaft included
 ⑤ 12.7 in. (323 mm) long operating shaft included
 ⑥ Line side terminal shrouds supplied with switch
 ⑦ Defeatable cover interlock included.
 Cover cannot be opened when the handle is padlocked in the OFF position.

⑧ Neither line or load terminal shrouds are supplied as standard with new style 200 & 400A switches.
 ⑨ 2 kits needed for 800A, total 12 lugs to cover line and load sides

Disconnect Switches

Type CFS Compact Fusible Switches

Technical Characteristics

UL & CSA Technical Characteristics And Panel Space Requirements

| Catalog Number | Amps | Fuse Class | Ac Short Circuit Rating | Electrical Endurance | Mechanical Endurance | Panel Space Requirements - in. (mm) | | |
|----------------|------|------------|-------------------------|----------------------|----------------------|-------------------------------------|-------------|--------------------|
| | | | | | | Height | Width | Depth ^① |
| CFS361C5 | 30 | CC | 100kA | 6000 | 10000 | 4.56 (116) | 3.78 (96) | 6.00 (152) |
| CFS361J5 | 30 | J | 100kA | 6000 | 10000 | 4.56 (116) | 4.15 (105) | 6.00 (152) |
| CFS361JN | 30 | J | 200kA | 6000 | 10000 | 5.35 (136) | 5.89 (150) | 6.00 (152) |
| CFS361JLN | 30 | J | 200kA | 6000 | 10000 | 5.35 (136) | 5.89 (150) | 6.00 (152) |
| CFS362JN1 | 60 | J | 100kA | 6000 | 10000 | 5.35 (136) | 5.89 (150) | 6.00 (152) |
| CFS362JN | 60 | J | 200kA | 6000 | 10000 | 7.32 (186) | 5.89 (150) | 6.00 (152) |
| CFS362JLN | 60 | J | 200kA | 6000 | 10000 | 7.32 (186) | 5.89 (150) | 6.00 (152) |
| CFS363JN | 100 | J | 200kA | 6000 | 10000 | 7.32 (186) | 5.89 (150) | 6.00 (152) |
| CFS363JLN | 100 | J | 200kA | 6000 | 10000 | 7.32 (186) | 5.89 (150) | 6.00 (152) |
| CFS364JN | 200 | J | 200kA | 6000 | 8000 | 11.46 (291) | 7.72 (196) | 6.00 (152) |
| CFS365JN | 400 | J | 200kA | 1000 | 6000 | 15.35 (390) | 10.19 (259) | 8.00 (203) |
| CFS366J | 600 | J | 200kA | 1000 | 5000 | 11.81 (300) | 14.33 (364) | 11.00 (280) |
| CFS466J | 600 | J | 200kA | 1000 | 5000 | 11.81 (300) | 18.03 (458) | 11.00 (280) |
| CFS367L | 800 | L | 200kA | 500 | 3500 | 11.81 (300) | 14.33 (364) | 11.00 (280) |
| CFS467L | 800 | L | 200kA | 500 | 3500 | 11.81 (300) | 18.03 (458) | 11.00 (280) |

Wire Ranges Line & Load Lugs

| Switch | Amperage Rating | UL Approved Wire Size (75° C) |
|-----------|-----------------|-------------------------------|
| CFS361J5 | 30 | (1)#14-10 |
| CFS361C5 | 30 | (1)#14-10 |
| CFS361JN | 30 | (1)#14-6 |
| CFS362JN1 | 60 | (1)#14-6 |
| CFS362JN | 60 | (1)#12-1 |
| CFS363JN | 100 | (1)#12-1 |
| CFS364JN | 200 | (1)#3/0 |
| CFS365JN | 400 | (1)600MCM |
| CFS366J | 600 | (2)350 MCM |
| CFS367L | 800 | (2)600 MCM |

Auxiliary Contact Capability When An NFPA79 Kit Is Used

| Switch | NFPA79 Kit | Aux Contacts That Can Be Installed |
|-----------|------------|--|
| CFS361C5 | CFSNFPA1 | (2) Total, CFS AUX1NO or CFS AUX1NC |
| CFS361J5 | | (1) CFS AUX1NO or (1) CFS AUX1NC |
| CFS361JN | CFSNFPA2N | (2) Total, CFS AUX1NO or CFS AUX1NC ^② |
| CFS362JN1 | | |
| CFS362JN | | |
| CFS363JN | | |
| CFS364JN | CFSNFPA3N | (2) Total, CFS AUX1NO or CFS AUX1NC ^② |
| CFS365JN | | |

① Minimum dimensions from mounting surface to inside of cover. Dimensions shown can be decreased if aux contacts are not required.

② For additional auxiliary contacts use side mounted CFS11AUX or CFS22AUX.

