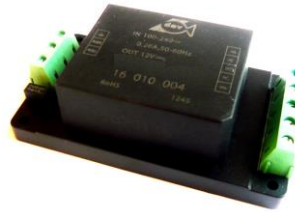




**13,5 - 25 Watt
AC/DC Modules, PCB mounting
Series DVM25-L96-CH**



Features

- Input: 85 – 264Vac (50/60Hz) & 100 – 370 VDC
- Operating Temperature Range -40°C to +85°C
- Efficiency to 87%
- I/O Isolation 4000 VAC
- Approved IEC/EN/UL62368-1
- Over Current Protection
- Over Voltage Protection
- Short Circuit Protection
- Over-Voltage Category OVCIII
- Meets CISPR32 / EN55032 Class B

MODEL NUMBER	OUTPUT VOLTAGE [VDC]	OUTPUT CURRENT MAX. [mA]	CAPACITIVE LOAD MAX. [μ F]	EFF. [%]	OUTPUT POWER [W]	PACKAGE [mm] CHASSIS
DVM25-L96-S3,3-CH	3,3	4100	48000	78	13,5	96,1x54x32
DVM25-L96-S05-CH	5	4100	12240	82	20,5	
DVM25-L96-S12-CH	12	2100	5400	84	25	
DVM25-L96-S15-CH	15	1600	2400	85	24	
DVM25-L96-S24-CH	24	1100	1440	85	25	
DVM25-L96-S48-CH	48	500	600	87	24	

Remarks:

1. Ripple and Noise were measured by the method of parallel lines
2. Unless otherwise specified, all specifications above are measured at rated input voltage and rated output load TA=25°C, humidity <75%

INPUT SPECIFICATIONS:

Input Voltage Range	85 to 264VAC / 100 to 370VDC
Input Frequency	47 to 63Hz
Input Current	115VAC 600mA / 230VAC 340mA max.
Inrush Current	115VAC 20A / 230VAC 40A typ.
Recommended External Input Fuse	3.15A/300V slow-blow, required

OUTPUT SPECIFICATIONS:

Voltage Accuracy	Vo 3,3V	±3% typ.
	Other Outputs	±2% typ.
Line Regulation (Full Load)		±0,5% typ.
Load Regulation (0-100% Load)		±1% typ.
Min. Load		0%
Ripple & Noise (20MHz Bandwidth)		100mVp-p max.
Short Circuit Protection		Hiccup, Continuous, self-recovery
Over Current Protection		≥150%Io, self-recovery
Over Voltage Protection	Vo 3,3V/5V	≤7,5Vdc
	Vo 12V/15V	≤20Vdc
	Vo 24V	≤30Vdc
	Vo 48V	≤60Vdc

GENERAL SPECIFICATIONS:

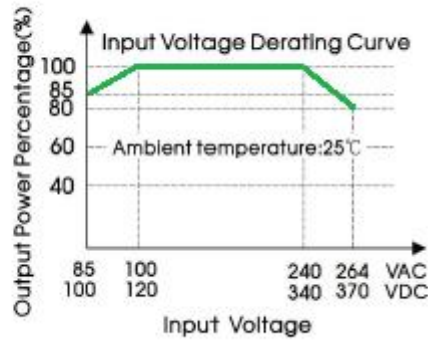
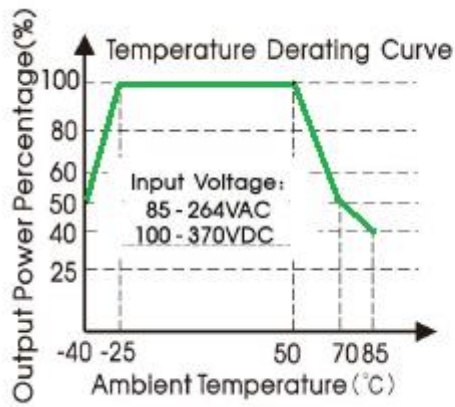
Isolation Voltage (Test for 1min., leakage current<5mA)	Input/Output	4000Vac min.
	Input/PE	2500Vac min.
	Output/PE	1250Vac min.
Hold-up Time		115Vac, 10ms / 230Vac, 60ms typ.
Operating Temperature Range		-40°C to +85°C
Derating Temperature		see Derating Curve
Input Voltage Derating		see Derating Curve
Storage Temperature Range		-40°C to +85°C
Humidity (non condensing)		95%RH max.
Switching Frequency		65kHz typ.
Efficiency		see table
MTBF (MIL-HD BK-217F@25°C)		>300.000h

