

# SPECIFICATION & APPROVALS

## **CUSTOMER:**

PowerConnections P/N: ECP

DESCRIPTION: EURO CONVERTER PLUG

DATE: 10 Nov 2021

Revision: K

Submission Sample Quantity: 10 Pieces

SPECIFICATION & APPROVALS

**SUPPLIER SPECIFICATION SUBMISSION**

Date of Application	10 Oct 2021	Specification No.	700-0001
Supplier's Name	PowerConnections	Supplier Code Part No	ECP
Part Name	EURO CONVERTER PLUG		

**Tick the relevant box "✓"**

**Reason for Submission**

- 1. New application
- 2. New part(s) is added to accepted specification
- 3. Revision of accepted specification

(Revision requested by  customer Or  supplier)

**Revision / Change**

- 1. The specification attached to this sheet does not deviate from the customer specification
- 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 "Δ" in the specification attached.

Revision No.	Date	Revision Description	Reason for Revision
A	15-06-04	First issue	
B	08-06-05	New test report added and material changes	Revised for Sony
C	20-01-06	New Certificates	New BSi Certificate
D	25-07-06	Marbo Fuse data added	Alternative fuse available
E	02-07-09	Revised Bussmann fuse	Removal of BSi certification
F	10-05-10	Revised to BS1363-5	Change of applicable standard
G	31-08-10	Base Marking change	Revision of co info
H	11-01-19	Base Marking change and AsiaFuse data added	BS1363 and RoHS Directive updates, and new fuse used

Revision History continues over page


SPECIFICATION & APPROVALS

I	30-05-19	Base marking changed to include WEEE markings	Updates to EU WEEE regulations guidance
J	21-06-19	Safety Specification Approvals - certification details added and links to validate, removed fuses not supplied any more, marking drawing now all black	Alignment with new format for all spec and approval documents
K	20-07-21	Base marking changed to include UKCA markings	Introduction of UKCA rating, replaces CE marking in the UK

Checked By


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Approved By


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Part No. ECP	SPECIFICATION NO. 700-0001			
	REVISION K			

## SPECIFICATION & APPROVALS

### 1.0 Application

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

### 2.0 Name/Part Number

Name: EURO CONVERTER PLUG

Part Number: ECP

### 3.0 Shape and Dimensions

See Below (Section 15)

### 4.0 Rating

Voltage: AC 240V / 50Hz

Current: 2.5A

Ambient Working Temperature: -5 +70°C

Storage Temperature: -40 +80°C 90%RH

### 5.0 Safety Specifications – Approvals

Plug: BSI Kitemark Licence No. KM 23223

Fuse: ASTA Diamond Mark Licence No.974


Standards

Plug: BS1363-5:2016

Fuse: BS1362:1973 + Amendment 1 & 2

For BSI Kite Mark Licence validation visit <https://www.bsigroup.com/en-GB/Product-Directory/>

For ASTA Diamond Mark Validation visit <http://www.astabeab.com/buyers-by-number.asp>

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**8.0 Construction Tests**

No.	Test	Clause in Standard	Result	Description of test 3 pieces are subjected to this series of tests
8.1	Accessibility to live parts	9.1 BS1363-5	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	Lid to Base security	12.5 BS1363-5	Pass	With the parts at 70°C±5° C a force of 60N is applied to the cover fixing screw, no damage or impairment of function to have occurred.
8.3	Resistance to Heat	22.2 BS1363-5	Pass	With the parts at 70°C±5° C a force of 20N is applied to the plug in the jaws of the apparatus shown in Figure 23, no damage or impairment of function to have occurred, shown by re-testing insulation resistance and electric strength, and must fit the Figure 5 gauge
8.4	Resistance to Heat	22.3 BS1363-5	Pass	Ball pressure test using the apparatus shown in Figure 24, test temperature at 75°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.

**9.0 Glow Wire Tests**

No.	Test	Clause in Standard	Result	Description of test 3 pieces are subjected to this series of tests
9.1	Resistance to Abnormal Heat	23.2 BS1363-5	Pass	A glow wire of 750°C is applied to all the insulating surfaces there must be no visible flames or glowing or these must extinguish within 30s of removal of the glow wire.


