



Key features

- Quick & easy EVSE socket testing
- LEDs and buzzer indicate 28 fault conditions
- High /low supply voltage indication (L1)
- Type-2 plug connects directly to the EVSE charging point
- Fast & easy testing for the correct wiring of L, N and PE
- The 4 position switch simulates CP mode A, B, C and E
- The Type-2 Connector LEDs indicate charger CP mode
- Three phase voltage indication (L1, L2, L3)

The BZ820-EV is the ideal first-line tool for checking EV chargers fitted with Type-2 connectors. The unit detects 28 wiring fault conditions and also checks the voltage supply level. Correct polarity is indicated by three flashing green LEDs and a continuous audible tone. Fault conditions are clearly indicated by 3 red LEDs and a warning buzzer.

Socket polarity and earth wiring faults are identified by a combination of red LEDs. A look up chart on the tester provides basic fault diagnosis, further information is available in the product manual.

The BZ820-EV connects to an EVSE charging point using the Type-2 connector. The integral CP mode slider switch allows vehicle states to be simulated: - No vehicle connected (A), vehicle connected but not ready to charge (B) and vehicle connected and ready to charge (C). Mode C is used for testing. The additional “E” (error) setting simulates failure of the CP signal, which should cause the charger to inhibit charging. LEDs on the integral Type-2 plug show the status of the CP signal and if the voltage supply is present (L1).

BZ820-EV Type-2 Connector mode specification

Vehicle State	State description	LED indications
A	No vehicle connected	None
B	Vehicle connected, not ready to charge	B only
C	Electric vehicle connected ready to charge (test mode)	C & L1 (single phase)
[E] Error	CP Error	None

**Keeping You Safe**

BZ820-EV

EVSE socket tester

FUNCTION	BZ820-EV
ELECTRICAL	
Nominal operating voltage	230V AC rms
Operating frequency	50Hz
Power consumption	<2.5W
Power	from socket under test
Standby	after approx. 10 minutes
Voltage low indication (L1)	<195V \pm 5%
Voltage high indication (L1)	>270V \pm 5%
Earth neutral voltage high indication	>30V nominal
Socket / test lead colours	L, N, PE in 3-wire cable
GENERAL	
Dimensions	91(L) x 80(W) x 38(D)mm
Weight	120g
ENVIRONMENTAL	
Location	Indoor & outdoor use in dry weather conditions only
Altitude	up to 2000m
Operating environment	-10°C to 40°C at max. 85%RH
Mains supply voltage fluctuations	\pm 10%
Overvoltage category	CAT III 300V
Pollution degree	2
SAFETY	
Conforms to	Conforms to BS EN 61010-1:2010+A1:2019 Class II, Reinforced insulation
EMC	
Conforms to	BS EN 61326-1

Type-2 LED Connector Indication

Vehicle State	State description	CP-PE Resistance	CP Terminal Voltage
A	Electric vehicle not connected	Open (∞)	\pm 12V @ 1KHz
B	Vehicle connected, not ready to charge	2.74k Ω	+9V/-12V @ 1KHz
C	Electric vehicle connected ready to charge (test mode)	882 Ω	+6V/-12V @ 1KHz
[E] Error	CP Error simulation	0 Ω	0V

Included

BZ820-EV & instruction manual

Related products

EZ890-EV Advanced EVSE Socket Tester

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