

BUS TIE SWITCH INSTALLATION

1. Working Clearances:

- 1.1 Six inches minimum clearance from top terminal spades to vault, ceiling or other obstructions.
- 1.2 Six inches minimum clearance from bottom terminal spades to vault floor, ground bus or ground conductor.
- 1.3 Five feet minimum clearance in front of BTS door.
- 1.4 Three feet minimum clearance from BTS switch handle to side.
- 1.5 Two feet minimum clearance from BTS door hinges to side.

2. Termination:

- 2.1 Unless otherwise instructed, terminate bus ties on system side of BTS terminals using either cable-to-bus or cable-to-cable limiters. (NSV-30)
- 2.2 Insulate terminations. (NTP-110)
- 2.3 Rack cables connected to the bottom terminals to clear the area in front of the BTS.
- 2.4 Ground case with 500 kcmil copper. Use contact sealant Stock No. 725696 for Cu to Steel connection. (NSV-30)
- 2.5 Install indicator lights according to NCB-130.

Figure 1, Types of Connection

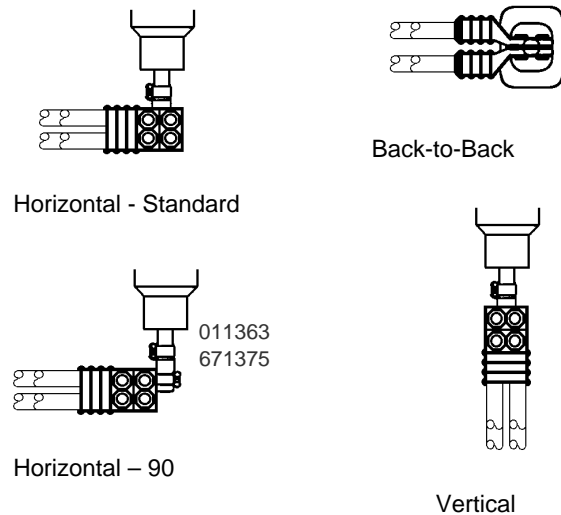


Figure 2, Bus Tie Switch - Plan View

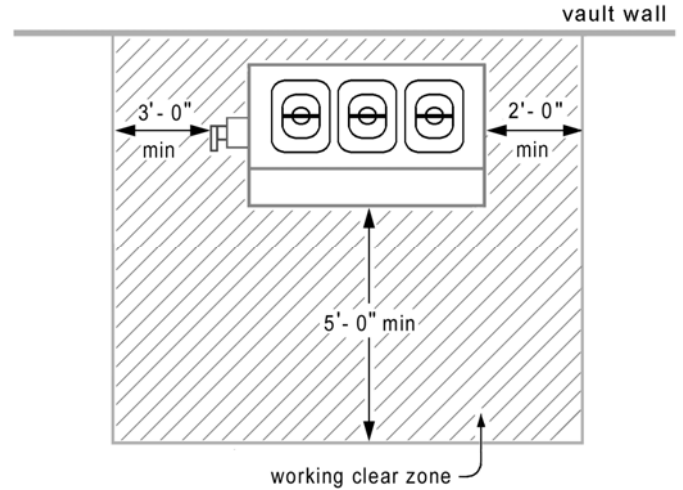
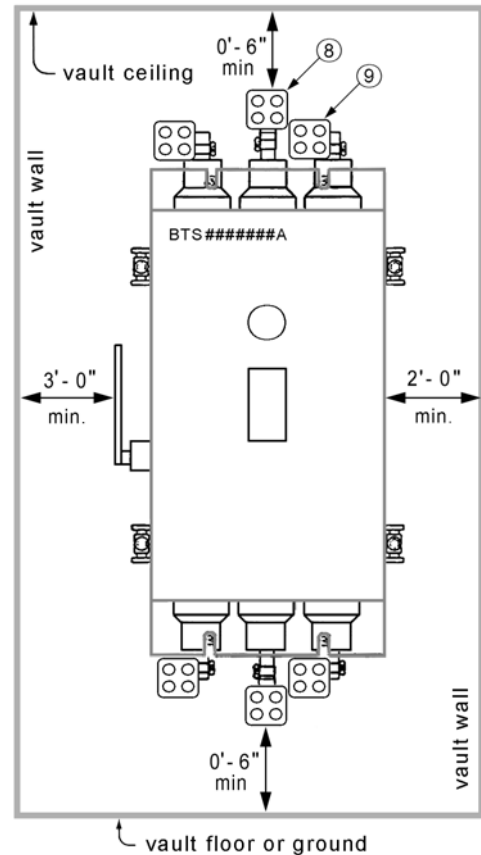


Figure 3, Bus Tie Switch - Front View



standards coordinator	standards supervisor	unit director
 John Shipek	 John Shipek	 Pam S. Johnson

