



## 5 Watt, Regulated AC/DC Modules, PCB mounting Series DVA05-D33



### Features

- Wide Input Range 85 – 277 VAC
- Single Outputs, Regulated
- Isolation I/O 3,75K VAC
- No Load Power Consumption <0,1W
- Meet CSA/UL62368
- Meet Safety of household and similar electrical appliances 60335-1
- Operating Tem. Range -40°C to +85°C
- Short Circuit Protection Continuous
- Ultra compact size 33,7 x 20 x 22,8 (mm)
- Meet DoE Level VI
- EN62368-1:2014/EN 55032 Class B/CE

MODEL NUMBER	INPUT VOLTAGE RANGE [ VAC / VDC ]	OUTPUT VOLTAGE [ VDC ]	OUTPUT CURRENT MAX. [ mA ]	EFF. TYP. [ % ]	RIPPLE & NOISE [ mV ] Note2	CASE DIMENSION [ mm ]
DVA85-277-05S1000D33	85 – 277 VAC	5	1000	74	100	D33 33,7x20x22,8
DVA85-277-12S417D33		12	417	76	120	
DVA85-277-15S333D33		15	333	76	150	
DVA85-277-24S209D33		24	210	78	240	

Note:

1. Voltage accuracy at full load.
2. Add a 0.1uF ceramic capacitor and a 10uF E.L. capacitor to output for Ripple & Noise measuring @20MHz BW.
3. Safety regulations input range 100 to 240VAC
4. Other model on request

## INPUT SPECIFICATIONS:

Input Voltage .....	Range .....	85 – 277VAC
Input Frequency .....	.....	47 – 63Hz
Input Frequency .....	.....	47 – 63Hz
Inrush Current .....	.....	Cold Start @25°C 90A max.
No-Load power consumption .....	.....	<0,1W
Leakage Current .....	.....	0,25mA max.

## OUTPUT SPECIFICATIONS:

Output Voltage Accuracy .....	.....	±5,0%
Minimum Load .....	Specifications valid for 10% minimum load only .....	0 mA
Ripple & Noise .....	.....	see table
Hold up Time Time .....	.....	12ms typ. @ 115VAC
Short Circuit Protection .....	.....	Continuous
Over Voltage Protection .....	.....	hiccup mode ( auto recover )
Line Regulation .....	High Line to Low Line with full load .....	±1% max.
Load Regulation .....	10% - 100% full load .....	±5% max.

## GENERAL SPECIFICATIONS:

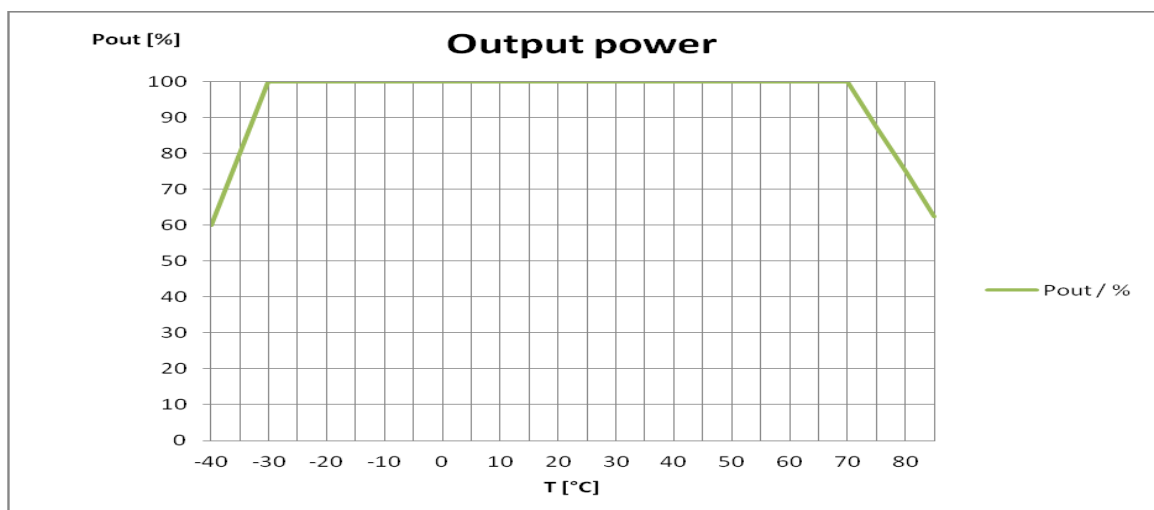
Efficiency .....	Vin 230Vac .....	see table
Isolation Voltage I/O .....	.....	3750 VAC
Switching Frequency .....	.....	65 KHz typ.
Operating Temperature Range .....	.....	-40°C to +85°C
Derating above 70°C and below -30°C .....	.....	see Derating Curve
Storage Temperature Range .....	.....	-40°C to +85°C
Cooling .....	.....	Natural Convection
Interference immunity .....	.....	EN61000-6-2
ESD Electrostatic discharge .....	.....	(±8kV) EN61000-4-2
RF field susceptibility .....	.....	(10V/m)EN61000-4-3
Burst <sup>1</sup> .....	.....	(±2KV ) EN61000-4-4
Surge <sup>1</sup> .....	(±1KV symmetrical,±2kV asymmetrical ) .....	EN61000-4-5
HF fields conducted disturbances .....	.....	(10Veff) EN61000-4-6
Voltage interruption .....	.....	EN61000-4-11
EMI/RFI Conducted .....	.....	EN61000-6-4 (EN55032 Class B)
Electrical Safety ( in Accordance with ) .....	.....	EN62368-1 / EN60335-1
Meet .....	.....	CSA62368 ;UL62368
SELV Protection Class .....	.....	Class 2
Dimension ( L x W x H ) .....	.....	33,7 x 20 x 22,8 mm
Case Material .....	.....	Plastic UL94-V0
Weight .....	.....	20g