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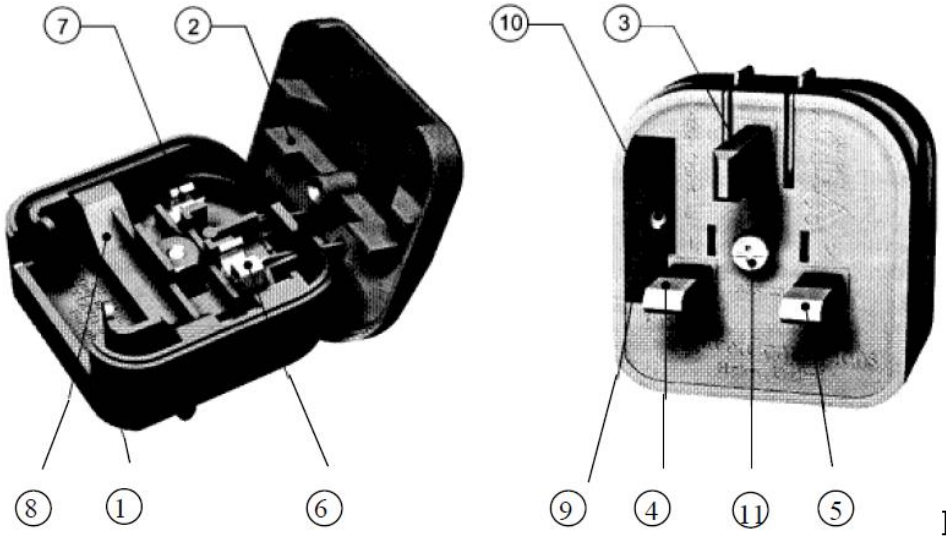
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**10.0 Material Strength Tests**

No.	Test	Clause in Standard	Result	Description of test 3 pieces are subjected to this series of tests
10.1	Construction of plug	12.2 BS1363-5	Pass	Critical dimensions of the plug must not exceed the dimensions given in Figure 4a. Compliance checked using the gauge as shown in Figure 5.
10.2	Flexibility of pins	12.8.11 BS1363-5	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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11.0 Component Name



No.	Test	Material
1	Base	Polycarbonate <b>K&amp;J Corporation KP-30</b>
2	Cover	Polycarbonate <b>K&amp;J Corporation KP-30</b>
3	Earth Pin,	Nylon 66 30% Glass Filled <b>Toray CM3004G30</b>
4	Live Pin	Brass (Universal) with Nylon 66 Sleeve <b>JGP Perrite Vitamide AF11BK</b>
5	Neutral Pin	Brass (Universal) with Nylon 66 Sleeve <b>JGP Perrite Vitamide AF11BK</b>
6	Live Clip	Phosphor Bronze <b>Taiwan VPN170-190</b>
7	Neutral Clip	Phosphor Bronze <b>Taiwan VPN170-190</b>
8	Insert	Nylon 66 Sleeve <b>JGP Perrite Vitamide AF11BK</b>
9	Fuse Holder	Nylon 66, <b>JGP Perrite Vitamide AF11BK</b>
10	Fuse	<sup>Δ</sup> <b>AsiaFuse</b> (Better Fuse) 3A, 5A (BS1362,ASTA) <b>Bussmann</b> 3A, 5A (BS1362, ASTA) <b>Marbo</b> 3A, 5A (BS1362, ASTA,)
11	Screw	Plain or Tamperproof Steel Screw with Zinc and Clear Pacification – <b>Golden Metal</b>

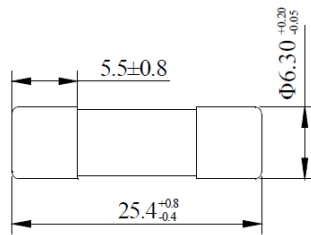
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**12.0 Fuse Specification**

BETTER FUSE/ASIA FUSE

Dimensions (units: mm)



**Operating Temperature:**  
-55°C to 125°C

**Storage Conditions:**  
+10°C to +60°C  
Relative humidity: ≤ 75% yearly average  
without dew, maximum 30 days at 95%


**Vibration Resistance:**  
24 cycles at 15 min. each (60068-6)  
10-60Hz at 0.75mm amplitude  
60-2000Hz at 10g acceleration

**Electrical characteristics**

Electrical Characteristics									
Amp Code	Rated Current	Max. Voltage	Breaking Capacity	Nominal Melting I <sup>2</sup> t(A <sup>2</sup> sec)	Max. Power Dissipation	Color	Approvals		
							CCC	PSB	ASTA
1100	1A	264V AC	6kA@ 264V AC 50Hz P.f.0.3-0.4	1.44	1W	black	●	○	○
1200	2A			8.73		black	○	○	○
1300	3A			29.16		red	●	●	●
1500	5A			144		black	●	●	●
1700	7A			146.4		black	○	○	●
2100	10A			324		black	●	●	●
2130	13A			961		brown	●	●	●

