

## DATASHEET

# W-CAT-EVBT-005 70mm<sup>2</sup> BATTERY TEST BOX

A specially designed test box to enable remote electrical safety testing of a 300 VDC electric vehicle DC battery pack.

## Special Features

- Specific Test Points for:
  - Voltage test
  - Insulation Test



## Functions and benefits

The W-CAT-EVBT-004 is specifically designed to be connected to the mating connectors installed on a 300 VDC battery pack:


- +Ve PL18W-301-70
- -Ve PL18Y-301-70

The cable length of 30cm from the connectors to the test box allow the tests to be carried out by the user in a safe and comfortable location away from the battery pack.

The test box has the following test points incorporated:

- 1000V CAT III test points for a Voltage check using RS PRO RS-9331 1000V Voltage Tester
- 1000V CAT III 4mm banana socket test points for an Insulation Test using a Fluke 1587 Insulation Multimeter.

## Specifications

W-CAT-EVBT-001 95mm <sup>2</sup> Battery Test Box	
	
<b>Cables</b>	
70mm <sup>2</sup> Cable	
Type	COROFLEX 180HV SSC - FHLR2GCB2G
Dimensions	Stranded bare copper 2175 (±5%) x max. 0.21 mm Conductor core 12.5mm, Outer sheath 14.4mm Length 1m
Insulation/ cable jacket	Silicone rubber (RAL 2003) min 0.8mm
Shielding	Tinned copper max. 0.21 mm Optical covering min. 85 %
Max wire resistance	0.259 mΩ/m
Voltage	Max 1000 VDC. Test voltage 5.0kV @ 5 mins
Temperature	-40 °C to +180 °C
<b>Internal Connections</b>	
Type	Electro-PJP 9017

Dimensions	Stranded bare copper 644 x Ø0,07 mm Outer diameter 3.7mm
Insulation/ cable jacket	Two pvc jackets. Wire wear indicator
Shielding	None
Max wire resistance	0.798 mΩ/m
Voltage	Insulation resistance greater than 2.2 GΩ @ 1000 VDC CAT IV
Temperature	-60 °C to +180 °C
<b>Test Sockets</b>	
<b>Voltage Test Sockets</b>	
Type	In-built to enclosure lid
Socket dimensions	Socket designed to accept the angles and length of the RS Pro RS-3991 tester probes
Electrical protection	1000V CAT III
Current	36A
Temperature	-20 °C to +80 °C, Pollution degree 2
Materials	Conductors – Stainless steel and copper bar Insulator – ABS
<b>Insulation Test Sockets</b>	
Type	Electro-PJP 3274-I
Socket dimensions	Socket accepts shrouded (safety) 4mm banana plugs in accordance with IEC 61010-031
Electrical protection	1000V CAT III
Current	36A
Temperature	-20 °C to +80 °C, Pollution degree 2
Materials	Conductors – Nickel coated brass Insulator – Polypropylene
<b>Enclosure</b>	
Materials	3d Printed Acrylonitrile Butadiene Styrene (ABS)
Impact strength	Charpy Notch, ISO 179 39.3 ± 3.6 kJ/m²
Dimensions	L120xW97xD71mm

## Dimensions

