# **SPECIFICATION & APPROVALS**

# **CUSTOMER:**

PowerConnections P/N: PC8338 LT **DESCRIPTION: Euro Converter Plug** 

DATE: 25 Jun 2019 **Revision: E** 

jed or Primier Submission Sample Quantity: 10 Pieces , PI

**PowerConnections** 

Master Version Filed: Confluence/Tech Department Space/PowerConnections/PC8338 LT

## SPECIFICATION & APPROVALS

SUPPLIER SPECIFICATION SUBMIS
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Date of Applica		25 Jun 2019		Specification No.	700-0003		
Supplie Name	er's	's PowerConnections Supplier Code PC8338 LT Part No.					
Part Na	ame	Euro Conv	erter Plug				
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for sion	□1.	New application			XO		
Reason for Submission	□ <b>2</b> .	New part(s) is ad	ded to accepted	specification	O CHINA		
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	□ 1.				viate from the customer specification		
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nge	□ 2.	Revision(s) within	the limits of cust	omer specification	is proposed. Revision proposal(s)		
Cha		listed below.		~	)*		
Revision / Change	<b>√</b> 3.	Revision(s) beyo	nd the limits of cus	stomer specification	on is proposed. Revision proposal(s)		
visio		listed below. How	vever, all other ite	ms contained witl	hin the specification are identical to the		
Re		customer specific	ation.	$\bigcirc$			
	Revis	ion(s) shall be mai	ked with a triangle	e " $\Delta$ " in the specif	ication attached.		
	Revis No		Revisio	n Description	Reason for Revision		
	А	29-03-07	Fi	rst issue			
	В	10-05-10	Revised	to BS 1363-5	Change of applicable Standard		
	C 31-08-10 Bussmar		Fuse Revision	Change to fuse markings			
	D	22-05-12	Marking, N	laterial changed	Use Brass clips		
	E	21-06-2019	change to ma drawing adde	details to SEM on rkings. Dimension d, certificate deta added	nal change to RoHS & WEEE		
		y					

# Checked By

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Approved By Paul Mlem Je

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	PowerConnections	WHICH IS PR POWERCONI	ENT CONTAINS OPRIETRY TO NECTIONS AND S OUT WRITTEN PE	SHOULD NOT BE
TITLE	Euro Converter Plug	DRAWN BY	CHECKED BY	APPROVED BY
Part No. PC8338 LT	SPECIFICATION NO. 700-0003			Parl Allen Jo
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# 1.0 Application

This Specification defines the performance for the Euro<sup>△</sup> Converter Plug, which is designed for the Euro Plug copied or Printed (CEE7).

# 2.0 Name/Part Number

Name: Euro Converter Plug<sup>△</sup>

Part Number: PC8338

# 3.0 Shape and Dimensions

See Below (Section 15) 4

# 4.0 Rating

Voltage: AC 250 V~ 50 Hz

Current: 8 A

Ambient Working Temperature: -5 to +70 ℃

Storage Temperature: -40 to +80 ℃ 90% RH

# 5.0 Safety Specifications – Approvals

Plug: BSI Kitemark Licence No. KM 52467 Fuse: ASTA Diamond Mark Licence No. 500

Standards

Plug: BS 5733 & Part of BS 1363-1

Fuse: BS1362

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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# 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	19.1 BS1363-5	Pass	A CEE7 Euro Plug is fitted into a PC 8338 and the CEE7cord 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	14.2 BS1363-5	Pass	Samples to be kept in a cabinet for 7 days (168 hours) at $70 ^{\circ}C\pm 2 ^{\circ}C$ , then tested for stickiness or greasiness by with dry rough cloth wrapped around a fore-finger, force 5N.
6.3	Insulation Resistance	15.1 BS 1363-5	Pass	500V DC is applied and after 60s the insulation resistance is checked and must be not less than:
				a) $5M\Omega$ between parts of opposite polarity, b) $5M\Omega$ between parts of opposite polarity connected together and other insulated parts including the earth.
6.4	Electric Strength	15.2 BS1363-5	Pass	2000V AC 50Hz is applied and after 60s the Voltage drop is checked and must be within 3% RMS of the applied Voltage:
		Y and the second		a) between live parts of opposite polarity
		d'h		<ul> <li>b) between live parts of opposite polarity connected together and other insulated parts including the earth.</li> </ul>
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# 7.0 Mechanical Strength Tests

