

# CCS 1.0 DC Fast Charge Electric Vehicle Inlet



SAE J1772™ Plug and Inlet

Designed and developed in accordance with SAE J1772™ , UL 2251: 2013 and IEC 62196-3: 2014 standards.

## Inlet Technical Characteristics

Type	DC Combined Charging System Type 1; IEC 62196-3, 2013 Conf EE; SAE J1772 DC Level 2
Name	REV -1C-150i
Product Number	Configurable
Conductor & Wire Gauge	DC 2X 2AWG; PE 1X 6AWG; L1 & L2 1X 10AWG; CP & CS 1X 18AWG
Rated Voltage & Current	600V, 150A DC, & 30A AC
Optional Temperature Sensor	PT1000
Connection capacity	Crimped
Cable Length	Configurable

# Specifications

## Features & Benefits

### Electrical Features:

- 150A 600V DC / 30A 240V AC
- Maximum charge performance: 90 kW
- Temperature Sensor: PT1000
- Design according to IEC 62196-3 Conf EE; SAE J1772™ DC Level 2
- Receptacle designed for AC and DC charging. AC Charging using SAE J1772™ compliant AC Level 1 or AC Level 2 connector
- Integral latch lock mechanism
- Integrated thermal sensor
- RoHS Compliant
- UL 2251 Recognized —USA & Canada

### Environmental Features:

- Temperature Range: -30°C to +50°C
- UL Type 3R Construction
- Efficient fluids and dust draining feature

### REMA Exclusive Terminal System:

- Male terminals on vehicle receptacle
- DC+/- Power terminal: 8.0mm
- AC L1 / L2(N) Power terminal: 3.6mm
- Ground terminal: 2.8mm
- Signal terminals: 1.5mm
- Terminal Material: Copper DIN EN13601
- Terminal Plating: Silver
- Terminals optimized for high mating cycle performance

### Physical Characteristics

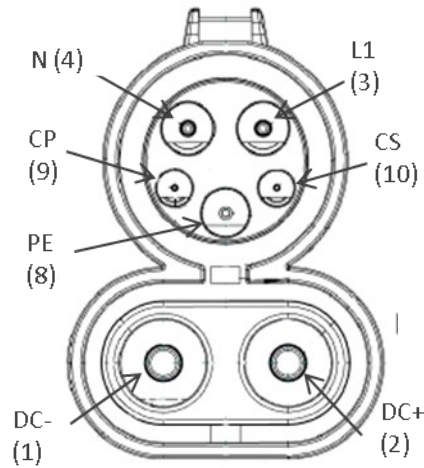
- Housing Material: PA66, GF30
- Flammability Rating: UL 94 V-0


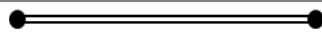
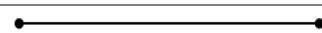



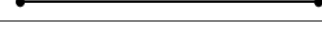


### Conductors:

- **2 DC+/-** Power Conductors plus 2 AC L1/L2 (N) Power Conductors + 4 Control Conductors
- Conductor Cross Section: DC 2X 2AWG/ PE X 6AWG/ AC 2X 10AWG / CS & CP 18AWG/ Temperature Sensor 2X 18AWG
- Conductors: ASTM B 33, ASTM B 172, ASTM B 174 Insulation & Jacket—UL62
- Temperature Range: -40°C to +90°C
- Cable Length (up to): 7.5M; 25Feet