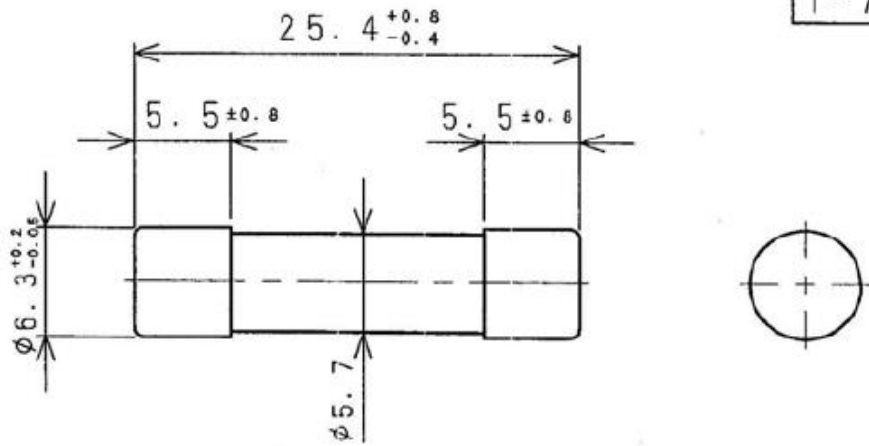
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**SPECIFICATION**

1-770-019-61用



MARKINGS




LEAD FREE MARK

MADE IN CHINA

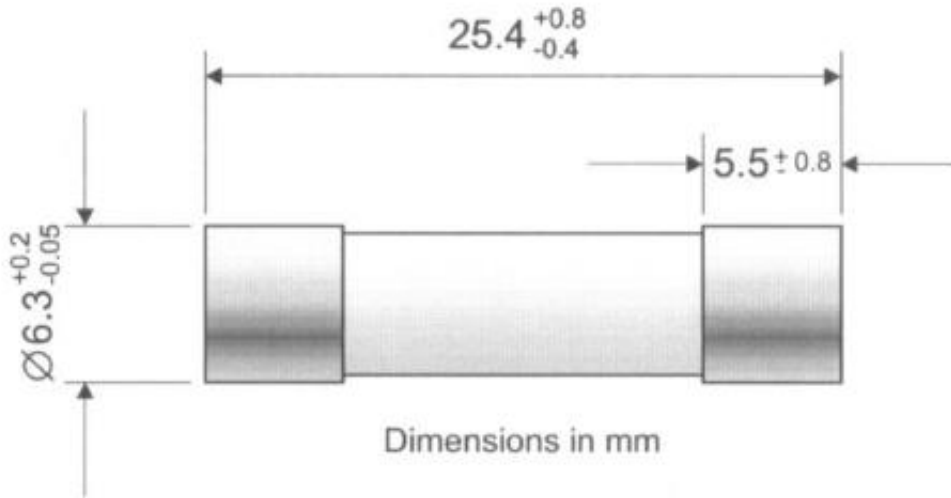
MARKING ···· ALL MARKINGS TO BE LEGIBLE.  
 COLOR ······ BLACK ON WHITE BACKGROUND.

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**SPECIFICATION**



Marking




- Bussmann
- 3A or 5A Fuse Rating
- BS Kite Symbol (Optional)
- ASTA Diamond Mark
- BS1362
- or mid 2002 onwards - MADE IN CHINA without marking



Marking - All marking to be legible

Color - 5A Black on white background  
3A Red on white background

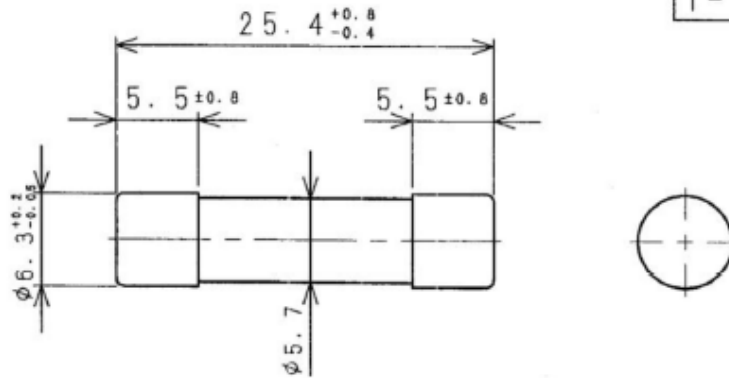
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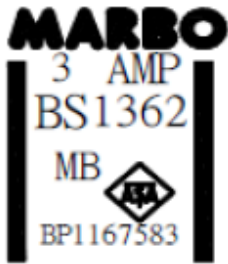
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**SPECIFICATION**