No.	Test	Clause in Standard	Result	Description of test 4 pieces are subjected to this series of tests
7.1	Tumble Barrel test	20.2 BS1363-5	Pass	The product is subjected singly to 1000-drop test in the apparatus as shown in the (BS1363-5) standard Figure 17.
7.2	Fuse insertion test	20.3.1 BS1363-5	Pass	A solid stainless steel fuse link is inserted 20 times, to test the strength of the clips.
7.3	Temperature rise test	16 BS1363-5	Pass	Current of 8.8 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
7.3.1	Box Ambient	For each sample		21.8℃, 22.1℃, 22.1℃
7.3.2	Line Pin Spacer temp rise	For each sample	0	16.0K, 15.9K, 15.6K max. temp rise permissible 37K
7.3.3	Neutral Pin Spacer temp rise	For each sample	~	13.5K, 12.8K, 12.7K max. temp rise permissible 37K
7.3.4	Accessible external surface temp rise	For each sample	0.	10.2K, 9.7K, 12.0K max. temp rise permissible 52K
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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 $75^{\circ}C\pm 5^{\circ}C$ , 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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# 10.0 Material Strength Tests

	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 mus 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 gauge.
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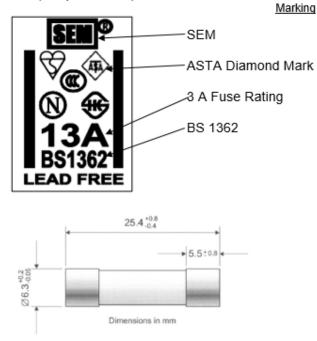
# 11.0 Component Name

No.	Test	Material
1	Base + Cover (one piece)	Polypropylene LG Lupol GP1007 FC
2	Earth Pin	Nylon 66 30% Glass Filled – Rhodia A30H2V25
3	Live Pin	Hard Brass (Luen Hop) with Nylon 66 Sleeve Dow 21SPC
4	Neutral Pin	Hard Brass (Luen Hop) with Nylon 66 Sleeve Dow 21SPC
5	Live Clip, Fuse clip	Hard Brass Luen Hop
6	Neutral Clip	Hard Brass Luen Hop
7	Insert	Polypropylene LG Lupol GP1007 FC
8	Fuse Holder	Nylon 66, Dow 21SPC
9	Fuse	<sup>A</sup> AsiaFuse 3A, 5A, 10A, 13A (ASTA Diamond Mark 974)
10	Screw	Plain or Tamperproof Steel Screw with Zinc and Clear Pacification -Luen Tai
11	CEE7 Plug	

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# 12.0 Fuse Specification

SEM (Group Talents Ltd)





### Designation:

1 A - SEM 11-01A 2 A - SEM 11-02A 3 A - SEM 11-03A & SEM 12-03A 5 A - SEM 11-05A & SEM 12-05A 7 A - SEM 11-07A 10 A - SEM 11-10A & SEM 12-10A 13 A - SEM 11-13A & SEM 12-13A

