Section 3

Safety Switches



Light Duty



General Duty



Heavy Duty



Stainless Steel Heavy Duty

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Safety Switches EZ Selector - Selection **Assistance** EZ-Selector



Steps to select a safety switch

- 1. Select product type:
 - · General duty safety switch
 - · Heavy duty safety switch
 - · Double throw safety switch
- 2. Select switch type.
- 3. Select fuse type: fused, non-fused, cartridge, class T or plug
- 4. Select maximum voltage: 240 Vac / 250 Vdc, 600 Vac / 600 Vdc
- 5. Select amperes:
 - General/light duty 30 A, 60 A, 100 A, 200 A, 400 A, 800 A
 - Heavy duty 30 A, 60 A, 100 A, 200 A, 225 A, 400 A, 600 A, 800 A, 1200 A
 - Double throw 30 A, 60 A, 100 A, 200 A, 600 A
- 6. Select number of poles:
 - General/light duty 1, 2 or 3
 - Heavy duty 2, 3, 4 or 6
 - Double Throw- 2, 3, 4 or 6
- 7. Select if neutral is needed.
- 8. Select enclosure type:
 - General/light duty NEMA 1, NEMA 3R
 - Heavy duty NEMA1, NEMA 12K, NEMA 3R, 5, 12, NEMA 4, 4X, 5 (stainless steel 304), NEMA 4, 4X, 5 (stainless steel 316)
 - Double throw NEMA1, NEMA 12K, NEMA 3R, 5, 12, NEMA 4, 4X, 5 (stainless
 - Optional enclosure types for special heavy duty applications.



Safety Switches EZ Selector - Selection Assistance

EZ-Selector

Wiring Diagrams

| | Wiring Diagrams | |
|---|---|--------------------------|
| Fuse | Fused with Neutral Two-wire (1 blade and fuse holder) | Non-Fused |
| | | |
| Two-wire (2 blades and fuse holder) | Three-wire (2 blades and fuse holder) | Two-wire (2 blades) |
| 9 9 5 5 5 5 | 9 9 9 N 5 5 | |
| Three-wire (3 blades and fuse holders) | Four-wire (3 blades and fuse holders) | Three-wire (3 blades) |
| <u> </u> | P P P P P P P P P P P P P P P P P P P | |
| Four-wire (4 blades and fuse holders) | | Four wires (4 blades) |
| 9 9 9 5 5 5 5 5 5 5 | | |
| Six-wire (6 blades and fuse holders) | | Six-wires (6 blades) |
| | | |

Safety Switches EZ Selector - Selection **Assistance**

EZ-Selector



Enclosure Options

Enclosure units are third party certified to UL 50E by Underwriters Laboratories

| Type 1 | Design for indoor use provide degree of protection against access to hazardous parts, protects against ingress of solid foreign objects. |
|---------|--|
| Type 3R | Design for indoor or outdoor use provide degree of protection against access to hazardous parts, protects against ingress of solid foreign objects, degree of protection to due ingress of water (rain, sleet, snow) and will remain undamaged by external formation of ice. |
| Type 4X | Design for indoor or outdoor use provide degree of protection against access to hazardous parts, prevents ingress of solid foreign objects, degree of protection to due ingress of water (rain, sleet, snow, splashing water, and hose directed water) and provides additional protection against corrosion, and will remain undamaged by external formation of ice. |
| Type 12 | Design for indoor use provide degree of protection against access to hazardous parts, protects against ingress of solid foreign objects (falling dirt and circulating dust, ling, fibers, and flyings) provide degree of protection due to ingress of water (dripping and light splashing). |

- Type 4X enclosures can be used for Type 4 or Type 5 Applications.
- Type 12 enclosures can be used for Type 5 applications and Type 3R via removal of drip hole knock out or drain
- Type 3R (800 and 1200 A Heavy Duty) are shipped as Type 5 must remove drain screw for Type 3R

Class H, R, J, and L Fuse Provisions

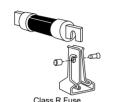
Plug Type Fuses: Fuses for standard circuits (not high-voltage appliance circuits) are called plug fuses and have screw-in bases. There are two different types of bases and screw-in fuses: the Edison base (found on Type T fuses) and the rejection base (found on Type S fuses).

Class H or K Fuse Provisions: Fusible Square D 30–600 A heavy duty safety switches accept Class H or K fuses as standard. With Class H or K fuses installed, the switch is UL Listed for use on systems with up to 10 kA available short circuit current.

Class R Fuse Provisions: Fusible Square D 30–600 A heavy duty safety switches will accept Class R fuses as standard. A field-installed rejection kit is available which, when installed, accepts only Class R fuses. With the installation of the rejection kit and Class R fuses, the switch is UL Listed for use on systems with up to 200 kA available short circuit

Class J Fuse Provisions: Provisions for installing Class J fuses are included in 30–400 A 600 Volt, and 100–400 A 240 Volt, fusible heavy duty safety switches. Conversion to Class J fuse spacing requires relocating the load side fuse base assembly from the craas a rase spacing requires reducting the local side rase assertinly from the standard Class H fuse location to an alternate position as marked in the enclosure. With Class J fuses installed, the switch is UL Listed for use on systems with up to 200 kA available short circuit current. Switches rated 600 A, 240 or 600 Volt require the addition of an adapter kit: H600J.

Class L Fuse Provisions: Fusible 800 and 1200 A safety switches use Class L bolt-in fuses and are rated for use on systems with up to 200 kA at 600 Vac maximum. 1200 A switches accept class L fuses from 601–1200 A, 800 A switches accept Class L fuses from 601-800 A.



Class **3130**

Light Duty Fusible Safety Switches

L111N

Light Duty—Visible Blades 10 kA Short Circuit Current RatingThe Square D light duty enclosed switch is ideal for home applications in disconnecting power to workshops, hobby rooms, furnaces, and garages.

The light duty safety switch has visible blades and a ground lug as standard features. NEC 2023 protects against these units from being applied in any application, for compliance with NE2023 obtain Heavy Duty Safety Switch.

Table 3.1: Light Duty 120 V or 120/240 Volt — Single Throw Fusible Switches

| | | | | | Horsepo | wer Ratings | |
|---|--------------|-----------------------------------|-------------------------|-------------|-----------------------|--|----|
| System | Amperes | NEMA Type 1 Indoor Cat. No. | Equipment Ground Kit | | Acting One- Fuses) | Max (Dual Element Time- Delay Fuses) | |
| | | | | 1Ø | 3Ø | 1Ø | 3Ø |
| 2 Wire (1 Blad | e and Fuseho | older, 1 Neutral) | - 120 Vac Plug | Type Fuses | ; | | |
| | 30 | L111N | Standard | _ | _ | - | _ |
| 3 Wire (2 Blad | e and Fuseho | lder, 1 Neutral) | - 120/240 Vac I | Plug Type F | uses | | |
| | 30 | L211N | Standard | 1/2 | 2 | 1-1/2 | 3 |
| 3 Wire (2 Blade and Fuseholder, 1 Neutral) – 120/240 Vac Cartridge Type Fuses | | | | | | | |
| P | 30 | L221N | Standard | 1/2 | 2 | 1-1/2 | 3 |





General Duty-Up To 100 kA Short Circuit Current Rating

General duty safety switches are designed for residential and commercial applications where durability and economy are prime considerations. Typical loads are lighting, air conditioning, and appliances. They are suitable for use as service equipment when equipped with a factory or field-installed neutral assembly or a field-installed service grounding kit, (see page 3-8) as applicable.

General duty safety switches are UL Listed, File E2875, and meet or exceed the NEMA Standard KS1. NEC 2023 protects against these units from being applied in any application; for compliance with NE2023 obtain Heavy Duty Safety Switch.

240 Volt - Single Throw Fusible Switches

Table 3.2: Fusible Single Throw Safety Switches

| | | NICES | NEMA | Class R | | Horsepower Ratings | | | | |
|--------------------------|--|--------------------|-------------|---------------|-------------------|--------------------------------------|---------------|---|---------------|--|
| System | Amperes | NEMA TYPE 1 | Type 3R [1] | Fuse Kits [2] | Line Side Barrier | Std. (Fast Acting One- Time Fuses | | Max. (Dual Element Time Delay Fuses) | | |
| | | Cat. No. | Cat. No. | Cat. No. | | 1Ø | 3Ø | 1Ø | 3Ø | |
| • | Wire (1 Blade and Fuseholder, 1 Neutral)—120 Vac | | | | | | | | | |
| Use Light Duty Devices o | | | | | | | | | | |
| 3 Wire (2 Blade and Fus | eholder, 1 Neutral) – 120/2 | 240 Vac Plug Type | Fuses | | | | | | | |
| 1 9 9 N 5 5 | 30 | D211N | D211NRB | _ | _ | 1-1/2 | _ | 3 | - | |
| 3 Wire (2 Blade and Fus | eholder, 1 Neutral) –240 V | ac Cart. Type Fuse | s | | | | | | | |
| | 30 | D221N | D221NRB | DRK30 | _ | 1-1/2 | 3 [3] | 3 | 7-1/2 [3] | |
| የየየ | 60 | D222N | D222NRB | RFK03H | Factory Included | 3 | 7-1/2 [3] | 10 | 15 <i>[3]</i> | |
| h (-(| 100 | D223N | D223NRB | RFK10 | Factory Included | 7–1/2 | 15 <i>[3]</i> | 15 | 30 [3] | |
| <u> የ</u> ፈረ | 200 | D224N [4] | D224NRB [4] | HRK1020 | Factory Included | 15 | 25 [3] | _ | 60 <i>[3]</i> | |
| 0 0 0 | 400 | D225N | D225NR | DRK40 | LSBI02 | | _ | _ | _ | |
| | 600 [5] | D226N | D226NR | DRK600 | LSBI02 | _ | _ | _ | _ | |
| 4 Wire (3 Blade and Fus | eholder, 1 Neutral) –240 V | ac Cart. Type Fuse | es | | | | | | | |
| | 30 | D321N | D321NRB | DRK30 | _ | 1-1/2 | 3 | 3 | 7-1/2 | |
| 9999 | 60 | D322N | D322NRB | RFK03H | Factory Included | 3 | 7-1/2 [6] | 10 | 15 <i>[6]</i> | |
| h (-(-(| 100 | D323N | D323NRB | RFK10 | Factory Included | 7-1/2 | 15 <i>[6]</i> | 15 | 30 <i>[6]</i> | |
| 1777 | 200 | D324N [4] | D324NRB [4] | HRK1020 | Factory Included | 15 | 25 [6] | _ | 60 <i>[6]</i> | |
| 0000 | 400 | D325N | D325NR | DRK40 | LSBI02 | | 50 | | _ | |
| | 600 [5] | D326N | D326NR | DRK600 | LSBI02 | _ | 75 | _ | 150 | |
| 4 Wire (3 Blade and Fus | eholder, 1 Neutral) –240 V | ac CLASS T Type | Fuses | | | | | | | |
| 99.99 | 400 [7] | D325NT | D325NTR | DRK40 | LSBI02 | I | 50 | 1 | _ | |
| h 5-5-5 | 600 [7] | D326NT | D326NTR | DRK600 | LSBI02 | | 75 | | 150 | |
| 1111 | 800 [7] | T327N | T327NR | | LSBI02 | - | 100 | _ | _ | |

Table 3.3: Fusible Switch UL Listed Maximum Short Circuit Current Ratings — AC Only

| Fuse Class | UL Listed Short Circuit Rating |
|-----------------------------|--------------------------------|
| Plug | 10 kA |
| H, K | 10 kA |
| R | 10 kA [8] |
| R with Rejection Fuse Clips | 100 kA |
| J | 100 kA |
| Т | 100 kA |

^[1] Bolt-on hubs —Refer to Rainproof Bolt-On Hubs., page 3-16

^[2] When properly installed, the Class R Fuse Kit accepts only Class R fuses.

³⁾ For corner grounded delta systems, use switching poles for ungrounded conductors. See data bulletin 2700DB0202 for additional information

For 200% neutral, order (1) additional neutral kit SN20A and (1) neutral jumper kit SN20NI.

^[5] Order Class J Fuse Kit GDJK600 if using Class J fuses.

If corner grounded delta system, use outer switching poles for ungrounded conductors.

^[7] D325NT, D325NTR, D326NT, D326NTR, T327N and T327NR accept only 300Vac Class T fuses.

Class R fuses are rated for 100 kA, however without the rejection fuse clips - system is limited to 10 kA since Class H or K fused could be installed in the future.

General Duty-Up to 100 kA Short Circuit **Current Rating**

Class 3130

240 Volt—Single Throw Non-Fusible Switches

Table 3.4: Non-Fusible Single Throw Safety Switches

| System | Amperes | NEMA Type 1 | NEMA Type 3R [9] | Line Side Barriers [10] | Equipment Ground Kit | Neutral Kit | Horsepowe (Ma Max. (Dual Ele Delay F | x.) ement Time- |
|--------------------|---------|------------------------|------------------|----------------------------|-------------------------|-------------|---|--------------------|
| | | Cat. No. | Cat. No. | | Cat. No. | | 1Ø | 3Ø |
| Wire (2 Blade)— | 240 Vac | | | | - | | - | |
| | 30 | _ | DU221RB | _ | PK3GTA1 | _ | 3 | _ |
| РР | 60 | _ | DU222RB | _ | GTK03 | _ | 10 | _ |
| <u>- </u> - | 100 | | _ | _ | _ | _ | _ | _ |
| | 200 | Use three wire switch | _ | _ | _ | _ | _ | _ |
| 6 6 | 400 | Ose tillee wile switch | _ | _ | _ | _ | _ | _ |
| | 600 | | _ | _ | _ | _ | _ | _ |
| 3 Wire (3 Blade)—: | 240 Vac | | | | | | | |
| | 30 | DU321 | DU321RB | _ | PK3GTA1 | _ | 3 | 7-1/2 |
| 9 9 9 | 60 | DU322 | DU322RB | _ | GTK03 | _ | 10 | 15 |
| 1 <u>, 1, 1</u> , | 100 | DU323 [11] | DU323RB [11] | Factory Included | GTK0610 | _ | 10 | 30 |
| (((| 200 | DU324 [12] | DU324RB [12] | Factory Included | PKOGTA2 | _ | 15 | 60 |
| 999 | 400 | DU325 | | LSBI02 | PKOGTA2 | _ | _ | 125 |
| | 600 | DU326 [13] | _ | LSBI02 | PKOGTA2 | _ | _ | 150 |

System equal or less than 10 kA SCCR — Any Brand of circuit breaker or fuse not exceeding the ampere rating of the switch may be used in conjunction with a non-fusible safety switch.

Systems above 10kA SCCR — The UL listed short circuit current rating for Square D non-fusible switches is based upon the switch being used in conjunction with fuses or Square D circuit breakers or Mag-Gard motor circuit protection.

Table 3.5: Non-Fusible Safety Switch Short Circuit Current Rating

| Fuse Class or Circuit Breaker Type [14] | UL Listed Short Circuit Rating |
|---|--------------------------------|
| Any Brand Circuit Breaker | 10 kA |
| H or J PowerPact Circuit Breaker | Up to 65 kA [15] |
| H, K | 10 kA |
| J, R | 100 kA <i>[16]</i> |
| T | 100 kA [17] |

Bolt-on hubs-Refer to Hubs, page 3-16. *[9]*

Factory included to protect against inadvertent contact with live parts per UL 869A and NEC Service entrance barrier requirements. [10]

If a neutral assembly is required, order and field install SN0610.

If a neutral assembly is required, order and field install a SN20A Neutral Assembly Kit. For a 200% neutral application, order and field install (2) SN20A Neutral Assembly Kits and (1) SN20NI Neutral Jumper Kit.

^[13] If a neutral assembly is required, order and field install D600SN.

^[14] Ampere rating of fuse or circuit breaker not to exceed switch ampere rating. Only applicable to DU324 and DU324RB. HD, JD = 25 kA maximum.

^[15] [16]

SCCR = 50 kA, applicable to DU222RB, DU322 and DU322RB.

Only applicable to DU323, DU323RB, DU325 and DU326

SQUARE D



FPK03 Fuse Puller Kit Series F Fusible Switches Only







Field-Installed Fuse Puller Kits

Kit consists of three fuse pullers as required for a 3P, fusible, 60 or 100 A general duty switch. Kits can be installed only in 60 or 100 A Series F fusible switches.

Table 3.6: Fuse Puller Kits

| Switch Ampere Rating | Series No. | Cat. No. |
|----------------------|------------|----------|
| 60 | F | FPK03 |
| 100 | F | FPK0610 |

Field-Installed Electrical Interlock Kits

Electrical interlocks for Series F 100–200 A general duty safety switches & Series F 60 A fusible general duty safety switches are available in kit form for field installation. Each kit contains instructions for proper field mounting. A pivot arm operates from switch mechanism, breaking the control circuit before the main switch blades break. Switches with electrical interlocks installed are UL Listed.