BUSSMANN 2009 >



Print Block		Print Colour
Computer number	Rating	
FI820227	2A	Black
FI820228	3A	Red
FI820229	5A	Black
FI820230	10A	Black
FI820231	13A	Brown

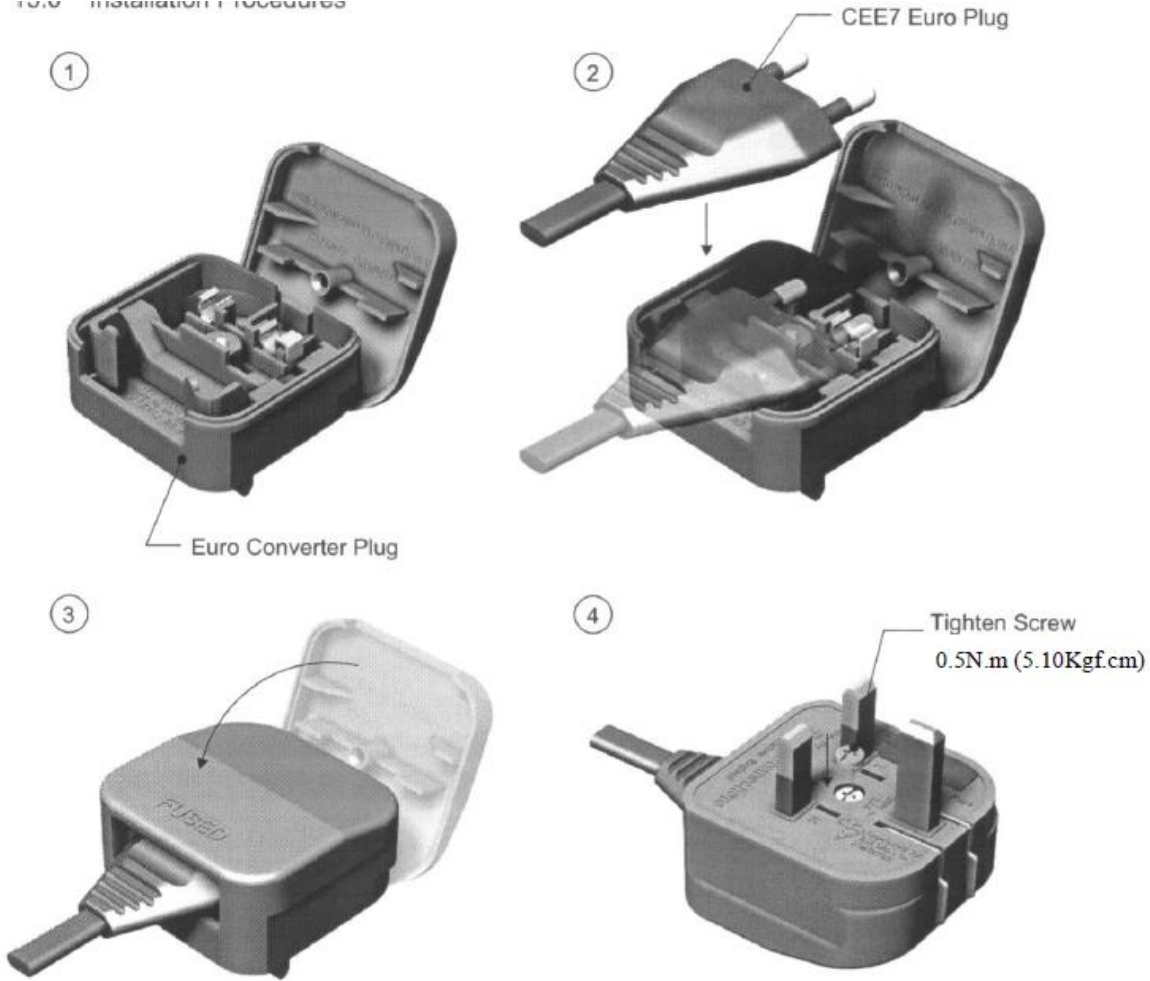
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**13.0 Installation Procedure**

