Data Sheet

HUBER+SUHNER

RADOX High Power Charging System | HPC600 GBT CC74 | Standard

Description

Continuous High Power Charging at 600 kW
Robust, safe ergonomic design
Easy to handle, thin and light flexible Cable
Rotatable Connector
Short assembly time, maintenance free, easy replaceable
Shutdown in case of overheating
Temperature sensors for overheating protection

The RADOX High Power Charging System allows to use much smaller and lighter cables then a conventional non cooled system. The cooled cable technology can handle high continuous current up to 800 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	600 A
Tested up to	800 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)	1.57 kg/m		
Cable diameter	31.5 mm		
Weight of Connector	0.9 kg		
Number of mating cycles	> 10'000		
Plug mating force	< 100 N		
Cable bending radius outer cable	Fixed: 200 mm	Free movement: 305 mm	
Cable bending radius DC+ and DC-	Fixed: 200 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	All item numbers conform to: 'Declaration of compliance with EU Directive 2011/65 / EU (RoHS)'		
REACh	All item numbers conform to: 'Regulation (EC) No 1907/2006 concerning the Registration'		
IP-Code			IP44 (plugged in) IP67 (housing)

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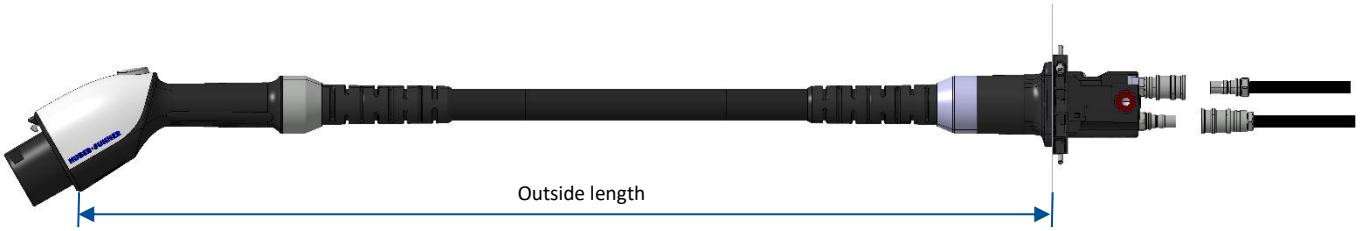
Additional properties

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		
Power Cables	**Conductor Cross Section**		
DC+ / DC-	36mm^2		
Mechanical support			
Bending protection on Connector			

Technical drawing



Ordering information

Item No	Description	Weight nom. [kg]	Outside Length nom. [m]	Remarks
85212989	HPC600 GBT 3.50 CC74	6.9	3.5	
85212990	HPC600 GBT 4.00 CC74	7.7	4.0	
85212991	HPC600 GBT 4.50 CC74	8.5	4.5	
85212992	HPC600 GBT 5.00 CC74	9.3	5.0	
85212993	HPC600 GBT 5.50 CC74	10.0	5.5	
85212994	HPC600 GBT 6.00 CC74	10.8	6.0	
		Tolerance	+/- 0.060	

Normative references

IEC 62893-1	Charging cables for electric vehicles
IEC TS 62893-4-2	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	DC Charging vehicle coupler and cable assembly with thermal management system
IEC 61851-23	Electric vehicle conductive charging system-DC electric vehicle charging station
GBT 20234.1-202X	Connection Set for Conductive Charging of Electric Vehicles
GBT 33594-2017	Charging cables for electric vehicles

CE

Change notes

Page / Chapter	Description