

## RADOX® High Power Charging System, HPC500 CCS Type-2, CC55, Standard

### Description

Continuous High Power Charging at 500 kW  
 Robust, safe ergonomic design  
 Easy to handle, thin and light flexible Cable  
 Short assembly time, maintenance free, easy replaceable  
 Shutdown in case of overheating  
 Temperature sensors for overheating protection  
 Ready for metering system



The RADOX® High Power Charging System allows to use much smaller and lighter cables than a conventional non cooled system. The cooled cable technology can handle high continuous current up to 500 Ampère / 1000V. The ergonomic connector can be easily operated with small or large hands and allows to use the system in a convenient, safe way.

### Technical data

#### Electrical specification

Description	Value
Nominal continuous current	500 A
Nominal voltage	1000 V DC
Test voltage cable	7000 V DC
Test voltage system	3000 V DC

#### Mechanical data

Characteristics	Value [approx.]		
Weight of outer cable (including coolant)	1.3 kg/m		
Weight of Connector	0.9 kg		
Number of mating cycles	> 10'000		
Plug mating force	< 100 N		
Bending radius	Fixed: 200 mm	Free movement: 305 mm	

#### Environmental data

Characteristics	Conditions	Tested acc. to	Values
Temperature range	Operational temperature	IEC 62196	-35°C up to +50°C
Coolant, readily biodegradable Details coolant: C3P-002 datasheet DOC-0000784407		OECD 301 B	> 80 %
Fire resistant		IEC 60332-1-2	
RoHS compliant			
IP-Code			IP44 (plugged in) IP67 (housing)

#### Additional properties

Metering Connection Signal Wire	Connected to		
0.5mm2 Pink (PK)	DC+		
0.5mm2 Turquoise (TQ)	DC-		
Contacts	Execution		
Exchangeable Body Contacts	DC+ / DC-		
Temperature sensors	Position at the hottest point		

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### Technical drawing



### Ordering information

Description	Weight nom. [kg]	Outside Length [m]	Inside Length	nom. [m]	Item number
HPC500 CCS2 3.50/0.55 CC55	8.4	3.5	Power DC+ Power DC- Earth Signal/Metering wires Tubes	0.5	85136763
HPC500 CCS2 4.50/0.55 CC55	9.9	4.5		0.55	85138970
HPC500 CCS2 5.50/0.55 CC55	11.8	5.5		1.0	85138971
HPC500 CCS2 6.50/0.55 CC55	13.3	6.5		1.0	85138974
HPC500 CCS2 6.5/1.50 CC55	13.6	6.5	Power DC+ Power DC – Earth Signal/Metering wires Tubes	1.5 1.5 1.5 1.5 1.5	85136765
	Tolerance	+/- 0.060	+/- 0.025		

### Normative references

IEC 62893-1	Charging cables for electric vehicles
IEC 62893-4-2 WD <sup>1)</sup>	Cables for DC charging according to mode 4 of IEC 61851-1
IEC 62196-3	Plugs socket-outlets, vehicle connectors and vehicle inlets
IEC TS 62196-3-1 CD <sup>1)</sup>	DC Charging vehicle coupler and cable assembly with thermal management system
IEC 61851-23	Electric vehicle conductive charging system-DC electric vehicle charging station



<sup>1)</sup> under consideration of the newest draft

### Change notes

Chapter	Description
Description / Technical drawing	New pic of connector
Ordering information	Correct tolerance