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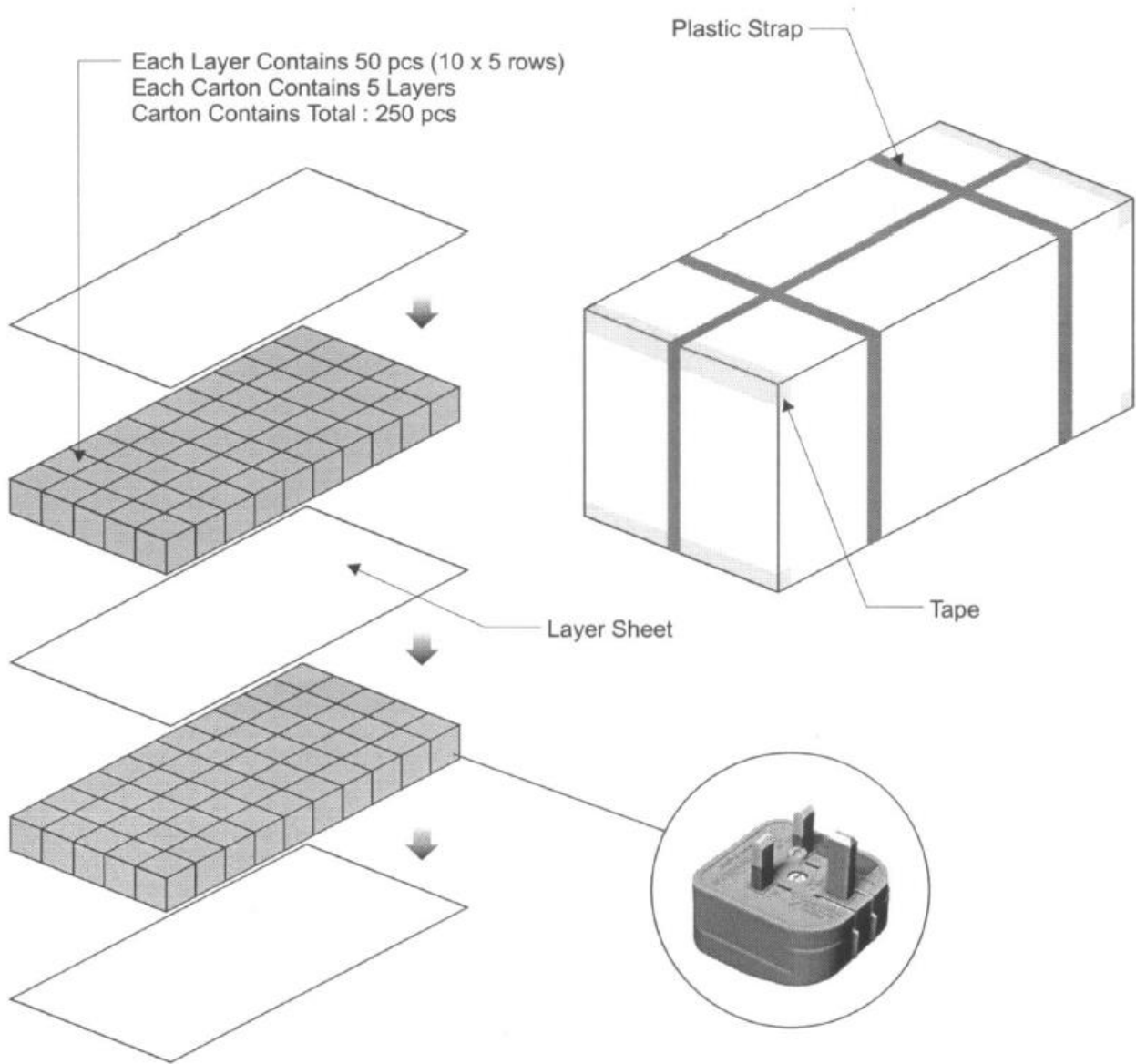



**Caution**

It is the responsibility of the installer to ensure that the CEE7 plug chosen fits correctly and the provisions in the test for electrical strength 6.1 BS1363-5 Clause 15.1

