

Special Application Safety Switches Dimension Drawings

Selection

Double Throw

Description

Double throw switches are intended to transfer loads from one power source to another. All 2 & 3-pole double throw switches are CSA certified and both horsepower and load break rated. Switches are rated for use on systems up to 10,000A when protected with Class H fuses or 200,000A when protected with Class R or Class T fuses^②. They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible switches so that the fuses are on the load side of the switching mechanism.

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

Fuse Capabilities of Fusible DT Switches

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



Double Throw Switches

System	Voltage	Number of Poles	Amps	Type 1 — Indoor
				Catalogue Number

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

	240 Volt AC or 250 Volt DC	3	30 60 100 200	DTFC321 DTFC322 DTFC323 DTFC324
	600 Volt AC, 250 Volt DC	3	30 60 100 200	DTFC361 DTFC362 DTFC363 DTFC364

System	Voltage	Number of Poles	Amps	Type 1 — Indoor	Type 3R — Outdoor ^①	
				Catalogue Number	Catalogue Number	Hub Type ^①

Heavy Duty Non-Fusible — Less Neutral^②

	240 Volt AC or 250 Volt DC	2	30 60 100 200 400	DTNFC221 DTNFC222 DTNFC323 DTNFC224 DTNFC225	— — — — DTNFC225R	*
		3	30 60 100 200 400 600	DTNFC321 DTNFC322 DTNFC323 DTNFC324 DTNFC325 DTNFC326	— — DTNFC323R DTNFC324R — —	ECHS *
	600 Volt AC, or 250 Volt DC	3	30 60 100 200 400 600	DTNFC361 DTNFC362 DTNFC363 DTNFC364 DTNFC365 DTNFC366	DTNFC361R DTNFC362R DTNFC363R DTNFC364R DTNFC365R DTNFC366R	ECHS *

① Hub catalogue number available p.1-33

② All Heavy Duty double throw switches with a catalogue number starting with "DT" are rated 200,000 AIC max. when protected by Class R, J or T fuses. Fuse ampere rating must not exceed switch ampere rating.

③ Move load base.

* Consult Siemens representative, 400A and larger Switches do not have hub provisions.

Safety Switches

Double Throw

Accessories, Lug Data and Horsepower Ratings

Selection

Accessories – 2 and 3-Pole Switches Type “DT” Only^①

Description		Catalogue Number
Neutral Kits	30 60 & 100A 200A 400 & 600A	HNC612 HNC263 HNC264 HNC678
Equipment Ground Kit	30-200A (2) #14-4 AWG 400 & 600A (4) #14-2/0	HG61234 HG656
Auxiliary Contacts (HD Only) (two required per switch) ^②	30-200A with (1) NO & (1) NC contact 30-200A with (2) NO & (2) NC contact 400-600A with (1) NO & (1) NC contact 400-600A with (2) NO & (2) NC contact	HA161234 HA261234 HA165678 HA265678
Class R Fuse Clip Kits (two required per switch)	30A, 240V Kit 30A, 600V Kit and 60A, 240V Kit 60A, 600V Kit 100A Kit 200A Kit	HR21 HR612 HR62 HR63 HR64
Class T Fuse Adapter Kits (two required per pole)	100A, 240V Kit 100A, 600V Kit 200A, 240V Kit 200A, 600V Kit	HT23 HT63 HT24 HT64
Type 3R Hubs (20-200A)	For 3/4" Conduit For 1" Conduit For 1 1/4" Conduit For 1 1/2" Conduit For 2" Conduit For 2 1/2" Conduit	ECHS075 ECHS100 ECHS125 ECHS150 ECHS200 ECHS250

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

30-200A – 2 & 3-Pole Switches

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

400-600A – 2 & 3-Pole Switches

Switch Ampere Rating	Wire Range (Cu/Al) DT 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

Maximum Horsepower Ratings

Fused

Ampere Rating	1-Phase AC	3-Phase AC			250V DC
	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
400-600	—	125	250	350	50

Replacement Parts – 2 and 3-Pole Switches Only^①

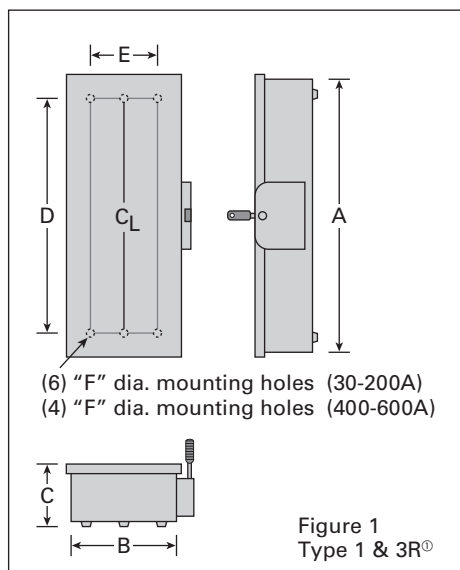
Description		Catalogue Number
Type 1, 3R Replacement Handle	30-200A	HHD61234
Replacement Handle	400-600A	HHD656

^① For “DT” VBII Type switches only.

^② One aux. required for normal and one required for emergency switch line base.

VBII Design Double Throw Dimensions

Catalogue Number	Enclosure dimensions - Inches (mm)					
	A	B	C	D	E	F
Figure 1 (30-600A Type 1 & 3R)						
DTNFC221, DTNFC321, DTNFC361, DTNFC361R	24.50 (622)	9.53 (242)	6.09 (155)	19.00 (483)	6.75 (171)	0.268 (7)
DTFC321, DTFC321R, DTFC361	29.12 (740)	9.53 (242)	6.09 (155)	23.50 (597)	6.75 (171)	0.268 (7)
DTNFC222, DTNFC322, DTNFC362, DTNFC362R	24.88 (632)	11.50 (292)	6.09 (155)	19.00 (483)	9.38 (238)	0.268 (7)
DTFC322, DTFC362	33.45 (852)	11.50 (292)	6.09 (155)	27.50 (699)	9.38 (238)	0.268 (7)
DTNFC223, DTNFC323, DTNFC323R, DTNFC363, DTNFC363R	27.62 (702)	12.18 (309)	6.09 (155)	19.36 (492)	8.00 (203)	0.268 (7)
DTFC323, DTFC363	36.44 (926)	12.18 (309)	6.09 (155)	28.11 (714)	8.00 (203)	0.268 (7)
DTNFC224, DTNFC224R, DTNFC324, DTNFC324R, DTNFC364, DTNFC364R	36.00 (914)	19.12 (486)	6.42 (163)	31.00 (787)	15.00 (381)	0.44 (11)
DTFC324, DTFC364	49.44 (1256)	19.12 (486)	6.42 (163)	44.50 (1130)	15.00 (381)	0.44 (11)
DTNFC225, DTNFC225R, DTNFC325, DTNFC365, DTNFC365R	57.71 (1466)	28.22 (717)	9.44 (240)	49.75 (1264)	16.00 (406)	0.56 (14)
DTNFC326, DTNFC366, DTNFC366R	57.71 (1466)	28.22 (717)	9.44 (240)	49.75 (1264)	16.00 (406)	0.56 (14)



[®] Drip hood not shown but provided on Type 3R enclosures.