

Product Specification

**NACS Charging Cable Assembly, Final
80A @ 240VAC**

JUL 13 ,2023

PROPRIETARY DOCUMENT

The purpose of this specification is to define the scope of supply offered by SINBON. This document may not, in whole or in part, be duplicated or disclosed without the written permission of the SINBON Product Specification author.

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► Product Overview



SINBON NACS Charging cable assembly with Vehicle connector and open cable end for charging electric vehicle and plug-in hybrid electric vehicle with alternating current by Tesla vehicle charging inlets, for installation at electric vehicle supply equipment, in accordance with NACS.

The NACS 32A/40A/50A/65A/80A charging connector provides Level 2 or 3 charging solution for NACS vehicles. The connector is manufactured with a built-in temperature sensor for over-temperature protection and a RF transmitter to remotely open charge port doors. The transmitter is available in two frequencies for regional compliance.

► Applicable Standard

TS-0023666

North American Charging Standard

IEC 62196

Plugs, socket-outlets, vehicle connectors and vehicle inlets – Conductive charging of electric vehicles

IEC 61851

Electric vehicle conductive charging system

► Product Feature



Safe and Stable



Ergonomic



High-structure Strength



Highly Waterproof



Low Heat Productivity



UV-resistant



Built-in Temperature Sensor



Flame Retardant

Technical Data



PERFORMANCE SPECIFICATION

| | |
|-----------------------------------|---|
| Model Number | A9604566 |
| Product Type | Charging Connector Assembly |
| Compatibility | AC |
| Rated Voltage (Nominal) | 240 VAC |
| Rated Current | 80A |
| Power Conductor Connection Method | Customized |
| Insulation Resistance | $\geq 500 \text{ M}\Omega$ |
| Rated Drop Resistance | 100 drops (Room temperature 1m) |
| Insertion / Withdrawal Force | < 90N |
| Flammability Rating | VW-1 For Cable V-0 for All Plastic Parts |



ENVIRONMENTAL SPECIFICATION

| | |
|-----------------------|--------------------------|
| Ambient Temperature | -40°C to +85°C |
| Operating Temperature | -40°C to +50°C |
| Maximum Elevation | 3,000 m |
| Operating Humidity | 95%@50°C, non-condensing |
| Protection Degree | IP67 |
| UV Resistance | F1 per UL 746C |



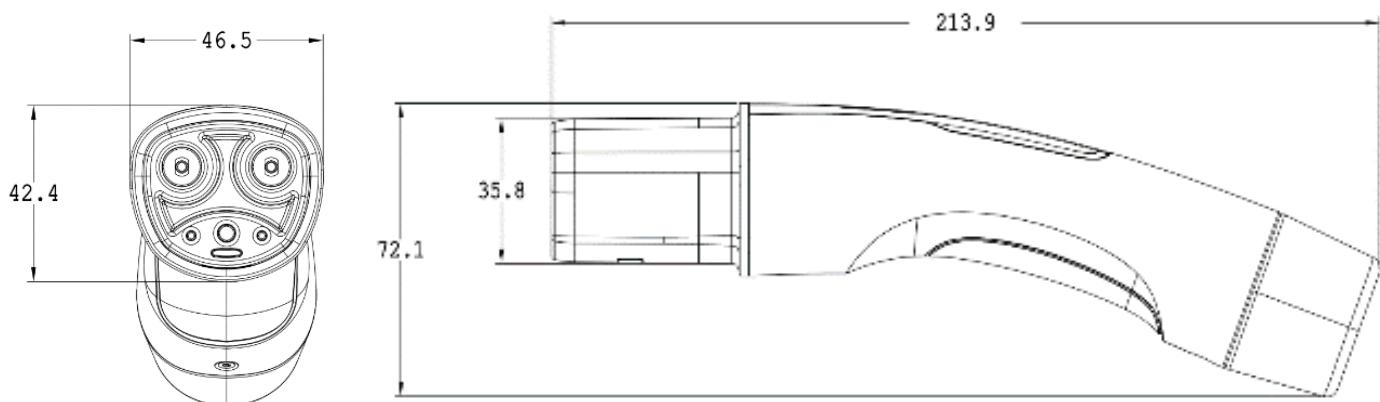
ELECTRICAL SPECIFICATION

| | |
|----------------------------------|---------------|
| Low Voltage Electrical Connector | Customized |
| Low Voltage Electrical Terminal | Customized |
| Temperature Sensor Type | NTC or PT1000 |
| Temperature Sensor Threshold | Customized |
| RF Transmitter Frequency | 315MHz |



