#### **PowerConnections**

# **SPECIFICATION & APPROVALS**

# **CUSTOMER:**

PowerConnections P/N: CP3

**DESCRIPTION:** Euro / Australian Plug

**DATE: 19 April 2022** 

Revision: D

Submission Sample Quantity: 10 Pieces

Master Version Filed: Confluence/Tech Department Space/PowerConnections/SCP

#### SPECIFICATION & APPROVALS

Date of 10 Mar 2022 Specification No. 700-0001 Application Supplier's Name PowerConnections Supplier Code CP3 Part No Part Name Euro / Australian plug Tick the relevant box "  $\square$ " □ 1. New application ☐ 2. New part(s) is added to accepted specification √ 3. Revision of accepted specification (Revision requested by □ customer Or □ supplier) □1. The specification attached to this sheet does not deviate from the customer specification Revision / Change □ 2. Revision(s) within the limits of customer specification is proposed. Revision proposal(s) listed below. **√** 3. Revision(s) beyond the limits of customer specification is proposed. Revision proposal(s) listed below. However, all other items contained within the specification are identical to the customer specification. Revision(s) shall be marked with a triangle " $\Delta$ " in the specification attached. Revision **Revision Description** Reason for Revision Date No. 29-06-04 First issue Α В 20-01-06 Revision of layout Conformity with other documents С 17-05-10 Removal of Licence & report New Licence issued D 19-04-22 Update, to Licence & report New Licence issued

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#### 1.0 Application

This Specification defines the performance for the Converter Plug, which is designed for the Euro Plug (CEE7).

#### 2.0 Name/Part Number

Name: Euro / Australian plug

Part Number: CP3

#### 3.0 Markings

See Below (Section 12)

#### 4.0 Rating

Voltage: AC 250V ~ 50Hz

Current: 2.5A

Ambient Working Temperature: -5 + 70°C Storage Temperature: -40 + 80°C 90%RH

### 5.0 Safety Specifications - Approvals

AS NZS 3100:2017 +A1 +A2 +A3

AS NZS 3112:2017 +A1

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6.0 Electrical Strength Test

No.	Test	Clause in Standard	Result	Description of test 6 pieces are subjected to this series of test
6.1	Provision for cables and Cords	4.6 AS/NZS 3100:2017	Pass	A CEE7 Euro Plug is fitted into a CP3 and the CEE7 cord is subjected to 25 pulls lasting is with a force of 30N, no more than 2mm of displacement is allowed. The cord is then subjected to the pulling force and at 3750v to ensure no breakdown in connection.
6.2	Resistance to ageing	Annex B AS/NZS 3100:2017	Pass	Samples to be kept in a cabinet for 7 days (168 hours) at 70°C±2°C, then tested for stickiness or greasiness by with dry rough cloth wrapped around a fore-finger, force 5N.
6.3	Insulation Resistance	8.3 AS/NZS 3100:2017	Pass	500V DC is applied and after 60s the insulation resistance is checked and must be not less than:  a) 10MΩ between parts of opposite polarity, b) 10MΩ between parts of opposite polarity connected together and other insulated parts including the earth.
6.4	Electric Strength	8.4 AS/NZS 3100:2017	Pass	2000V AC 50Hz is applied and after 60s the Voltage drop is checked and must be within 3% RMS of the applied Voltage:  a) between live parts of opposite polarity b) between live parts of opposite polarity connected together and other insulated parts including the earth.

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### 7.0 Mechanical Strength Test

No.	Test	Clause in Standard	Result	Description of test 4 pieces are subjected to this series of test		
7.1	Tumble Barrel test	8.8.2 AS/NZS 3100:2017	Pass	The product is subjected singly to 1000-drop test in the apparatus as shown in the (BS 1363-5) standard Figure 17.		
7.2	Temperature rise test	8.11 AS/NZS 3100:2017	Pass	Current of 11 amps is passed for not less than 4 hours and not greater than 8 hours at 250 volts or until stable, the temperature rise is then measured		

#### **8.0 Construction Tests**

No.	Test	Clause in Standard	Result	Description of test 3 pieces are subjected to this series of test
8.1	Accessibility to live parts	5.1 AS/NZS 3100:2017	Pass	With the unit assembled as in normal use a probe 12 to BS EN 61032:1998 is supplied with a force of 5N whilst a voltage of 45V is supplied to the live parts via an electrical indicator. No access permissible.
8.2	Resistant to Heat	6.2 Annex B AS/NZS 3100:2017	K.	Ball pressure test, test temperature at 125°C±5°C, the force of 20N is applied for 60 mins after an initial period of 10 mins. The sample is then cooled by immersion in water at room temp and the indentation caused by the ball measured, this must be less than 2mm in diameter.

