

Test Certificate

CERTIFICATE No: TRA061109CC01

ISSUE: B

DATE: 05/07/2024

PURPOSE OF TEST: Ingress Protection Testing, IP43

CLIENT ORDER No: 376

CLIENT: Panel Technologies Ltd, 49-61 Jodrell Street, Nuneaton, Warwickshire, CV11 5EG

EQUIPMENT UNDER TEST: EUT Name: Over Meter Box
Part Number: 16-120-MD-PF-BL-TRI
Element Stores Number: TRA-061109-S1
Receipt date: 17/10/2023

TEST SPECIFICATIONS: In accordance with quotation TRA-061109-00
BS EN 60529:1992+A2:2013

TEST DATE: 17/10/2023 and 19/10/2023

TEST LOCATION: Element Materials Technology, Rothwell Road, Warwick, Warwickshire, CV34 5JX

WRITTEN BY:



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APPROVED BY:



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TESTS CARRIED OUT:**IP4X - Protected Against Access to Hazardous Parts and Against Solid Foreign Objects**

Probe: 1.0^{+0.05}₋₀ mm diameter x 100mm wire
Force: 1N ± 10%
Test Configuration: Refer to Figures 1 and 2

Any barriers, shapes and covers attached to or formed by the enclosure S1 which could be removed without the use of a key or tool, were removed and the 100mm long access probe was applied to assess if the 1mm diameter probe could gain access to the openings of the enclosure or if a spherical object capable of motion, following a tortuous entry path could gain access to the openings of the enclosure, at a force of 1N.

IPX3 – Protected Against Spraying Water

Nozzle: Spray Nozzle (Counter Balance Shield Fitted)
Flow Rate: 10 litres per minute ± 5%
Duration: 1 minute per m² of surface area of enclosure from all practicable directions (5 minutes minimum)
Distance: 300 to 500 mm
Water Temperature: Within ±5 °C of specimen temperature
Test Configuration: Refer to Figures 1 and 2

The temperature of the water and the specimen was measured to ensure the differential was within 5°C. The specimen S1 was mounted in its normal operating orientation and sprayed from all practicable directions for a period of 5 minutes in accordance with the specification.

TESTS RESULTS:**IP4X - Protected Against Access to Hazardous Parts and Against Solid Foreign Objects**

The specimen was found to have no openings that could be penetrated by the 1.0mm Ø, 100mm long access probe reducing adequate clearance between the access probe and hazardous parts or access by a 1mm Ø spherical object capable of motion.

Specimen TRA-061109-S1 when installed as per the test configuration therefore satisfies the requirements of BS EN 60529:1992+A2:2013, IP4X.

IPX3 – Protected Against Spraying Water

After testing, the specimen was dried externally before being opened for internal inspection. No water ingress was found.

Specimen TRA-061109-S1 when installed as per the test configuration therefore satisfies the requirements of BS EN 60529:1992+A2:2013, IPX3.

FIGURES:



Specimen Test Configuration for Ingress Protection Tests

Figure 1



Specimen Test Configuration for Ingress Protection Tests

Figure 2