E-Moblity Portfolio

With 70,000 products, together we can find your solution

Innovative product variety

PHOENIX CONTACT
INSPIRING INNOVATIONS

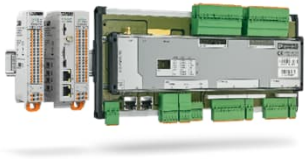
Specially developed for e-mobility applications

Our powerful charging technology products

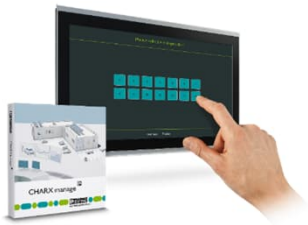
CHARX

E-Mobility empowered by Phoenix Contact

CHARX connect



CHARX control



CHARX manage

CHARX power

CHARX protect

CHARX contact

PHOENIX CONTACT
INSPIRING INNOVATIONS

Phoenix Contact E-Mobility - CHARX

We have a complete portfolio!

new

Charging controllers
(EMO)

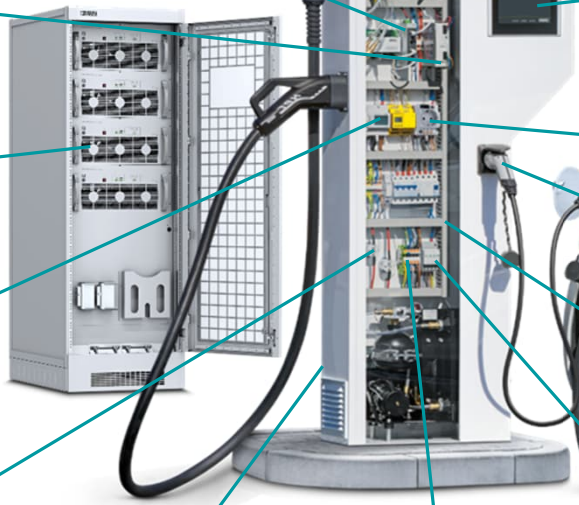
HMIs & IPCs
(IMA-AS)

Communication technology
(IMA-AI)

Components for devices
(DC)

Charging management software
(EMO)

Power supplies & UPS
(ICE-PS)



new

DC power electronics
(ICE-PS)

Control cabinet sockets
(ICE-ICC)

new

Energy meters
(ICE-IF)

Charging cables & sockets
(EMO)

new

DC contactors
(ICE-IF)

Heavy duty connectors
(ICE-IFC)

Terminal blocks
(ICE-ICC)

new

Surge protection
(ICE-TT)

Marking & installation
(ICE-MI/ICC)

Phoenix Contact E-Mobility - Connectivity

Product Range Connectivity

CHARX connect

E-Mobility empowered by Phoenix Contact

PHOENIX CONTACT
INSPIRING INNOVATIONS

Charging technology for e-mobility – New products 2020/2021

CCS charging cables in compact design

Fast and convenient charging – at home, in restaurants and retail outlets. The new family of compact CCS charging cables has been specially developed for the lower power range up to 80 kW.

This makes them perfect for DC home chargers as well as small DC charging stations in the public/commercial sector to take advantage of fast DC charging here as well.

Your advantages:

- ✓ Compact design is technically, visually and economically optimized for DC charging stations in the lower power range
- ✓ Comfortable handling thanks to ergonomic handle
- ✓ Safe from overheating due to fast, accurate temperature measurement
- ✓ Complete longitudinal watertightness against water ingress into the cable
- ✓ Efficient power transmission thanks to silver-plated contact surfaces

PHOENIX CONTACT
INSPIRING INNOVATIONS

Charging technology for e-mobility – New products 2020/2021

CCS charging cables in compact design

Main Features:

- Rated current: 40 A ... 80 A
- Rated voltage: 1000 V DC
- Conductor cross section:
  6 mm^2 ... 16 mm^2
- Cable length: 5 m (more on request)
- Temperature sensor technology: PT1000
- Certifications: CE, UL

