TDK-Lambda KM40 Series Handbook Part Number 17167

Input Parameters

RATED INPUT VOLTAGE RANGE	ED INPUT VOLTAGE RANGE 100 - 240V AC	
INPUT FREQUENCY	FREQUENCY 47-63Hz	
RATED INPUT CURRENT (max)	0.8A,	
INRUSH CURRENT (240VAC)	20A Max (25°C, COLD START)	

Output Parameters

Model	Output Voltage (V)	Maximum Current (A)	Power (W)
KMS40-3P3	3.3V	8.00A	26.4W
KMS40-5	5V	8.00A	40W
KMS40-9	9V	4.44A	40W
KMS40-12	12V	3.33A	40W
KMS40-15	15V	2.67A	40W
KMS40-24	24V	1.67A	40W
KMD40-55	+5V	4A	40W
	-5V	4A	
KMD40-512	5V (1)	5A	40W
	12V (1)	1.25A	
KMD40-524	5V (1)	5A	40W
	24V (1)	0.625A	
KMD40-1212	+12V	1.66A	40W
	-12V	1.66A	
KMD40-1515	+15V	1.33A	40W
	-15V	1.33A	7
KMT40-51212	5V (2)	5A	40W
	+12V	0.6A	
	-12V	0.6A	
KMT40-51515	5V(2)	5A	40W
	+15V	0.5A	
	-15V	0.5A	

- 1 = Output V1 is isolated from output V2
- 2 = Output V1 is isolated from outputs V2 and V3

Important safety instructions

Servicing

These products are not customer serviceable. Repairs may only be carried out by TDK-Lambda Limited 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 TDK-Lambda Limited.

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 IIIb, 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

UL/CSA/IEC/EN60601-1, Class II

CE marking when applied to any KM40 series product, indicates compliance to the low voltage directive 2006/95/EC in that it complies with EN60950-1

Environmental parameters

Operation

Temperature: -25°C to +70°C derate linearly to 50% load from 50V°C to 70°C max case

temperature

Humidity: 20 to 95% RH, non-condensing

Storage and Transportation

Temperature: -40°C to +100°C

Humidity: 20% to 95% RH, non-condensing

Shock

<196.1 m/s² (20G)

Vibration

23.52 m/s 2 (10-55Hz): constant sweep 1 min X, Y, Z for one hour)

Cooling

Convection, over temperature protected ~ 100°C case temperature

Level of insulation

Dielectric Strength testing is carried out as follows: Primary mains circuits to secondary -4kVAC.

Fuse Information

Fuse

Internal fuse (F1): T3.15AL/250V- Not serviceable

Pin Designations

Pin	Single O/P	Function Dual O/P	5S/12&24SS	Triple O/P
1	AC (L)	AC (L)	AC (L)	AC (L)
2	AC (N)	AC (N)	AC (N)	AC (N)
3	+DC	+DC	+O/P2	+DC
4	No pin	No Pin	+O/P1	+5V
5	-DC	GND	GND1	GND
6	No Pin	No Pin	GND2	+5V GND
7	No Connection	-DC	No Connection	-DC

General installation instructions

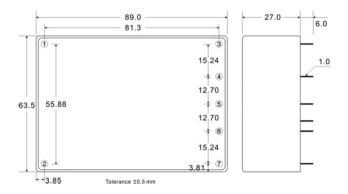
The KM40 family of component power supplies is designed for use within other equipment or enclosures which restrict access to authorised competent personnel only. For safe installation and operation of this product, carefully follow the instructions listed below.

- i) These products are supplied fully encapsulated
- ii) These products are Class II and must be installed in accordance with Class II requirements of IE/EN/UL/CSAC60601-1
- iii) These products are IPX0, and therefore chemicals/solvents, cleaning agents and other liquids must not be used

Special instructions for medical applications (IEC/EN/UL/CSA60601-1)

- i) These products are designed for continuous operation within an overall enclosure, and must be mounted such that access to the mains terminals is restricted. See Clause 16, IEC/EN/UL/ CSA60601-1.
- ii) These products are NOT suitable for use in the presence of flammable anaesthetic mixtures with air or with oxygen or with nitrous oxide.
- iii) These products are classed as ordinary equipment according to IEC/EN/UL/CSA60601-1 and are NOT protected against the ingress of water.
- iv) Connect only apparatus complying with IEC/EN/UL/CSA60601-1 to the signal ports.
- v) Except for permanently installed equipment as defined in Clause 57.6 of IEC/EN/UL/CSA60601-1, the overall equipment in which these products are installed must have double pole fusing on the input mains supply or DC supply as appropriate. The products themselves have single pole fusing in the live line or positive DC line as appropriate.
- vi) Reference should be made to local regulations concerning the disposal of these products at

KM40 Mechanical Outline Drawing



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