Connectors, Terminal, Bolted, Bronze, Stud to Flat

1. Scope

This standard covers the requirements for stud-to-flat, bronze, bolted, terminal connectors.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Description	Stud Size (in)
671372	Standard, 4-hole flat	1-1/2
671375	90-degree, vertical, 4-hole flat	1-1/2
671415	Standard, 4-hole flat	3
011363	90-degree, vertical, 4-hole flat	3

2. Application

Bolted terminal connectors are used to connect threaded or plain copper studs to flat 4-hole NEMA pads or flat bars.

Bolted terminal connectors may be used on equipment up to 230 kV.

3. Industry Standards

Terminal connectors shall meet the applicable requirements of the latest revision of the following industry standards:

ANSI C119.4, American National Standard for Electric Connectors— Connectors for Use between Aluminum-to-Aluminum and Aluminum-to-Copper Conductors Designed for Normal Operation at or Below 93°C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100°C

ANSI/NEMA CC1; Electric Power Connection for Substations

4. Requirements

Bolted terminal connectors shall have the following attributes:

- Bronze alloy body
- Design and dimensions as shown in Table 4 and figures 4a and 4b.
- Four-hole, 4 in x 4 in, NEMA pad
- Contact surface on both sides of pad
- Bronze or stainless-steel hardware, (hex bolts, split-lock washers, and nuts)
- Accept 12-threads-per-inch studs

90-degree bolted terminal connectors shall be vertical flat style.

Figure 4a. Bolted Terminal Connector, Standard Style

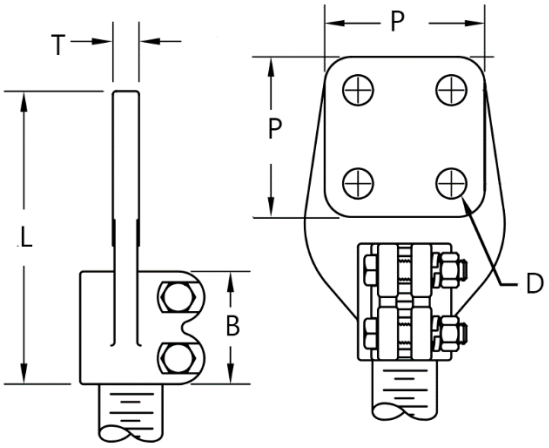

Figure 4b. Bolted Terminal Connector, 90-Degree, Vertical Flat Style

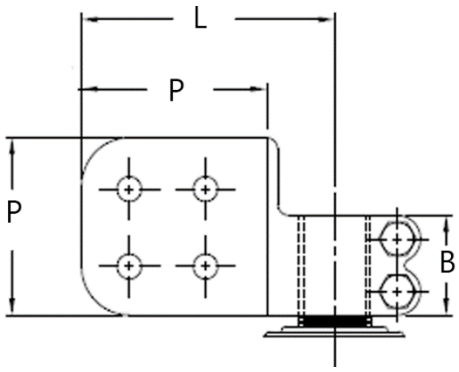

Table 4. Bolted Terminal Connector Dimensions

Stock No.	Stud Diameter (in)	Style	Dimensions (in)					Figure
			Connector Length (L)	Barrel Depth (B)	Pad Size (P)	Pad Thickness (T)	Pad Hole Dia. (D)	
671372	1-1/2	Standard	7-1/2	2	4	1/2	9/16	4a
671375	1-1/2	90-degree, vertical	5-1/2	2	4	1/2	9/16	4b
671415	3	Standard	8-1/2	3	4	3/4	9/16	4a
011363	3	90-degree, vertical	6-3/4	3	4	3/4	9/16	4b

5. Marking

Terminal connectors shall be legibly marked with the following:

- Manufacturer name or trademark
- Catalog number
- Stud diameter

6. Packaging

Terminal connectors shall be packaged to prevent damage during shipping, handling, and storage.

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product catalog part number
- Product description
- SCL stock number

Each shipping container shall be legibly marked with the following information:

- Seattle City Light purchase order number

7. Issuance

EA

8. Approved Manufacturers

Stock No.	Hubbell Power Systems / Anderson	ABB / Thomas & Betts / Homac	AFL (Formerly Dossert)	Travis Foundry
671372	HDSF141D1212	KSLC-10-4NN	SCB150-1/2F-4N4-T12	14-348
671375	HDSF141D129012	—	—	—
671415	HDSF301D3412	KSLC-15-4NN	SCB300-3/4F-4N4-T12	14-380
011363	HDSF301D349012	—	—	—

9. Sources

Hubbell Power Systems, Stud Connector, Stud to Flat Bar, Drawing# CC-5850, Revision 19, 12-15-2010

Stock Catalog Page 65-19; January 08, 2010

www.aflglobal.com

www.hubbell.com

www.abb.com

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