Table 3.7: Electrical Interlock Kit

| Switch Amperes Rating | Electrical Interlock Kit Cat. No. [18] |
|--------------------------|--|
| Fusible Series F 60 | EIK031 or EIK032 |
| Series F 100–200 | EIK1 or EIK2 |

Table 3.8: Electrical Interlock Contact Ratings [19]

| | AC 50 or 60Hz | | | | DC | | | |
|------------------------------|---------------|---------|---------|---------|-------|-----------------|---------|--|
| Interlock Type | Volts | Make | Break | Cont. | Volts | Make / Break | Cont. | |
| 1 N. O. / 1 N. C. | 120 | 40.00 A | 15.00 A | 15.00 A | 115 | 0.50 A | 15.00 A | |
| Contact (-1 Suffix [20]) | 240 | 20.00 A | 10.00 A | 15.00 A | 230 | 0.25 A | 15.00 A | |
| 2 N. O. / 2 N. C. | 120 | 30.00 A | 3.00 A | 10.00 A | 115 | 1.00 A | 10.00 A | |
| Contacts (-2 Suffix [21]) | 240 | 15.00 A | 1.5 A | 10.00 A | 230 | 0.30 A | 10.00 A | |

Equipment Grounding Kits

Table 3.9: Equipment Grounding Kits

| Switch Ampere Rating | Cat. No. | Lug Wire Range (AWG) |
|-------------------------|--------------|--|
| 30 [22] | Std. | (1) 14 – 10 Cu or (1) 12 – 8 Al |
| 30 | PK3GTA1 | (3) 14 – 4 Cu or (3) 12 – 4 Al or (6) 14 – 12 Cu or (6) 12 – 10 Al |
| 60 [23] | GTK03 | (2) 14 – 4 Cu or (2) 12 – 4 Al (4) 14 – 12 Cu or (4) 12 – 10 Al |
| 100 | GTK0610 | (2) 14 – 1/0 Cu or (2) 12 – 1/0 Al (2) 14 – 6 Cu or (2) 12 – 6 Al |
| 200 | PKOGTA2 | (2) 10 – 2/0 Cu or (2) 6 – 2/0 Cu Al |
| 400, 600 | PKOGTA2 [24] | (2) 10 – 2/0 Cu or (2) 6 – 2/0 Cu Al |
| 800 | PKOGTA3 | (6) 6 – 3/0 Al/Cu Max. |

Field-Installed Lug Kit 400-600 A

Table 3.10: Field-Installed Lug Kit 400-600 A

| | • | | |
|------------------------|------------------|---|------------------------------------|
| Switch Ampere Rating | Lug Kit Cat. No. | Wire Range/NEC | Lug Wire Range |
| 400 or 600 Series [25] | GD4060LK | 1-1/0-600 kcmil 2-1/0-500 kcmil 4-1/0-250 kcmil | 2-1/0-600 kcmil 4-1/0-250 kcmil |

Line Side Barrier Kits

The field instable line side barrier kits are required to meet National Electric Code (NFPA 70) for service entrance applications. Barrier kits protect against inadvertent contact with line side, uninsulated, ungrounded or service terminal live parts.

Table 3.11: Line Side Barrier Kits for General Duty Safety Switches

| Amperes | Voltage | Blades/Fuses | Catalog | | |
|-----------------|-----------|--------------|---------|--|--|
| 30 | 600 | 2 or 3 | LSBD602 | | |
| 60 [26] | 240 | 2 or 3 | LSBD202 | | |
| 60 | 600 | 2 == 2 | LSBC02 | | |
| 100 | 240 / 600 | 2 or 3 | LSBC02 | | |
| | 240 | 2 | LSBE202 | | |
| 200 | 240 | 3 | LSBE203 | | |
| | 600 | 3 | LSBE603 | | |
| 400 / 600 / 800 | 240 | 2 or 3 | LSBI02 | | |

^[18] Electrical interlock kit catalog numbers with -1 suffix indicate one normally open and one normally closed contact; -2 indicates two normally open and two normally closed contacts. Kits are UL Listed.

[19] Single-pole single-throw interlock kits are rated 1/2 hp at 110 and 220 Vac

[20] -1 Suffix uses a 9007A01 limit switch.

[21] -2 Suffix uses a 9007C03 limit switch.

[22] Light duty switches only.

60 A non-fusible switches accept PK3GTA1. [23]

Two required if ground conductors are run in parrellel *[24]*

Not suitable for use on 400 A NEMA Type 3R. [25]

[26] Only for Fused applications



Dimensions for General Duty Safety Switches

Class **3130**

Terminal Lug Data

Table 3.12: Terminal Lug Data [27]

| Amperes | Conductors Per Phase | Wire Range Wire Bending Space Per NEC Table 312.6 AWG/kcmil | Lug Wire Range AWG/kcmil |
|---------------------|-------------------------|---|---|
| 30 [28] | 1 | 12-8 (AI) or 14-8 (Cu) | 12-8 (AI) or 14-8 (Cu) |
| 30 | 1 | 12-6 (AI) or 14-6 (Cu) | 12-6 (AI) or 14-6 (Cu) |
| 60 | 1 | 12–3 (AI) or 14–3 (Cu) | 12-2 (AI) or 14-2 (Cu) |
| 100 | 1 | 12-1 (AI) or 14-1 (Cu) | 12-1/0 (AI) or 14-1/0 (Cu) |
| 200 | 1 | 6 –250 (Al/Cu) | 6 –300 (Al/Cu) |
| 400 NEMA Type 1 | 1 or 2 | 1/0 –600 (Al/Cu) or 1/0 –300 (Al/Cu) | (1) 1/0 –750 (Al/Cu) or (2) 1/0 –300 (Al/Cu) |
| 400 NEMA Type 3R | 2 | 1/0–250 (AI/Cu) | (1) 1 –600 (Al/Cu) or (2) 1/0 –250 (Al/Cu) |
| 600 | 2 | 4 –500 (AI/Cu) | 4 -600 (Al/Cu) |
| 800 | 3 | 3/0 -500 (Al/Cu) | 3/0 -500 (Al/Cu) |

Dimensions for General Duty Safety Switches

Table 3.13: Approximate Dimensions

| Cat.No. | Series | ŀ | 1 | V | ٧ | W/H | | D | | Std. Pack | |
|---------|--------|-------|------|-------|-----|-------|-----|-------|-----|--------------|--|
| | Series | in. | mm | in. | mm | in. | mm | in. | mm | Pacl | |
| L111N | E2 | 7.63 | 194 | 5.00 | 127 | 127 | 156 | 4.00 | 102 | 1 | |
| L211N | E2 | 7.63 | 194 | 5.00 | 127 | 6.13 | 156 | 4.00 | 102 | 1 | |
| L221N | E2 | 7.63 | 194 | 5.00 | 127 | 6.13 | 156 | 4.00 | 102 | 1 | |
| D211N | E3 | 9.25 | 235 | 6.75 | 171 | 7.25 | 184 | 3.63 | 92 | 5 | |
| D211NRB | E2 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| D221N | E3 | 9.25 | 235 | 6.75 | 171 | 7.25 | 184 | 3.63 | 92 | 5 | |
| D221NRB | E3 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| D222N | F1 | 14.63 | 372 | 6.50 | 165 | 7.45 | 189 | 4.88 | 124 | 1 | |
| D222NRB | F1 | 14.88 | 378 | 6.63 | 168 | 7.45 | 189 | 4.88 | 124 | 1 | |
| D223N | F3 | 17.50 | 445 | 8.50 | 216 | 10.50 | 267 | 6.50 | 165 | 1 | |
| D223NRB | F3 | 17.50 | 445 | 8.50 | 216 | 10.50 | 267 | 6.50 | 165 | 1 | |
| D224N | F1 | 29.00 | 737 | 17.25 | 438 | 19.00 | 483 | 8.25 | 210 | 1 | |
| D224NRB | F1 | 29.25 | 743 | 17.25 | 438 | 19.00 | 483 | 8.25 | 210 | 1 | |
| D225N | E3 | 45.12 | 1146 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| D225NR | E1 | 30.63 | 778 | 21.38 | 543 | 22.25 | 565 | 10.13 | 257 | 1 | |
| D226N | E3 | 49.13 | 1248 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| D226NR | E1 | 49.13 | 1248 | 24.75 | 629 | 25.13 | 638 | 8.88 | 226 | 1 | |
| D321N | E3 | 9.25 | 235 | 6.75 | 171 | 7.25 | 184 | 3.63 | 92 | 5 | |
| D321NRB | E3 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| D322N | F1 | 14.63 | 372 | 6.50 | 165 | 7.45 | 189 | 4.88 | 124 | 1 | |
| D322NRB | F1 | 14.88 | 378 | 6.63 | 168 | 7.45 | 189 | 4.88 | 124 | 1 | |
| D323N | F3 | 17.50 | 445 | 8.50 | 216 | 10.50 | 267 | 6.50 | 165 | 1 | |
| D323NRB | F3 | 17.50 | 445 | 8.50 | 216 | 10.50 | 267 | 6.50 | 165 | 1 | |
| D324N | F1 | 29.00 | 737 | 17.25 | 438 | 19.00 | 483 | 8.25 | 210 | 1 | |
| D324NRB | F1 | 29.25 | 743 | 17.25 | 438 | 19.00 | 483 | 8.25 | 210 | 1 | |
| D325N | E3 | 45.12 | 1146 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| D325NT | E3 | 45.12 | 1146 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| D325NR | E1 | 30.63 | 778 | 21.38 | 543 | 22.25 | 565 | 10.13 | 257 | 1 | |
| D325NTR | E1 | 30.63 | 778 | 21.38 | 543 | 22.25 | 565 | 10.13 | 257 | 1 | |
| D326N | E3 | 49.13 | 1248 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| D326NT | E3 | 49.13 | 1248 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | | |
| D326NR | E1 | 49.13 | 1248 | 24.75 | 629 | 25.13 | 638 | 8.88 | 226 | 1 | |
| D326NTR | E1 | 49.13 | 1246 | 24.75 | 629 | 25.13 | 638 | 8.88 | 226 | 1 | |
| DU221RB | E2 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| DU222RB | E1 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| DU321 | E2 | 9.25 | 235 | 6.75 | 171 | 7.25 | 184 | 3.63 | 92 | 5 | |
| DU321RB | E2 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| DU322 | E1 | 9.25 | 235 | 6.75 | 171 | 7.25 | 184 | 3.63 | 92 | 5 | |
| DU322RB | E1 | 9.63 | 245 | 7.25 | 184 | 7.75 | 197 | 3.75 | 95 | 5 | |
| DU323 | F3 | 17.50 | 445 | 8.50 | 216 | 10.50 | 267 | 6.50 | 165 | 1 | |
| DU323RB | F3 | 17.50 | 445 | 8.50 | 216 | 10.50 | 267 | 6.50 | 165 | 1 | |
| DU324 | F1 | 29.00 | 737 | 17.25 | 438 | 19.00 | 483 | 8.25 | 210 | 1 | |
| DU324RB | F1 | 29.25 | 743 | 17.25 | 438 | 19.00 | 483 | 8.25 | 210 | 1 | |
| DU325 | E3 | 45.12 | 1146 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| DU326 | E3 | 49.13 | 1248 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| T327N | E1 | 49.13 | 1248 | 24.00 | 610 | 24.88 | 632 | 8.88 | 226 | 1 | |
| T327NR | E1 | 49.13 | 1248 | 24.75 | 629 | 25.13 | 638 | 8.88 | 226 | 1 | |

Heavy Duty Safety Switches









NEMA Type 1

NEMA Type 3R

NEMA Type 12

NEMA Type 4, 4x, 5 Stainless Steel

Visible blade heavy duty safety switches are designed for application where maximum performance and continuity of service are required. Heavy duty safety switches feature performance and continuity of service are required. Heavy duty safety switches feature quick-make, quick-break operating mechanism, a dual cover interlock and a color coded indicator handle. They are suitable for use as service equipment when equipped with a field- or factory-installed neutral assembly or equipment grounding kit, unless a 600Y/347 V or 480 Y/277 V, 1000 A or greater, solidly grounded WYE system is used, per NEC 230-95. Heavy duty safety switches are UL Listed (except as noted). Files E2875 and E154828 meet or exceed the NEMA Standard KS1. For UL Listed short circuit current ratings, see UL Listed Maximum Short Circuit Current Ratings-AC only, page 3-13.

Table 3.14: 240 Volt — Single Throw Fusible Switches

| | | | | | | | | Но | rsepower F | atings | |
|---|-------------|--------------------|--------------------|-----------------|-------------------|---------------------------|---------------------|------------------------|------------|------------------------|-------------|
| System | Amp | Type 1 | Type 3R [1] | Type 12[1] | Type 4X 304 SS[1] | Line Side Barriers [2] | Std (Fas One-Tim | st Acting le Fuses) | | l Element ay Fuses) | 250 Vdc [3] |
| | | | | | | | 1Ø | 3Ø [4] | 1Ø | 3Ø [4] | |
| 2 Wire (2 Bl | ade and Fus | eholder) – 240 Vad | 250 Vdc | | | | | | | | |
| | 30 | | | VH221AWKGL [5] | VH221DSGL [5] | Factory Included | 1-1/2 | 3 | 3 | 7-1/2 | 5 |
| | 30 | | | VH2213AWKGL [5] | VH2213DSGL [5] | Factory Included | 1-1/2 | _ | 3 | _ | 5 |
| 0 0 | 60 | Use device wit | h factory neutral | VH222AWKGL [5] | VH222DSGL [5] | Factory Included | 3 | 7-1/2 | 10 | 15 | 10 |
| // | 100 | | | VH223AWKGL [5] | VH223DSGL [5] | Factory Included | 7-1/2 | 15 | 15 | 30 | 20 |
| 9 | 200 | | | VH224AWKGL [5] | VH224DSGL [5] | Factory Included | 15 | 25 | _ | 60 | 40 |
| ነ ነ | 400 | H225 | H225R | H225AWK | H225DS | LSBG202 | _ | _ | _ | _ | 50 |
| 0 0 | 600 | H226 | H226R | H226AWK | H226DS | LSBG202 | _ | 75 | _ | 200 | 50 |
| | 800 | H227 | H227R | H227AWK | _ | LSBF202 | 50 | _ | _ | _ | 50 |
| | 1200 | H228 | H228R | H228AWK | _ | LSBF202 | 50 | _ | _ | _ | 50 |
| 3 Wire (2 Bl | ade and Fus | eholder, 1 neutral | - 240 Vac 250 Vd | С | | | | | | | |
| | 30 | VH221N | VH221NRB | VH221NAWKGL [5] | VH221NDSGL [5] | Factory Included | 1-1/2 | 3 | 3 | 7-1/2 | 5 |
| | 60 | VH222N | VH222NRB | VH222NAWKGL [5] | VH222NDSGL [5] | Factory Included | 3 | 7-1/2 | 10 | 15 | 10 |
| | 100 | VH223N | VH223NRB | VH223NAWKGL [5] | VH223NDSGL [5] | Factory Included | 7-1/2 | 15 | 15 | 30 | 20 |
| h 5 ⁻ 5 | 200 | VH224N | VH224NR [6] | VH224NAWKGL [5] | VH224NDSGL [5] | Factory Included | 15 | 25 | _ | 60 | 40 |
| ISS | 400 | H225N | H225NR | H225NAWK | H225NDS | LSBG202 | _ | 50 | _ | 125 | 50 |
| 000 | 600 | H226N | H226NR | H226NAWK | H226NDS | LSBG202 | _ | 75 | _ | 200 | 50 |
| | 800 | H227N | H227NR | H227NAWK | _ | LSBF202 | 50 | _ | _ | _ | 50 |
| | 1200 | H228N | H228NR | H228NAWK | _ | LSBF202 | 50 | _ | _ | _ | 50 |
| 3 Wire (3 Bl | ade and Fus | eholder) – 240 Vad | 250 Vdc | | | | | | | | |
| | 30 | | | VH321AWKGL [5] | VH321DSGL [5] | Factory Included | 1-1/2 | 3 | 3 | 7-1/2 | 5 |
| 10.750 No. 100 | 60 | Llas davias wit | h faatam, masstual | VH322AWKGL [5] | VH322DSGL [5] | Factory Included | 3 | 7-1/2 | 10 | 15 | 10 |
| | 100 | Use device wit | h factory neutral | VH323AWKGL [5] | VH323DSGL[5] | Factory Included | 7-1/2 | 15 | 15 | 30 | 20 |
| (-(-(| 200 | | | VH324AWKGL [5] | VH324DSGL [5] | Factory Included | 15 | 25 | _ | 60 | 40 |
| 777 | 400 | H325 | H325R | H325AWK | H325DS | LSBG203 | _ | 50 | _ | 125 | 50 |
| 000 | 600 | H326 | H326R | H326AWK | H326DS | LSBG203 | _ | 75 | _ | 200 | 50 |
| | 800 | H327 | H327R | H327AWK | _ | LSBF203 | 50 | _ | _ | _ | 50 |
| | 1200 | H328 | H328R | H328AWK | _ | LSBF203 | 50 | _ | | _ | 50 |
| 4 Wire (3 Bl | ade and Fus | eholder, 1 neutral | -240 Vac 250 Vdd | 3 | | | | | | | |
| | 30 | VH321N | VH321NRB | VH321NAWKGL [5] | VH321NDSGL [5] | Factory Included | 1-1/2 | 3 | 3 | 7-1/2 | 5 |
| | 60 | VH322N | VH322NRB | VH322NAWKGL [5] | VH322NDSGL [5] | Factory Included | 3 | 7-1/2 | 10 | 15 | 10 |
| 9999 | 100 | VH323N | VH323NRB | VH323NAWKGL [5] | VH323NDSGL [5] | Factory Included | 7-1/2 | 15 | 15 | 30 | 20 |
| | 200 | VH324N | VH324NR[6] | VH324NAWKGL [5] | VH324NDSGL [5] | Factory Included | 15 | 25 | _ | 60 | 40 |
| ITTT | 400 | H325N | H325NR | H325NAWK | H325NDS | LSBG203 | _ | 50 | _ | 125 | 50 |
| | 600 | H326N | H326NR | H326NAWK | H326NDS | LSBG203 | _ | 75 | _ | 200 | 50 |
| | 800 | H327N | H327NR | H327NAWK | _ | LSBF203 | 50 | _ | _ | _ | 50 |
| | 1200 | H328N | H328NR | H328NAWK | _ | LSBF203 | 50 | _ | _ | _ | 50 |

Accessories: see page 3-16
Dimensions: NEMA Type 1 and 3R, see page 3-22
Dimensions: NEMA Type 4, 4X and 5 Stainless and NEMA Type 12, see page 3-24

For rainproof bolt-on hubs and water resistant hubs.