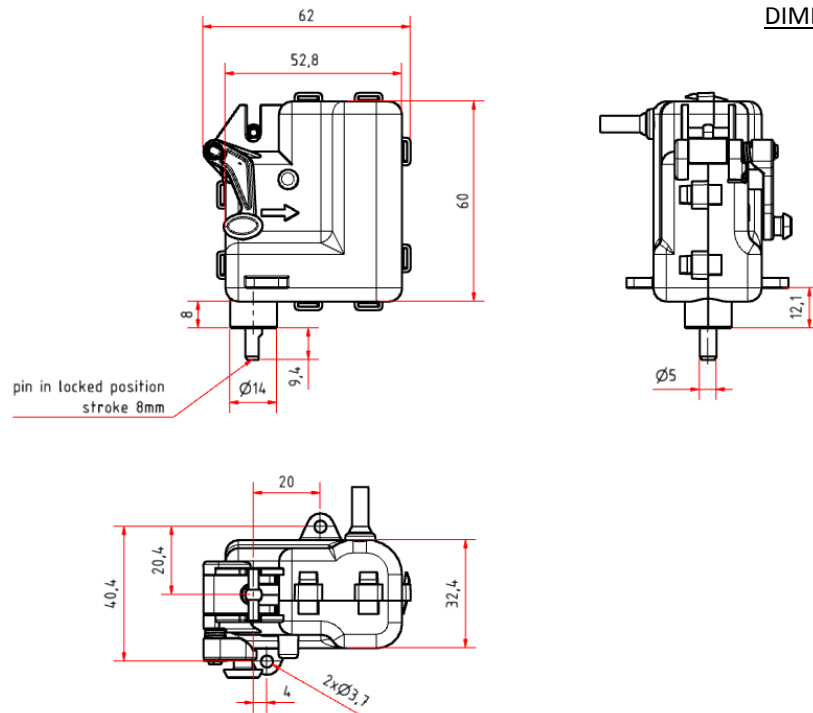
# Inlet Technical Specifications



PIN ASSIGN	CIRCUIT	COLOR	LINE	COND. SIZE
1		Black	DC Power (-)	2AWG
2		Red	DC Power (+)	2AWG
8		Black	PE	6AWG
9		Blue	Pilot, CP	18AWG
10		Gray	CS	18AWG
3		Black	L1	10AWG
4		Brown	N	10AWG
According to IEC 62196-3 CDV, 62196-1 FDIS, 2013				

# Actuator Specifications

## DIMENSIONS



## TECHNICAL DATA

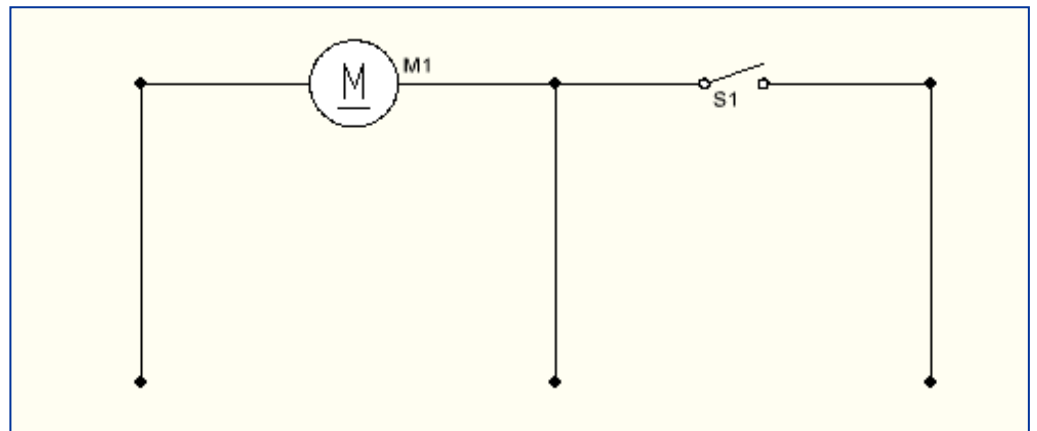
VOLTAGE RANGE :  $U_A = 7$  to  $16V$  DC  
OPERATION MODE : S3 VDE 0530-1  
DUTY CYCLE : 10% of 1min  
NOMINAL CURRENT :  $I_{nom} = 1700$  mA  
STALL CURRENT :  $I_{max} = 3,3A @ 12V / I_{max} = 4,6A @ 16V$   
OPERATIONAL RANGE :  $t = - 30^{\circ}C$  to  $+ 60^{\circ}C$

