

Test Certificate

CERTIFICATE No: TRA062005CC03

ISSUE: A

DATE: 01/03/2024

PURPOSE OF TEST: Ingress Protection, IP21

CLIENT ORDER No: D1176

CLIENT: Computationics Limited (t/a C-TEC), Dark Lane,
Mawdesley, Lancashire, L40 2QU, United Kingdom,

EQUIPMENT UNDER TEST: EUT Name: Alert Buddy
Part Number: BF325
Element Stores Number: TRA-062005-S6
Receipt date: 24/01/2024

TEST SPECIFICATIONS: In accordance with quotation TRA-062005-04
BS EN 60529:1992+A2:2013

TEST DATE: 24/01/2024

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:**IP2X - Protected Against Access to Hazardous Parts and Against Solid Foreign Objects**

Solid foreign objects Sphere: 12.5^{+0.2}₋₀ mm diameter sphere
Force: 30N ± 10%
Access to Hazardous Parts Probe: 12mm⁺⁰_{-0.05} mm Ø x 80±0.2mm Jointed Test Finger
Force: 10N ± 10%

Any barriers, shapes and covers attached to or formed by the enclosure of the specimen S6 which could be removed without the use of a key or tool, were removed and the 12mm Ø jointed test finger inserted through any opening and the 12.5mm Ø sphere pushed against any opening in accordance with the specification reducing adequate clearance between the access probe and hazardous parts or penetration by the 12.5mm Ø sphere.

IPX1 – Protected Against Vertically Falling Water Drops

Drip Tray: 20 mm hole matrix
Flow Rate: 1mm ^{+0.5}₋₀ per minute
Rotation Speed: 1 revolution per minute. Specimen offset 100mm
Duration: 10 minutes
Drip Height: 200 mm above specimen
Water Temperature: Within ±5 °C of specimen temperature

The specimen S6 was placed on a turntable at a 100mm offset between turntable and specimen axis in its normal working orientation. The specimens were placed at a distance of 200mm below a calibrated drip tray producing a flow rate equivalent to 1 to 1.5mm per minute. The temperature of the water and the specimen was measured to ensure the differential was within 5°C. The specimens were tested for a period of 10 minutes in accordance with the specification.

TEST RESULTS:**IP2X – Protected Against Access to Hazardous Parts and Against Solid Foreign Objects**

The specimen S6 were found to have no openings that could be penetrated by the 12mm Ø jointed test finger reducing adequate clearance between the access probe and hazardous parts or access by a 12.5mm Ø sphere.

Specimen TRA-062005-S6 when installed as per the test configuration therefore satisfies the requirements of BS EN 60529:1992+A2:2013, IP2X.

IPX1 – Protected Against Vertically Falling Water Drops

After testing, the specimen S6 were dried externally before being opened for internal inspection. No water ingress was found. Please note that the specimen S6 was tested in two orientations, examples of which can be seen in Figures 1 and 2.

Specimen TRA-062005-S6 when installed as per the test configuration therefore satisfies the requirements of BS EN 60529:1992+A2:2013, IPX1.

FIGURES:



**Specimen S6 orientation 1
Ingress Protection Test, IPX1**

Figure 1



**Specimen S6 orientation 2
Ingress Protection Test, IPX1**

Figure 2