Description	DC charging cable CCS Type 1		DC charging cable CCS Type 2	
Rated current	40 A	80 A	40 A	80 A
Conductor cross section	10 AWG	6 AWG	6 mm^2	16 mm^2
Type	EV-T1G2CC-DC-40A-5.0M10AS BK11	EV-T1G2CC-DC-80A-5.0M6AS BK11	EV-T2G4CC-DC40A-5.0M6.0ES BK11	EV-T2G4CC-DC80A-5.0M16ES BK11
Art. no.	1105880	1105881	1106637	1106633

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INSPIRING INNOVATIONS

Phoenix Contact E-Mobility - Connectivity

CHARX Connect - DC charging cables 2021

CCS1: 40A*, 80A*, 200A*, HPC 500A*
CCS2: 40A*, 60A, 80A*, 125A, 150A*, 200A, 250A*, HPC 500A*

- We can supply you with standard-compliant charging cables for worldwide fast charging with direct current
- Charging capacities up to 250 kW are supported
- The cooled variants for High Power Charging (HPC) can even achieve charging capacities of up to 500 kW
- This makes the charging process comparable to refuelling a vehicle with a combustion engine

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INSPIRING INNOVATIONS

CCS type 1 charging cables for High Power Charging

Fast charging in North America up to 500 kW: The CHARX connect DC charging cables with High Power Charging Technology are now also available for the North American charging standard CCS Type 1.

With the liquid-cooled charging connectors, you can charge e-vehicles in just a few minutes. Extensive accessories complete the portfolio.

Your advantages:

- ✓ Fast HPC charging with up to 500 kW charging power, efficient cooling and safe temperature and leakage monitoring
- ✓ Fast and safe installation with optional panel feed-through
- ✓ Maintenance and environmentally friendly thanks to replaceable mating face and semi-open water-glycol based cooling circuit
- ✓ Comfortable operation thanks to flexible charging cable and rubberized handle component with novel operating lever

PHOENIX CONTACT
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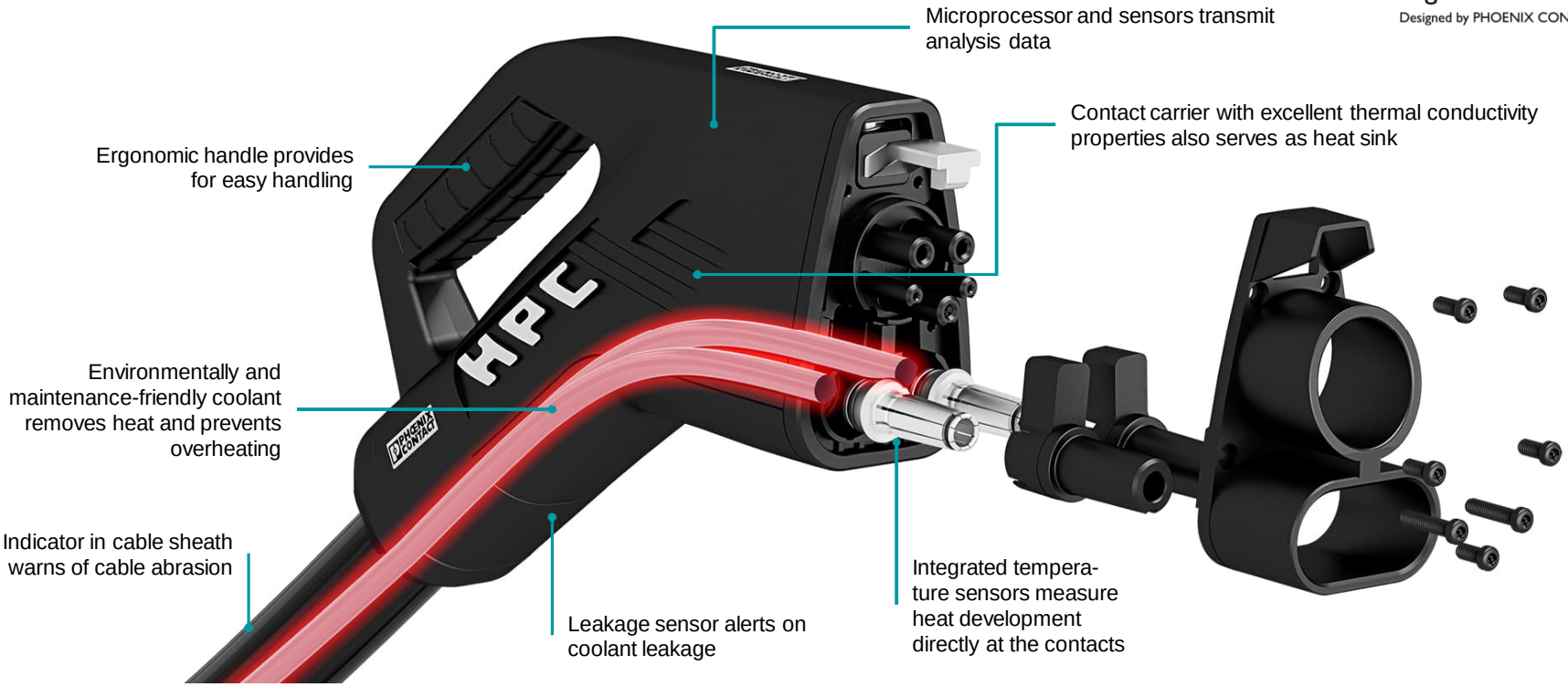
Unique selling proposition

