

CA 6652

Test adapter for Type 2 AC charging stations for electric vehicles

**From qualification
to maintenance**

Efficient and cost-effective

- Immediate diagnostics of your installations AC EV charging stations for BEV/PHEV electric vehicles
- Simplified connection of measurement and testing devices
- Safe use, indoors and outdoors

CAT II
300 V

IP 54

IEC
61851-1

IEC
60364-7-722

Measure up



Quick and comprehensive diagnostics of EV charging stations

The **CA 6652** unit alone enables quick diagnostics to verify proper operation of the **EVS charging station** and its safety shutdown in the event of faults.

When used in conjunction with a **multifunction installation controller**, it enables the performance of all electrical safety tests required by regulatory standards.



A technically certified charging station ensures proper vehicle charging

To ensure the long-term reliability of **EV charging station** installations, the **CA 6652** adapter enables the performance of all required measurements and tests, from design through initial and periodic inspections. This ensures that electric vehicle battery charging is optimized, reliable, and sustainable.



APPLICATIONS

- Technical Specifications
- Installation & Commissioning
- Maintenance & Troubleshooting
- Periodic Tests
- EVS Training



Monitoring of voltages delivered by a terminal with a 6 mA B/EV-type DDR during charging

Picture me



Inspection of EV Charging Stations and Infrastructure

Professionals working on charging points for BEV/PHEV electric vehicles must possess the necessary skills and the measurement and testing equipment required by the installation and inspection standards set out in European standards.

EV CHARGING STATION PACKAGE, A PERFECTLY TAILORED SOLUTION

To perform these operations safely, the EV Charging Station Decree requires a number of measures and the necessary equipment: DDT/VAT, universal tester, earth tester, insulation and continuity tester, DDR tester, phase sequence tester, and charging port tester. It is necessary to test Type A RCDs, and for certain installations, Type B RCDs and 6 mA EV RCDs.

THE CA 6652, THE IDEAL ADAPTER FOR IRVE AC CHARGING STATIONS

The **CA 6652** adapter is designed to test **EV charging stations intended for charging mode 3** (from 3.7 kW to 22 kW AC) in private low-voltage installations with a Type 2 connection point.

The CA 6652's ease of field deployment allows for rapid testing of a charging station. Its ability to simulate electric vehicle states (CP) and various vehicle charging cable configurations (PP) helps to quickly test all situations required by standards.

Its fault simulation push buttons help verify the safety shutdown of the EV charging station in the event of an anomaly between the electric vehicle and the charging system.

CP signal available on the CA 6652 terminals

Analysis of communication issues between the electric vehicle and the EV charging station is performed using an oscilloscope such as **HANDSCOPE II** or **SCOPIX IV BUS** in order to view the CP signal directly at the terminals of the **CA 6652**.

		CA 6652	Advanced EV Charging Station Package
Simulation of V status and charging station safety conditions	Detection of hazardous voltage on accessible parts (PE)	✓	✓
	Simulation of EV states	✓	✓
	Simulation of maximum current accepted by the cable	✓	✓
	Error simulation (CP-PE short circuit, diode short circuit, Open PE)	✓	✓
	Verification of control signals (CP)	Via oscilloscope	
Electrical safety verification of the terminal	Continuity and insulation test of the measurement cable conductors	-	✓
	Testing the electrical safety of a single-phase or three-phase terminal	-	✓
	Testing the activation of DDR Type A / AC	-	✓
	Test of DDR Type B/B+ /EV 6 mA Activation	-	✓
	Inspection Report	-	PC software

STANDARDS IEC 60364-7-722 AND IEC 61851-1

The **IEC 60364-7-722** standard requires that the electrical safety aspects of EV charging stations intended for charging mode 3 be checked:

- Grounding of the EV charging station,
- Continuity of the protective conductor (PE),
- Insulation testing of conductors relative to each other and to the chassis,
- Circuit breaker trip test.

The **IEC 61851-1** standard applies to low-voltage charging systems for BEV/PHEV electric vehicles.


It covers:

- The operation of EV charging stations,
- The connection system between charging points and electric vehicles,
- The electrical safety of EV charging stations.

THE CA 6652 FUNCTIONS

- Simulation of vehicle connection and maximum current supported by the cable
- Visual indication of voltage presence
- Access to charging station terminals via 4 mm banana plugs
- Safety test of the station under fault conditions
- Operator safety through detection of the PE potential via a conductive button
- Availability of the CP signal for communication problem detection

TECHNICAL SPECIFICATIONS

Vehicle Presence Simulation	
PP Simulation	Not Connected (NC), 13A, 20A, 32A, 63A
CP Simulation	States A, B, C, D 
Fault condition simulation	CP-PE short circuit, CP-PE diode short circuit, PE open circuit
4 mm banana measurement terminals	L1, L2, L3, N, PE, CP signal
Voltage presence indication	via LEDs
General specifications	
Environment	Operating temperature -20 °C to +55 °C; Storage -20 °C to +70 °C;
Housing dimensions (L x W x H)	221 x 100 x 44 mm
Cable length	Approx. 60 cm
Protection rating	IP 40 / IP 54 - IEC 60529
Standards	
Electrical safety	Adapter: IEC 61010-2-030; Cord: IEC 61010-2-031, 300 V CAT II, pollution degree 2; Plug connector: IEC 62196-2
EMC	IEC/EN 61326-1

CONDITION UPON DELIVERY

- A CA 6652, charging station adapter comprising:
 - 1 carrying case
 - 1 cable with a Type 2 plug
 - 1 multilingual quick start guide
 - 1 multilingual safety data sheet
 - 1 of verification

The operating instructions are available for download from our website www.chauvin-arnoux.com

TO ORDER

CA 6652 P01191309

CA 6652 Advanced IRVE Pack.....P01300002

- 1 CA 6652 adapter
- 1 CA 762 IP2X DDT/VAT
- 1 CA 6117 installation controller



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