



Standard Specification

NRTL-Approved DC Distribution Panel

1. General

- 1.1. The DC Distribution Panel is an assembly designed to connect battery chargers and industrial-sized batteries to the user-connected dc loads. The DC Distribution Panel shall provide multiple branch circuits rated for 130Vdc or less. A main breaker may be provided if required.
- 1.2. Site Installation Configurations:
 - 1.2.1. The main circuit breaker can serve as a disconnect for all branched dc loads.
 - 1.2.2. The main circuit breaker can also be used as a battery disconnect when one (1) of the branch breakers is specially wired as the input for a battery charger.
 - 1.2.3. The panel can be supplied without a main breaker, replaced with direct dc bus connection lugs.

2. Applicable Codes

- 2.1. The DC Distribution Panel is an assembly designed to connect battery chargers and industrial-sized batteries to the user-connected dc loads. The DC Distribution Panel shall provide multiple branch circuits rated for 130Vdc or less. A main breaker may be provided if required.

3. Electrical

- 3.1. The DC Distribution Panel shall be equipped with one (1) two-pole main circuit breaker. The main breaker shall be rated 100A or 200A, as specified by purchaser and required by the installation.
- 3.2. The DC Distribution Panel shall have a capacity of up to fifteen (15) two-pole 130V branch dc distribution circuit breakers, or thirty-two (32) single-pole 48V branch breakers. The quantity and current trip ratings shall be selected at point of sale, specified by purchaser, and as required by the installation.
- 3.3. The distribution circuit breakers shall be UL Listed Components rated as dc branch circuit breakers and be available in current trip ratings of 1, 2, 3, 5, 10, 15, 20, 25, 30, 40, 50, and 63A, as specified by the purchaser and required by the installation's dc loads.
- 3.4. All breakers shall be electrically rated for 10 kAIC.
- 3.5. All circuit breakers shall feature solderless compression screw terminals, accepting the following wire sizes:

100A main breaker	200A main breaker	1-63A branch breakers
#12 - #2/0 AWG	#4 - 350MCM	#18 - #4 AWG



- 3.6. One (1) copper-aluminum compression lug shall be supplied for user grounding. An optional ground bus bar shall also be available.

4. Construction

- 4.1. The DC Distribution Panel enclosure shall be designed for wall, or optional rack mounting. Enclosure dimensions shall be 31.8" (809.6mm) H x 20.0" (507.8mm) W x 5.20" (132.1mm) D.
- 4.2. The DC Distribution Panel enclosure shall be a NEMA Type 1 assembly, designed for indoor use.
- 4.3. The DC Distribution Panel enclosure shall be constructed of 16 GA steel. External finish shall be ANSI 61 gray epoxy powder coat paint.
- 4.4. The DC Distribution Panel shall feature pre-punched, easy-to-remove, 1.00in/25.4mm knock-outs on all four (4) sides for access into the enclosure. The main dc circuit breaker cabling is entered through the top of the enclosure.
- 4.5. Distribution circuit breakers shall be clip-mounted for ease of replacement, and/or future expansion.