^[2] Factory included to protect against inadvertent contact with live parts per .UL 869A and NEC Service entrance barrier requirements.

For switching dc, use two outside switching poles

For corner grounded delta systems, use switching poles for ungrounded conductors. See data bulletin 2700DB0202 for additional information.

Ground Lug Factory Included

^[3] [4] [5] [6] This catalog is shipped with HUB provision and knockouts.



600 Volt—Single Throw Fusible Switches Class **3130**

600 Volt-Single Throw Fusible

Table 3.15: 600 Volt-Single Throw Fusible

| | | | | | | | | | Horsepow | ver Rating | s | | | | |
|--------------------|--------------|-------------------|----------------------|-----------------|--------------------|-----------------------|--|-----|----------|-----------------------------|----------------|---------|--|--|--|
| System | Amp | Type 1 | Type 3R [7] | Type 12 [7] | Type 4X 304 SS [7] | Line Side Barriers | Std (Fast Acting One-Time Fuses) | | | (Dual nt Time- Fuses) | 250 Vdc [8] | 600 Vdc | | | |
| | | | | | | 1Ø | 3Ø | 1Ø | 3Ø | | | | | | |
| 2 Wire (2 B | | seholder) – 600 V | /ac 600 Vdc | | | | | | | | | | | | |
| J | 30 | f | | | | | | | | | | | | | |
| የየ | 60 100 | i | | | Use device wit | th three blade | | | | | | | | | |
| 7-7 | 200 | í | | | | | | | | | | | | | |
| ۱ ح ح | 400 | H265 | H265R | H265AWK | H265DS | LSBG602 | 100 | 250 | _ | Т | 50 | 50 | | | |
| 77 . | 600 | H266 | H266R | H266AWK | H266DS | LSBG602 | 150 | 400 | _ | | 50 | 50 | | | |
| | 800 | H267 | H267R | H267AWK | _ | LSBF602 | | _ | _ | _ | _ | 50 | | | |
| ' | 1200 | H268 | H268R | H268AWK | _ | LSBF602 | | | | | <u> </u> | 50 | | | |
| 3 Wire (3 B) | lade and Fus | seholder) – 600 V | /ac 600 Vdc | | | | | | | | | | | | |
| J | 30 | VH361 | VH361RB | VH361AWKGL [9] | VH361DSGL [9] | Factory Included | 5 | 15 | 7-1/2 | 20 | 5 | 15 | | | |
| 1 | 30 | | _ | VH3613AWKGL [9] | VH3613DSGL [9] | Factory Included | 5 | 15 | 7-1/2 | 20 | _ | 15 | | | |
| 000 | 60 | VH362 | VH362RB | VH362AWKGL [9] | VH362DSGL [9] | Factory Included | 15 | 30 | 15 | 50 | _ | 30 | | | |
| 7-7-1 | 100 | VH363 | VH363RB | VH363AWKGL [9] | VH363DSGL [9] | Factory Included | 25 | 60 | 30 | 100 | _ | 50 | | | |
| \$ <u>\$ \$ \$</u> | 200 | VH364 | VH364R [10] | VH364AWKGL [9] | VH364DSGL [9] | Factory Included | 50 | 125 | 60 | 150 | 40 | 50 | | | |
| 999 | 400 | H365 | H365R | H365AWK | H365DS | LSBG602 | 100 | 250 | 125 | 350 | 50 | 50 | | | |
| **** | 600 | H366 | H366R | H366AWK | H366DS | LSBG602 | 150 | 400 | 200 | 500 | 50 | 50 | | | |
| , Г | 800 | H367 | H367R | H367AWK | _ | LSBF602 | 200 | 500 | 250 | 500 | _ | 50 | | | |
| ' | 1200 | H368 | H368R | H368AWK | _ | LSBF602 | 200 | 500 | 250 | 500 | _ | 50 | | | |
| 4 Wire (3 B | lade and Fus | eholder, 1 neutr | ral) - 600 Vac 600 \ | Vdc | | | | | | | | | | | |
| | 30 | VH361N | VH361NRB | VH361NAWKGL [9] | VH361NDSGL [9] | Factory Included | 5 | 15 | 7-1/2 | 20 | 5 | 15 | | | |
| , ! | 60 | VH362N | VH362NRB | VH362NAWKGL [9] | VH362NDSGL [9] | Factory Included | 15 | 30 | 15 | 50 | _ | 30 | | | |
| 9999 | 100 | VH363N | VH363NRB | VH363NAWKGL [9] | VH363NDSGL [9] | Factory Included | 25 | 60 | 30 | 100 | _ | 50 | | | |
| | 200 | VH364N | VH364NR [10] | VH364NAWKGL [9] | VH364NDSGL [9] | Factory Included | 50 | 125 | 60 | 150 | 40 | 50 | | | |
| 1555 | 400 | H365N | H365NR | H365NAWK | H365NDS | LSBG602 | 100 | 250 | 125 | 350 | 50 | 50 | | | |
| , | 600 | H366N | H366NR | H366NAWK | H366NDS | LSBG602 | 150 | 400 | 200 | 500 | 50 | 50 | | | |
| , 1 | 800 | H367N | H367NR | H367NAWK | _ | LSBF602 | 200 | 500 | 250 | 500 | _ | 50 | | | |
| , ' | 1200 | H368N | H368NR | H368NAWK | _ | LSBF602 | 200 | 500 | 250 | 500 | _ | 50 | | | |

Accessories: see page 3-16
Dimensions: NEMA Type 1 and 3R, see page 3-22
Dimensions: NEMA Type 4, 4X and 5 Stainless and NEMA Type 12, see page 3-24

Table 3.16: 4-Pole and 6-Pole - Single Throw Fusible (NOT SUITABLE FOR SERVICE ENTRANCE)

| | | | | Class R | Line Side | | Hor | sepower Ra | itings Max (| Dual Eleemn | t Time-Delay | Fuses) | |
|---------------|--------------|------------------|-------------|-----------|----------------------|-------|-----|------------|--------------|-------------|--------------|---------|---------|
| System | Amperes | Type 12 | Type 4X | F KITO | Barriana . | 240 V | | 480 V | | 600 V | | 250 Vdc | 600 Vdo |
| | | | | Fuse KITS | Barriers | 2Ø | 3Ø | 2Ø | 3Ø | 2Ø | 3Ø | 250 Vac | 600 Vdc |
| 4-Wire (4 Bla | des and fuse | holders) - 600 V | ac 600 Vdc | | | | | | | | | | |
| | 30 | H461AWK | H461DS | RFK03L | FactoryIncluded | 10 | 10 | 20 | 20 | 25 | 30 | 10 | 15 |
| 9999 | 60 | H462AWK | H462DS | RFK03H | FactoryIncluded | 20 | 20 | 40 | 50 | 50 | 60 | 10 | 30 |
| 5555 | 100 | H463AWK | H463DS | RFK10 | FactoryIncluded | 30 | 40 | 50 | 75 | 50 | 75 | 20 | 30 |
| 5555 | 200 | H464AWK | H464DS | HRK1020 | FactoryIncluded | 50 | 60 | 50 | 125 | 50 | 150 | 40 | 50 |
| 0000 | 400 | H465AWK | H465DS | HRK4060 | Qty. (2): LSBG602 | _ | 125 | _ | 250 | _ | 350 | 50 | 50 |
| 6-Wire (6 Bla | des and fuse | holders) - 600 \ | /ac 600 Vdc | | | | | | | | | | |
| 99999 | 100 | H663AWK | H663DS | RFK10 | FactoryIncluded | _ | 50 | _ | 75 | _ | 75 | _ | _ |
| 333333 | 200 | H664AWK | H664DS | HRK1020 | FactoryIncluded | _ | 60 | _ | 125 | _ | 150 | _ | _ |

 ^[7] For rainproof bolt-on hubs and water resistant hubs.
 [8] For switching dc, use two outside switching poles.
 [9] Ground Lug Factory Included.
 [10] This catalog is shipped with HUB provision and knockouts.

Table 3.17: 600 Volt—Single Throw Non-Fusible

| | | | | | | | | | Horsepo | wer Ratings | | |
|-------------|--------------|------------------|--------------|-----------------------------|---------------------|----------------------------|----------------------|-----|---------|--------------------------|---------------------|---------|
| System | Amp | Type 1 | Type 3R [11] | Type 12 [11] | Type 4X 304 SS [11] | Line Side Barriers [12] | Std (Fas One-Time | | | al Element lay Fuses) | 250 Vdc [13] | 600 Vdc |
| | | | | | | | 1Ø | 3Ø | 1Ø | 3Ø | [13] | |
| 2 Wire (2 B | Blade) - 600 | Vac 600 Vdc [14] | 1 | | | | | | | | | |
| 9 9 | 400 | HU265 | HU265R | HU265AWK | HU265DS | LSBG602 | _ | 125 | _ | 250 | 50 | 50 |
| , , | 600 | HU266 | HU266R | HU266AWK | HU266DS | LSBG602 | | 200 | | 400 | 50 | 50 |
| 7-7 | 800 | HU267 | HU267R | HU267AWK | _ | LSBF602 | _ | _ | _ | _ | | 50 |
| 99 | 1200 | HU268 | HU268R | HU268AWK | _ | LSBF602 | _ | _ | _ | _ | _ | 50 |
| 3 Wire (3 B | Blade) - 600 | Vac 600 Vdc | | | | | | | | | | |
| | 30 | VHU361 | VHU361RB | VHU361AWKGL [15] | VHU361DSGL [15] | Factory Included | 5 | 15 | 7-1/2 | 20 | 5 | 15 |
| | 30 | - | _ | VHU3613AWKGL <i>[15]</i> | VHU3613DSGL [15] | Factory Included | 5 | 15 | 7-1/2 | 20 | _ | 15 |
| | 60 | VHU362 | VHU362RB | VHU362AWKGL [15] | VHU362DSGL [15] | Factory Included | 15 | 30 | 15 | 50 | _ | 30 |
| 1, 1, 1, | 100 | VHU363 | VHU363RB | VHU363AWKGL [15] | VHU363DSGL [15] | Factory Included | 25 | 60 | 30 | 100 | _ | 50 |
| 111 | 200 | VHU364 | VHU364R [16] | VHU364AWKGL [15] | VHU364DSGL [15] | Factory Included | 50 | 125 | 60 | 150 | 40 | 50 |
| | 400 | HU365 | HU365R | HU365AWK | HU365DS | LSBG602 | 100 | 250 | 125 | 350 | 50 | 50 |
| | 600 | HU366 | HU366R | HU366AWK | HU366DS | LSBG602 | 150 | 400 | 200 | 500 | 50 | 50 |
| | 800 | HU367 | HU367R | HU367AWK | | LSBF602 | 200 | 500 | 250 | 500 | _ | 50 |
| | 1200 | HU368 | HU368R | HU368AWK | _ | LSBF602 | 200 | 500 | 250 | 500 | _ | 50 |
| | 1200 | HU268 | HU268R | HU268AWK | _ | LSBF602 | _ | _ | _ | _ | | 50 |

Table 3.18: 4-Pole and 6-Pole - Single Throw Non-Fusible (NOT SUITABLE FOR SERVICE ENTRANCE)

| | | | | 01 5 | | | Henry | | diama Mass / | Duel Electron | Time Delever | • | |
|---------------|----------------|------------------------|---------|-----------|----------------------|----|-------|-----------|--------------|---------------|--------------|---------|---------|
| | | | | Class R | Line Side | | | epower Ra | tings Max (| Dual Eleemnt | Time-Delay F | uses) | |
| System | Amperes | Type 12 | Type 4X | Fuse KITS | Davison | 24 | 0 V | 48 | 480 V | | 600 V | | 600 Vdc |
| | | | | ruse KIIS | Barriers | 2Ø | 3Ø | 2Ø | 3Ø | 2Ø | 3Ø | 250 Vdc | 600 Vac |
| 4-Wire (4 Bla | ides) - 600 Va | c 600 Vdc | | | | | | | | | | | |
| | 30 | _ | HU461DS | RFK03L | FactoryIncluded | 10 | 10 | 20 | 20 | 25 | 30 | 10 | 15 |
| 9999 | 30 | HU461AWK (SeriesF6) | _ | _ | FactoryIncluded | 10 | 10 | 20 | 20 | 25 | 30 | 5 | 15 |
| 1, 1, 1, 1, | 60 | HU462AWK | HU462DS | RFK03H | FactoryIncluded | 20 | 20 | 40 | 50 | 50 | 60 | 10 | 30 |
| | 100 | HU463AWK | HU463DS | RFK10 | FactoryIncluded | 30 | 40 | 50 | 75 | 50 | 75 | 20 | 30 |
| 0 0 0 0 | 200 | HU464AWK | HU464DS | HRK1020 | FactoryIncluded | 50 | 60 | 50 | 125 | 50 | 150 | 40 | 50 |
| | 400 | HU465AWK | HU465DS | HRK4060 | Qty. (2): LSBG602 | - | 125 | _ | 250 | 1 | 350 | 50 | 50 |
| 6-Wire (6 Bla | ides) - 600 Va | c 600 Vdc | | | | | | | | | | | |
| | 30 | HU661AWK | HU661DS | _ | FactoryIncluded | - | 10 | _ | 20 | | 30 | _ | _ |
| 1,1,1,1,1, | 60 | HU662AWK | HU662DS | _ | FactoryIncluded | | 20 | _ | 50 | | 60 | _ | _ |
| 111111 | 100 | HU663AWK | HU663DS | RFK10 | FactoryIncluded | _ | 50 | _ | 75 | _ | 75 | _ | _ |
| | 200 | HU664AWK | HU664DS | HRK1020 | FactoryIncluded | - | 60 | _ | 125 | - | 150 | _ | _ |

^[11] For rainproof bolt-on hubs and water resistant hubs.

^[12] Factory Included to protect against inadvertent contact with live parts per UL 869A and NEC service entrance barrier requirements.

^[13] For switching dc, use two outside switching poles.[14] For 30-200 A two wire application use a three blade device.

^[15] Ground Lug Factory Included.

^[16] This catalog is shipped with HUB provision and knockouts.

UL Listed Maximum Short Circuit Current Ratings—AC only

Class 3140

UL Listed Maximum Short Circuit Current Ratings—AC only

NOTE: Consult the wiring diagram of the switch to verify the UL Listed short circuit current rating.

Table 3.19: Fusible Safety Switches

| Heavy Duty Safety Switch Type | UL Listed Fuse Class | UL Listed Short Circuit Current Ratings |
|----------------------------------|-------------------------|--|
| - · | H, K | 10 kA |
| Fusible | R, J, L | 200 kA [17] |

Non-Fusible Safety Switches - Ratings

Systems equal or less than 10 kAIR SCCR —Any brand of circuit breaker or fuse not exceeding the ampere rating of the switch may be used in conjunction with a non-fusible safety switch.

Systems above 10 kAIR SCCR—The UL Listed short circuit current rating for Square D non-fusible switches is based upon the switch being used in conjunction with fuses or Square D circuit breakers or Mag-Gard motor circuit protectors.

| Switch Rating | Fuse or Circuit Breaker Type [20] | | 3-Phase | | 250 Vdc / |
|----------------------------------|-----------------------------------|---------|---------|---------|--------------|
| (A) | ruse of Circuit Breaker Type [20] | 240 Vac | 480 Vac | 600 Vac | 600 Vdc |
| ith Upstream Fuse Protection | | | | | |
| A.II | H, K | 10 kA | 10 kA | 10 kA | Lin to 10 kA |
| All | R,T,J,L | 200 kA | 200 kA | 200 kA | Up to 10 kA |
| ith Upstream Circuit Breaker Pro | tection | | | | |
| All | Any brand circuit breaker | 10 kA | 10 kA | 10 kA | |
| 30–100 | HD | 25 kA | 18 kA | 14 kA | 1 |
| 30–100 | HG | 65 kA | 35 kA | 18 kA | |
| 30–100 | HJ | 65 kA | 35 kA | 25 kA | |
| 30–100 | HL | 65 kA | 35 kA | 35 kA | |
| 30–100 | HR | 65 kA | 35 kA | 35 kA | |
| 30–100 | FA | 14 kA | 14 kA | 14 kA | |
| 30-100 | FH | 18 kA | 18 kA | 18 kA | |
| 200 | HD, JD | 25 kA | 18 kA | 14 kA | |
| 200 | HG, JG | 65 kA | 35 kA | 18 kA | |
| 200 | HJ, JJ | 65 kA | 35 kA | 25 kA | Up to 10 kA |
| 200 | HL, JL | 65 kA | 35 kA | 35 kA | 1 |
| 200 | HR, JR | 65 kA | 35 kA | 35 kA | 1 |
| 400 | LA | 22 kA | 22 kA | 22 kA | 1 |
| 400 | LH | 25 kA | 25 kA | 25 kA | 1 |
| 400-600 | LD | 25 kA | 18 kA | 14 kA | 1 |
| 400–600 | LG | 65 kA | 35 kA | 18 kA | |
| 400–600 | LJ | 100 kA | 65 kA | 25 kA | |
| 400-600 | LL | 100 kA | 65 kA | 50 kA | |
| 400-600 | LR | 100 kA | 65 kA | 65 kA | 1 |

^[17] On 600 V, 200 A switches, 100,000 A max. on corner grounded delta when using Class J or R fuses.