### Rating

240 Va.c. 50 Hz, 1, 2, 3, 5, 7, 10, 13 Amperes

# Breaking Capacity

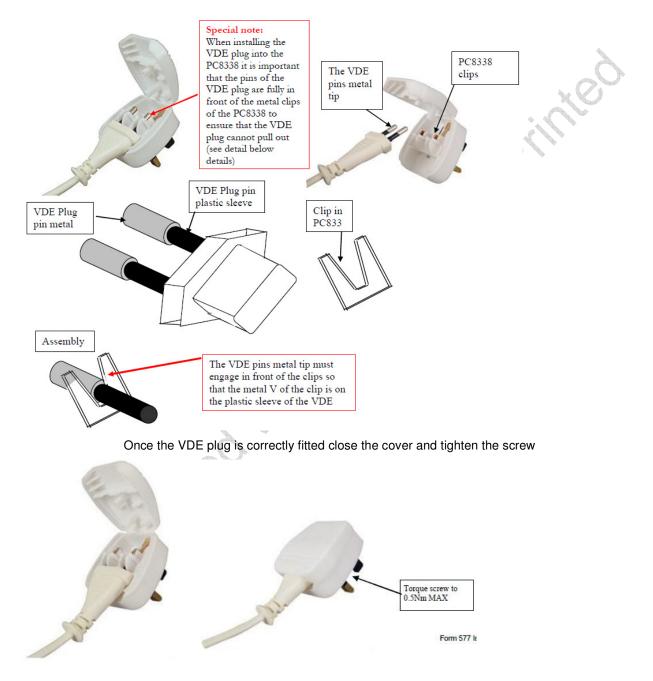
6 kA r.m.s

### Rated Power loss Less than 1 Watt



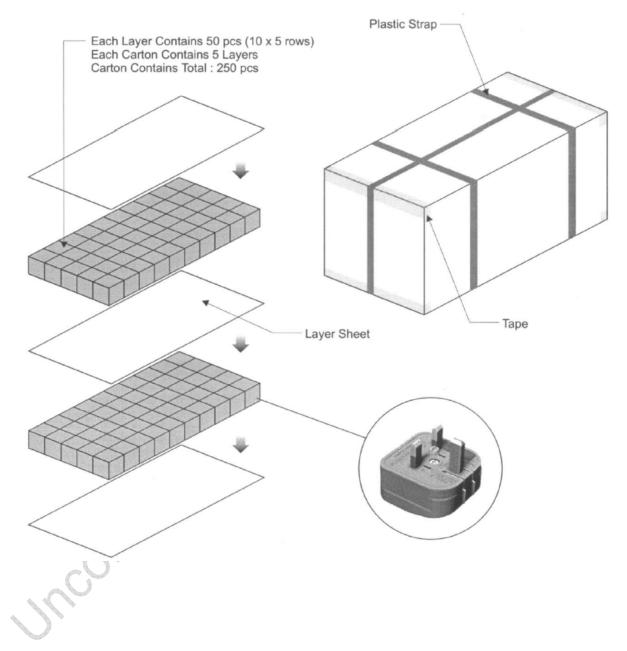
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# 13.0 Installation Procedure

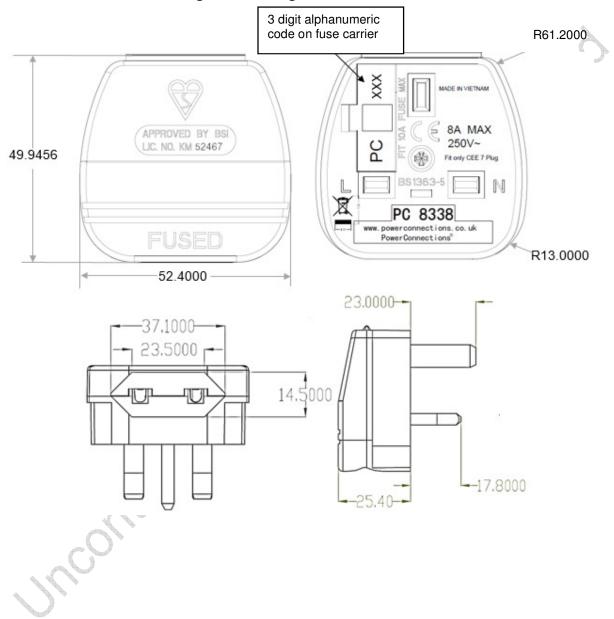


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# 14.0 Packing Method



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# 15.0 Dimensional Drawing and Markings∆

PowerConnections		DO NOT SCALE FROM DRAWING Unless otherwise stated dimensions are mm			
TITLE Euro Converter Plug		.X			<u>+</u> 0.4
Part No. PC8338 LT	SPECIFICATION NO. 700-0003	.xx		<u>±</u> 0.1	
	REVISION E	ANG			<u>+</u> 1/2°
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