

# SIEMENS

Data Sheet

## VBI Heavy Duty Safety Switch

30A, 240 – 600V, Type 3R

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### Standards and Ratings

- UL Listed under file #E4776
- Meets UL98 for switches and UL 50 for enclosures
- Meets NEMA Standard KS-1 for enclosed switches
- Meets NEC wire bending space requirements
- Rated 10,000 AIC with Class H fuses or 200,000 AIC with Class R and J fuses
- Rated 100,000 AIC at 600Vdc with Class R or J fuses
- 12t rated ( $\text{Amps}^2 \times \text{Seconds} = 50,000$ )
- 12X overload current rating exceeds 10X industry standard
- Suitable for use as service entrance equipment
- Includes internal shields which meet NEC 2020 230.62 line side barrier requirements

### Features

- Quick-make and break switching action
- Double break visible blade design
- Highly visible ON/OFF indication
- Rugged installer friendly enclosure design
- Modular design allows quick and easy replacement of parts
- Front removable lugs which can easily be converted to copper body or compression type lugs
- Defeatable dual cover interlock

# Product Specifications

## Heavy Duty 30A, 240 - 600V Type 3R

### General Information

| Catalog Number       | Volts | Description             | Shipping Weight (lbs.) |
|----------------------|-------|-------------------------|------------------------|
| HF221NR <sup>1</sup> | 240   | 2 Pole, 3 Wire, Fusible | 13                     |
| HF321NR              | 240   | 3 Pole, 4 Wire, Fusible | 15                     |
| HF261R               | 600   | 2 Pole, 2 Wire, Fusible | 15                     |
| HF361R               | 600   | 3 Pole, 3 Wire, Fusible | 15                     |
| HF361NR              | 600   | 3 Pole, 4 Wire, Fusible | 15                     |

### Horsepower Ratings<sup>2, 3</sup> – 240 Volts

| Catalog Number | 1 Phase, 240V AC |     | 3 Phase, 240V AC |     | 250V DC |
|----------------|------------------|-----|------------------|-----|---------|
|                | Std              | Max | Std              | Max |         |
| HF221NR        | 1½               | 3   | 3                | 7½  | 15      |
| HF321NR        | 1½               | 3   | 3                | 7½  | 15      |

### Horsepower Ratings<sup>2, 3, 4</sup> – 600 Volts

| Catalog Number | 3 Phase, 480V AC |                | 3 Phase, 600V AC |                | 600V DC |
|----------------|------------------|----------------|------------------|----------------|---------|
|                | Std              | Max            | Std              | Max            |         |
| HF261R         | —                | — <sup>5</sup> | —                | — <sup>5</sup> | 15      |
| HF361R         | 5                | 15             | 7½               | 20             | —       |
| HF361NR        | 5                | 15             | 7½               | 20             | —       |

### Mechanical Lug Wire Range (60/75°C, Cu/Al)

| Description         | Wire Range                       |
|---------------------|----------------------------------|
| Line, Load, Neutral | #12-6 AWG (Al) or #14-6 AWG (Cu) |
| Ground              | #14-4 AWG                        |

### Compression Lugs<sup>7</sup>

| Wire Size | Burndy                    |       | Thomas-Betts   |                         | Ilsco   |                |
|-----------|---------------------------|-------|----------------|-------------------------|---------|----------------|
|           | CU Only                   | CU/AL | CU Only        | CU/AL                   | CU Only | CU/AL          |
| #14-10    | —                         | —     | —              | 60096<br>60097          | —       | —              |
| #8        | YA8C-L BOX<br>YA8C-L1 BOX | —     | 54104<br>54130 | 60101<br>60102<br>61102 | CRA-8   | ACL-8<br>ACN-8 |
| #6        | —                         | —     | —              | 61107                   | —       | —              |

### Accessories

| Catalog Number | Description   |
|----------------|---|
| HA161234       | One Normally Open and Closed Auxiliary Switches                                 |
| HA261234       | Two Normally Open and Closed Auxiliary Switches                                 |
| HA361234       | Low Voltage Auxiliary Switch  |
| HG61234        | Equipment Ground Lug Kit  |
| HG261234       | Isolated Equipment Ground Lug Kit   |
| HP61           | Fuse Puller (3 per kit)   |
| HN612          | Neutral Kit   |
| HR21           | 240 Volt Class R Fuse Clip Kit (3 fuse clips per kit) (HF221NR, HF321NR)        |
| HR612          | 600 Volt Class R Fuse Clip Kit (3 fuse clips per kit) (HF261R, HF361R, HF361NR) |
| HLC612         | Copper Lug Kit (9 lugs per kit)   |
| HCL612         | Compression Lug Neutral Barrier Kit   |
| HS075          | 0.75" Type "HS" Outdoor Hub   |
| HS100          | 1.00" Type "HS" Outdoor Hub   |