High Power Charging Technology
Designed by PHOENIX CONTACT



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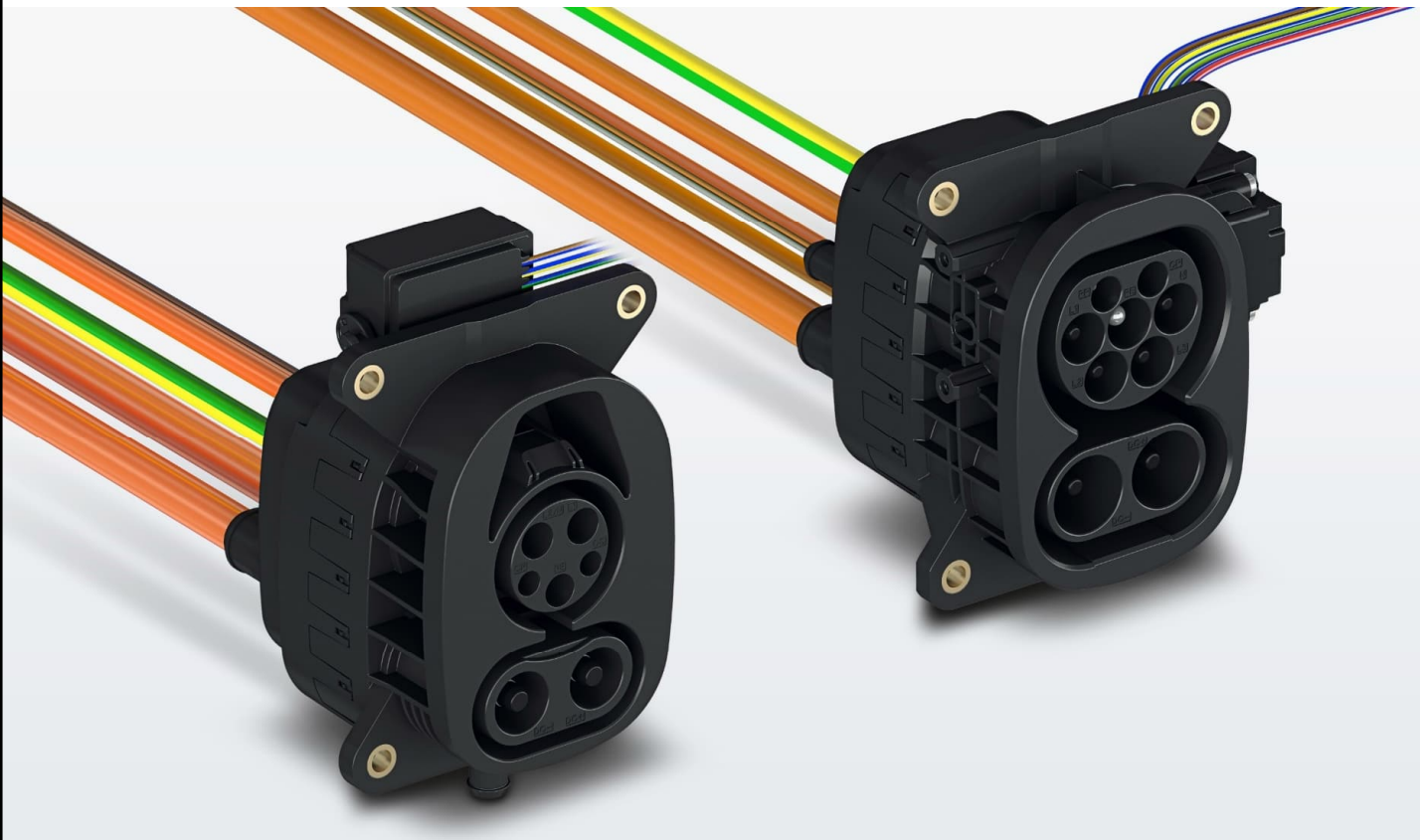
Phoenix Contact E-Mobility - Connectivity