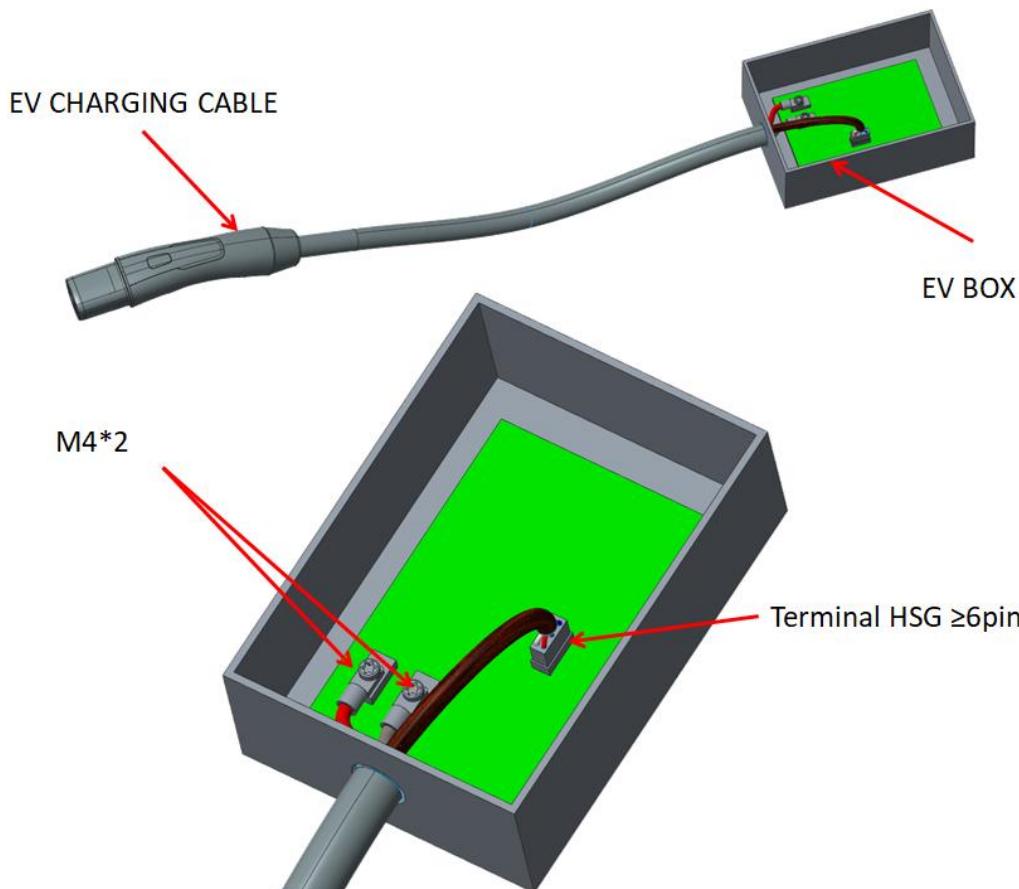
MECHANICAL SPECIFICATION

| | |
|----------------------|------------------------|
| Dimensions (Overall) | 46.5mm×72.1mm×213.9mm |
| Cable Diameter | 19.5mm |
| Cable Length | 5m, Others(Customized) |





INSTALLATION INSTRUCTION



TWISTED PAIRS
 (BLK & WHT)
 (RED & BRN)

| CSM CONNECTOR 12-002531-01 TERMINAL 12-002529-01 | | | | |
|--|---------|-------|--------|-----------|
| Cavity | Circuit | Color | Type | To |
| 2 | PP | BLUE | 18 AWG | NACS PP |
| 5 | T1+ | BLK | 18 AWG | PT1000 |
| 3 | T1-/T2- | WHT | 18 AWG | PT COMMON |
| 17 | T2+ | RED | 18 AWG | PT1000 |
| 11 | CP | YEL | 18 AWG | NACS CP |
| 12 | GND | GRN | 18 AWG | SPLICE |
| 9 | 5V VCC | BRN | 18 AWG | PCBA |



Service Terms

Whole Solution

SINBON could provide customers and cooperative partners with a whole solution of technical support, training, maintenance service, etc.

One-stop Service

SINBON could provide customers and cooperative partners with one-stop service. All charging related products purchased from SINBON are offered professional and guaranteed service for any problem caused due to product usage and quality.

Warranty

Two years from shipment / Accumulation 10000 charging cycles after initial use.

During the warranty period, products must be carried out on-site technical service due to product faults or quality defects (caused by abnormal or improper usage is not included), SINBON will promptly dispatch technical engineer to solve product malfunction for free.

FCC Statement

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

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.

ISED RSS Warning:

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This device has been assessed to be in compliance with SAR and/or RF field strength limits. The device can be used in the exposure condition without restriction.

ISED RF exposure statement:

This equipment complies with ISED radiation exposure limits set forth for used on the car. The device has been evaluated to meet general RF exposure requirement.

Le matériel est conforme aux limites de dose d'exposition aux rayonnements énoncés pour fac un autre environnement. ce dispositif a été évalué à satisfaire l'exigence générale de l'exposition aux rf.

On a évalué que ce dispositif était conforme aux limites d'intensité du das et/ou du champ RF. L'appareil peut être utilisé dans les conditions d'exposition sans restriction.