
PRODUCT INFORMATION

IEEE 837-2014 compliant grounding connectors



IEEE 837-2014 compliant grounding connectors

A complete line of connectors that meets the latest, most robust standard to date for substation grounding.

The IEEE 837-2014 standard provides direction and methods for qualifying permanent connections used for substation grounding.



The standard specifically addresses connections used:

- Within the grid system
- To join ground leads to the grid system
- To join ground leads to equipment and structures

Its intent is to assure the user that a connection meeting the requirements of the IEEE 837-2014 standard will perform satisfactorily over the lifetime of the installation.

IEEE 837-2014 compliant grounding connectors from ABB are safe, cost-efficient and time-saving compression connectors that were designed with the installer in mind. They can be used in your substation and distribution line grounding applications with the confidence that comes from knowing they meet the more demanding electromagnetic force testing requirements of the IEEE 837-2014 standard.



EZGround® figure 6 and C-tap compression grounding connectors

Easy-to-install copper compression connectors for long-term grounding performance.

- Robust, high-conductivity copper construction
- An all-weather alternative to exothermic weld connections
- Easy to install with standard compression tools and dies
- IEEE 837-2014 compliant, cULus listed and rated for direct burial (DB)

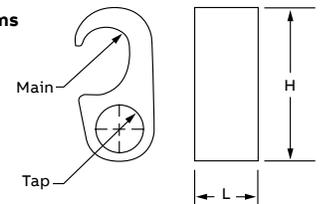


Figure 6 compression grounding connectors

DB cUL^{US} Meets IEEE 837-2014 requirements

| Cat. no. | Main | Tap - AWG or kcmil | Dimensions in. (mm) | | Die for ABB tools** |
|-----------|---------------------|--------------------|---------------------|------------|---------------------|
| | | | H | L | |
| 54865CKN* | 5/8 in. rod | 3/0 str.-250 | 2.09 (53.1) | 1.5 (38.1) | 15506SS |
| 54860N | 5/8 in. rod | 1/0 str.-2/0 str. | 2.09 (53.1) | 1.5 (38.1) | 15506SS |
| 54855N | 5/8 in. rod | #4 sol.-#2 str. | 2.09 (53.1) | 1.5 (38.1) | 15506SS |
| 54875N | #6 sol.-#2 str. AWG | #6 sol.-#2 str. | 1.41 (35.8) | 1.5 (38.1) | 15517SS |

Diagrams



* For 54865CKN, the ground rod must be pre-crimped with die 15526SS to comply with IEEE 837-2014.

** These dies may be used with the 13100A, TBM14M, TBM14CR-LI, TBM15CR-LI and TBM15I compression tools. If used with TBM15CR-LI or TBM15I, please note that die adapter 15500-TB is also required.

†54865CKN is dual rated for cable-to-ground rod and cable-to-cable connections

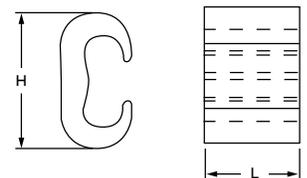


C-tap compression grounding connectors

DB cUL^{US} Meets IEEE 837-2014 requirements

| Cat. no. | Cable A AWG or kcmil | Cable B AWG or kcmil | Dimensions in. (mm) | | Die for ABB tools* |
|--------------|-------------------------|-------------------------|---------------------|------------|--------------------|
| | | | H | L | |
| CTP500500N** | 300-500 | 300-500 | 2.92 (74.17) | 2.5 (63.5) | 15G121N |
| CTP50020N | 300-500 | #6 sol.-#2/0 str. | 2.42 (61.6) | 2.5 (63.5) | 15603SS |
| CTP500250N | 300-500 | 3/0 str.-250 kcmil | 2.72 (69.1) | 2.5 (63.5) | 15603SS |
| CTP250250N† | 3/0 str.-250 | 3/0 str.-250 | 2.06 (52.3) | 1.5 (38.1) | 15506SS |
| CTP25020N | 3/0 str.-250 | #1 str.-2/0 str. | 1.99 (50.5) | 1.5 (38.1) | 15506SS |
| CTP2020N | #1 str.-2/0 str. | #1 str.-2/0 str. | 1.55 (39.4) | 1.5 (38.1) | 15517SS |
| CTP202N | #1 str.-2/0 str. | #6 sol.-#2 str. | 1.41 (35.8) | 1.5 (38.1) | 15517SS |
| CTP22N | #6 sol.-#2 str. | #6 sol.-#2 str. | 1.06 (26.9) | 1.5 (38.1) | 15534SS |