Product – Universal Inlets Generation 4



CHARX connect

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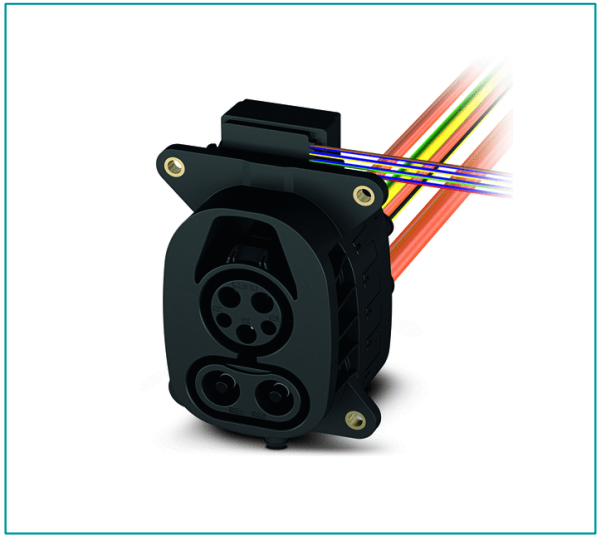
Phoenix Contact E-Mobility - Connectivity

Universal Inlets Generation 4 CCS



Universal Inlets Generation 4 CCS 1

Universal Inlets Generation 4 CCS 2

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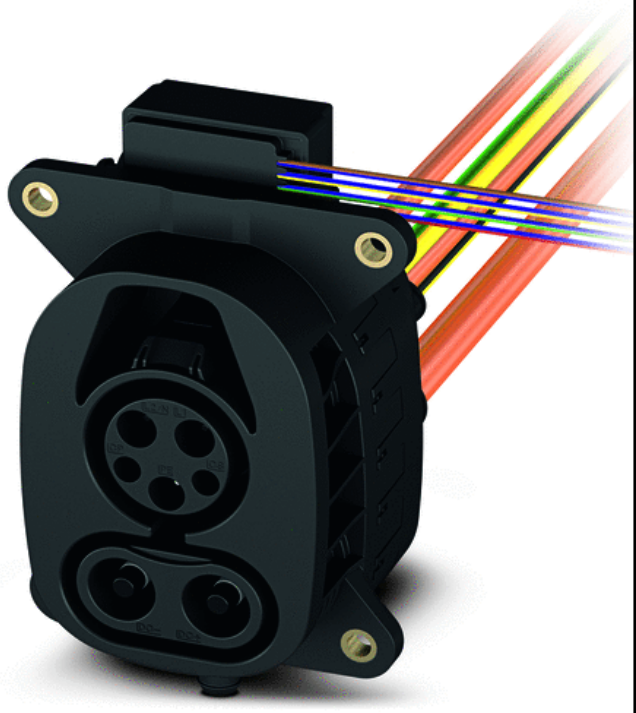
Phoenix Contact E-Mobility - Connectivity

Universal Inlets Generation 4 CCS 1 – General technical details

Charging System:	Combined Charging System
Charging Mode:	AC: Mode 2 and Mode 3 DC: Mode 4
Standards:	IEC 62196-3 IEC 62196-3-1 SAE J1772
Ambient temperature:	- 40 °C up to 60 °C operating - 40 °C up to 85 °C storage
Mating cycles:	min. 10.000 cycles
Mating force:	< 100 N with PxC connector
IP protection:	IP67 (inner area of vehicle charging inlet) IP6K9K and IP6K6K (in front area of the inlet)



PHOENIX CONTACT
INSPIRING INNOVATIONS

Phoenix Contact E-Mobility - Connectivity

Universal Inlets Generation 4 CCS 2 – General technical details

Charging System:	Combined Charging System
Charging Mode:	AC: Mode 2 and Mode 3 DC: Mode 4
Standards:	IEC 62196-3 IEC 62196-3-1
Ambient temperature:	- 40 °C up to 60 °C operating - 40 °C up to 85 °C storage
Mating cycles:	min. 10.000 cycles
Mating force:	< 100 N with PxC connector
IP protection:	IP 55/ IP67 (inner area of vehicle charging inlet) IP6K9K and IP6K6K (in front area of the inlet)

INSPIRING INNOVATIONS

Everything for your charging infrastructure

All CHARX products at a glance

DC charging cables

GB/T and CCS charging connectors
for fast charging with up to 500 kW
(High Power Charging)

AC charging cables

Mode 3 charging cables for
AC charging with up to 26 kW –