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14.0 Packing Method

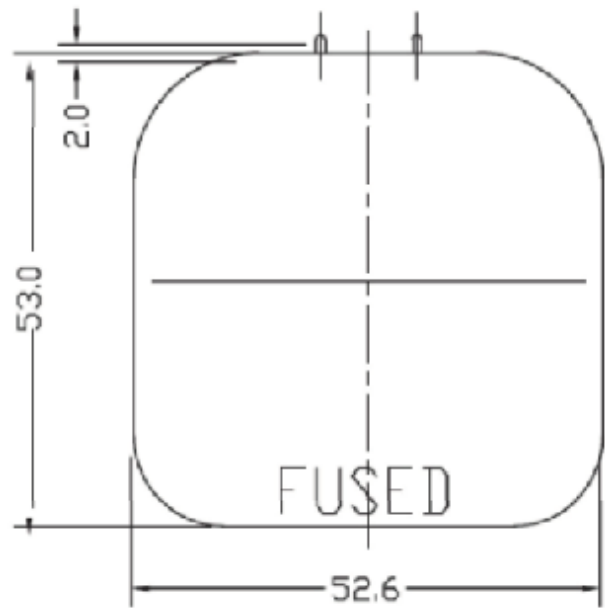
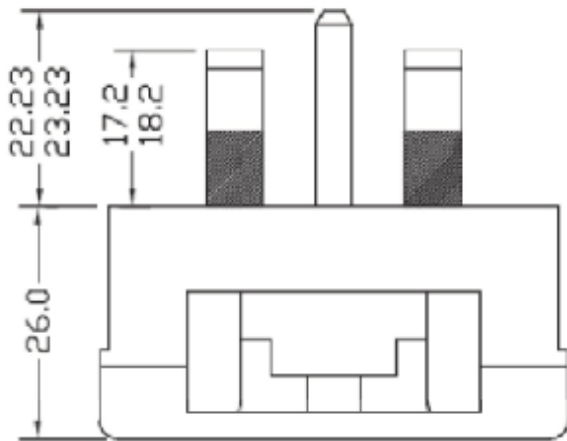
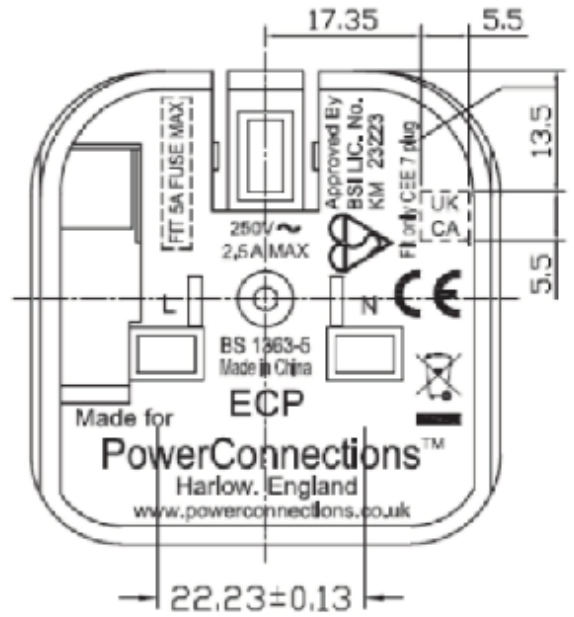
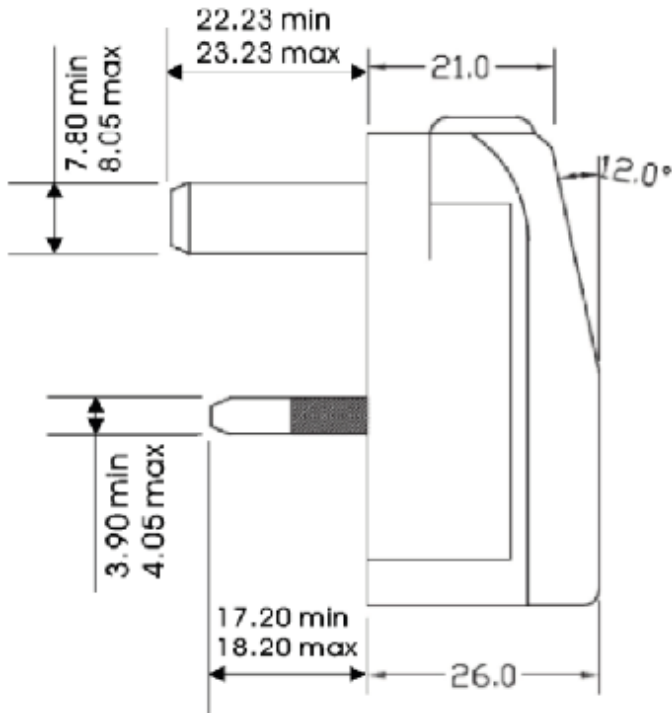


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**15.0 Dimensional Drawing and Markings**

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