CONSTRUCTION GUIDELINE

Bus Tie Switch Installation

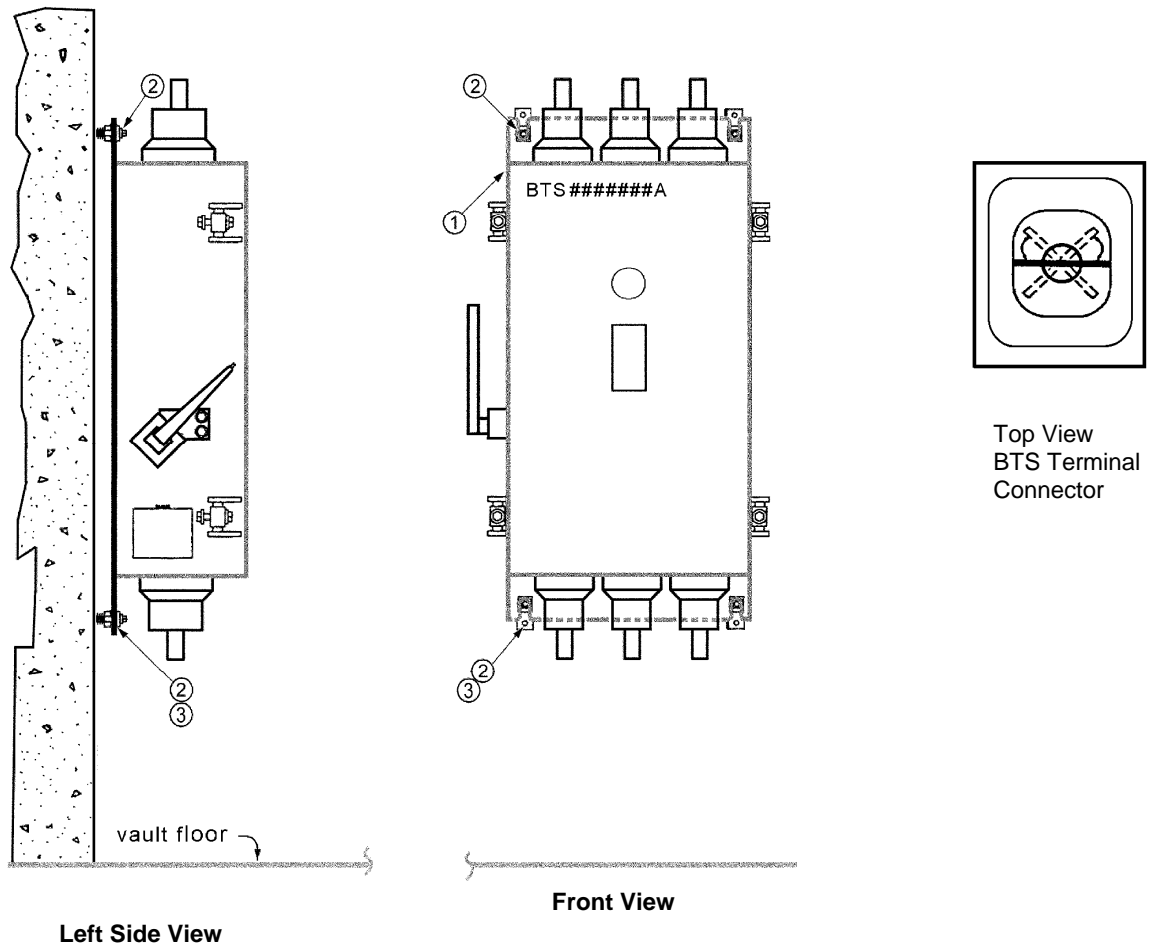
standard number: **NTP-130**

superseding: September 30, 2003

effective date: September 10, 2008

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Figure 4, Bus Tie Switch Mounting



3. Bus Tie Switch Mounting Notes

- 3.1 Mount BTS on solid concrete wall.
- 3.2 Terminal spades can be rotated as desired.
- 3.3 Use stud to flat straight terminal for middle studs.
- 3.4 Use stud to flat 90 degree terminal for left and right studs.
- 3.5 One stud to flat terminal connector can hold 4 bus tie cables connected back-to-back.
- 3.6 BTS 800A to 1875A have 1-1/2" – 12 stud terminals. BTS 2000A to 4500A have 3" – 12 stud terminals.

4. Material List

Item	Quantity	Description	Stock Number
1	1	BUS TIE SWITCH, 2825 Amp	335207
		BUS TIE SWITCH, 1875 Amp	335205
2	4	ANCHOR STUD BOLT, 5/8" X 6"	780145
3	4	WASHER, 5/8" round, galvanized	585030
4	2	TERMINAL, Stud to Flat, Straight, 1-1/2" - 12	671372
	2	TERMINAL, Stud to Flat, Straight, 3" - 12	671415
5	4	TERMINAL, Stud to Flat, 90°, 1-1/2" - 12	671375
	4	TERMINAL, Stud to Flat, 90°, 3" - 12	011363