



Tightness tests for IP55

- ENSTO Phase Balancer, Type: PB50A-3P-200



VTT Expert Services Ltd

Requested by: Ensto Finland Oy

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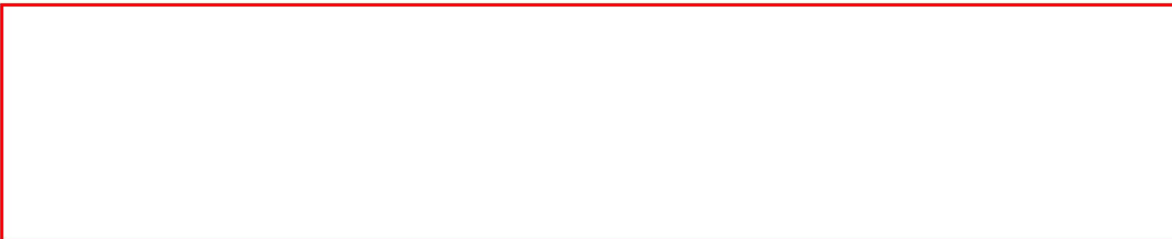
Order 7.10.2016, Aki Lähdesmäki

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Tightness tests for ENSTO Phase Balancer, Type: PB50A-3P-200

Summary Based on the test results the protection provided by casing of the ENSTO Phase Balancer, Type: PB50A-3P-200 complies with the requirements stated for the protection class IP55.



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1 General

The test place was VTT Expert Services Ltd and the test was carried out 12. - 13.10.2016. The tested specimen was ENSTO Phase Balancer PB50A-3P-200 (Serial no. 2016-41-0001).

The test was performed in accordance with the standard IEC 60529 “Degrees of protection provided by enclosures (IP Code)” (2013-08).

Environmental conditions: +20...+21 °C / 30...33 % RH.

- dust test chamber, IDN TL04118, calibrated 20.8.2014, valid 36 months
- hand held shower head, IDN TL04126
- flow meter Typ M4/1600, IDN TL04123, calibrated 1.10.2014, valid 36 months
- Rotronic Hygro Palm Temperature / Humidity meter, IDN TL12780, calibrated 26.8.2016, valid 12 months
- Ceba thermometer, IDN TL18293, calibrated 1.3.2012, valid 60 months

2 Dust test for IP5X

2.1 Test procedure

For the dust test the specimen was placed in the dust chamber provided with talcum powder circulation. The specimen was exposed to the free settling dust for a period of 8 hours. No underpressure was used (category 2 enclosure).



Photograph 1. The test setup for dust test.

The test results relate only to the sample tested.

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2.2 Test results

In the visual examination after the test no deposit of dust was noticed inside the casing.

Based on the results the protection against dust complies with the requirements stated for the protection class IP5X.

3 Water test for IPX5

3.1 Test procedure

The test was carried out by spraying the specimen with a water jet hose nozzle (Ø 6,3 mm, described in figure 6 in IEC 60529) from all practicable directions for a period of totally three minutes. The flow rate of the water was 12,5 l/min, temperature was +22 °C and the distance from the nozzle to the specimen was 2,7 m.



Photograph 2. The test setup for water test.

3.2 Test results

In the visual examination after the test no ingress of water was noticed inside the casing.

Based on the test results the protection against water jets complies with the requirements stated for protection class IPX5.

The test results relate only to the sample tested.

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