

Product Specifications



NORTH AMERICAN AC CHARGING CONNECTOR



Product Specifications

The North American 50A AC charging connector provides a Level 2 charging solution for North American vehicles.

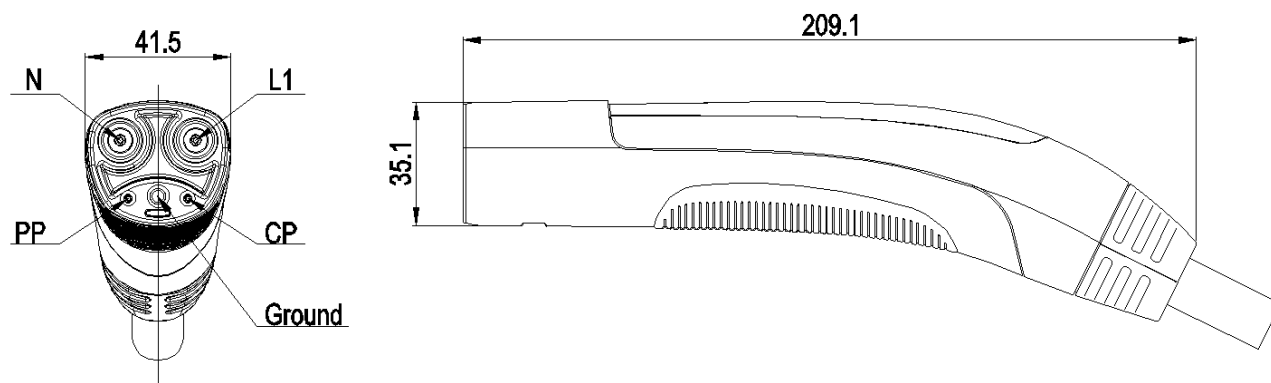
The connector is available in customized lengths and can be mechanically fitted to a Level 2 Charging system using standard mounting hardware. The connector is manufactured with A built-in temperature sensor for overtemperature protection and a UHF transmitter to remotely open chargeport doors. The transmitter is available in two frequencies for regional compliance.

PERFORMANCE SPECIFICATIONS

Rated voltage	240V AC
Rated current	50A
Insulation resistance	$\geq 100\text{M}\Omega$
Withstand Voltage	2000V AC
Rated Drop Resistance	200 drops
Insertion/Withdrawal Force	$< 90\text{N}$
Flammability Rating	UL 94 V-0
Mating Cycles	> 10000 times
Temperature rise	$< 50\text{K}$

MECHANICAL SPECIFICATIONS

Colour of Connector Enclosure	Black
Dimensions(Overall)	41.5mm x 35.1mm x 209.1mm
Cable Length	On Request
Connector Enclosure Material	PC
EVSE HV Terminal Material	Red Copper
EVSE Signal Terminal Material	CU-Alloy
Plating	Silver Plating
Connection	Crimped Connections



ELECTRICAL SPECIFICATIONS

Temperature Sensor Type	NTC 10K
Temperature Sensor Threshold	75°C
UHF Transmitter	Remotely open chargeport doors
UHF Transmitter Frequency	315MHZ
Resistance value (between PE and PP)	480 Ω (Switch operated) 150 Ω (Switch not operated)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C to 50°C (-40°F to 122°F)
Ambient Temperature	-40°C to 105°C (-40°F to 221°F)
Maximum Elevation	3000m (9.843ft)
Operating Humidity	Up to 95%RH, condensing
Protection Degree	IP44 working status (IP67 in handle)
UV Resistance	F1 per UL 746C



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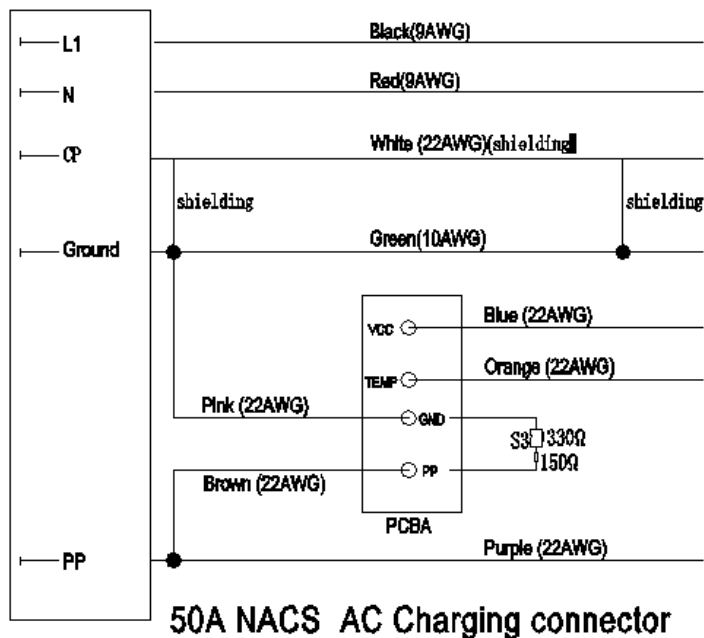
CABLE

Cable		
AMPERAGE	CABLE STRUCTURE	CABLE O.D
50A	2×9AWG+1×10AWG+1×22AWG(S)+3×22AWG	14.0mm±0.5

WIRING DIAGRAM

Temperature Sensor Type(50A): One NTC(10K) placed in PCBA

Wiring diagram



CERTIFICATION

UL certification

FCC Warning

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.