^[18] For NEMA Type 4X Fiberglass Reinforced Polyester switches, see page 3-15.

NEMA Type 7/9 SCCR 10 kAIR 600 Vac maximum. [19]

Ampere rating of fuse or circuit breaker not to exceed switch ampere rating.



Special Application Heavy Duty Safety Switches







316 Grade Stainless Steel—NEMA Type 3, 3R, 4, 4X, 5, 12

316 stainless steel enclosure safety switches offer superior corrosion resistance to a wider range of chemicals than 304 stainless switches. 316 better resists chloride and is often used in marine, waste treatment and transportation applications. Use water resistant hubs, see Hubs, page 3-16. Equipment grounding lugs are supplied as standard through 200 A. See Terminal Lug Data, page 3-21 for wire Termination data for

For 304 stainless switches, see 240 Volt, page 3-10 and 600 Volt, page 3-11.



VH361SSGL

Table 3.21: 316 Grade Stainless Steel 3 Pole 600 Vac, 600 Vdc

| | | | | | | Horsepowe | r Ratings- 3Ø | |
|---------------------|----------------------|-----------------------|-------------------------|-------|---------|-----------|---------------|--------------|
| System | Amperes | Cat. No | Line Side Barriers [21] | 480 V | ac [22] | 600 | Vac [22] | 600 Vac [23] |
| | | | | Std. | Max. | Std. | Max. | Max. |
| Fusible - 3 Wire (3 | Blade and fuse ho | olders) - 600 Vac 600 | Vdc | | | | | |
| | 30 | VH361SSGL | Factory included | 5 | 15 | 7-1/2 | 20 | 15 |
| 9 9 9 | 60 | VH362SSGL | Factory included | 15 | 30 | 15 | 50 | 30 |
| (-(-(| 100 | VH363SSGL | Factory included | 25 | 60 | 30 | 75 | 50 |
| 777 | 200 | VH364SSGL | Factory included | 50 | 125 | 60 | 150 | 50 |
| 999 | 400 | H365SS | LSBG602 | 100 | 250 | 125 | 350 | 50 |
| Gr 25. 13 | 600 | H366SS | LSBG602 | 150 | 400 | 200 | 500 | 50 |
| Non-Fusible - 3 W | ire (3 Blades) - 600 | Vac 600 Vdc | | | | | | |
| | 30 | VHU361SSGL | Factory included | _ | 20 | _ | 30 | 15 |
| 9 9 9 | 60 | VHU362SSGL | Factory included | _ | 50 | _ | 60 | 30 |
| _{/-} / | 100 | VHU363SSGL | Factory included | _ | 75 | _ | 100 | 50 |
| | 200 | VHU364SSGL | Factory included | _ | 125 | _ | 150 | 50 |
| 000 | 400 | HU365SS | LSBG602 | _ | 250 | _ | 350 | 50 |
| | 600 | HU366SS | LSBG602 | _ | 400 | _ | 500 | 50 |

Std.—Using fast acting, one time fuses. Max.—Using dual element time delay fuses.



Special Applications Class 3140

Fiberglass Reinforced Polyester Enclosures—NEMA Type 4X

Fiberglass reinforced polyester enclosures are water resistant, corrosion resistant, and resists to windblown dust, rain, and splashing liquid. The molded fiberglass can withstand a wide range of operating temperatures and can withstand heavy impact. Switches are furnished with hubs, conduit provisions Table 3.40 Conduit Provisions, page 3-22, and equipment grounding lugs. See CAD drawings of the switch to verify the UL listed short circuit current rating or the enclosed safety switch catalog. UL Listed.



Table 3.22: Fiberglass Reinforced Polyester Enclosures NEMA Type 4X 3 Pole 600 Vac, 600 Vdc

| | | | Solid | Class R | Electrical In | nterlock Kits | Line Side | | Horse | power Rating | js- 3Ø | | | |
|-------------|---|----------------|------------|-----------------|---------------|-----------------------|-----------------------|------------------|---------|--------------|--------|------|-----------|-----------|
| System | Amperes | Cat. No. | Neutral | Fuse Kits | | led Cat. No. | Barriers Factory | 480 V | ac [26] | 600 Vac [26] | | | Hubs [25] | |
| C)SiSiii | | Out. NO. | Gui. No. | Assembly Kit | Cat. No. | 1 NO/1 NC Contacts | 2 NO/2 NC Contacts | Included [24] | Std. | Max. | Std. | Max. | Max. | Hubs (20) |
| Fusible - 3 | Fusible - 3 Wire (3 Blade and fuse holders) - 600 Vac 600 Vdc | | | | | | | | | | | | | |
| 0.00 | 30 | H361DF | SN03 | RFK06 | 9999TC10 | 9999TC20 | Factory Included | 5 | 15 | 7-1/2 | 20 | 15 | 3/4 | |
| 999 | 60 | H362DF | SN03 | RFK06H | 9999TC10 | 9999TC20 | Factory Included | 15 | 30 | 15 | 50 | 30 | 1-1/4 | |
| 222 | 100 | H363DF | SN0610 | RFK10 | 9999TC10 | 9999TC20 | Factory Included | 25 | 60 | 30 | 75 | 50 | 2 | |
| 3 3 3 | 200 | H364DF | _ | HRK1020 | 9999R8 | 9999R9 | Factory Included | 50 | 125 | 60 | 150 | 50 | 2-1/2 | |
| Non-Fusible | le - 3 Wire (3 B | lade) - 600 Va | ac 600 Vdc | | | | | | | | | | | |
| 1 | 30 | HU361DF | SN03 | _ | 9999TC10 | 9999TC20 | Factory Included | | 20 | | 30 | 15 | 3/4 | |
| 1,1,1, | 60 | HU362DF | SN03 | _ | 9999TC10 | 9999TC20 | Factory Included | _ | 50 | _ | 60 | 30 | 1-1/4 | |
| [77] | 100 | HU363DF | SN0610 | _ | 9999TC10 | 9999TC20 | Factory Included | _ | 75 | _ | 75 | 50 | 2 | |
| Í | 200 | HU364DF | _ | _ | 9999R8 | 9999R9 | Factory Included | | 125 | _ | 150 | 50 | 2-1/2 | |

Krydon™ Enclosures—NEMA Type 4X

Krydon enclosures are compression molded of fiberglass reinforced polyester, specially formulated to withstand attack from almost any corrosive atmosphere found in the toughest industrial application. Switches are furnished with water resistant hubs and equipment grounding lugs. See CAD drawing of the switch to verify the UL listed short circuit current rating or the enclosed safety switch catalog. UL Listed.



Table 3.23: Krydon™ Enclosures — NEMA Type 4X 3 Pole 600 Vac, 600 Vdc

| | | | | | Class R Electrical Interlock Kits L | | Line Side Hor | | | power Rating | js- 3Ø | | |
|--------------------------------|-----------------|----------------|------------------|-----------|-------------------------------------|--------------------------|---------------------|---------------------|------|---------------------|--------|---------------------|------------|
| System | Amperes | Cat No No | Solid Neutral | Fuse Kits | Field-Installed Cat. No. | | Barriers Factory | 480 Vac [28] | | 600 Vac [28] | | 600 Vdc [29] | Hubs [25] |
| Oystelli | Amperes | | Assembly Kit | Cat. No. | 1 NO/1 NC Contact | 2 NO/2 NC Contacts | Included [27] | Std. | Max. | Std. | Max. | Max. | 11003 [20] |
| Fusible - 3 V | Nire (3 Blade | and fuse hold | ders) - 600 Va | c 600 Vdc | | | | | | | | | |
| 999 | 30 | H361DX | H60SN | RFK06 | 9999TC10 | 9999TC20 | Factory Included | 5 | 15 | 7-1/2 | 20 | 15 | 3/4 |
| 553 | 60 | H362DX | H60SN | RFK06H | 9999TC10 | 9999TC20 | Factory Included | 15 | 30 | 15 | 50 | 30 | 1-1/4 |
| 111 | 100 | H363DX | SN0610 | RFK10 | 9999TC10 | 9999TC20 | Factory Included | 25 | 60 | 30 | 75 | 50 | 2 |
| Non-Fusible | e - 3 Wire (3 B | lade) - 600 Va | c 600 Vdc | | | | | | | | | | |
| 9 9 9 | 30 | HU361DX | H60SN | _ | 9999TC10 | 9999TC20 | Factory Included | _ | 20 | _ | 30 | 15 | 3/4 |
| /- / - / | 60 | HU362DX | H60SN | _ | 9999TC10 | 9999TC20 | Factory Included | - | 50 | _ | 60 | 30 | 1-1/4 |
| 999 | 100 | HU363DX | SN0610 | _ | 9999TC10 | 9999TC20 | Factory Included | _ | 75 | _ | 75 | 50 | 2 |

Factory included to protect against inadvertent contact with live parts per UL 869A and NEC service entrance barrier requirements.

^[25] Two hubs and hub drilling template are provided for field installation.

Std.—Using fast acting, one time fuses. Max.—Using dual element time delay fuses. [26]

^[27] Factory included to protect against inadvertent contact with live parts per UL 869A and NEC service entrance barrier requirements.

^[28] Std.—Using fast acting one time fuses. Max.—Using dual element time delay fuses.

For switching dc, use two outside switching poles.



Rainproof Bolt-On Hubs

Class 3140



Heavy Duty Safety Switch Accessories

Square D by Schneider Electric brand heavy duty safety switches are UL listed for use with the following accessories:

Rainproof Bolt-On Hubs and Water Resistant Hubs Rainproof Bolt-On Hubs

- UL Listed for indoor or rainproof applications
- Suitable for use with conduit having ANSI standard taper pipe thread
- NEMA Type 3R switches with catalog number ending in RB have a bolt-on closing cap factory installed
 - Accepts 3/4 in. through 2-1/2 in. bolt-on hubs
- No gaskets required
- NEMA Type 3R switches with R suffix have blank top endwalls [30]
 - Accepts 3 in. through 4 in. bolt on hubs
 - Gaskets provided
 - Conduit entry holes must be cut in the field

Table 3.24: Rainproof Bolt-On Hubs [31]

| Conduit Size | 3/4 | 1 | 1-1/4 | 1-1/2 | 2 | 2-1/2 | 3 | 4 | Closing Cap |
|-----------------|------|------|-------|-------|------|-------|------|------|----------------|
| Hub Cat. No | B075 | B100 | B125 | B150 | B200 | B250 | B300 | B400 | BCAP |

Water Resistant Hubs

- UL Listed for dusty and wet applications
- Suitable for use with conduit having ANSI standard taper pipe thread
- Water resistant hubs are field installed on NEMA Type 4/4X/5 stainless steel and NEMA Type 12/3R and 12K enclosures
- · Water resistant hubs are available in zinc or chrome plated finish
- · Gaskets provided



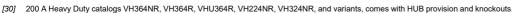




H050CP Chrome Plated

Table 3.25: Water Resistant Hubs (32)

| Tubic 0.20. Water Resistant Hubs [52] | | | | | | | | | | |
|---------------------------------------|--------|--------|--------|--------|--------|-------------|-------|------|-------|------|
| Conduit Size | 1/2 | 3/4 | 1 | 1-1/4 | 1-1/2 | 2 | 2-1/2 | 3 | 3-1/2 | 4 |
| Standard- Zinc Hub Cat. No | H050 | H075 | H100 | H125 | H150 | H200 | H250 | H300 | H350 | H400 |
| Chrome Plated Hub | H050CP | H075CP | H100CP | H125CP | H150CP | H200C- P | _ | _ | 1 | _ |



Gaskets are provided on 3 in. and larger hubs [31]

[32] Gaskets are provided.



Class 3140

Accessories and Special Features



EIK1 Electrical Interlock Kit

Electrical Interlock Kits

Electrical interlocks for heavy duty safety switches 30 A through 1200 A are available as field installed kits, or on Type 12 or Type 4X enclosure factory installed. A pivot arm operates from the switch mechanism, breaking the control circuit before the main switch blades break. See supplemental digest section 2 for contact ratings. UL Listed for factory or field installation

For factory installation catalog numbers available on Type 12 or 4X enclosures use the product configurator.

Table 3.26: Electrical Interlock Kit [33] [34]

| Switch Amperes Rating | Series Number [35] | Electrical Interlock Kit Cat. No. [36] |
|-----------------------------|--------------------|---|
| 30 | F5–F8 | EIK031 |
| 30 | 1 5-1 0 | EIK032 |
| 60 | F5–F8 | EIK1 |
| (600 V) | F3-F6 | EIK2 |
| 60 | F5–F8 | EIK031 |
| (240 V) | 1 5-1 0 | EIK032 |
| 100–200 | F5–F8 | EIK1 |
| 100-200 | F3-F6 | EIK2 |
| 30–100 | F5–F7 | EIK1 |
| Receptacle Switches | 1 5–1 7 | EIK2 |
| 30–200 | F5-F6 | EIK1 |
| Four- and Six-Pole Switches | F3=F0 | EIK2 |
| 400–1200 | E4-E5 | EIK40601 |
| 400-1200 | E4-E3 | EIK40602 |

Table 3.27: Electrical Interlock Contact Ratings [37]

| Interlock Type | | AC 50 | or 60Hz | DC | | | |
|----------------------------|-------|---------|---------|---------|-------|--------------|---------|
| interiock type | Volts | Make | Break | Cont. | Volts | Make / Break | Cont. |
| 1 N. O. / 1 N. C. Contact | 120 | 40.00 A | 15.00 A | 15.00 A | 115 | 0.50 A | 15.00 A |
| (-1 Suffix [38]) | 240 | 20.00 A | 10.00 A | 15.00 A | 230 | 0.25 A | 15.00 A |
| 2 N. O. / 2 N. C. Contacts | 120 | 30.00 A | 3.00 A | 10.00 A | 115 | 1.00 A | 10.00 A |
| (-2 Suffix [39]) | 240 | 15.00 A | 1.5 A | 10.00 A | 230 | 0.30 A | 10.00 A |

Class R Fuse Rejection Kits

When installed, kit limits switch to Class R fuses only. Kits are available for field installation. Each kit supports one three pole switch.

Table 3.28: 240 Vac — Class R Fuse Kits [40]

| Amperes | Series Number | Class R Fuse Kit Cat. No. |
|---------|---------------|------------------------------|
| 30 | F5–F8 | RFK03L |
| 60 | F5–F8 | RFK03H |
| 100 | F5–F8 | RFK10 |
| 200 | F5–F8 | HRK1020 |
| 400-600 | E4-E5 | HRK4060 |

Table 3.29: 600 Vac — Class R Fuse Kits [40] [41]

| Amperes | Series Number | Class R Fuse Kit Cat. No. |
|-----------------------------|---------------|------------------------------|
| 30 [42] | F5–F8 | RFK03H |
| 30 A Receptacle Switches | F7 | RFK06 |
| 30 A Four-Pole Switches | F5–F6 | RFK06 |
| 60 | F5–F8 | RFK06H |
| 100 | F5–F8 | RFK10 |
| 200 | F5–F8 | HRK1020 |
| 400–600 | E4-E5 | HRK4060 |

- [33] For series not shown in table refer to the switch wiring diagram.
- [34] Electrical interlocks for NEMA Type 4X fiberblass reinforced polyester and Krydon™ see Table 3.22 and Table 3.23 respectively.
- [35] See page 3-22 and page 3-24 for safety switch series.
- [36] Electrical interlock kit catalog numbers ending in 1 indicates one normally open and one normally closed contact. These kits use a 9007A01 industrial snap switch. Electrical interlock kit catalog numbers ending in 2 indicates two normally open and two normally closed contacts. These kits use a 9007C03 industrial snap switch.
- [37] Single-pole single-throw interlock kits are rated 1/2 hp at 110 and 220 Vac.
- [38] -1 Suffix uses a 9007A01 limit switch.
- [39] -2 Suffix uses a 9007C03 limit switch.
- [40] For series not shown in the table, refer to the switch wiring diagram.
- [41] Class R Fuse Kits for Fiberglass Reinforced Polyester enclosures and Krydon™ enclosures see Table 3.22 Fiberglass Reinforced Polyester Enclosures NEMA Type 4X 3 Pole 600 Vac, 600 Vdc, page 3-15 and Table 3.23 Krydon™ Enclosures NEMA Type 4X 3 Pole 600 Vdc, 600 Vdc, page 3-15 respectively.
- [42] H361-2, H361-2A, H361-2AWK and H361-2RB use RFK06.

Line Side Barrier Kits

The field instable line side barrier kits are required to meet National Electric Code (NFPA 70) for service entrance applications. Barrier kits protect against inadvertent contact with line side, uninsulated, ungrounded or service terminal live parts.