### Replacement Parts

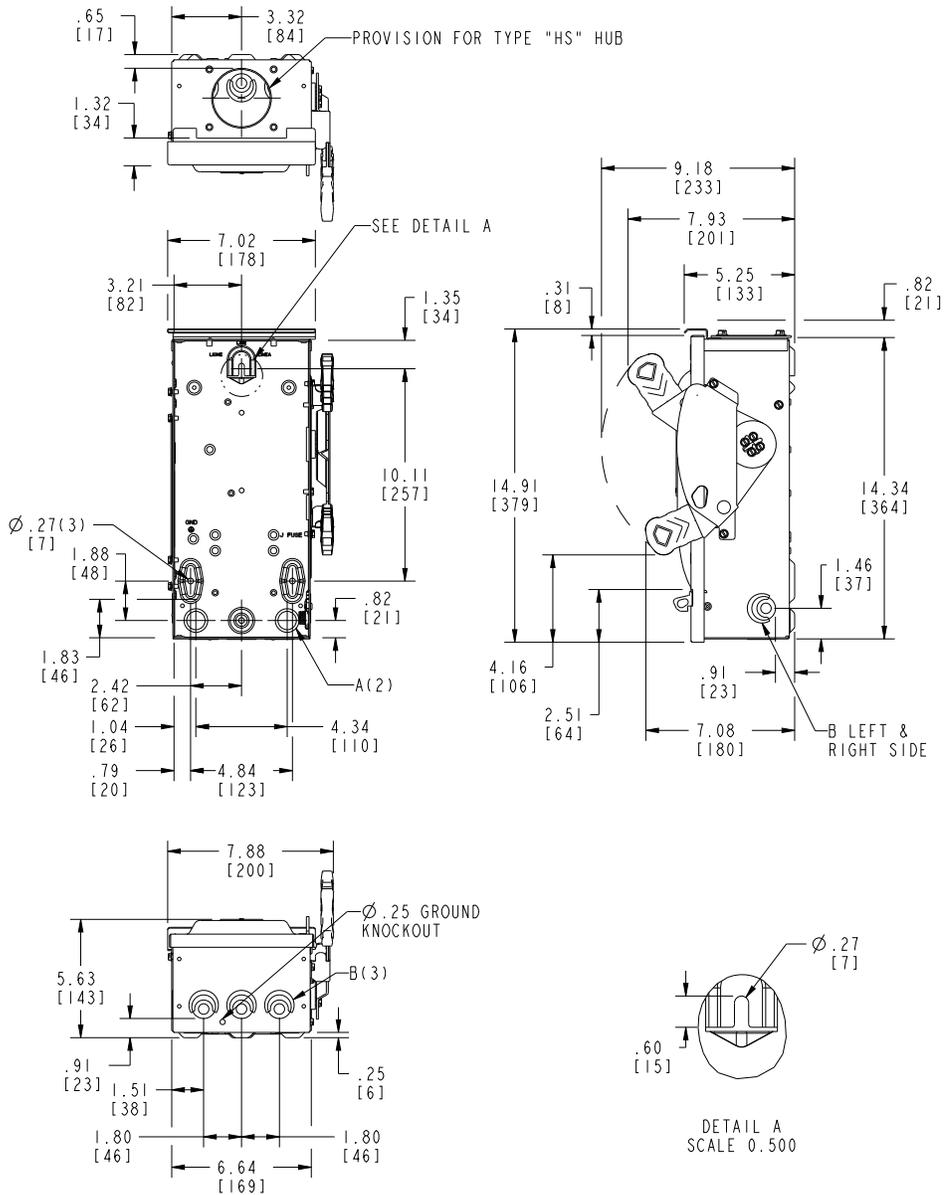
| Catalog Number | Description   |
|----------------|---|
| HFB21          | 240 Volt Line Side Replacement Base (HF221NR, HF321NR)        |
| HBB21          | 240 Volt Load Side Replacement Base (HF221NR, HF321NR)        |
| HFB612         | 600 Volt Line Side Replacement Base (HF261R, HF361R, HF361NR) |
| HBB612         | 600 Volt Load Side Replacement Base (HF261R, HF361R, HF361NR) |
| HH6123         | Legacy Larger Replacement Handle/Handle Guard                 |
| HH6123A        | Replacement Handle/Handle Guard                               |
| HL612          | Replacement Lugs (3 lugs per kit)                             |
| HM6123S        | Replacement Mechanism   |
| 6              | Replacement Door  |

NOTE: Legacy style handle phased out in 2021. "How can I tell?" Order the legacy handle if the red handle grip is attached with screw. The new style grip is pressed onto the metal handle and does not require a screw.

- These switches are UL Listed for application on grounded B phase systems.
- Dual horsepower ratings: Std - applies when non-time delay fuses are installed.  
Max - applies when time-delay fuses are installed.
- Horsepower ratings listed also apply to Design E motors with no derating.
- Also rated 5HP at 250V DC.
- Also rated 7½ HP at 480V, 1 phase and 10HP at 600V, 1 phase.
- Place "DOOR" at the end of the switch catalog number.
- If compression lugs are used for the neutral, order compression lug neutral barrier kit HCL612.

# Dimension Drawings

## Heavy Duty 30A, 240 - 600V Type 3R



| KNOCKOUT CODE  | CONDUIT CODE   |                |
|----------------|----------------|----------------|
|                | A (Concentric) | B (Tangential) |
| A (Concentric) | .75            | 1.00           |
| B (Tangential) | .50            | .75 1.00       |

|      | LINE SIDE WIRE BEND | LOAD SIDE WIRE BEND |
|------|---------------------|---------------------|
|      | 240V                | 3.02 (77)           |
| 600V | 3.02 (77)           | 2.61 (66)           |

Dimensions shown in inches and millimeters ( ).  
Dimension shown accurate to  $\pm \frac{1}{16}$  inch.

Enclosure: Galvanized Steel  
.054 Thick (17 Gauge)  
Finish: ANSI Grey #61 Paint)

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