# ZPS40 , 40D/T & 60 Handbook

## Input Parameters

RATED INPUT VOLTAGE RANGE	100 - 240V AC
INPUT FREQUENCY	47- 63Hz
RATED INPUT CURRENT	1.5A
INRUSH CURRENT (132/264VAC)	25/50 (COLD START)

#### Outputs

## **Output Parameters**

Models		
Model	Output Voltage (V)	Output Current (A)
ZPS40-3	3.3	6.0
ZPS60-3	3.3	8.0
ZPS40-5	5.0	6.0
ZPS60-5	5.0	8.0
ZPS40-9	9.0	4.45
ZPS60-9	9.0	6.67
ZPS40-12	12.0	3.34
ZPS60-12	12.0	5.0
ZPS40-15	15.0	2.67
ZPS60-15	15.0	4.0
ZPS40-24	24.0	1.67
ZPS60-24	24.0	2.5
ZPS40-28	28.0	1.43
ZPS60-28	28.0	2.14
ZPS40-30	30.0	1.33
ZPS60-30	30.0	2.0
ZPS40-36	36.0	1.11
ZPS60-36	36.0	1.67
ZPS40-48	48.0	0.834
ZPS60-48	48.0	1.25
ZPD40-512	+5.0	3.2
21 0 10 012	+12.0	2.0
ZPD40-524	+5.0	3.2
21 0 40 024	+24.0	1.0
ZPD40-5125N	+5.0	3.2
21 0 10 0 12011	+12.0	2.0
	-5.0	0.3
ZPT40-51212N	+5.0	3.2
	+12.0	2.0
	-12.0	0.3
ZPT40-51515N	+5	3.2
	+15.0	1.5
	-15.0	0.3
ZPT40-52412N	+5.0	3.2
LI 170"J2412IN	+3.0	1.0
	-12.0	0.3
ZPT40-5245N	+5.0	3.2
	+24.0	1.0
	-5.0	0.3
ZPT40-52412p	-5.0	3.2
ZF 140-92412p	+5.0	1.0
	+24.0 +12.0	
70740 05400		0.3
ZPT40-3512N	+3.3	5.0
	+5.0	2.0
	-12.0	0.3

# **Output Limitations**

Adjusting output voltage beyond the stated range may cause the overvoltage protection (OVP) to operate, whereby the output will cycle on and off or latch off. To reset for normal operation simply adjust the potentiometer to reduce the ouput voltage to within it's range or cycle the input off then on if the unit has latched off.

#### Important safety instructions

#### Servicing

These products are not customer serviceable. Repairs may only be carried out by Lambda UK or their authorised agents. These products are not authorised for use as critical components in nuclear control systems, life support systems or equipment for use in hazardous environments without the express written approval of the Managing Director of Coutant Lambda Ltd.

### Approval Limitations: Use in North America (AC units only)

When this product is used on 180VAC-250VAC mains with no neutral, connect the two live wires to L(live) and N (neutral) terminals on the input connector. In this instance double pole fusing is required.

#### **High Voltage Warning**

Dangerous voltages present within the power supply. The proffesional installer must protect service personnel from inadvertant contact with these dangerous voltages in the end equipment.

#### Safety Class of Protection

These products are designed for the following parameters : Material Group IIIa, Pollution Degree 2, Overvoltage Category II, Class II, Indoor use as part of an overall equipment such that the product is accessible to service engineers only.

## Safety approvals

UL60950 and CSA 60950 EN60950, Class II and CE (LVD) mark.

## Conducted and Radiated EMI

EN55022-B, FCC Class B

Immunity

EN61000-4-2, EN61000-4-3, EN6100-4-4, EN61000-4-6, EN61000-4-8

## **Environmental parameters**

#### Operation

Temperature: 0 to +70°C (ZPS40-3,-5,-9 and ZPS60-3,-5,-9, >40°C -70°C derate at 2.5%/°C )

0 to +70°C (ZPS40-12,-15,-24,-28,-30,-36,-40 and ZPD40,ZPD40 and ZPS60-12,-15,-24,-28,-30,-36,-40 >40°C -70°C derate at 2.5%/°C) Humidity: 10 to 95% RH, non-condensing

## Storage and Transportation

Temperature: -20°C to +85°C Humidity: 10% to 95% RH, non-condensing

#### Shock

<196.1 m/s<sup>2</sup>(20G)

### Vibration

23.52 m/s  $^{\rm 2}$  (10-55Hz): constant sweep 1 min X , Y, Z for one hour)

## Cooling

Convection

### Level of insulation

Dielectric Strength testing is carried out as follows: Primary mains circuit to earth - 1.5kVAC.Primary mains circuits to secondary -3kVAC. Outputs to each other and to earth are isolated to 500VDC.

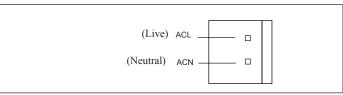
## **Fuse Information**

#### Fuse

Internal fuse (F1): T2.2AL, 250V.

## Input Connector

Input connector mates with Molex housing 09-50-3031 and Molex 2878 series crimp terminal.



## General installation instructions

The ZP family of component power supplies is designed for use within other equipment or enclosures which restrict access to authorised competent personnel only. For safe installation and operation of this product, carefully follow the instructions listed below.

i) These products are supplied open frame

 These products are Class II and must be installed in accordance with Class II requirements of IE/EN/UL/CSAC60950.

iii) These products are IPX0, and therefore chemicals/solvents, cleaning agents and other liquids must not be used.

#### **Output Connector**

For ZPS40 and ZPS60 output connector mates with Molex Housing 09-50-3041 and Molex 2878 series crimp terminal

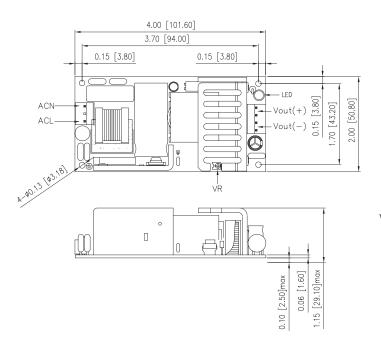
For ZPS40D/T output connector mates with Molex Housing 09-50-3061 and Molex 2878 series crimp terminal

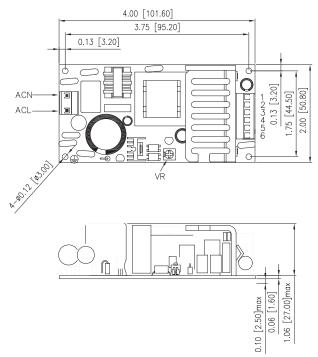
# ZPS40 & 60 Outline Drawing

# ZPD/ZPT Outline Drawing

All Dimensions are in inches[mm] Tolerances:.XX±.02[.XX±.5] unless otherwise noted

es[mm] All Dimensions are in inches[mm] unless otherwise noted Tolerances:.XX±.02[.XX±.5] unless otherwise noted





Pin Connection (ZPD/ZPT)				
Pin	Function	Pin	Function	
1	V2	2	V1	
3	V1	4	COM	
5	COM	6	V3	

CEL Part No. 17164 Issue 01, July 2005



Coutant Lambda Limited, Kingsley Avenue, Ilfracombe, Devon, EX34 8ES. Telephone - Sales and Service (01271) 856666. Head Office and Works (01271) 856600. Facsimile (01271) 864894. WEBSITE: www.lambda-gb.com