Disconnect Switches

Type CNFS Compact Non-Fusible Switches

General Information

Type CNFS Compact Non-Fusible Switches

Description

Siemens Type CNFS compact non-fusible switches meet UL 98 requirements and can be used in either service entrance or branch circuit applications. They are available in 30-800A, 3-pole switches and are all rated 600VAC maximum.

All are open style, designed to be panel mounted and are UL listed under file number #E121152 or #E68312 and CSA certified under file number #222227. A variety of door mounted rotary operators are available with Type 1, 3R, 12 or 4/4X ratings.

These non-fusible switches are UL listed under file #E201138 and CSA certified under file #112964. They also conform to IEC standard 60947-3.

Catalog Numbering System

CNFS Switches

Compact Non-Fusible Switch

- | | | | | |
|------|---|---|---|---|
| CNFS | 3 | 6 | 1 | N |
|------|---|---|---|---|
- Number of poles 3 = 3
 - Max. Voltage Rating 6 = 600V
 - Ampere rating
 - 1 = 30A
 - 2 = 60A
 - 3 = 100A
 - 4 = 200A
 - 5 = 400A
 - 6 = 600A
 - 7 = 800A
 - Design type
 - N = Compact design



Disconnect Switches

Type CNFS Compact Non-Fusible Switches

Features And Ordering Information

Features

- 30 - 800A ratings
- UL Listed under file #E201138 & CSA Certified under file #112964 or #703166
- Options to have door mounted pistol handles with defeat-able cover interlock or direct mounted handles.
- Meets UL 98 requirements
- Compact size
- All short circuit protection ratings require the use of Class J fuses in the circuit.
- Load break and horsepower rated
- Quick make and break operation
- All external handles and direct handles for 600-800A switches are padlockable with up to (3) padlocks with 5/16" hasps in the OFF position. Direct handles for 30-100A switches are padlockable with (1) padlock with 3/16" hasps in the OFF position.
- All switches are able to be panel mounted. Catalog numbers CNFS361N, CNFS362N, & CNFS363N can also be DIN-rail mounted and can either be front or side operated with standard pistol handles.
- Handles are available in Type 1, 3R, 4/4X & 12 ratings



Ordering information

1. Select the panel mounted switch required based on Ampere, HP and AIC requirements. Switches with a right hand mechanism are standard.
 2. Select handle based on environmental rating required.
 3. For door mounted handles, select operating shaft based on enclosure depth. For enclosure depths of 9.00" or less from panel mounting surface to inside of door use up to 200 mm long shafts. From 9.00" to 13.00" use up to 320 mm long shafts. For deeper enclosures use up to 400 mm long shafts. For direct mount handles, no shaft is needed.
 4. Line & load lugs are provided as standard on 30-100A switches. Terminal kits are available for 200-800A switches if needed.
 5. Auxiliary contacts are available if needed. Each switch will accept up to (2) aux contact modules, containing (2) contacts in each.
 6. 30-100A Series N switches are designed to prevent inadvertent contact with live parts and shields are not required but are offered as terminal shrouds. 100-400A switches are not supplied with terminal shields. They are available as separate field installed kits for both line and load terminals by amperage rating. Line side terminal screens are provided for 600-800A switches.
- Note: Be sure to check shaft and handle compatibility with the switch selected by using information provided in the selection tables.

Disconnect Switches

Type CNFS Compact Non-Fusible Switches

Shaft and Handle Selection

Type CNFS compact non-fusible switches

| Switch Ampere Rating | Catalog Number | Max Horsepower Ratings | | | Short Circuit Rating | |
|----------------------|-----------------------|------------------------|---------------|---------------|----------------------|----------|
| | | 240V 3Ø AC | 480V 3Ø AC | 600V 3Ø AC | @ 480VAC | @ 600VAC |
| 30 | CNFS361N ^① | 10 | 20 | 25 | 100 | 100 |
| 60 | CNFS362N ^① | 20 | 40 | 50 | 100 | 100 |
| 100 | CNFS363N ^① | 20 | 50 | 50 | 100 | 25 |
| 200 | CNFS364N ^② | 75 | 150 | 200 | 200 | 200 |
| 400 | CNFS365N ^② | 125 | 250 | 350 | 200 | 200 |
| 600 | CNFS366N ^② | 200 | 400 | 350 | 200 | 200 |
| 800 | CNFS367N ^② | 200 | 500 | 500 | 100 | 100 |



Direct mount rotary handles for compact non-fusible switches

| Catalog Number | Color | Use with compact non-fusible switches |
|----------------|-------|---------------------------------------|
| CNFSHD1 | Blue | CNFS361N, CNFS362N, CNFS363N |
| CNFSHD2 | Black | CNFS364N, CNFS365N |
| CNFSHD3 | Black | CNFS366N, CNFS367N |



