

Other instruments / adapters / accessories 康高特-A 1732 DC EVSE Adapter



The A 1732 DC EVSE Adapter is a specialized tool designed for electrical safety and functional testing of Electric Vehicle Supply Equipment in both Mode 4 (DC EVSE) and Mode 3 (AC EVSE) configurations. It supports a range of connector types, including CCS2, CHAdeMO, and Type 2 AC plugs, making it highly versatile. The A 1732 adapter enables initiation when paired with MI 3155 of communication protocols, such as ISO 15118, DIN 70121, CHAdeMO, and Low-level PWM, and it can also simulate errors on the Control Pilot (CP) signal and Protective Earth (PE) connections to assess EVSE response. When paired with the MI 3155 EurotestXD installation tester, the A 1732 DC EVSE Adapter can be used to log the charging protocol, perform measurements and testing required for EVSE commissioning and for periodic safety testing.

康高特-METREL A 1732 DC EVSE Adapter KEY FEATURES

- Support for **CCS2, CHAdeMO and AC EVSE**;
- Functional test protocol for measuring voltages and current on the terminals;
- Fault simulation on CCS2 and Type 2 for **CP open, PE open and CP short**;
- Fault simulation on CHAdeMO for **CP3 open, PE open and CAN stop**;
- Banana test points for DC, AC and PE terminals;
- Double PE test terminals (PE(C) and PE(P)) for a **true 4-wire Rlow measurement**;
- Bluetooth communication with MI 3155 EurotestXD;
- Overvoltage category CAT III / 300 V;
- **CCS ISO 15118-1 or DIN 70121** communication support;
- **CHAdeMO version 0.9.1** and higher communication support;
- **AC EN 61851-1** communication support;
- Simulated EV Battery of 300 V and 5 A.

USED TOGETHER WITH MI 3155

- Communication with A 1732 DC EVSE Adapter via Bluetooth;

- **Predefined test protocol for DC EVSE** in the memory structure;
- All measurement can be started and viewed on **MI 3155 EurotestXD**;
- Performing accurate 4-wire measurements with 200 mA measuring current;
- **Insulation resistance** with DC voltage up to 1000 V;
- Functional test with a **live view of charge protocol** and voltages and currents on the test terminals;
- Remote faults triggering and reaction time measuring;
- DC impedance measurement;
- Discharge time measurement;
- Asymmetric **IMD test** with a setupable fault resistance between 20 kΩ and 640 kΩ at 5 kΩ intervals;
- **Programmable AUTO SEQUENCES*** for customizing the test protocol;
- PC SW Metrel ES Manager for measurement pre and post processing: preparation of the test structure, result download, tree-view, table view and graphical view, storing and **printing the reports**.

APPLICATION

- EVSE production for functional and electric tests;
- EVSE installation and commissioning;
- Periodic testing of EVSE;
- Troubleshooting problematic EVSE;

STANDARDS

Functionality

- EN 61851 - 1
- EN 61851 - 23
- ISO 15118-1
- DIN SPEC 70121
- CHAdeMO

Electromagnetic compatibility

- EN 61326 - 1

Safety

- EN 61010 - 1
- EN 61010 - 2 - 030
- EN 61010 - 031

GENERAL DATA

Mains supply	
Supply voltage, frequency	205 ... 254 V AC, 50 Hz / 60 Hz
Max. power consumption	2000 VA
Mains supply overvoltage category	CAT II / 300 V
Altitude	≤ 2000 m
Measuring category	
Measuring category	CAT III / 300 V
Protection classifications	
Power supply	Class I
Pollution degree	2
Degree of protection	IP40
Case	Shock proof plastic / portable
Communication	
USB 2.0	Standard USB Type B
Bluetooth	v4.2 BR/EDR and BLE specification
EMC	
Emission	Class B (Group 1)
Immunity	Industrial environment
Reference conditions	
Reference temperature range	15 °C ... 35 °C
Reference humidity range	35 % ... 65 % RH
Operation conditions	
Operation	Outdoor use
Working temperature range	-10 °C ... +40 °C
Maximum relative humidity	85 % RH (0 °C ... 40 °C), non-condensing
Storage conditions	
Temperature range	-20 °C ... +60 °C
Maximum relative humidity	90 % RH (-10 °C ... +40 °C) 80 % RH (40 °C ... 60 °C)
General	
Dimensions (w×h×d)	50 cm x 25 cm x 41 cm
Weight	16.2 kg
Communication standards	
CHAdcMO	Versions 0.9.1 and higher
CCS (DC)	ISO 15118-1or DIN SPEC 70121
ISO by default, DIN otherwise	
CCS (AC)	EN 61851-1 low level
Simulated EV battery	
Voltage	280 V to 310 V
Load (charging) current	Cca 4.9 A at 300 V
Input resistance	
DC+/DC-	24 MΩ
DC+/PE, DC-/PE	> 200 MΩ

ORDERING INFORMATION



- Standard set A 1732**
- A 1732 DC EVSE Adapter
 - A 1781 Test cable, GRY/GRN/BRN, 1.5m, 0.75mm2, CAT IV
 - A 1493 Power cable, 2m, 3x1.5mm2
 - A 1727 USB cable TypeA/B

CAN BE USED TOGETHER WITH

Photo	Order No.	Description
	MI 3155	EurotestXD

MEMORY STRUCTURE EXAMPLE

Memory Organizer

DC EVSE - 400 V DESIGNWERK MDC 22 \ CCS - 400 V

CCS - 400 V

- Rlow (DC EVSE) 18.Sep.24
- Riso (DC EVSE) 18.Sep.24
- DC EVSE Functional 18.Sep.24
- DC EVSE Functional

Memory 1/10: Rlow (DC EVSE)

R 0.003 Ω

R+ 0.00 Ω R- 0.00 Ω

System CCS 2 Ω 18.Sep.2024 12:54:24

Memory 2/10: Riso (DC EVSE)

R Um

DC+ / DC- 0.00 MΩ 5 V

DC+ / PE 4.03 MΩ 525 V

DC- / PE 4.01 MΩ 525 V

System CCS 500 V 18.Sep.2024 12:55:02

Limit(Riso(+,PE),Riso(-,PE)) 1 MΩ

Limit(Riso(+,)) Off

Memory 3/10: DC EVSE Functi...

Authentication

Parameter	Standard	DIN SP...
Isolation	Attenuation	17.0 dB
PreCharge	Umax (iso)	482 V
Charge	Umax (charge)	301 V
StopCharge	Imax (charge)	4.9 A
SessionStop	PP res. range	1500 Ω
ShutOff		
Default		

System CCS 10 s 18.Sep.2024 12:55:37

Memory 5/10: Z (DC EVSE)

Z 2.28 Ω

Ipsc 130 A

U DC 298 V

System CCS Off 18.Sep.2024 12:58:39

Memory 6/10: Tdisch (DC EVSE)

t 0.18 s

Ures 26.0 V

U 59.0 V

System CCS 60 V 18.Sep.2024 13:02:49

Limit(t) 1 s

Memory 7/10: IMD (DC EVSE)

t 7.01 s

System CCS 40 kΩ 18.Sep.2024 13:04:27

R Test 10 s

tcharge