Table 3.30: Line Side Barrier Kits for Heavy Duty Safety Switch

| Amperes | Voltage | Blades/Fuses | Catalog |
|------------|-----------|--------------|---------|
| 30 | 600 | | LSBD602 |
| 30 / 60 | 240 | 2 or 3 | LSBD202 |
| 60 | 600 | 2013 | LSBC02 |
| 100 | 240 / 600 | | LSBC02 |
| | 240 | 2 | LSBE202 |
| 200 | 240 | 3 | LSBE203 |
| | 600 | 3 | LSBE603 |
| | 240 | 2 | LSBG202 |
| 400 / 600 | 240 | 3 | LSBG203 |
| | 600 | 2 or 3 | LSBG602 |
| | 240 | 2 | LSBF202 |
| 800 / 1200 | 240 | 3 | LSBF203 |
| | 600 | 2 or 3 | LSBF602 |

Internal Barrier Kits

Internal barrier kits provide an additional barrier that helps prevent accidental contact with live parts. Field-installed transparent barriers do not restrict visual inspection of the switch. Barrier provides IEC529 IP2X protection when door of enclosed disconnect switch is open. Designed with convenient door for accessing fuses for replacement without removing barrier, and allows use of test probes.

Internal barrier kits are not designed to meet NEC2020 for service entrance applications, see Table 3.30 Line Side Barrier Kits for Heavy Duty Safety Switch, page 3-18 for meeting this standard.

Table 3.31: Internal Barrier Kits for Heavy Duty

| Amperes | Voltage | Barrier for | Cat. No. |
|------------|-----------|---------------|----------------|
| 30 | 30 600 | | SS03 [43] |
| 00 | 240 | | SS03 [43] |
| 60 | 600 | Line and Load | SS06 [43] |
| 100 | | 1 | SS10 [43] |
| 200 | | | SS20 [43] [44] |
| 400 / 000 | 240 / 600 | Line Side | SS4060LI |
| 400 / 600 | 240 / 600 | Load Side | SS4060LO [45] |
| 000 / 4000 | | Line Side | SS80120LI |
| 800 / 1200 | | Load Side | SS80120LO [45] |



Solid Neutral Assembly Kits for Safety Switches

Table 3.32: Solid Neutral Assembly Kits [46] [47] [48] [49]

| Amperes | Series Number [50] | Standard Neutral Kit Cat. No. | Terminal Data AWG/kcmil | Optional Copper Only Neutral Kit Cat. No. | Terminal Data AWG/kemil |
|-------------|--------------------|----------------------------------|--|---|--|
| 30 | F5–F8 | SN03 [51] | (2) 14-3 Al/Cu plus (1) 14-3 Al/Cu Svc Ground | SN03C [51] | (2) 14-6 Cu plus (1) 14-6 Cu Svc Ground |
| 00 | F5–F8, (600 V) | SN0610 | (2) 14-1/0 Al/Cu plus (2) 14-6 Al/Cu Svc Ground | SN0610C | (2) 14-1/0 Cu plus (2) 14-6 Cu Svc Ground |
| 60 | F5–F8 (240 V) | SN03 | (2) 14-3 Al/Cu plus (1) 14-3 Al/Cu Svc Ground | SN03C | (2) 14-1/0 Cu plus (2) 14-6 Cu Svc Ground |
| 100 | F5–F8 | SN0610 | (2) 14-1/0 Al/Cu plus (2) 14-6 Al/Cu Svc Ground | SN0610C | (2) 14-1/0 Cu plus (2) 14-6 Cu Svc Ground |
| 200 [52] | F5–F8 | SN20A | (2) 6-250 Al/Cu plus (1) 14-10 Al/Cu Svc Ground | SN20C | (2) 6-250 Cu plus (1) 14-1/0 Cu Svc Ground |
| 400 and 600 | E4-E5 | H600SN | (4) 1-750 Al/Cu plus (1) 4-300 Al/Cu Svc Ground | H600SNC | (2) 1-600 Cu and (2) 4-350 Cu plus (2) 6-250 Cu Svc Ground |
| 800 | E4 | H800SNE4 | (6) 3/0-750 Al/Cu plus (2) 6-350 Al/Cu Svc Ground | _ | _ |
| 1200 | E4 | H1200SNE4 | (8) 3/0-750 Al/Cu plus (2) 6-350 Al/Cu Svc Ground | _ | _ |

Can only be applied to F series. [43]

^[44] For 200 A 240 V devices is also needed to order line side barriers kits from table 3.29 LSBE202 or LSBE2023.

^[45] Must buy line side also

For series not shown in chart refer to the switch wiring diagram

^[47] For solid Neutral Assembly Kits for Krydon™ enclosure see Table 3.23.

^[48] For Solid Neutral Assembly Kits for Fiberglass Reinforced Polyester enclosures see Table 3.22.

Neutrals cannot be installed in 4 or 6 pole switches or receptacle switches See page 3-22 and page 3-24 for safety switch series. [49]

^[50]

^[51] The following 30 A Series F5-F6 switches use SN0610 or SN0610C: H3612, H3612RB, H3612A, H3612AWK, HU3612, HU3612RB, HU3612A and HU3612AWK.

^[52] For 200% neutral, order (2) SN20A Neutral Kits and (1) SN20NI Neutral Jumper Kit.



Accessories and Special Features
Class 3140



Fuse Puller Kits

Fuse Puller Kits are standard equipment on the following 30 A - 100 A switches: NEMA Type 12, Type 4/4X/5 stainless steel, Type 4X fiberglass reinforced polyester and KrydonTM.

Fuse Puller Kit available for field installation on Type 1 and Type 3R, 30 A – 100 A switches. One Fuse Puller Kit required for a 3 pole fusible 240 V or 600 V heavy duty switch. Fuse Puller Kits can be field installed on switches manufactured since February 1980.

Table 3.33: Fuse Puller Kits for Heavy Duty Safety Switches

| Amperes | Series Number [53] | Fuse Puller Kit Cat. No. |
|----------|-----------------------------|--------------------------|
| 30 | F5–F7 | FPK03 [54] |
| 60 60 | F5–F7 (600 V) F5 (240 V) | FPK0610 FPK03 |
| 100 | F5–F7 | FPK0610 |

Equipment Grounding Kits For Safety Switches

Equipment grounding kits are available for field installation.

Factory included ground lug comes as standard on heavy duty safety switches Type 12 and 4X enclosures.

Table 3.34: Equipment Grounding Kits and Terminal Data [55] [56]

| Amperes | Series Number | Standard Cat. No. | Terminal Data AWG/kcmil | Optional Copper Only Cat. No. | Terminal Data AWG/kcmil |
|-------------|------------------|-------------------|---|-------------------------------------|----------------------------------|
| 30 | F5–F8 | GTK03 [57] | (2) 14-4 Cu or (2) 12-4 Al or (4) 14-12 Cu or (4) 12-10 Al | GTK03C [57] [58] | (2) 14-6 Cu |
| 60 | F5–F8 (600 V) | GTK0610 | (2) 14-1/0 Cu or (2) 12-1/0 Al and (2) 14-6 Cu or (2) 12-6 Al | GTK0610C | (2) 14-1/0 Cu and (2) 14-6 Cu |
| 60 | F5–F8 (240 V) | GTK03 | (2) 14-4 Cu or (2) 12-4 Al or (4) 14-12 Cu or (4) 12-10 Al | GTK03C | (2) 14-6 Cu |
| 100 | F5–F8 | GTK0610 | (2) 14-1/0 Cu or (2) 12-1/0 Al and (2) 14-6 Cu or (2) 12-6 Al | GTK0610C | (2) 14-1/0 Cu and (2) 14-6 Cu |
| 200 | F5–F8 | PKOGTA2 | (2) 10-2/0 Cu or (2) 6-2/0 Al | PKOGTC2 | (2) 14-4 Cu |
| 400 and 600 | E4-E5 | PKOGTA2 [59] | (2) 10-2/0 Cu or (2) 6-2/0 Al | PKOGTC3 | (4) 14-1/0 Cu |
| 800 | E4 | PKOGTA7 | (4) 4-350 Al/Cu | _ | _ |
| 1200 | E4 | PKOGTA8 | (8) 4-350 Al/Cu | _ | _ |

Touch-Up Paint for Safety Switches

| Description | Cat. No. |
|--|----------|
| 12 oz. Aerosol Paint Can, Square D ANSI-49 Gray Touch-Up Paint | PK49SP |
| NOTE: Standard neckage grantity is 6 cans | |

NOTE: Standard package quantity is 6 cans

Cover Viewing Window – Heavy Duty Single Throw Switches

Cover viewing window is positioned over the blades to allow visual verification of "ONOFF" status.

- Available as standard on Heavy Duty Single Throw Safety Switches 30, 60, 100, and 200 AMP, Type 1, Type 3R, Type 12, and Type 4X Stainless Steel Enclosures.
- Units can be obtained without window on Type 12 and Type 4X stainless steel devices
 – shipped from factory.
- Available as factory modification on Type 12 and Type 4X enclosures 400, 600, 800, and 1200 A.



^[53] For series not shown in chart refer to the switch wiring diagram

^{[54] 30} A 4 pole, H361-2 and H361-2RB Series F5, H361WA and H361WC Series F6 use FPK0610.

^[55] For series not shown in table refer to the switch wiring diagram.

^[56] Equipment Ground Kits (Al/Cu) are factory installed standard in 30-200 A Series F NEMA Type 4/4X/5 (stainless steel), 12. Equipment Ground Kits are standard factory installed on receptacle switches and Series F 30-200 A, 4 and 6 pole switches.

^[57] H2212AWK accepts GTK03 or GTK03C. H3612A or AWK accepts GTK03C. H3612 and H3612RB accepts GTK0610 HU3612AWK accepts GTK03C. HU3612A accepts GTK0610C. HU3612RB accepts GTK0610 or GTK0610C.

^{58]} Optional copper equipment grounding kit for the 4 and 6 pole 30 A F Series: H461DS, H461AWK, HU461DS, HU661DS and HU661AWK accepts GTK03C HU461AWK accepts GTK0610C.

Two required if equipment grounding conductors are run in parallel

Lock OFF / Lock ON

Lock off provisions are standard on Heavy Duty Switches

Lock-on is also available as a factory modification on Type 12 and 304 Stainless Steel Type 4X enclosures. Obtain by selecting on product configurator.

Lock Off Guard Kits

For field installed kits, the lock off guard works by covering the lockout tagout openings whenever the switch is in the ON POSITION. This protects against a padlock from being inadvertently inserted into the switch lockplate. Available ONLY for use on Type 1, Type 3R, Type 12, Heavy Duty Safety Switches.

Table 3.35: Lock-Off Guard Kits for Heavy Duty Safety Switches

| Switch Rating | Cat. No. |
|---------------|----------|
| 30 A | LOGK1 |
| 60 A 240 V | LOGKT |
| 60 A 600 V | LOCKS |
| 100 and 200 A | LOGK2 |

Key Interlock Systems

Factory installed only on heavy duty safety switches from 30 amp to 1200 amp, Type 12 and 304 stainless steel Type 4X.

The key interlock system is a simple and easy method of applying individual key interlock units and assemblies to the above equipment so as to require operation in a predetermined sequence. UL Listed.

Quoting: Contact Schneider Electric for catalog number, availability, and pricing prior to quoting a job. Detailed information is required before an order can be processed. Please see Supplemental Digest Section 2 for further information.

Use these suffixes on switch catalog numbers:

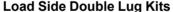
- KI = 1 lock per switch
- KI2 = 1 lock with 2 cylinders (2 keys) per switch
- KIKI = 2 separate locks per switch

Voltage Monitors for Safety Switches

Voltage monitors installed on safety switches indicate when voltage is present, helping to prevent hazards during maintenance work. Voltage monitors can be combined with other safety features such as Key Interlock, Viewing Windows or Lock-ON provisions.

- UL Listed
- Available on 30-1200 A Type 12 and 4X 304 Stainless steel Heavy duty Safety Switches
- Obtain by selecting on product configurator [60]
- Not available on NEMA Type 7 and 9 and NEMA Type 4X Fiberglass and Krydon™ switches

NOTE: When voltage monitoring is required for 30 and 60 A application, a 100 A enclosure is used.



200 A heavy duty F-series switches are supplied standard with lugs suitable for one wire per phase. For two wires per phase and neutral, order the Double Lug Kit.

UL Recognized. Not included on switch wiring diagram as an accessory, available for Load Connections only. Lug can only be field installed on load side terminals. [61]



| Amperes | Cat. No. [62] | Lug Wire Range per Phase and Neutral AWG/kcmil | Wire Range Wire Bending Space per NEC Table 312.6 AWG/kcmil |
|---------|---------------|--|---|
| 200 | AL20DTF | (2) 6 -300 Cu/Al | (2) 6 -250 Cu/Al |



Optional Lock-OFF Guard Kit Installed



Key Interlock System



Safety Switch with Voltage Monitoring







AL20DTF

Accessories and Special Features

Class 3140



Copper Lug Kits

Lug kits that accept only copper wire are available for field installation:

- UL Listed
- UL Marine Listed
 - UL Marine listing is applicable ONLY to 30 200 A, NEMA Type 12/3R, NEMA Type 12K and NEMA Type 4/4X/5 stainless steel, safety switches
- When copper only lugs kits are factory installed the switch will bear the UL Marine mark and be suitable for use on vessels over 65 feet long
- When the copper only lugs kits are field installed the switch will not bear the UL Marine mark and would not be suitable for use on vessels over 65 feet long
- Not available for use on NEMA Type 4X Fiberglass, Krydon or NEMA Type 7 and 9 switches
- For field installation, order copper lug kits. See Table below
- For factory installation of copper lugs, add the suffix SLC to the standard catalog number

Table 3.37: Copper Lug Kits [63]

| Amperes | Lug Kit Cat. No. | Lug Wire Range AWG/kcmil |
|---------|------------------|--|
| 30–60 | CL0306F | (1) 14-8 Cu solid or 14-4 Cu stranded |
| 100 | CL10F | (1) 14-8 Cu solid or 14-1/0 Cu stranded |
| 200 | CL20F | (1) 6-250 Cu |
| 400 | CL40F | (1) 1-600 Cu plus (1) 6-250 Cu |
| 600 | CL60F | (1) 4-350 Cu |
| 800 | _ | _ |
| 1200 | _ | _ |

Compression Lug Kits — 800 A and 1200 A Safety Switches

- UL Listed
- Compression Lug Kits available for field installation
- Compression Lug Kits contain VCEL07512H1 Versa-Crimp™ compression lugs
- Order one Compression Lug Kit per switching pole and/or neutral (see Table below)

Table 3.38: Compression Lug Kits

| Amperes | Lug Kit Cat. No. | Conductors per Phase | Lug Wire Range kcmil |
|---------|---------------------|-----------------------|--|
| 800 | H8LKE2 | (3) Line and (3) Load | 500-750 kcmil (AI) or 500 kcmil (CU) |
| 1200 | H12LKE2 | (4) Line and (4) Load | 500-750 kcmil (AI) or 500 kcmil (CU) |



Table 3.39: Terminal Lug Data [64]

| Rating (A) | Wires Per Phase and Neutral | Wire Range Wire Bending Space per NEC Table 312.6 AWG/kcmil | Lug Wire Range AWG/kcmil | Optional [65] Compression Lug Field-Installed | Optional Copper Only [65] Compression Lug Field- Installed [66] |
|------------|--------------------------------|---|--|--|---|
| 30 | 1 | 12–6 (AI) or 14–6 (Cu) | 12–2 (AI) or | C10–14, [67] D8–14–SK, or | _ |
| 30 | 2 | 12–10 (AI) or 14–10 (Cu) | 14–2 (Cu) | E6–14 | _ |
| 60 [68] | 1 | 12–3 (AI) or 14–3 (Cu) | 12–2 (AI) or 14–2 (Cu) | C10–14, [67] D8–14–SK, or E6–14 | _ |
| 100 [69] | 1 | 12–1/0 (AI) or 14–1/0 (Cu) | 12–1/0 (AI) or 14–1/0 (Cu) | VCEL02114S1 | VCELC02114S1 |
| 200 [70] | 1 | 6-250 (Al/Cu) | 6-300 (Al/Cu) | VCEL030516H1 | VCELC030516H1 |
| 400 [71] | 1 or 2 | 1/0–750 (Al/Cu) or 1/0–300 (Al/Cu) | 1/0–750 (Al/Cu) or 1/0–300 (Al/Cu) | VCEL07512H1 or VCEL030516H1 [72] and VCEL05012H1 | VCELC07512H1 or VCELC030516H1 [73] and VCELC05012H1 |
| 600 | 2 | 3/0-500 (Al/Cu) | 3/0-500 (Al/Cu) | VCEL05012H1 | VCELC05012H1 |
| 800 | 3 | 3/0-750 (Al/Cu) | 3/0-750 (Al/Cu) | H8LKE2 [74] | _ |
| 1200 | 4 | 3/0-750 (Al/Cu) | 3/0-750 (Al/Cu) | H12LKE2 [74] | _ |

- One kit includes line/load lugs for a 3-pole switch. CL0306F, CL10F and CL20F includes six lugs. CL40F and CL60F includes twelve lugs. 30–100 A switches suitable for 60°C or 75°C conductors. 200–1200 A switches suitable for 75°C conductors
- *[64]*
- Hubbell Versa-Crimp™ unless otherwise noted [65]
- [66] For NEMA Type 1, 12/3R, 12K and 4/4X/5 stainless steel switches only
- [67] Order from Thomas and Betts.
- H60XFA and H60XFA1212 use 75°C copper wire only. #6 AWG copper wire required for 60 A rating.
- [69] H100XFA and H100XFA1212 — use 75°C copper wire only. #3 AWG copper wire required for 100 A rating.
- H225XJG and H225XJGAA use 75°C copper wire only. Lug wire range is #3 AWG 350 kcmil. Not UL Listed due to inadequate wire bending space (5" on ON end, 6" on OFF end). Maximum wire bending space allows for (1) 600 kcmil or (2) 300 kcmil Al/Cu on NEMA Type 4/4X/5 stainless steel and NEMA Type 12 switches. [70]
- [71]
- Order two PK516KN mounting kits when installing VCEL030516H1 lugs. Only one kit is required on 2 pole switches. PK516KN consists of (4) 5/16-18 Keps Nuts **I721**
- Order two PK516KN mounting kits when installing VCEL030516H1 or VCELC030516H1 lugs. Only one kit is required on 2 pole switches. PK516KN consists of (4) 5/16-18 Keps Nuts. [73]
- For 800 and 1200 A compression lug kits see Table 3.38 Compression Lug Kits, page 3-21 for additional information

Table 3.40: Conduit Provisions

| | Top and Bottom Endwall |
|---------|---|
| Amperes | NEMA Type 4X Fiberglass Reinforced Polyester and Krydon [75] |
| 30 | 3/4 in. |
| 60 | 1-1/4 in. |
| 100 | 2 in. |
| 200 | 2-1/2 in. |

Dimensions for VisiPacT Type 1 and 3R Safety Switches

See Terminal Lug Data, page 3-21 for terminal lug data for the series switches listed in the dimension table below.