# Actuator Specifications

CYCLE TIME @ 20°C WITHOUT ELECTRICAL LIMITATION

MEASUREMENT	VOLTAGE	CYCLE TIME
	<b>V</b>	<b>ms</b>
1	7	83
2	9	76
3	12	72
4	14	68
5	16	64

WIRE DIAGRAM



Pin 1

Pin 2

Pin 3

WIRE CONNECTION:  
WIRE LENGTH : L=500mm

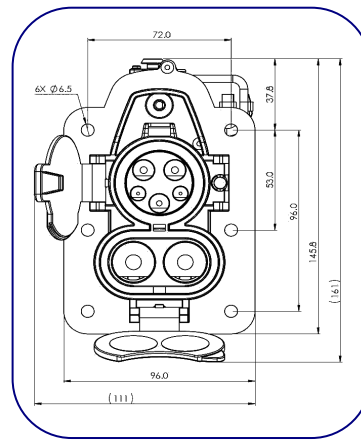
PIN NO..	COLOR	EXTEND	RETRACT
1	Gray	-	+
2	Black	+	-
3	Blue	S1 Position	

## Test Results

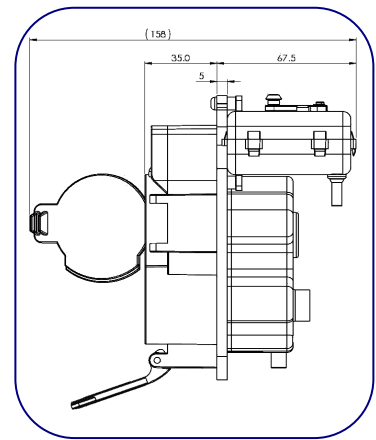
STANDARD	DESCRIPTION	RESULT
UL 2251 Section 29	Mold Stress Relief Test	PASS
UL 2251 Section 30	Moisture Absorption Resistance	PASS
UL 2251 Section 33	Dielectric Withstand Test	PASS
UL 2251 Section 34	Dew Point Test	PASS
UL 2251 Section 35	Conductor Secureness And Pullout Test	PASS
UL 2251 Section 36	Cable Secureness Test	PASS
UL 2251 Section 37	Impact Test (Plugs, Vehicle Connectors And Breakaway Couplings)	PASS
UL 2251 Section 38	Crush Test	PASS
UL 2251 Section 39	Vehicle Drive over Test	PASS
UL 2251 Section 40	Withdrawal Force Test	PASS
UL 2251 Section 41	Grounding Path Current Test	PASS
UL 2251 Section 44	No Load Endurance Test	PASS
UL 2251 Sections 49 And 51	Temperature Rise And Surface Temperature Test	PASS
UL 50E Sec. 8.5	External Icing Test	PASS
UL 50E Sec. 8.4.1.2	Dust Test - Outdoor Method (Hose Method)	PASS
CSA C22.2 No. 182.2 Section 7.3	Strain Relief Test	PASS
CSA C22.2 No. 182.2 Section 7.8	Temperature Test	PASS
CSA C22.2 No. 182.2 Section 7.4	Crushing Test	PASS
CSA C22.2 No. 182.2 Section 7.10	Impact Test	PASS
CSA C22.2 No. 182.2 Section 7.11	Dielectric Strength Test	PASS



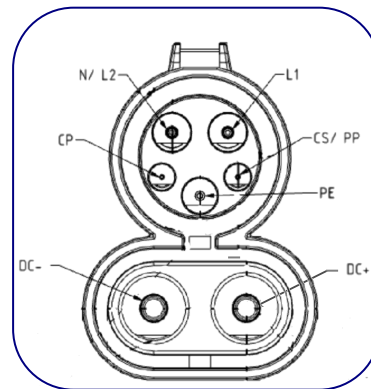
# Dimensional Data



Inlet Front View



Inlet Side View



Inlet Front View

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