

(EV) ELECTRIC VEHICLE CHARGER INSTALLATION INFORMATION

<u>Charger Type</u>	<u>Variable Inputs or settings</u>
Charge Point/Home Flex	32,40, or 48 amp Cord /Plug connection, most equipment failures occur with this model.
Juice Box Tesla	40 or 48-amp cord-n-plug or hard-wired.
Clipper-Creek	32,40, or 48-amp hard-wired.
Wall-Box/Pulsar	Fixed 48-amp (considered top of line) hard-wired.
Plus Autel	32,40, or 48-amp cord-n-plug.
Grizzl-e Level 2	Variable to 50-amp cord-n-plug.
Emporia	32,40, or 48-amp cord-n-plug.
Lectron V Box	Low cost \$400 range only half of it is listed by UL. 16,24,32 or 40-amp cord-n-plug or hard wire.

Installation Notes:

1. Chargers are not failing or melting only equipment fails such as the: 14R50 single phase receptacle and 60a Pull out Disconnects. Circuit breakers not tripping but melting itself the surrounding equipment inside enclosure.
2. Chargers that are direct connect or hard-wired don't seem to have melting problems.
3. Chargers greater than or equal to 48-amps are hard wired.
4. Most chargers can be hard-wired.
5. Circuit-breakers and wire (copper or aluminum) are set at 125% of max fla.
6. Customers are allowed to increase or decrease (32 amp - 48amp) input to charger via phone application or equivalent.

Helpful Video Guide: <https://www.youtube.com/watch?v=tDp9PhPJhUI>

RECI meeting notes to counteract problems with EV chargers are as follows:

1. 14R50 amp receptacles are not rated for long duty cycle of the EV charger this receptacle material should be the Bakelite type.
2. Pull-out-disconnects should not be used. Disconnects with a side handle are better since they are heavier duty.
3. All copper conductors should be used. Due to the history of aluminum and loosening of the terminal screws, etc.
4. Circuit-breakers may need to be rated differently for EV charging or even mounted in a separate enclosure.
5. Disconnects and installation of equipment should be mounted on Unistrut not on a combustibile surface.