Table 3.41: Approximate Dimensions

| Cat Na | No. Series H | | | ١ | N | | D W/H | | | Cot No | Ser- | Н | | W | | D | | W/H | |
|----------|--------------|-------|-----|-------|-----|------|-------|-------|-----|----------|------|-------|-----|-------|-----|------|-----|-------|-----|
| Cat. No. | Series | in. | mm | in. | mm | in. | mm | in. | mm | Cat. No. | ies | in. | mm | in. | mm | in. | mm | in. | mm |
| VH221N | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VH221NRB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VH321N | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VH321NRB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VH361 | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VH361RB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VH361N | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VH361NRB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VHU361 | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VHU361RB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VH222N | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VH222NRB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VH322N | F8 | 14.57 | 370 | 6.36 | 162 | 5.11 | 130 | 7.48 | 190 | VH322NRB | F8 | 14.84 | 377 | 6.63 | 168 | 5.05 | 128 | 7.60 | 193 |
| VH362 | F8 | 18.18 | 462 | 8.91 | 226 | 7.04 | 179 | 10.26 | 261 | VH362RB | F8 | 18.40 | 467 | 9.08 | 231 | 6.98 | 177 | 10.39 | 264 |
| VH362N | F8 | 18.18 | 462 | 8.91 | 226 | 7.04 | 179 | 10.26 | 261 | VH362NRB | F8 | 18.40 | 467 | 9.08 | 231 | 6.98 | 177 | 10.39 | 264 |
| VHU362 | F8 | 18.18 | 462 | 8.91 | 226 | 7.04 | 179 | 10.26 | 261 | VHU362RB | F8 | 18.40 | 467 | 9.08 | 231 | 6.98 | 177 | 10.39 | 264 |
| VH223N | F8 | 21.84 | 555 | 8.91 | 226 | 7.04 | 179 | 10.28 | 261 | VH223NRB | F8 | 22.10 | 561 | 9.08 | 231 | 7.02 | 178 | 10.42 | 265 |
| VH323N | F8 | 21.84 | 555 | 8.91 | 226 | 7.04 | 179 | 10.28 | 261 | VH323NRB | F8 | 22.10 | 561 | 9.08 | 231 | 7.02 | 178 | 10.42 | 265 |
| VH363 | F8 | 21.84 | 555 | 8.91 | 226 | 7.04 | 179 | 10.28 | 261 | VH363RB | F8 | 22.10 | 561 | 9.08 | 231 | 7.02 | 178 | 10.42 | 265 |
| VH363N | F8 | 21.84 | 555 | 8.91 | 226 | 7.04 | 179 | 10.28 | 261 | VH363NRB | F8 | 22.10 | 561 | 9.08 | 231 | 7.02 | 178 | 10.42 | 265 |
| VHU363 | F8 | 21.84 | 555 | 8.91 | 226 | 7.04 | 179 | 10.28 | 261 | VHU363RB | F8 | 22.10 | 561 | 9.08 | 231 | 7.02 | 178 | 10.42 | 265 |
| VH224N | F8 | 28.00 | 711 | 16.61 | 422 | 8.51 | 216 | 18.55 | 471 | VH224NRB | F8 | 28.94 | 735 | 17.02 | 432 | 8.51 | 216 | 18.36 | 466 |
| VH324N | F8 | 28.00 | 711 | 16.61 | 422 | 8.51 | 216 | 18.55 | 471 | VH324NRB | F8 | 28.94 | 735 | 17.02 | 432 | 8.51 | 216 | 18.36 | 466 |
| VH364 | F8 | 28.00 | 711 | 16.61 | 422 | 8.51 | 216 | 18.55 | 471 | VH364RB | F8 | 28.94 | 735 | 17.02 | 432 | 8.51 | 216 | 18.36 | 466 |
| VH364N | F8 | 28.00 | 711 | 16.61 | 422 | 8.51 | 216 | 18.55 | 471 | VH364NRB | F8 | 28.94 | 735 | 17.02 | 432 | 8.51 | 216 | 18.36 | 466 |
| VHU364 | F8 | 28.00 | 711 | 16.61 | 422 | 8.51 | 216 | 18.55 | 471 | VHU364RB | F8 | 28.94 | 735 | 17.02 | 432 | 8.51 | 216 | 18.36 | 466 |

Dimensions for NEMA Type 1 and 3R Safety Switches

See Terminal Lug Data, page 3-21 for terminal lug data for the series switches listed in the dimension table below.

Table 3.42: Approximate Dimensions

| | 2.1 | | 1 | W D | | | V | //H | 2 | | | 1 | W | | D | | W/H | | |
|----------|--------|-------|------|-------|-----|-------|-----|-------|-----|----------|--------|-------|------|-------|-----|-------|-----|-------|-----|
| Cat. No. | Series | in. | mm | in. | mm | in. | mm | in. | mm | Cat. No. | Series | in. | mm | in. | mm | in. | mm | in. | mm |
| H225 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | H327NR | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H225N | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | H328 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H225NR | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | H328N | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H225R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | H328R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H226 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | H328NR | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H226N | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | H365 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H226NR | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | H365N | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H226R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | H365R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H227 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H365NR | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H227N | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H366 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H227NR | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H366N | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H227R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H366NR | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H228 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H366R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H228N | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H367 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H228NR | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H367N | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H228R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H367NR | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H265 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | H367R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H265R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | H368 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H266 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | H368N | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H266R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | H368NR | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H267 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H368R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H267R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU265 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H268 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU265R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H268R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU266 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H321N | F5 | 14.60 | 371 | 6.50 | 165 | 4.88 | 124 | 7.55 | 192 | HU266R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H321NRB | F5 | 14.88 | 378 | 6.63 | 168 | 4.88 | 124 | 7.55 | 192 | HU267 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H322N | F5 | 14.60 | 371 | 6.50 | 165 | 4.88 | 124 | 7.55 | 192 | HU267R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H322NRB | F5 | 14.88 | 378 | 6.63 | 168 | 4.88 | 124 | 7.55 | 192 | HU268 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H323N | F5 | 21.25 | 540 | 8.50 | 216 | 6.38 | 162 | 10.50 | 267 | HU268R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H323NRB | F5 | 21.25 | 540 | 8.50 | 216 | 6.38 | 162 | 10.50 | 267 | HU365 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H324N | F5 | 29.00 | 737 | 17.13 | 435 | 8.25 | 210 | 18.50 | 470 | HU365R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H324NRB | F5 | 29.25 | 743 | 17.25 | 438 | 8.50 | 216 | 18.63 | 473 | HU366 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 |
| H325 | E4 | 50.25 | 1276 | 27.88 | 708 | 10.13 | 257 | 27.88 | 708 | HU366R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 |
| H325N | E4 | 50.25 | 1276 | 27.88 | 708 | 10.13 | 257 | 27.88 | 708 | HU367 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H325R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | HU367R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H325NR | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | HU368 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H326 | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | HU368R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 |
| H326N | E4 | 50.25 | 1276 | 27.63 | 702 | 10.13 | 257 | 27.63 | 702 | HU461 | F5 | 20.50 | 521 | 14.75 | 375 | 6.85 | 174 | 16.13 | 410 |
| H326R | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | HU462 | F5 | 20.50 | 521 | 14.75 | 375 | 6.85 | 174 | 16.13 | 410 |
| H326NR | E5 | 50.31 | 1278 | 27.76 | 705 | 9.53 | 242 | 27.88 | 708 | HU463 | F5 | 20.50 | 521 | 14.75 | 375 | 6.85 | 174 | 16.13 | 410 |
| H327 | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU464 | F5 | 29.00 | 737 | 23.25 | 591 | 8.75 | 222 | 24.88 | 632 |
| H327N | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU465 | E4 | 50.25 | 1276 | 33.88 | 861 | 10.13 | 257 | 33.88 | 861 |
| H327R | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU466 | E4 | 50.25 | 1276 | 33.88 | 861 | 10.13 | 257 | 33.88 | 861 |



Dimensions for Heavy Duty Safety Switches

Class **3140**

Dimensions for VisiPacT Type 4X and 12 Safety SwitchesSee Terminal Lug Data, page 3-21 for terminal lug data for the series switches listed in the dimension table below.

Table 3.43: Approximate Dimensions

| | Ser- | H | | ١ | N | | ` | W | /LI | | Ser- | 1 | H | | V | D | | W/H | |
|-------------------------|------|-------|-----------|--------------|-----------|--------------|-----------|-------------|-----------|-------------------------|------|-------|------------|----------------|------------|--------------|-----------|-------|------------------|
| Cat. No. | ies | in. | | in. | | in. | | | | Cat. No. | ies | in. | | | | in. | | in. | |
| VILIDDADECI | F8 | | mm 379 | | mm 201 | | mm 137 | in. 8.40 | mm 213 | VH364SSGL | F8 | | mm | in. | mm | | mm 227 | 19.27 | mm 489 |
| VH221DSGL VH221NDSGL | F8 | 14.93 | 379 | 7.91 7.91 | 201 | 5.40 5.40 | 137 | 8.40 | 213 | VH364SSGL VHU364SSGL | F8 | 28.90 | 734 734 | 17.47 17.47 | 444 444 | 8.94 8.94 | 227 | 19.27 | 489 |
| VH321DSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH221AWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| | | | | | | | | | | | | | | | | | | | |
| VH321NDSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH221NAWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH361DSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH321AWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH361NDSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH321NAWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VHU361DSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH361AWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH361SSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH361NAWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VHU361SSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VHU361AWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH222DSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VHU361NAWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH222NDSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH222AWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH322DSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH222NAWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH322NDSGL | F8 | 14.93 | 379 | 7.91 | 201 | 5.40 | 137 | 8.40 | 213 | VH322AWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH362DSGL | F8 | 16.93 | 430 | 8.90 | 226 | 7.26 | 184 | 10.71 | 272 | VH322NAWKGL | F8 | 14.57 | 370 | 6.48 | 165 | 5.25 | 133 | 7.67 | 195 |
| VH362NDSGL | F8 | 16.93 | 430 | 8.90 | 226 | 7.26 | 184 | 10.71 | 272 | VH362AWKGL | F8 | 16.53 | 420 | 8.91 | 226 | 7.17 | 182 | 10.45 | 265 |
| VU362DSGL | F8 | 16.93 | 430 | 8.90 | 226 | 7.26 | 184 | 10.71 | 272 | VH362NAWKGL | F8 | 16.53 | 420 | 8.91 | 226 | 7.17 | 182 | 10.45 | 265 |
| VH362SSGL | F8 | 16.93 | 430 | 8.90 | 226 | 7.26 | 184 | 10.71 | 272 | VHU362AWKGL | F8 | 16.53 | 420 | 8.91 | 226 | 7.17 | 182 | 10.45 | 265 |
| VHU362SSGL | F8 | 16.93 | 430 | 8.90 | 226 | 7.26 | 184 | 10.71 | 272 | VHU362NAWKGL | F8 | 16.53 | 420 | 8.91 | 226 | 7.17 | 182 | 10.45 | 265 |
| VH223DSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH223AWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VH223NDSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH223NAWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VH323DSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH323AWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VH323NDSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH323NAWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VH363DSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH363AWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VH363NDSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH363NAWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VU363DSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VHU363AWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VH363SSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VHU363NAWKGL | F8 | 20.49 | 520 | 8.92 | 227 | 7.15 | 182 | 10.44 | 265 |
| VHU363SSGL | F8 | 20.73 | 527 | 9.34 | 237 | 7.20 | 183 | 11.15 | 283 | VH224AWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VH224DSGL | F8 | 28.90 | 734 | 17.47 | 444 | 8.94 | 227 | 19.27 | 489 | VH224NAWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VH224NDSGL | F8 | 28.90 | 734 | 17.47 | 444 | 8.94 | 227 | 19.27 | 489 | VH324AWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VH324DSGL | F8 | 28.90 | 734 | 17.47 | 444 | 8.94 | 227 | 19.27 | 489 | VH324NAWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VH324NDSGL | F8 | 28.90 | 734 | 17.47 | 444 | 8.94 | 227 | 19.27 | 489 | VH364AWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VH364DSGL | F8 | 28.90 | 734 | 17.47 | 444 | 8.94 | 227 | 19.27 | 489 | VH364NAWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VH364NDSGL | F8 | 28.90 | 734 | 17.47 | 444 | 8.94 | 227 | 19.27 | 489 | VHU364AWKGL | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |
| VU364DSGI | F8 | 28.90 | 734 | 17.47 | 444 | 8 94 | 227 | 19.27 | 489 | VHU364NAWKGI | F8 | 28.93 | 735 | 17.01 | 432 | 9.02 | 229 | 18.58 | 472 |



Dimensions for NEMA Type 4, 4X, 5, 7, 9, and 12 Safety Switches See Terminal Lug Data, page 3-21 for terminal lug data for the series switches listed in the dimension table below.

Table 3.44: Approximate Dimensions

| 200 | | | 1 | V | ٧ | E | | W/H | | W/H | | W/H | | | Ser- | | 1 | V | ٧ | | D | W | //H |
|----------|----------|----------------|------|-------|-----|-------|------------|----------------|-----|----------|-----|----------------|------|-------|------|-------|-----|-------|-----|--|---|---|-----|
| Cat. No. | Series | in. | mm | in. | mm | in. | mm | in. | mm | Cat. No. | ies | in. | mm | in. | mm | in. | mm | in. | mm | | | | |
| H225AWK | E4 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H461AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H225NAWK | E4 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H461DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H225NDS | E4 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H462AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H225XJG | A1 | 22.56 | 573 | 10.88 | 276 | 7.75 | 197 | 10.88 | 276 | H462DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H226AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H463AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H226DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H463DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H226NDS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H464AWK | F6 | 29.00 | 737 | 23.25 | 591 | 8.75 | 222 | 24.88 | 632 | | | | |
| H226NAWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H464DS | F6 | 29.00 | 737 | 23.75 | 603 | 8.88 | 226 | 25.25 | 641 | | | | |
| H227AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H465AWK | E5 | 46.25 | 1175 | 32.50 | 826 | 10.13 | 259 | 32.50 | 826 | | | | |
| H227NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H663AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H228AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H663DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H228NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | H664AWK | F6 | 29.00 | 737 | 23.25 | 591 | 8.75 | 222 | 24.88 | 632 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| H265AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | H664DS | F6 | 29.00 | 737 | 23.75 | 603 | 8.88 | 226 | 25.25 | 641 | | | | |
| H265DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU265AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H266AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU265DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H266A | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU266AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H266DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU266DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H267AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU267AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | | | | |
| H267NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU268AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | | | | |
| H268AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU361DF | F1 | 16.50 | 419 | 11.00 | 279 | 8.80 | 224 | 11.00 | 279 | | | | |
| H268NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU361DX | F1 | 19.40 | 493 | 11.40 | 290 | 8.60 | 218 | 11.40 | 290 | | | | |
| H325AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU362DF | F1 | 16.50 | 419 | 11.00 | 279 | 8.80 | 224 | 11.00 | 279 | | | | |
| H325DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU362DX | F1 | 19.40 | 493 | 11.40 | 290 | 8.60 | 218 | 11.40 | 290 | | | | |
| H325NAWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU363DF | F1 | 24.80 | 630 | 13.70 | 348 | 12.00 | 305 | 13.70 | 348 | | | | |
| H325NDS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU363DX | F1 | 25.25 | 641 | 11.40 | 290 | 8.60 | 218 | 11.40 | 290 | | | | |
| H326AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU364DF | E1 | 31.30 | 795 | 26.30 | 668 | 11.80 | 300 | 26.30 | 668 | | | | |
| H327AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU365AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H327NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU365DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H328AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU365SS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H328NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU366AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H361DF | F1 | 16.50 | 419 | 11.00 | 279 | 8.80 | 224 | 11.00 | 279 | HU366DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H361DX | F1 | 19.40 | 493 | 11.40 | 290 | 8.60 | 218 | 11.40 | 290 | HU366SS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | | | | |
| H362DF | F1 | 16.50 | 419 | 11.00 | 279 | 8.80 | 224 | 11.00 | 279 | HU367AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | | | | |
| H362DX | F1 | 19.40 | 493 | 11.40 | 290 | 8.60 | 218 | 11.40 | 290 | HU368AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | | | | |
| H363DF | F1 | 24.80 | 630 | 13.70 | 348 | 12.00 | 305 | 13.70 | 348 | HU461AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 411 | | | | |
| H363DX | F1 | 25.25 | 641 | 11.40 | 290 | 8.60 | 218 | 11.40 | 290 | HU461DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H365SS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU462AWK | F6 | 21.25 | 540 | 16.13 | 410 | 6.80 | 173 | 16.13 | 410 | | | | |
| H364DF | E1 | 31.30 | 795 | 26.30 | 668 | 11.80 | 300 | 26.30 | 668 | HU462DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H365AWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU463AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H365DS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU463DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H365NAWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU464AWK | F6 | 29.00 | 737 | 23.25 | 591 | 8.75 | 222 | 24.88 | 632 | | | | |
| H365NDS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU464DS | F6 | 29.00 | 737 | 23.75 | 603 | 8.88 | 226 | 25.25 | 641 | | | | |
| H366AWK | | | 1175 | | | | | | | HU465AWK | | | | | | 10.13 | | | | | | | |
| | E5 E5 | 46.25 46.25 | | 26.25 | 667 | 10.13 | 259 259 | 26.25 26.25 | 667 | | E5 | 46.25 20.50 | 1175 | 32.50 | 826 | | 259 | 32.50 | 826 | | | | |
| H366DS | | | 1175 | 26.25 | 667 | 10.13 | | | 667 | HU661AWK | F6 | | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H366NAWK | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU661DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H366NDS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU662AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H366SS | E5 | 46.25 | 1175 | 26.25 | 667 | 10.13 | 259 | 26.25 | 667 | HU662DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H367AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU663AWK | F6 | 20.50 | 521 | 14.75 | 375 | 6.80 | 173 | 16.13 | 410 | | | | |
| H367NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU663DS | F6 | 20.82 | 529 | 15.08 | 383 | 6.97 | 177 | 16.85 | 428 | | | | |
| H368AWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU664AWK | F6 | 29.00 | 737 | 23.25 | 591 | 8.75 | 222 | 24.88 | 632 | | | | |
| H368NAWK | E4 | 69.13 | 1756 | 36.62 | 930 | 17.75 | 451 | 36.62 | 930 | HU664DS | F6 | 29.00 | 737 | 23.75 | 603 | 8.88 | 226 | 25.25 | 641 | | | | |