SAFETY:

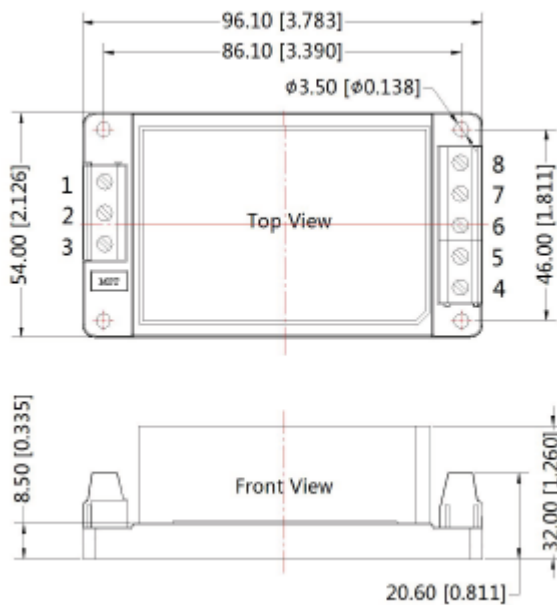
EMI	CE/RE	CISPR32/EN55032 Class B
Safety standards	Vo 9V&12V	Meet IEC/EN/UL62368-1
	Vo Others	Approved IEC/EN/UL62368-1
Safety Class		CLASS I

MECHANICAL SPECIFICATIONS:

Install		Chassis mounting
Case Material		Plastic UL94V-0
Dimension:		96,1x54x32 mm
Weight		170g typ.



Dimension



Pin	Single Output
1	
2	AC (N)
3	AC (L)
4	+Vo
5	NC
6	TRIM
7	NC
8	-Vo

NC = NOT CONNECTED

Note:
Unit: mm [inch]
Wire range: 24-12 AWG
Tightening torque: Max. 0.4 Nm
General tolerances: $\pm 1.00\text{mm} [\pm 0.040]$

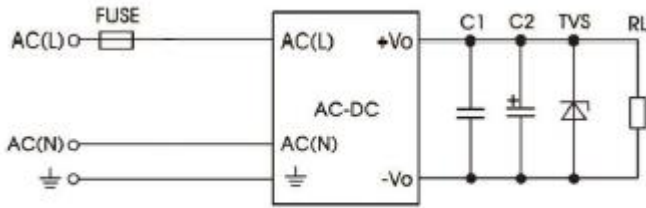


Fig. 1: Typical circuit diagram

Part No.	C1	C2	FUSE	TVS
DVM25-L96-S3,3-CH	1uF/50V	330uF/16V	3.15A/300V, slow-blow, required	SMBJ7.0A
DVM25-L96-S05-CH		330uF/16V		SMBJ7.0A
DVM25-L96-S12-CH		330uF/25V		SMBJ20A
DVM25-L96-S15-CH		330uF/25V		SMBJ20A
DVM25-L96-S24-CH		120uF/35V		SMBJ30A
DVM25-L96-S48-CH		68uF/63V		SMBJ64A

Output Filter Components:

We recommend using an electrolytic capacitor with high frequency, and low ESR rating for C2 (refer to manufacture's datasheet).

Choose a Capacitor voltage rating with at least 20% margin, in other words not exceeding 80%. C1 is a ceramic capacitor used for filtering high-frequency noise and TVS is a recommended suppressor diode to protect the application in case of a converter failure.