Operating shafts for compact non-fusible switches

| Catalog Number | Shaft length in. (mm) | Switch and handle compatibility |
|----------------|-----------------------|--|
| CNFSS52001 | 7.9 (200) | 5mm x 5mm for use with CNFS361N, CNFS362N and CNFS363N switches and with "CNFSH5" handles only |
| CNFSS53201 | 12.6 (320) | |
| CNFSS54001 | 15.7 (400) | |
| CFSS10200HN | 7.9 (200) | 10mm x 10mm for use with "CFSH10" handles and with CNFS364N and CNFS365N switches only |
| CNFSS103202 | 12.6 (320) | |
| CFSS10400HN | 15.7 (400) | |
| CNFSS152003 | 7.9 (200) | 15mm x 15mm for use with "CFSH12" handles and with CNFS366N and CNFS367N switches only |
| CNFSS153203 | 12.6 (320) | |
| CNFSS154003 | 15.7 (400) | |



Compact rotary operating handles for non-fusible switches – door mounted

| Catalog Number | Color | UL Type | Operating shaft compatibility | Use with non-fusible compact switches |
|----------------|------------|----------------|---------------------------------------|---------------------------------------|
| CNF5H5BP121 | Black | NEMA 1, 3R, 12 | CNFSS52001, CNFSS53201, CNFSS54001 | CNFS361N, CNFS362N, CNFS363N |
| CNF5H5RP121 | Red/Yellow | NEMA 1, 3R, 12 | | |
| CNF5H5BP41 | Black | NEMA 4/4X | | |
| CNF5H5RP41 | Red/Yellow | NEMA 4/4X | | |
| CF5H10BL12N | Black | NEMA 1, 3R, 12 | CFSS10200HN, CNFSS103202, CFSS10400HN | CNFS364N, CNFS365N |
| CF5H10RL12N | Red/Yellow | NEMA 1, 3R, 12 | | |
| CF5H10BL4N | Black | NEMA 4/4X | | |
| CF5H10RL4N | Red/Yellow | NEMA 4/4X | | |
| CF5H12BL12 | Black | NEMA 1, 3R, 12 | CNFSS152003, CNFSS153203, CNFSS154003 | CNFS366N, CNFS367N |
| CF5H12RL12 | Red/Yellow | NEMA 1, 3R, 12 | | |
| CF5H12BL4 | Black | NEMA 4/4X | | |
| CF5H12RL4 | Red/Yellow | NEMA 4/4X | | |

① Line and load lugs are included.

② Line and load lugs are not included. Order from table on following pages if needed.

③ All switches can be rotated 180° for left hand operation as standard.

④ Compact pistol grip design (2.75" long) with defeatable cover interlock. Cover can be opened when handle is padlocked in the OFF position.

⑤ Defeatable cover interlock provided. Cover cannot be opened when handle is in the OFF position.

⑥ Flange mounting is not available for non-fusible switches.

Disconnect Switches

Type CNFS Compact Non-Fusible Switches

Additional Accessories

Auxiliary contacts for use with non-fusible switches

| Catalog Number | Number of Contacts | Use with Non-fusible Contact Switches |
|----------------|---|---|
| CNFS1AUX1 | 1 Normally Open + 1 Normally Closed | CNFS361N, CNFS362N, CNFS363N |
| CNFS2AUX1 | 2 Normally Closed | |
| CNFS1AUX2 | 1st Auxiliary Contact: 1 Normally Open + 1 Normally Closed | CNFS364N, CNFS365N, CNFS366N, CNFS367N |
| CNFS2AUX2 | 2nd Auxiliary Contact: 1 Normally Open + 1 Normally Closed | |



Terminal shrouds for use with non-fusible switches

| Catalog Number | Shroud Location | Use with Non-fusible Contact Switches |
|----------------|-----------------|---------------------------------------|
| CNFSSTS100 | Top and Bottom | CNFS361N, CNFS362N, CNFS363N |
| CNFTS200T | Top | CNFS364N |
| CNFTS200B | Bottom | |
| CNFTS400T | Top | CNFS365N |
| CNFTS400B | Bottom | |
| CNFTS600B | Bottom | CNFS366N |
| CNFTS800B | Bottom | CNFS367N |



Terminal lug kits for use with non-fusible switches

| Catalog Number | Wire Sizes | Use with Non-fusible Contact Switches |
|----------------|----------------------------|---------------------------------------|
| Included | #10-2/0 | CNFS361N, CNFS362N, CNFS363N |
| CFSL200 | #6-300MCM | CNFS364N |
| CFSL400N | #2-600MCM | CNFS365N |
| CNFSL400D | #6-350MCM, 2 wires per lug | CNFS366N |
| CFSL400 | #6-350MCM, 2 wires per lug | CNFS366N, CNFS367N [Ⓞ] |



[Ⓞ] 2 kits needed for 800A, total 12 lugs to cover line and load sides.



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