

NORTH AMERICAN 48A AC CHARGING CONNECTOR

The North American 48A AC charging connector provides a Level 2 charging solution for North American vehicles.

The connector is available in 3 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

Model Number	1488675-XX-F
Product Type	Charging Connector Assembly
Compatibility	Single Phase AC, DC
Rated Voltage (Nominal)	240 VAC / 500 VDC
Rated Current	48A AC
Power Conductor Connection Method	Bolted joints
Insulation Resistance	$\geq 100 \text{ M}\Omega$
Rated Drop Resistance	200 drops ¹
Insertion / Withdrawal Force	$< 90 \text{ N}$
Flammability Rating	UL 94 V-0

¹ Drops performed from 1m height onto concrete surface at $22^{\circ}\text{C} \pm 8^{\circ}\text{C}$.

ELECTRICAL SPECIFICATIONS

Low Voltage Electrical Connector	Molex Microfit 0436450400
Low Voltage Electrical Terminal	Molex 0430300001
Temperature Sensor Type	NTC, 10K
Temperature Sensor	Murata NCU15XH103F60RC
Temperature Sensor Threshold	75°C
UHF Transmitter	Silicon Labs Si4010-C2-ATR
UHF Transmitter Frequency	315 MHz, 434 MHz

ENVIRONMENTAL SPECIFICATIONS

Ambient Temperature	-40°C to 50°C (-40°F to 122°F)
Operating Temperature	-40°C to 105°C (-40°F to 221°F)
Maximum Elevation	3,000 m (9,843 ft)
Operating Humidity	Up to 95% RH, condensing
Protection Degree	IP67
UV Resistance	F1 per UL 746C

MECHANICAL SPECIFICATIONS

Dimensions (Overall)	41.5 mm x 35.1 mm x 194.5 mm
Cable Diameter	14.5 mm
Cable Length	2.6 m, 5.5 m, 7.3 m
Connector Enclosure Material	Polycarbonate
EVSE HV Terminal Material	Copper - Unplated
EVSE Signal Terminal Material	Phosphor Bronze - Tin Plated

