



36 kV 400/630 A T-Body Connector Type Test Report

Others

Report Number:

Test Start Date:

Test Complete Date:

RN-R1101-OTHERS

2015 / 10 / 26

2015/ 11 / 01

Chardon Taiwan
No. 37 Min-Chie Road
Tung Lo Industrial Park
Miao Li, Taiwan 366



No. 37, Min-Chie Road, Tung Lo Industrial Park,
Miao Li, 366 Taiwan, R.O.C.
Tel: +886-37-984385 | Fax: +886-37-984770
E-Mail: sales@chardongroup.com

Table of Contents

1.	Screen Resistance Measurement.....	3
2.	Leakage Current Measurement.....	4
3.	Examination	5

1. Screen Resistance Measurement

Object

To verify the connectors that the parts meet the resistance requirements of IEC 60502.4/HD629.1S2, $R \leq 5000 \Omega$

Testing Samples

T-Body Connector CHARDON 36-FDT630 4 pcs

Procedures and Test Spec

The test shall be carried out on a separable connector which does not need to be installed on either a cable or a mating bushing. Silver painted or wraparound electrodes shall be installed at each end of the separable connector.

The screen resistance of the separable connector shall be measured at ambient temperature between the two electrodes. The power dissipation of the test circuit shall not exceed 100 mW.

The sample shall then be subjected to thermal aging in an air oven at $(120 \pm 2) ^\circ\text{C}$ for 168 h under the conditions described in 8.1 of IEC 60811-1-2. The separable connector screen resistance at ambient temperature shall be measured again.

Results

Sample number	Screen Resistance
A8	1142.5 Ω
A9	1217.6 Ω
A10	1195.2 Ω
A11	1246.5 Ω

2. Leakage Current Measurement

Object

To verify the connectors that the parts meet the Leakage Current Measurement requirements of 60502.4/HD629.1S2, when parts are energized to 36 kV, the leakage current shall not exceed 0.5 mA.

Testing Samples

T-Body Connector	CHARDON 36-FDT630	4 pcs
------------------	-------------------	-------

Mating Parts

Insulated Plug	CHARDON 36kV 630A
Cable	185mm ² Copper

Procedures and Test Spec

A separable connector shall be installed on a length of cable and connected to its mating bushing. The test shall be carried out at ambient temperature.

A metal foil of 50 mm × 50 mm, shall be fixed without any air gap to the outer screen of the separable connector as far as possible from the earthing points:

- in the case of separable connectors with an earthed metal flange (see Figure 9a), the metal foil shall be placed mid-way between the metal flange and the earth bond of the cable screen;
- in the case of separable connectors without a metal flange (see Figure 9b), the metal foil shall be placed at the end of the separable connector opposite to the earth bond of the cable screen.

In both cases, the metal foil shall be earthed through a millimeter and a resistance of 2 000 Ω, as shown in the test arrangement below.

The leakage current shall be measured with an a.c. test voltage of U_m applied between conductor and earth. ($\leq 0.5\text{mA}$)

Results

Sample number	Leakage Current
A8	10.61μA
A9	10.26μA
A10	10.48μA
A11	10.92μA

