FLIR EV45-NACS

EV Charger Test Adapter with NACS Plug and Type 1 Converter

www.flir.com/EV45-NACS



Key Features

- Ensures EV charging station safety by verifying Protective Earth (PE) and electrical wiring integrity
- Tests residual current device (RCD)
- Indicates the maximum current output of EV chargers
- Designed for Type 2 and compatible with Type 1 connectors
- Measures charging voltage and frequency when used with an optional FLIR digital multimeter
- Complies with CAT II 300 V and IEC 61851-1 EV safety standards

Main Applications

- Providing safe and reliable EV charging stations
- Installing and maintaining public and private EV chargers
- Diagnosing and troubleshooting EVSEs





SPECIFICATIONS

Electrical Measurement	
PE pre-test	Pass / Fault (>50 V AC/DC between PE conductor and touch sensor)
PP state indication	Open, 13 A, 20 A, 32 A, 63 A
CP state simulation	A (Disconnected) , B (Connected) , C (Charging), D (Charging w/ ventilation), E (Error)
Voltage phase indication	L1, L2
CP Error (E state) simulation	Pass / Fault (CP signal short-circuited to PE)
PE Error simulation	Pass / Fault (Interruption of PE conductor)
RCD/CCID trip test	Pass / Fault (Test RCD/CCID activation once tripped)
Outputs (For Test Purpose Only)	
Measuring Terminals L1, PE, N	Max. 250 V (Single Phase), 50 / 60 Hz, CAT II 300 V, Max. 10 A

Outputs (Optional Meters)	
Connect to DMM (DM286)	CP State C / D for AC Voltage with Hz measurement
Connect to insulation tester (IM75-2)	CP State B for EV cable Insulation Test
Power System	
Battery	4 × AA Alkaline batteries
Battery life	Approx. 100 hours, with alkaline batteries
General Information	
NACS connector (Built-in)	Connector for NACS Station
Accessory converter	NACS to SAE J1772 Type 1
Category rating	CAT II-300 V
Warranty	Limited 3-Year Warranty https://www.flir.com/testwarranty

Specifications subject to change. For the most up-to-date specifications, please visit flir.com.

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SPECIFICATIONS, CONT.

Certifications	
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Safety standards	IEC 61010-1 CAT II-300 V
EMC standards	EN61326-1
Environmental Data	
Operating ambient temperatures and relative humidity (RH)	–10°C to 30°C (14°F to 86°F), <85% RH 30°C to 40°C (86°F to 104°F), <75% RH 40°C to 50°C (104°F to 122°F), <45% RH
Storage temperature and RH	–20°C to 60°C (–4°F to 140°F), 0 to 80% RH (without batteries)
Operating altitude	2000 m (6560 ft)
Pollution degree	2
Meter Physical Data	
Weight	600 g (1.32 lbs)
Dimensions (L × W × H)	237 mm × 65 mm × 56 mm (9.33 in × 2.56 in × 2.20 in)
Included in the box	EV45-NACS Converter for Type 1 Carrying Pouch Test Leads 4 x AA batteries User Manual



For technical or sales support, please visit:
www.flir.com/about/general-inquiries

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