

CCS Type-2 – Charging Cable



Specification

CCS Type-2 – Charging Connector +
Charging Cable

Product Definition

| | |
|-------------------------|--|
| Charging standard | Combined Charging System Type-2 |
| Standards / regulations | IEC 62196-1 IEC 62196-3 |
| Approval | CE, on request |
| Country approval | On request |
| Confection line end | 220mm stripped length, further length on request |

Dimensions Charging Connector

| | |
|------------------|------------|
| Width | 76 mm |
| Height | 209 mm |
| Depth | 308 mm |
| Conductor length | On request |

Ambient Conditions

| | |
|---|---------------------------|
| Ambient temperature (operation) | -30°C ... +50°C |
| Ambient temperature (storage/transport) | -40°C ... +80°C |
| Max. altitude | 5.000 m (above sea level) |
| Degree of protection (plugged) | IP65 |
| Degree of protection (unplugged) | IP20 |



Electrical Properties

| | | | |
|-------------------------------------|--|--------|--------|
| Rated voltage for power contacts | 1000V DC | | |
| Rated current for power contacts | 80 A | 200 A | 250A |
| Maximum charging power | 80 kW | 200 kW | 250 kW |
| Number of power contacts | 3 (DC+ / DC- / PE) | | |
| Rated voltage for signal contacts | 30 V AC | | |
| Rated current for signal contacts | 2 A | | |
| Number of signal contacts | 2 (CP, PP) | | |
| Note on the connection method | Crimp termination (cannot be disconnected) | | |
| Resistor coding (between PE and PP) | 1500 Ω | | |
| Temperature monitoring | 2x Pt 1000 | | |

Mechanical Properties

| | |
|-----------------|----------|
| Mating cycles | > 10.000 |
| Insertion force | < 100 N |
| Withdrawal | < 100 N |

Design

| | |
|-----------------------------|------------|
| Color housing / handle area | black |
| Color mating face | black |
| Housing with customer logo | On request |

Material

| | |
|--------------------------------|----------|
| Material housing / handle area | Plastic |
| Material mating face | Plastic |
| Flammability rating | V0 |
| Material contacts | Cu-Alloy |
| Material surface of contacts | Ag |



Pushing Performance

Cable

| Cable structure | DC | | |
|--|--|---|---|
| | 80 A | 200 A | 250 A |
| | 3 x 16 mm ² + 3 x 2 x 0,75 mm ² | 2 x 50 mm ² + 25 mm ² + 3 x 2 x 0,75 mm ² | 2 x 70 mm ² + 35 mm ² + 3 x 2 x 0,75 mm ² |
| Cable diameter | 19,5 ± 0,4 mm | 29,3 ± 0,4 mm | 33,9 ± 0,5 mm |
| Cable resistance at 20°C (70 mm ²) | ≤ 0,272 Ω/km | | |
| Cable resistance at 20°C (50 mm ²) | ≤ 0,386 Ω/km | | |
| Cable resistance at 20°C (35 mm ²) | ≤ 0,554 Ω/km | | |
| Cable resistance at 20°C (25 mm ²) | ≤ 0,780 Ω/km | | |
| Cable resistance at 20°C (16 mm ²) | ≤ 1,21 Ω/km | | |
| Cable resistance at 20°C (0,75 mm ²) | ≤ 26,0 Ω/km | | |
| Wiring standard | DIN EN 50620 | | |
| Type of conductor | Straight | | |
| Outer sheath, material | TPE-U / EVM-1 | | |
| Outer sheath, color | On request | | |
| Minimum bending radius | 10 x cable diameter with 200A | | |

Temperature Sensors

| | |
|---|--|
| Type of sensor | Pt 1000 |
| Standards / regulations | DIN EN 60751 |
| Recommended measuring current | 0,1 - 0,3 mA |
| Sensor tolerance with recommended measuring current | acc. to DIN EN 60751 |
| Temperature range | -40°C ... 180°C |
| Temperatur coefficient (TCR) | acc to. DIN EN 60751 |
| Long-term stability (max. R0-Drift) | within temperature range no drift expected (>20 years) |
| Shutdown temperature | 90°C, equivalent to a Pt 1000-value of 1347,07 Ω |

