

Kenny Clamp®, LLC

C (UL) US
LISTED 2DF3

Kenny Clamp® Compression Connector, US Patent No. 7595455, Selection Instructions for Grounding Electrode Conductors

Selection of proper size UL listed Kenny Clamp® Compression Connector; size is based on the grounding electrode conductor selected from table 250.66 of the 2008 National Electrical Code. The grounding electrode conductor is sized in accordance with the largest service entrance conductor or derived phase conductors for separately derived systems.

Example: A 200-ampere single-phase residential service is supplied by 4/0 aluminum service entrance cable (SEC). From the Kenny Clamp Compression Connector Selection Chart select 4/0 aluminum SEC and on the same line move right under the column referencing Kenny Clamp Compression Connector Sizes. 4/0 SEC requires a 4 AWG copper grounding electrode conductor and 4 AWG Kenny Clamp Compression Connector for either solid or stranded copper wire.

Kenny Clamp® Compression Connector Selection Chart

Select Service Entrance Conductor Sizes Copper conductors	aluminum conductors aluminum or copper clad	Select Kenny Clamp Compression Connector Sizes
2 or smaller	1/0 or smaller	No. 8 solid or stranded
1 to 1/0	2/0 or 3/0	No. 6 solid or stranded
2/0 or 3/0	4/0 or 250 KCMIL	No. 4 stranded
over 3/0 through 350 KCMIL	over 250 KCMIL through 500 KCMIL	No. 2 stranded
over 350 KCMIL through 600 KCMIL	over 500 KCMIL through 900 KCMIL	No. 1/0 stranded
over 600 KCMIL through 1100 KCMIL	over 900 KCMIL through 1750 KCMIL	No. 2/0 stranded
over 600 KCMIL though 1100 KCMIL	over 1750 KCMIL	No. 3/0 stranded

Installation Instructions for the Kenny Clamp® Compression Connector

If insulated, remove the insulation from the grounding electrode conductor one-inch above and below the connector. Punch out a ½ inch knockout in the bottom or top of the panelboard enclosure. Remove paint from both sides of the enclosure knockout to ensure good electrical continuity between the connector and enclosure. Install the Kenny Clamp Compression Connector through the knockout and attach it to the panelboard using the ½ inch steel locknut prepackaged with the connector, tighten the connector to a minimum torque of 150 inches pounds. Loosen the one-inch brass nut on the connector and insert the 4 AWG copper conductor through the center of the internal sleeve located inside the body of the connector. Terminate the 4 AWG copper conductor on the grounded termination bar (neutral), in the panelboard. Tighten or torque the brass nut around the conductor using the torque specifications guideline chart, for a 4 AWG conductor a minimum torque of 110 pounds inches is required. Finish attaching the grounding electrode conductor to the electrode, i.e. steel, water, rod or pipe using the appropriate clamp for the selected electrode. Your installation is now complete.

Installation Instructions for attaching the Kenny Clamp® Compression Connector to a Raceway and Enclosure

Attaching the Kenny Clamp Compression Connector to a raceway is easily accomplished by first installing a connector and a rigid coupling to the raceway. Reduce the rigid coupling to ½" using an RE (reducing bushing) if necessary. Remove the steel locknut from the prepackaged connector and insert the threaded portion of the Kenny Clamp Compression Connector through the enclosure into the rigid coupling. Tighten or torque the connector to the enclosure to a minimum of 150 inches pounds. Remove any insulation from the conductor, which may come in contact with the connector by at least one-inch above and below connector, loosen the one-inch brass nut on the connector and insert the grounding electrode conductor through the internal sleeve of the connector. Tighten or torque the brass nut using the torque specification guideline chart. Terminate the grounding electrode conductor to the enclosure or to the grounded conductor terminal strip, depending on application. Your installation now is complete.

Kenny Clamp® Compression Connector sizes for Separately Derived Systems, panelboards and enclosures.

The Kenny Clamp® Compression Connector is a new alternative in bonding and grounding separately derived systems, panelboards and enclosures. Advantages of using the Kenny Clamp Compression Connector are:

Eliminates the need for installing lugs on the frame of separately derived systems to bond the frame or to install a main bonding jumper from XO to the transformer can. Most lugs installed today don't meet the grounding and bonding standards under UL 467.

Standard lugs for terminating current carrying conductors are not listed and labeled for grounding connections.

A listed and labeled grounding and bonding connector under UL 467 "Grounding and Bonding Equipment" and UL 486A "Wire Connectors and Soldering Lugs for Use with Copper Conductors".

The only listed connector for terminating grounding electrode conductors to metal enclosures. The only connector, which provides adequate strain relief for grounding electrode conductors.

Its not labor intensive, we all know time is money.

Minimum Enclosure Thickness

Wire size AWG	Enclosure thickness
3/0	.078
2/0	.062
1/0	.053
2 AWG through 8 AWG	.053 or less

Installation Instructions for Separately Derived Systems Dry Type (Transformers)

Select the proper size Kenny Clamp® Compression Connector using the selection chart below.

Kenny Clamp Compression Connector Selection Chart for Separately Derived Systems

Transformer Size	Kenny Clamp Compression Connector Size
15 KVA	No. 8 solid or stranded
30 KVA	No. 8 solid or stranded
45 KVA	No. 6 solid or stranded
50 KVA	No. 4 solid or stranded
75 KVA	No. 2 stranded
112.5 KVA	No. 1/0 stranded
150 KVA	No. 2/0 stranded
225 KVA	No. 3/0 stranded
500 KVA	No. 3/0 stranded

The above Chart is an approximation derived from 240.21(C)(6) of the 2002 NEC, to ensure proper selection of the grounding electrode conductor check with your local jurisdiction and the National Electrical Code®.

Select the appropriate Kenny Clamp® Compression Connector from the Separately Derived System Selection Chart. On the side near the bottom of the transformer enclosure drill or punch a ½" knockout, remove any paint from around the drilled or punched hole on both sides of the enclosure. Install the Kenny Clamp® Compression Connector through the ½" knockout and attach it to the enclosure with the prepackaged ½" steel locknut, tighten or torque the connector using the enclosed torque guideline chart. If the grounding electrode conductor is insulated remove the conductor insulation one-inch above and below the area where the conductor makes contact where it passes through the connector. Loosen the one-inch brass nut and install the grounding electrode conductor through the center of the internal sleeve located inside the connector. Terminate the grounding electrode conductor to XO, tighten or torque the one-inch brass nut using the enclosed torque guideline chart. Your installation is now complete.

Torque guidelines for conductors using the Kenny Clamp® Compression Connector

Copper Conductor Size	Tighten Torque, Pound Inches
8 AWG	75
6 AWG	110
4 AWG	110
3 AWG	150
2 AWG	150
1 AWG	150
1/0 AWG	180
2/0 AWG	250
3/0 AWG	250