SQUARE D

Fusible and Non-Fusible Overview Class 3140

30-100 A Types DT, DTU (Series F)

- Fusible (DT) and non-fusible (DTU) switches available
- Manually-operated switch suitable for use in accordance with article 702 of the NEC, ANSI/NFPA 70
- Standards: UL 98, Type KS1, CSA, and NOM
- Modular design—switch handle, lock-plate, switch mechanism; line and load bases are field replaceable
- UL Listed short circuit current ratings up to 200 kA (using with (fusible) or (non-fusible)
 Class R, J, or T fuses—see table for rating)
- · Load make/break rated
- Horsepower rated
- Dual cover interlock
- May be padlocked ON (I) or OFF (O)
- · Lock-off accepts up to three padlocks
- · Side-opening door
- · Quick make / quick break mechanism
- · Meets NEMA requirements as heavy duty switch
- Field-installed electrical interlock kits
- Field-installed neutral assembly kits (2P and 3P switches)
- UL Listed as suitable for use as service equipment
- Supplied as standard for switching one load between two power sources, and may be field-converted to switch one power source between two loads.

30 (Series T4), 200-600 A Types 82,000 & 200 A DTU (Series E, A)

- Non-fusible
- Designed for manual transfer of one load between two power sources
- UL Listed switches are suitable for use in accordance with Article 702 of the National Electrical Code, ANSI / NFPA 70
- 82,000 and DTU double throw switches are continuous duty rated for their nameplate ampere rating
- The 82,000 and DTU (Series E, A) switches are load make/break rated
- UL Listed as suitable for use as service equipment
- · Horsepower rated only as footnoted

Field-Installable Accessories

- Neutral
- Electrical Interlock
- Grounding Terminals





82,000 Line NEMA Type 1

Double Throw Safety Switches (240 V)

Table 3.45: 240 V Double Throw Safety Switches

| | | | | | NEMA Type 4,4X,5 | NEMA Toronto | | | | atings [1] [2 | 1 |
|--------------------------|---------------------|-------------------|-----------------|-------------------|---------------------|--------------------------|---------|---------------|---------------|---------------|--------------------|
| System | Amperes | Current Series | NEMA Type 1 | NEMA Type 3R | 304 Stainless | NEMA Type 12 Gasketed | | | Vac | | 050 1/4- (0) |
| | | Series | Cat. No. | Cat. No. | Steel Cat. No. | Cat. No. | 1Ø | Std. 3Ø | 1Ø | Max. 3Ø | 250 Vdc [3] |
| Fusible—2P, 240 Vac—250 | Vdc | | Cat. No. | Cat. No. | Cat. No. | Cat. No. | - IW | 3,0 | שו | 39 | |
| γ γ Line | 100 F DT223 DT223RB | | | | | | | | | | |
| o o Line | | F | DT223 | DT223RB | | | 7.5 | 15 <i>[4]</i> | 15 | 30 [4] | 20 |
| Fusible—3P, 240 Vac—250 | | | | ı | 1 | | | | | | |
| ρρρ Line | 30 | F | DT321 | DT321RB | _ | | 1.5 [5] | 3 [4] | 3 [5] | 7.5 [4] | 5 |
| (-(-(| 60 | F | DT322 | DT322RB | | _ | 3 [5] | 7.5 [4] | 10 <i>[5]</i> | 15 <i>[4]</i> | 10 |
| o o o Line | 100 | F | DT323 | DT323RB | _ | _ | 7.5 [5] | 15 <i>[4]</i> | 15 <i>[5]</i> | 30 [4] | 20 |
| Non-Fusible—2P, 240 Vac- | –250 Vdc | | | | | | | | | | |
| o o Line | 60 | F | DTU222 | _ | _ | _ | _ | _ | 10 | _ | 10 <i>[6]</i> |
| o o Line | 100 | F | DTU223 | DTU223RB | _ | _ | _ | _ | 15 | _ | 20 [6] |
| 9 9 | 30 | T4 | 92251 [7] | _ | _ | _ | _ | _ | | _ | _ |
| ∞-∞ | 200 | E | 82254 | DTU224NRB [7] [8] | _ | H82254 | 15 | _ | | _ | _ |
|]] | 400 | Α | DTU225 | DTU225R | _ | _ | _ | _ | _ | _ | 50 |
| Non-Fusible—3P, 240 Vac- | | | | | <u> </u> | <u> </u> | | <u> </u> | | | |
| o o o Line | 30 | F | DTU321 | _ | I _ | _ | I _ | 3 [4] | 5 [5] | 10 [4] | 5 [6] |
| | 60 | F | DTU322 | _ | _ | _ | _ | - | 10 [5] | 15 [4] | 10 [6] |
| Q Q Line | 100 | F | DTU323 | DTU323RB | _ | - | _ | - | 15 [5] | 30 [4] | 20 [6] |
| 000 | 30 | T4 | 92351 [7] | _ | _ | _ | _ | _ | _ | _ | _ |
| lll | 200 | E | 82354 [7] | _ | _ | H82354 [7] | _ | 15 | _ | _ | |
| ≪;≪;≪, | 200 | Е | DTU324N [7] [8] | DTU324NRB [7] [8] | _ | _ | _ | 15 | _ | _ | _ |
| | 400 | A | DTU325 | DTU325R | | | _ | 125 | _ | _ | 50 |
| | 600 | Α | DTU326 | DTU326R | <u> </u> | | | 125 | _ | _ | 50 |
| Non-Fusible—4P, 240 Vac | 20 | Ι τ. | 02451 [7] | <u> </u> | 1 | | 1 | 1 | | 1 | |
| | 30 | T4 | 92451 [7] | _ | | | _ | | _ | _ | |
| ∞ -∞-∞-∞ | 600 | А | DTU426 | DTU426R | _ | _ | _ | 125 | _ | _ | 50 |

^[1] The starting current of motors or more than standard horsepower may require the use of fuses with appropriate time delay characteristics.

Std.—Using fast acting one time fuses. Max.—Using dual element time delay fuses.

For switching dc, use two switching poles.

If used on corner grounded delta systems, install neutral and use outer switching pole for ungrounded conductors. See data bulletin 2700DB0202 for additional information.

Use outer switching poles.

Maximum rating.

²⁴⁰ Vac only. Not Vdc rated.

^[2] [3] [4] [5] [6] [7] [8] Neutral included with device.



Class **3140**

600 Volt — Double Throw Safety Switches

Double Throw Safety Switches (600 V)

Table 3.46: 600 V Double Throw Safety Switches

| | | | | NEMA Type | NEMA Torres 40 | Horsepower Ratings [9] [10] | | | | | | | |
|-----------|---|-----------------|---|-------------------------|--------------------------|---|---|---|--|--------------------|--|--|--|
| Amnoros | Current | NEMA Type 1 | NEMA Type 3R | 4,4X,5 304 Stainless | NEMA Type 12 Gasketed | 240 | Vac | | Vac | 600 | Vac | Vdd | [11] |
| Alliperes | Series | | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Steel | | Std | Max | | Max | Std | Max | 250 | 600 |
| | | Cat. No. | Cat. No. | Cat. No. | Cat. No. | 3Ø | 3Ø | 3Ø [12] | 3Ø [12] | 3Ø | 3Ø | | |
| 00 Vdc | ı | l | l | | | 1 | ı | _ | 45 | | | | - 15 |
| 30 | F | DT361 | DT361RB | _ | _ | _ | _ | 5 [13] | 15 [13] | 7.5 | 20 | 5 | 15 <i>[14]</i> |
| 60 | _ | DT262 | DT262DD | | | | | 15 | 30 | 15 | ΕO | | 30 |
| 00 | Г | D1302 | DISOZRB | | | _ | _ | [15] | [15] | 10 | 30 | | [16] |
| 100 | F | DT363 | DT363RB | _ | _ | _ | _ | 25 [17] | 60 [17] | 30 | 75 | _ | 50 [18] |
| c—600 Vdc | | | | | | 1Ø [11] [19] | 3Ø [12] [19] | 1Ø [11] [19] | 3Ø [12] [19] | 1Ø [11] [19] | 3Ø [19] | | |
| 30 | F | DTU361 | DTU361RB | _ | _ | 5 | 10 | 7.5 | 20 | 10 | 30 | 5 | 15 |
| 60 | F | DTU362 | DTU362RB | DTU362DS | DTU362AWK[20] | 10 | 20[21] | 25 | 50 [22] | 30 | 60 | 10 | 30 |
| 100 | F | DTU363 | DTU363RB | DTU363DS | DTU363AWK <i>[20]</i> | 20 | 40[24] | 40 | 75[24] | 40 | 100 [24] | 20 | 50 |
| 200 | E | 82344 [25] | 82344RB <i>[25]</i> | 82344DS [25] [26] | H82344 [25] | _ | _ | _ | 15 <i>[</i> 27 <i>]</i> | _ | _ | _ | _ |
| 400 | Α | DTU365 | DTU365R | DTU365DS | DTU365AWK | _ | 125 | _ | 250 | _ | 350 | 50 | |
| | A | D1U366[28] | D1U366R[28] | _ | D1U366AWK[28] | | | | | | | 50 | |
| c-600 Vac | l | ı | ı | | DTI I 460 AVAILATOOT | 20 | 3Ø | 200 | 3Ø | 20 | 3Ø | | |
| 60 | F | DTU462[29] | | DTU462DS [29] | [29] | 20 | 20 | 40 | 50 | 50 | 60 | 10 | 30 |
| 100 | F | DTU463 [29] | Use NEMA Type 12 | DTU463DS [29] | DTU463AWK [20] [29] | 30 | 40 | 50 | 75 | 50 | 100 | 20 | 50 |
| 400 | Α | DTU465[28] | DTU465R[28] | _ | _ | _ | 125 | _ | 250 | | 350 | 50 | _ |
| 600 | А | DTU466 [28] | DTU466R [28] | _ | _ | _ | 125 | - | 250 | _ | 350 | 50 | _ |
| c—600 Vdc | | | | | | 10 | 301 | 10 | 301 | 10 | 301 | | |
| | _ | | | | DTU662AWK [20] | | | | | | | 10 | 30 |
| 100 | F | _ | _ | _ | [29] DTU663AWK [20] [29] | _ | 40 | - | 75 | | 100 | 20 | 50 |
| | 60 100 100 200 400 600 100 400 600 400 600 100 600 6 | Series Series | Cat. No. | Cat. No. Cat. No. | Series | Type 1 Type 3R 304 Stainless Gaskéted Series Cat. No. Cat. No. | Type 1 Type 3R 304 Stainless Gasketed State State | Amperes Current Series Cat. No. Cat. No. Cat. No. Cat. No. Cat. No. Steel Steel Steel Steel Steel Steel Max Steel Cat. No. 30 30 30 30 30 30 30 3 | Amperes Current Type 1 Type 3R 304 Stainless State State | Amperes | Amperos Series Type 1 Type 3R 304 Stainless Stase State State Max State Max State St | Ampores Carl No. Cat. No. | Ampores Carl No. Cat. No. |

- The starting current of motors of more than standard horsepower may require the use of fuses with appropriate time delay characteristics.
- Std.—Using fast acting one time fuses. Max.—Using dual element time delay fuses. (Non-fusible switches have max rating unless noted.) Use outer switching poles.
- [11]
- [12] If used on corner grounded delta systems, install neutral and use outer switching pole for ungrounded conductors. See data bulletin 2700DB0202 for additional information.
- [13] 480 Vac 1 Phase HP = 3 Std, 7.5 Max
- [14] 10 Std, 15 Max
- 480 Vac 1 Phase HP = 5 Std, 20 Max
- [16] 25 Std, 30 Max
- [17] 480 Vac 1 Phase HP = 10 Std, 30 Max
- 40 Std, 50 Max [18]
- [19] Maximum HP
- [20] Complete rating on switch is NEMA Type 3R, 5 or 12. For 3R applications, remove drain screw from bottom endwall.
- [21] Maximum HP is 15 for corner grounded delta systems.
- [22] Maximum HP is 30 for corner grounded delta systems.
- Use 75°C #4 Cu or #2 Al conductors only on DTU362 and DTU362RB.
- Use 75°C #1 Cu conductors only. 480 Vac, 250 Vdc maximum
- [25] Not UL Listed. [26]
- Standard Hp rating. [27]
- [28] 250 Vdc maximum.
- Not suitable for use as service equipment.



Electrical Interlocks for Double Throw Safety Switches

Table 3.47: Electrical Interlocks (For Electrical Interlock Contact Ratings, see Supplemental Digest Section 2)

| Switch | Field-Installed Electrical Interlock Kit Cat. No. [30] |
|--|--|
| 30-100 A Type DT, DTU (Series F) | EIK1, EIK2 [31] [32] |
| 200 A Type 82000 and DTU (Series E) [33] | [34] |
| 400-600 A Type DTU (Series A) | DS200EK2D |

Neutral Assemblies for Double Throw Safety Switches

Table 3.48: Neutral Assemblies

| Switch | Field-Installed Standard Neutral Kit Cat. No. | Terminal Data AWG/kcmil | Field-Installed Copper only Neutral Kit Cat. No. | Terminal Data AWG/kcmil |
|---|---|--|--|--|
| 30–100 A Type DT, DTU (Series F) (2- and 3-pole switches only) | SN0310 | (3) 14-1/0 Al/Cu plus (2) 14-6 Al/Cu Svc Ground | SN0310C | (3) 14-1/0 Cu plus (2) 14-6 Cu Svc Ground |
| 30 A (Series T4) (2- and 3-pole switches only) | DT30SN | (3) 14-4 Al/Cu plus (2) 14-4 Al/Cu Svc Ground | ı | _ |
| 200 A Type 82000 (Series E) (2- and 3-pole switches only) [35] | [36] | (3) 6-300 Al/Cu plus (1) 6-2/0 Al or 10-2/0 Cu Svc Ground | | _ |
| 200 A Type DTU (Series E) | Factory Installed | (3) 4-300 Al/Cu plus (1) 4-300 Al/Cu Svc Ground | ı | _ |
| 400 A Type DTU (Series A) | DT400NKD | (1) 1/0-720 Al/Cu or (2) 1/0-300 Al/Cu plus (2) 6-250 Al/Cu Svc Ground | _ | _ |
| 600 A Type DTU (Series A) | DT600NKD | (6) 250-500 Al/Cu plus (1) 6-250 Al/Cu Svc Ground | _ | _ |

Service Grounding Kits for Double Throw Safety Switches

Table 3.49: Service Grounding Kits—Required for Service Equipment Use





Class R Fuse Rejection Kits

When properly installed, this kit accepts only Class R fuses. Kits are available for field



Table 3.50: Class R Fuse Rejection Kits

| Switch | Series Number | Class R Fuse Kit Cat. No. |
|--|---------------|---------------------------|
| Class R Fuse Kits-240 V (two kits per 3F | switch) | |
| 30 A | F5 | RFK03 |
| 60 A | F5 | RFK06 |
| 100 A | F5 | RFK10 |
| Class R Fuse Kits-600 V (two kits per 3F | switch) | |
| 30 A | F5 | RFK06 |
| 60 A | F5 | RFK06H |
| 100 A | F5 | RFK10 |

Viewing Windows for Double Throw Safety Switches

Accessory available on 30-100 A DT and DTU Series F switches only. Add the suffix VW to the catalog number.