Environmental Product Compliance

REACH SVHC

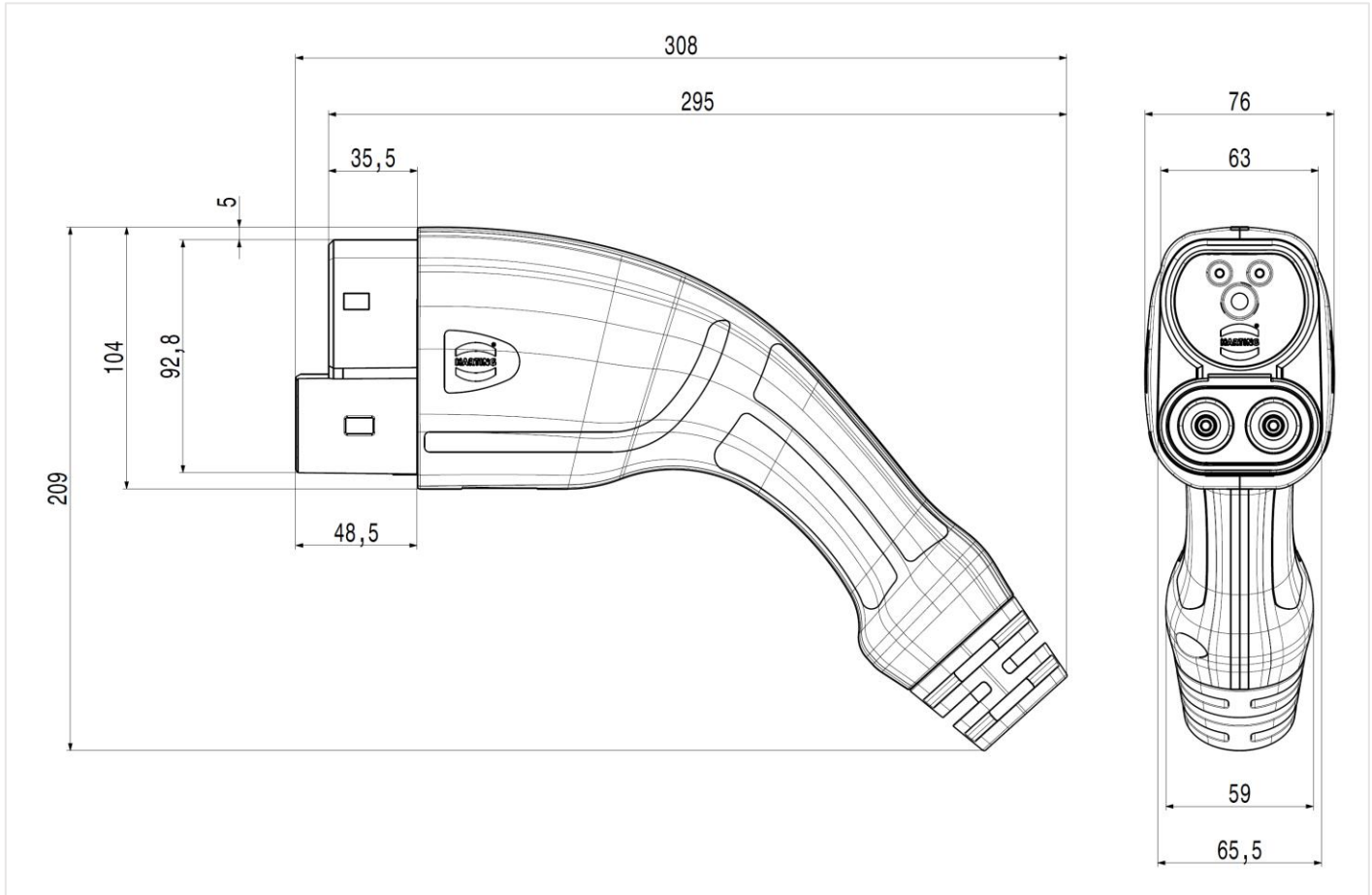
Lead | CAS 7439-92-1

China RoHS

Environmentally Friendly Use Period: 50 years

Drawings

Dimensional drawing



Pin assignment of the Vehicle connector

