

CCS Type-2 – Charging Cable



Specification	CCS Type-2 – Charging Connector + Charging Cable
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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, 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	IP65

Electrical Properties

Rated voltage for power contacts	1000V DC		
Rated current for power contacts	80 A	200 A	250 A*
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		

*Continuous current: 210 A

Mechanical Properties

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

Design

Colour housing / handle area	black
Colour 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

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		
Outer sheath, colour	On request		
Minimum bending radius	10 x cable diameter with 200 A (15 x with 60 A)		

*Continuous current: 210 A

Temperature Sensors

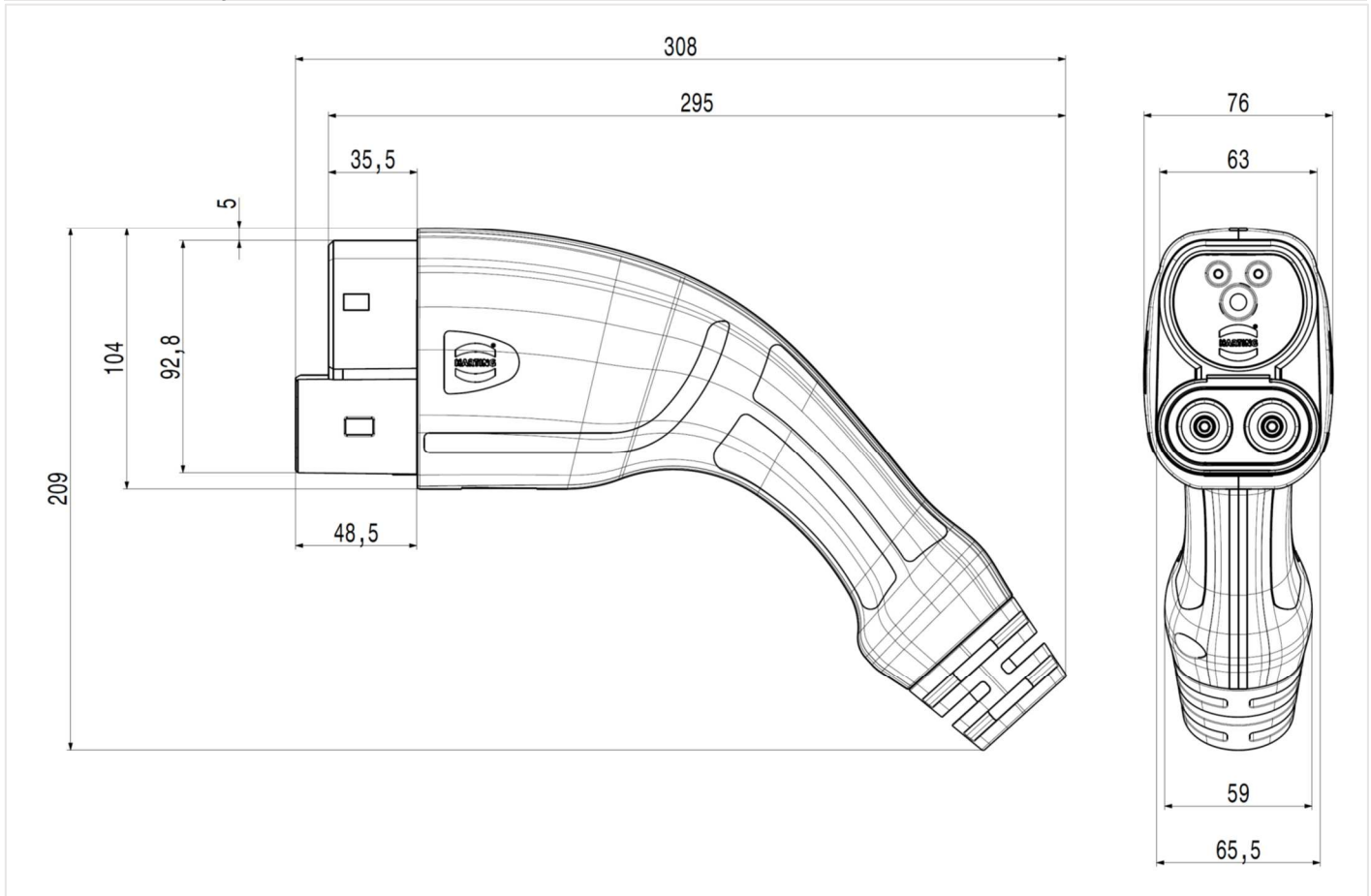
Type of sensor	Pt 1000
Standards / regulations	DIN EN 60751
Recommended measuring current	0,1 - 0,3 mA
Sensor tolerance with recommended measuring current	acc. to DIN EN 60751
Temperature range	-40°C ... 180°C
Temperatur coefficient (TCR)	acc. to DIN EN 60751
Long-term stability (max. R0-Drift)	within 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