Key Interlock Systems for Double Throw Safety Switches

For factory-installed key interlocks, refer to page 3-20.

Lock-ON Provisions for Double Throw Safety Switches

Standard feature on 30–100 A type DT and DTU (Series F), and type 92000 switches. Feature available as factory installed option for Type 82000 (200 A only) and 200 A DTU (Series E) switches. Add the suffix **SPLO** to the catalog number.

- Electrical interlock kit catalog numbers with "1" suffix indicate one normally open and normally closed contact; "2" indicates two normally open and two normally closed contacts. See Table [30] 3.27 Electrical Interlock Contact Ratings., page 3-17
- 30-100 and 600 A Type DT, DTU (Series F) switches contain (2) separate switching mechanisms. Each mechanism will accept an electrical interlock. Some applications may therefore [31] require (2) electrical interlocks.
- [32] Double throw switches 92251, 92351, and 92451 are not available with factory or field installed electrical interlocks.
- [33] Electrical interlock EK400DTU2 can be added to 200 A, 4-pole Type 82000 switches in the field
- Type 82000 and DTU switches are available with electrical interlock factory-installed only. Not UL listed. Electrical interlocks are furnished with 2 N.O./N.C. contacts and are installed in both "ON" positions. To order, add suffix EI to standard switch catalog number.
- Neutral assembly catalog number DT200N can be added to 4P, 200 A, Type 82000 switches in the field. [35]
- For 200 A Type 82000, a neutral assembly is available factory installed on 2P and 3P switches. Not UL Listed. To order, add suffix N to the standard catalog number. Neutral terminal lug [36] data = (3) #4 - 250 kcmil Al/Cu wire and (1) #4 - 250 kcmil Al/Cu service ground.
- [37] (3) 6-250 ground lugs are provided as standard. DS468GKD provides an additional (2) 6-250 ground lugs.



Accessories and Lug Data Class **3140**



Rainproof Bolt-On Hubs for Double Throw Safety Switches

- UL Listed for indoor or rainproof applications
- Suitable for use with conduit having ANSI standard taper pipe thread
- NEMA Type 3R switches with catalog number ending in RB have a bolt-on closing cap factory installed
- Accepts 3/4 in. through 2-1/2 in. bolt-on hubs
- No gaskets required
- NEMA Type 3R switches with R suffix have blank top endwalls
 - Accepts 3 in. through 4 in. bolt on hubs
 - Gaskets provided
 - Conduit entry holes must be cut in the field

Table 3.51: Rainproof Bolt-On Hubs

| Conduit Size | 3/4 | 1 | 1-1/4 | 1-1/2 | 2 | 2-1/2 | 3 | 3-1/2 | 4 | Closing Cap |
|-----------------|------|------|-------|-------|------|-------|------|-------|------|----------------|
| Hub Cat. No | B075 | B100 | B125 | B150 | B200 | B250 | B300 | B350 | B400 | BCAP |

Water Resistant Hubs for Double Throw Safety Switches

- UL Listed for dust resistant and water resistant applications
- Suitable for use with conduit having ANSI standard taper pipe thread
- Water resistant hubs are field installed on NEMA Type 4/4X/5 stainless steel and NEMA Type 12/3R and 12K enclosures
- Water resistant hubs are available in zinc or chrome plated finish
- Gaskets provided



H200 Zinc Plated



H050CP Chrome Plated

Table 3.52: Water Resistant Hubs [38]

| Conduit Size | 1/2 | 3/4 | 1 | 1-1/4 | 1-1/2 | 2 | 2-1/2 | 3 | 3-1/2 | 4 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|-------|------|-------|------|
| Standard- Zinc Hub Cat. No | H050 | H075 | H100 | H125 | H150 | H200 | H250 | H300 | H350 | H400 |
| Chrome Plated Hub Cat. No. | H050CP | H075CP | H100CP | H125CP | H150CP | H200CP | ı | ı | ı | ı |

Terminal Lug Data for Double Throw Safety Switches

Table 3.53: Terminal Lug Data for Type DT, DTU (Series F) Double Throw Safety Switches [39]

| | Wires | NEM | | | |
|---------------------------------------|--------------|---|---|--|--|
| Switch Type | per Phase | Wire Range Wire Bending Space Per NEC Table 373-6 AWG/kcmil | Standard Lug Wire Range AWG/kcmil | Optional Compression Lug Field-Installed | Optional Copper Only Lug |
| 30–60 A Type DT, DTU (Series F) | 1 | 12–2 Al or 14–2 Cu | 12–2 Al or 14–2 Cu | C10-14, D8-14-SK, or E6-14 <i>[40]</i> | See Table 3.37 Copper Lug Kits, page 3-21 and Double Lug Kits, page 3-20 for |
| 100 A Type DT, DTU (Series F) | 1 | 12–1/0 Al or 14–1/0 Cu | 12–1/0 Al or 14–1/0 Cu | VCEL02114S1 [41] | appropriate kit. Order two kits per switch. |

Table 3.54: Terminal Lug Data for Types 82,000 and for A and E-Series DTU devices [39]

| Amperes | Wires per Phase | Wire Range Wire Bending Space Per NEC Table 373-6 AWG/kcmil | Lug Wire Range AWG/kcmil | Optional Compression Lugs Field-Installed |
|------------------|--------------------|---|--|--|
| 30 A (Series T4) | 1 | 14-8 Al/Cu | 12–2 Al or 14–2 Cu | _ |
| 200 | 1 | 6-300 Al/Cu | 6-300 Al/Cu | VCEL030516H1 [41] |
| 400 | 1 | | 1/0 - 750 Al/Cu or 1/0 - 300 Al/Cu | _ |
| 600 | 2 | 250-500 Al/Cu | 250-500 Al/Cu | _ |

Line Line Fusible Single Throw Switch or Non-Fusible Circuit Double Throw Breaker Switch Non-Fusible Double Load Throw Switch Fusible Single Fusible Throw Switch Single Throw or Circuit Switch or Breaker Circuit Breaker Line Load Diagram 2 Diagram 1

Application Data for Double Throw Safety Switches Situations Requiring Fuses

- 30–100 A Type DT (Series F): Select DT switches from 240 Volt Double-Throw Safety Switches, page 3-26 and 600 Volt Double Throw Safety Switches, page 3-27 which have provisions for accepting fuses.
- 30 A, 200–600 A Type 82,000 (Series E, T4, A), DTU devices:
 Use the non-fusible double throw switches from 240 Volt Double-Throw Safety Switches, page 3-26 and 600 Volt Double Throw Safety Switches, page 3-27 in conjunction with standard fusible devices, and install them according to diagram 1 or 2, below.

Table 3.55: UL Listed Short Circuit Current Ratings

| | | | • | |
|---|-----------|-------------------|-------------------------|--|
| Switch Type | Amperes | Voltage Rating | UL Listed Fuse Class | Short Circuit Current Rating <i>[42]</i> (A) |
| Type 92000 | 30 A | 240 V | H, K | 10,000 <i>[43]</i> |
| Type DT_ | 30-100 A | 240 V or | H, K | 10,000 |
| (Series F) | 00 10071 | 600 V | R, J | 200,000 |
| Type DTU [44] (Series F) | | | H or K | 10,000 <i>[43]</i> |
| (Selles F) | | 600 V | R, J or T | 200,000 |
| DTU224NRB and DTU324NRB (Series E) | 200 A | 240 V | Н, К | 10,000 [43] |
| DTU324N | 200.4 | 04014 | H, K | 10,000 [43] |
| (Series E) | 200 A | 240 V | R, J | 100,000 |
| Type 82,000 | All | 240 V or 600 V | H, J | 10,000[43] |
| Type DTU | 400 COO A | 240 V or | H, K | 10,000 |
| (Śeries A) | 400–600 A | 600 V | R, J, T | 100,000 |

^{[39] 30-100} A switches suitable for 60° C or 75° C conductors. 200-600 A switches suitable for 75° C conductors.

^[40] Order from Thomas and Betts

^[41] Hubbell Versa-Crimp™ catalog numbers

^[42] Rating applies to AC only. The UL Listed short circuit current rating for non-fusible switches is based on the switch being used in conjunction with the corresponding fuse type. Evaluation of non-fusible switches in conjunction with molded case circuit breakers has not been performed.

^[43] Any brand of circuit breaker or fuse not exceeding the ampere rating of the switch may be used ahead of a non-fusible safety switch when there is up to 10 kA short circuit current available.

^[44] The DTU361 and DTU361RB are also suitable for use on a circuit capable of delivering not more than

⁽A) 18 kA, 600 Vac maximum when using Type FH circuit breaker rated 30 A maximum or (B) 14 kA, 600 Vac maximum when using Type FA circuit breaker rated 30 A maximum.



Dimensions for Double Throw Safety Switches Class 3140

Dimensions for DT/DTU (Series F) Safety Switches 30-100 A

Table 3.56: 30–100 A Type DT, DTU (Series F)—Approximate Dimensions

| Cat. No. | Series | H | | W | | W/H | | D | |
|-----------|--------|-------|-----|-------|-----|-------|-----|------|-----|
| Cat. No. | Series | in. | mm | in. | mm | in. | mm | in. | mm |
| DT223 | F5 | 38.00 | 965 | 9.88 | 251 | 11.13 | 283 | 6.75 | 171 |
| DT223RB | F5 | 38.00 | 965 | 6.87 | 174 | 8.12 | 206 | 6.60 | 168 |
| DT321 | F5 | 38.00 | 965 | 10.25 | 260 | 11.50 | 292 | 6.75 | 171 |
| DT321RB | F5 | 38.00 | 965 | 10.25 | 260 | 11.80 | 300 | 6.60 | 168 |
| DT322 | F5 | 38.00 | 965 | 10.25 | 260 | 11.50 | 292 | 6.75 | 171 |
| DT322RB | F5 | 38.00 | 965 | 10.25 | 260 | 11.80 | 300 | 6.60 | 168 |
| DT323 | F5 | 38.00 | 965 | 9.88 | 251 | 11.13 | 283 | 6.75 | 171 |
| DT323RB | F5 | 38.00 | 965 | 6.87 | 174 | 8.12 | 206 | 6.60 | 168 |
| DT361 | F5 | 38.00 | 965 | 10.25 | 260 | 11.50 | 292 | 6.75 | 171 |
| DT361RB | F5 | 38.00 | 965 | 10.25 | 260 | 11.80 | 300 | 6.60 | 168 |
| DT362 | F5 | 38.00 | 965 | 10.25 | 260 | 11.50 | 292 | 6.75 | 171 |
| DT362RB | F5 | 38.00 | 965 | 10.25 | 260 | 11.80 | 300 | 6.60 | 168 |
| DT363 | F5 | 38.00 | 965 | 9.88 | 251 | 11.13 | 283 | 6.75 | 171 |
| DT363RB | F5 | 38.00 | 965 | 6.87 | 174 | 8.12 | 206 | 6.60 | 168 |
| DTU222 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU223 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU223RB | F5 | 30.50 | 775 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU321 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU322 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU323 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU323RB | F5 | 30.50 | 775 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU361 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU361RB | F5 | 30.50 | 775 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU362 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU362AWK | F6 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU362DS | F6 | 30.26 | 769 | 10.25 | 260 | 11.50 | 292 | 7.12 | 181 |
| DTU362RB | F5 | 30.50 | 775 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU363 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU363AWK | F6 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU363DS | F6 | 30.26 | 769 | 10.25 | 260 | 11.50 | 292 | 7.12 | 181 |
| DTU363RB | F5 | 30.50 | 775 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU462 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU462AWK | F6 | 30.26 | 769 | 15.50 | 394 | 16.75 | 425 | 7.12 | 181 |
| DTU462DS | F6 | 30.26 | 769 | 15.50 | 394 | 16.75 | 425 | 7.12 | 181 |
| DTU463 | F5 | 29.94 | 760 | 10.25 | 260 | 11.96 | 304 | 6.93 | 176 |
| DTU463AWK | F6 | 30.26 | 769 | 15.50 | 394 | 16.75 | 425 | 7.12 | 181 |
| DTU463DS | F6 | 30.26 | 769 | 15.50 | 394 | 16.75 | 425 | 7.12 | 181 |
| DTU662AWK | F6 | 30.26 | 769 | 15.50 | 394 | 16.75 | 425 | 7.12 | 181 |
| DTU663AWK | F6 | 30.26 | 769 | 15.50 | 394 | 16.75 | 425 | 7.12 | 181 |

Dimensions for DTU (Series A E T4) Safety Switches 200-600 A

Table 3.57: 200-600 A Types 82,000 and E-Series DTU and 30 A devices—Approximate Dimensions

| 0-4 N- | Ounter | | Н | | W | | /H | D | | |
|-----------|--------|-------|------|-------|-----|-------|-----|-------|-----|--|
| Cat. No. | Series | in. | mm | in. | mm | in. | mm | in. | mm | |
| DTU224NRB | E1 | 32.50 | 826 | 20.63 | 524 | 24.00 | 610 | 10.63 | 270 | |
| 82254 | E1 | 30.88 | 784 | 15.75 | 400 | 19.63 | 499 | 9.75 | 248 | |
| 82254NW | E1 | 30.88 | 784 | 20.00 | 508 | 23.88 | 607 | 11.75 | 298 | |
| 82344 | E2 | 30.88 | 784 | 20.00 | 508 | 23.88 | 607 | 11.75 | 298 | |
| 82344RB | E1 | 32.50 | 826 | 20.63 | 524 | 24.00 | 610 | 10.63 | 270 | |
| 82354 | E1 | 30.88 | 784 | 20.00 | 508 | 23.88 | 607 | 11.75 | 298 | |
| 92251 | T4 | 10.00 | 254 | 8.00 | 203 | 9.75 | 248 | 4.75 | 121 | |
| 82344DS | E1 | 30.88 | 784 | 20.00 | 508 | 23.88 | 607 | 11.75 | 298 | |
| DTU324N | E1 | 32.50 | 826 | 24.50 | 622 | 26.25 | 667 | 10.63 | 270 | |
| DTU324NRB | E1 | 32.50 | 826 | 24.50 | 622 | 26.25 | 667 | 10.63 | 270 | |
| H82344 | E2 | 32.50 | 826 | 24.50 | 622 | 26.25 | 667 | 10.63 | 270 | |
| H82444 | E2 | 32.50 | 826 | 30.21 | 767 | 33.61 | 854 | 10.63 | 270 | |
| H82454 | E3 | 32.50 | 826 | 30.21 | 767 | 33.61 | 854 | 10.63 | 270 | |
| 82454 | E3 | 38.00 | 965 | 29.62 | 753 | 33.02 | 839 | 10.63 | 270 | |
| 82444 | E3 | 38.00 | 965 | 29.62 | 753 | 33.02 | 839 | 10.63 | 270 | |
| 82454R | E3 | 38.00 | 965 | 29.62 | 753 | 33.02 | 839 | 10.63 | 270 | |
| 82444R | E3 | 38.00 | 965 | 29.62 | 753 | 33.02 | 839 | 10.63 | 270 | |
| H82254 | E3 | 32.50 | 826 | 24.50 | 622 | 26.25 | 667 | 10.63 | 270 | |
| H82354 | E3 | 32.50 | 826 | 24.50 | 622 | 26.25 | 667 | 10.63 | 270 | |
| 82444DS | E3 | 38.00 | 965 | 29.62 | 753 | 33.02 | 839 | 10.63 | 270 | |
| DTU326 | A1 | 63.31 | 1608 | 23.66 | 601 | 24.46 | 621 | 8.88 | 226 | |
| DTU426 | A1 | 63.31 | 1608 | 27.00 | 686 | 27.80 | 706 | 8.88 | 226 | |
| DTU366 | A1 | 63.31 | 1608 | 23.66 | 601 | 24.46 | 621 | 8.88 | 226 | |
| DTU466 | A1 | 63.31 | 1608 | 27.00 | 686 | 27.80 | 706 | 8.88 | 226 | |
| DTU326R | A1 | 63.76 | 1619 | 23.66 | 601 | 24.46 | 621 | 8.88 | 226 | |
| DTU426R | A1 | 63.76 | 1619 | 27.00 | 686 | 27.80 | 706 | 8.88 | 226 | |
| DTU366R | A1 | 63.76 | 1619 | 23.66 | 601 | 24.46 | 621 | 8.88 | 226 | |
| DTU466R | A1 | 63.76 | 1619 | 27.00 | 686 | 27.80 | 706 | 8.88 | 226 | |
| DTU366AWK | A1 | 63.76 | 1619 | 23.66 | 601 | 24.46 | 621 | 8.88 | 226 | |
| DTU225 | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU225R | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU325 | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU325R | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU365 | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU325R | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU365AWK | A1 | 57.50 | 1461 | 23.00 | 584 | 23.75 | 603 | 7.25 | 184 | |
| DTU365DS | A1 | 57.50 | 1461 | 23.00 | 584 | 23.75 | 603 | 7.25 | 184 | |
| DTU465 | A1 | 53.81 | 1367 | 23.13 | 588 | 23.88 | 607 | 7.25 | 184 | |
| DTU465R | A1 | 53 81 | 1367 | 23 13 | 588 | 23.88 | 607 | 7 25 | 184 | |