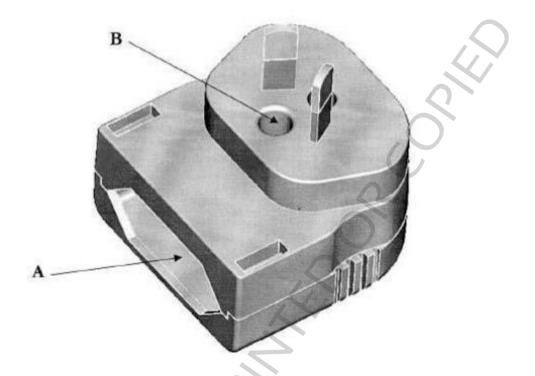
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#### 9.0 Construction Tests

No.	Test	Clause in Standard	Result	Description of test 3 pieces are subjected to this series of test
10.1	Construction of plug	3.1 AS/NZS 3100:2017	Pass	Critical dimensions of the plug must not exceed the dimensions given in Figure 4a. Compliance check using the gauge as shown in Figure 5.
10.2	Flexibility of pins	J4.3.4 AS/NZS 3100:2017	Pass	Using the apparatus as shown in Figure 8 pins are tested with force of 4.2 to 4.4N applied 25mm from the engagement face, the pins must not deflect by more than 3°30'. The results on the pins were <1°. After this test the parts are again checked again checked using the Figure 5 gauge.

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#### 10.0 Installation Procedure

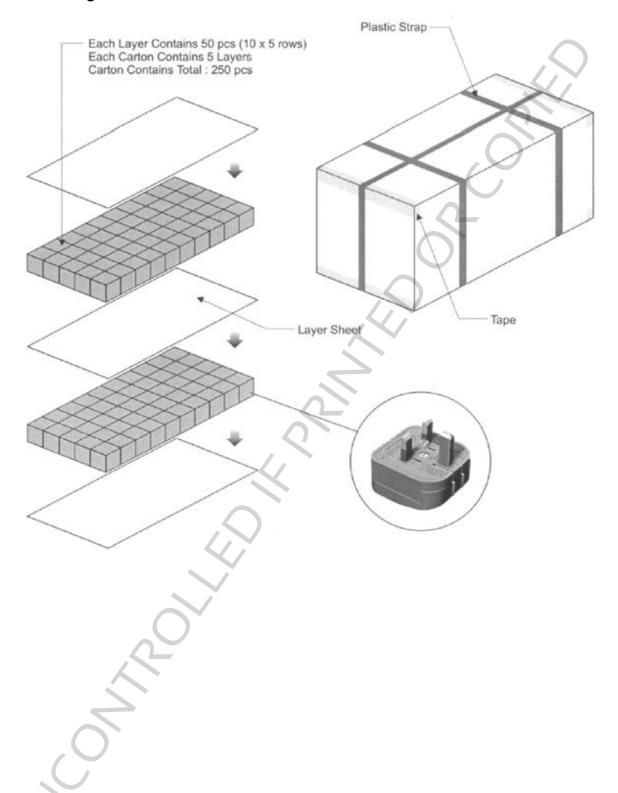


Note. The screw does not open the cover

- 1. Insert the CEE7 (VDE) European Plug fully into the CP3 converter Plug, aperture "A". You will feel it click home.
- 2. Tighten the Anti-tamper screw (SCREW-C-P04) "B" on the base to 0.6Nm.
- 3. Test CEE7 Plug is secure by pulling on it firmly, there should be no movement.
- 4. Fitting complete

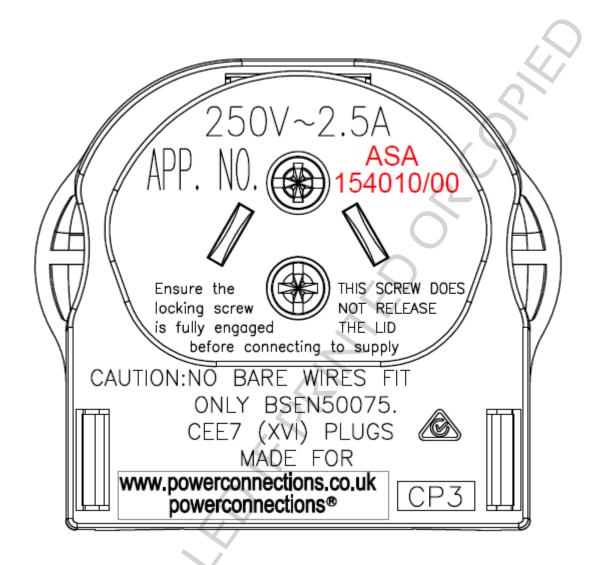
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# 11.0 Packing Method



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#### 12.0 Markings



DO NOT SCALE FROM DRAWING Unless otherwise stated, dimensions are mm

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