ergonomic, robust and high quality

AC charging sockets

Charging sockets for portable
mode 3 charging cables – with LED status
display and temperature measurement

PHOENIX CONTACT
INSPIRING INNOVATIONS

Everything for your charging infrastructure

All CHARX products at a glance

CHARX control

DC charging controller

The powerful charging controller for modern CHAdeMO and CCS charging stations

CHARX control

AC charging controllers

Extremely compact and freely scalable mode 3 charging controllers with open Linux platform

CHARX manage

Charging and load management

Conveniently manage charging points or entire charging parks and distribute loads intelligently

PHOENIX CONTACT
INSPIRING INNOVATIONS

Everything for your charging infrastructure

All CHARX products at a glance

DC power electronics

Power modules for efficient and scalable DC supply of fast charging stations

DC power contactors

High voltage contactors for switching high DC charging currents and for galvanic isolation of the charging cable

Surge protection

Protect charging points and vehicles from damage caused by lightning and switching operations

PHOENIX CONTACT
INSPIRING INNOVATIONS

Everything for your charging infrastructure

More products at a glance

Power supplies

Reliably supply the charging station components with 24 V using power supply units – for a stable operation

Energy meters

Measure energy consumption with MID-certified devices to accurately bill charging processes

Communication technology

Network charging stations, connect them to management and backend systems, and protect them against cyber attacks

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Thank you

Charging technology for e-mobility

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