

# Safety Switches

## General Duty and Heavy Duty

## Product Overview

**3**  
SAFETY SWITCHES

### Enclosure Types

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

**Type 7/9** enclosures for use in hazardous locations. Use with molded case switches listed on page 6-62. For enclosure catalog numbers and dimensions see page 5-2 & 5-12.

**Note:** Type 1 60A General Duty and Type 1 30 & 60A Heavy Duty Switches have tangential knockouts which are UL approved for bonding conduits for non-service entrance conductors.



### Load Break Ratings

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

### Load Break Ratings

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

<sup>Ⓢ</sup> VBII Type 12 switches are also rated 3R & 3S for outdoor use. Type 3R is defined in B above. 3S rated enclosures provide a degree of protection against windblown dust and allow operation when the enclosure is ice laden.

### Horsepower Ratings

All Siemens safety switches, where appropriate, are horsepower rated. The assignment of such ratings is made by UL only after the switching unit has undergone tests to determine its acceptability. In addition, the unit must successfully perform on an overload test series which includes repeated interruption of the locked rotor current of the motor for which it is to be rated as follows:

### Horsepower Ratings

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

# Safety Switches

## Double Throw

Accessories, Lug Data and Horsepower Ratings

## Selection

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

### Accessories – 2 and 3-Pole Switches Type “DT” Only<sup>Ⓞ</sup>

Description	Catalog Number	List Price \$
<b>Neutral Kits</b>	30A 60 & 100A 200A 400 & 600A 800 & 1200A	HNC612 97.00 HN263 225.00 HNC264 352.00 HN678 838.00 HND678 919.00
<b>Equipment Ground Kit</b>	30-200A (2) #14-4 AWG 400 & 600A (4) #14-2/0 800-1200A (8) #6-350 Kcmil	HG61234 24.00 HG656 123.00 HG678 239.00
<b>Auxiliary Contacts (HD only) (two required per switch)<sup>Ⓞ</sup></b>	30-200A with (1) NO & (1) NC contact 30-200A with (2) NO & (2) NC contacts 400-1200A with (1) NO & (1) NC contact 400-1200A with (2) NO & (2) NC contacts	HA161234 239.00 HA261234 266.00 HA165678 587.00 HA265678 614.00
<b>Class R Fuse Clip Kits (two required per switch)</b>	30A, 240V Kit 30A, 600V Kit/60A, 240V Kit 60A, 600V Kit 100A Kit 200A Kit	HR21 83.00 HR612 83.00 HR62 83.00 HR63 54.00 HR64 54.00
<b>Class T Fuse Adapter Kits (two required per pole)</b>	100A, 240V Kit 100A, 600V Kit 200A, 240V Kit 200A, 600V Kit	HT23 76.00 HT63 120.00 HT24 102.00 HT64 143.00
<b>Type 3R Hubs (30-200A)</b>	For 3/4" Conduit For 1" Conduit For 1 1/2" Conduit For 2" Conduit For 2 1/2" Conduit	ECHS075 39.50 ECHS100 39.50 ECHS125 39.50 ECHS150 39.50 ECHS200 69.00 ECHS250 109.00

### 30-200A – 2, 3 & 4-Pole Switches

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

### 400-1200A – 2 & 3-Pole Switches

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

### 400-800A – 4-Pole switches

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

### Accessories – 4-Pole and Type “F” & “NF” 3-Pole Switches Only<sup>Ⓞ</sup>

Description	Catalog Number	List Price \$
<b>Auxiliary Switch (two required per switch)</b>	30-800A (1) NO, (1) NC <sup>Ⓞ</sup> (2) NO, (2) NC <sup>Ⓞ</sup>	DS200EK1 373.00 DS200EK2 743.00
<b>Ground Lug Kit<sup>Ⓞ</sup></b>	30-60-100A 200A 400-600-800A	DS100GK 12.00 DS200GK 203.00 DS468GK 292.00
<b>Hubs</b>	30-60-100A Use Type HR Hubs 200-400A Use Type SSH 4, 4X Hubs 600-800A Use Type SSH 4, 4X Hubs	
<b>Neutrals (3-pole only)</b>	30-60-100A 200A 400 & 600A Fusible 400A 3P Non-Fusible	DT100NK 195.00 DT200NK 391.00 DS800NK 488.00 DT600NK 432.00

### Maximum Horsepower Ratings Fused

Ampere Rating	1-Phase AC		3-Phase AC			250V DC
	240V	240V	240V	480V	600V	
30	3	7 1/2	15	20	5	
60	10	15	30	50	10	
100	15	30	60	75	20	
200	15	60	125	150	40	
400	—	125	125	125	50	
600	—	125	—	—	50	

### Non-Fused

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

### Replacement Parts – 2 and 3-Pole Switches Only<sup>Ⓞ</sup>

Description	Catalog Number	List Price \$
Type 1, 3R & 12 Replacement Handle	30-200A	HHD61234 98.00
Type 4X Replacement Handle	30-200A	HHD61234S 174.00
Replacement Handle	400-1200A	HHD65678 143.00

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

Ⓞ For “DT” VBII Type switches only.

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

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

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