Diagrams



* These dies may be used with the TBM15CR-LI or TBM15I compression tools. Please note that the die adapter 15500-TB is required for use with these tools.

** Can be used with 5/8 in. (17.3 mm) copper-clad ground rod. The ground rod must be pre-crimped with die 15507SS to comply with IEEE 837-2014.

†Can be used with 5/8 in. (15.8 mm) copper-clad ground rod. The ground rod must be pre-crimped with die 15526SS to comply with IEEE 837-2014.

Copper heavy-duty two-hole NEMA lugs

Heavy-wall lugs for grounding and other critical applications.



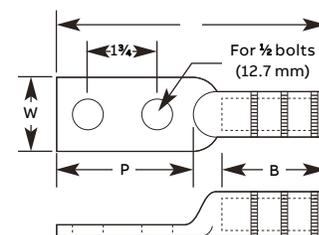
- Made from heavy-wall electrolytic-grade seamless copper tubing to handle the most severe heavy-loading applications
- Generous chamfers in the barrel enable easy cable insertion
- Install with standard compression tools and dies
- IEEE 837-2014 compliant

Copper heavy-duty two-hole NEMA lugs

Meets IEEE 837-2014 requirements

| Cat. no. | Wire size AWG or kcmil | Dimensions in. (mm) | | | | Die for ABB tools* |
|-----------|---------------------------|---------------------|--------------|-------------|-------------|-----------------------|
| | | B | L | P | W | |
| HDL 2 N | #2 | 1.50 (38.1) | 5.25 (133.4) | 3.00 (76.2) | 0.81 (20.6) | 15508SS |
| HDL 1 N | #1 | 1.50 (38.1) | 5.25 (133.4) | 3.00 (76.2) | 0.81 (20.6) | 15526SS |
| HDL 1/0 N | 1/0 | 1.50 (38.1) | 5.25 (133.4) | 3.00 (76.2) | 0.81 (20.6) | 15530SS |
| HDL 2/0 N | 2/0 | 1.75 (44.5) | 5.50 (139.7) | 3.00 (76.2) | 0.94 (23.8) | 15507SS |
| HDL 3/0 N | 3/0 | 1.69 (42.9) | 5.19 (131.8) | 3.00 (76.2) | 1.00 (25.4) | 15532SS |
| HDL 4/0 N | 4/0 | 1.75 (44.5) | 5.63 (143.0) | 3.00 (76.2) | 1.13 (28.6) | 15514SS |
| HDL 250 N | 250 | 1.75 (44.5) | 5.63 (143.0) | 3.00 (76.2) | 1.25 (31.8) | 15517SS |
| HDL 300 N | 300 | 2.25 (57.2) | 5.81 (147.6) | 3.00 (76.2) | 1.38 (34.9) | 15506SS |
| HDL 350 N | 350 | 2.31 (58.7) | 6.56 (166.6) | 3.00 (76.2) | 1.56 (39.7) | 15503SS |
| HDL 500 N | 500 | 2.63 (66.8) | 6.38 (162.1) | 3.00 (76.2) | 1.75 (44.5) | 15609SS |

Diagrams



Note: For tin plating, add suffix -TN after the catalogue number. For oxide-inhibiting compound, contact your ABB representative.

*These dies may be used with the TBM15CR-LI or TBM15I compression tools. Please note that the die adapter 15500-TB is required for use with these tools.