Note:

Installation requirement:

According to EN62368-1 a fuse max. 1,0 A/T should be placed in ac- line (L).  
An external MOV is required for 230VAC operation. The varistor should comply with IEC-61051-2

Technical Data at Ta=25°C and Vin=230VAC unless otherwise specified.

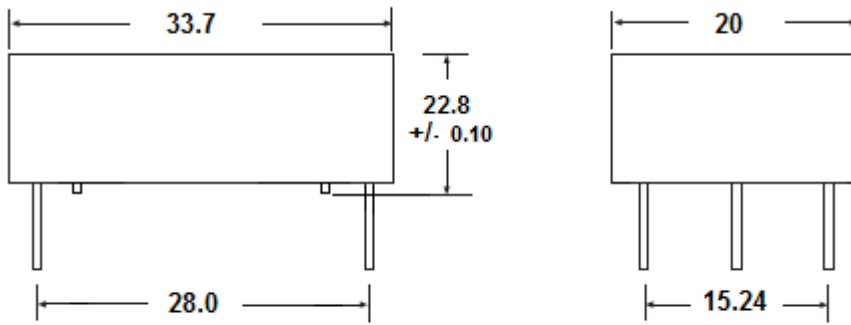


**Bottom View.**

Pin diameter = 0,63 mm ±0,05

Tolerances ±0,5 mm

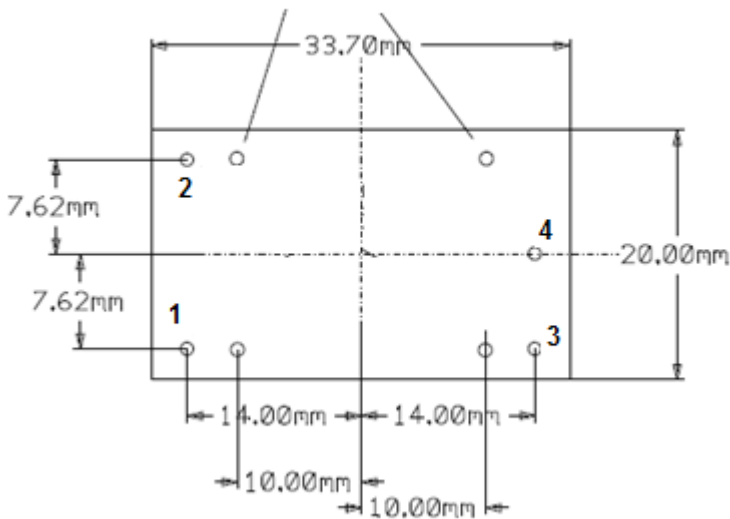
Dimensions in mm



Allow 5mm clearance around converter for air circulation.

**Bottom View**

4x Standoff Diameter 1,5mm, height 0.3mm

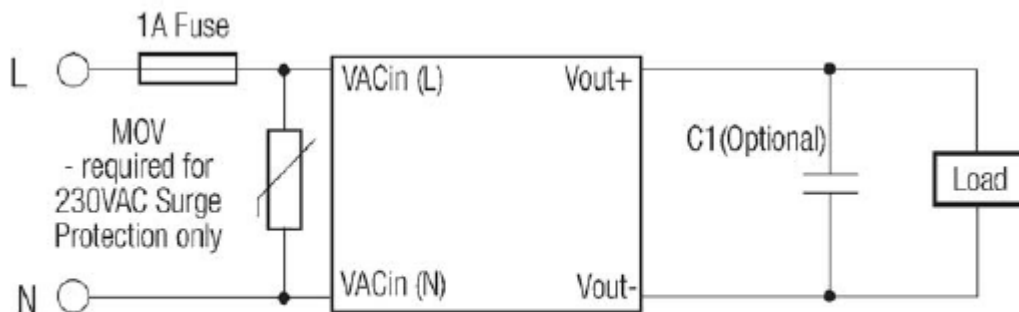


Pins	Connection
1	Vin (N)
2	Vin (L)
3	-Vout
4	+Vout

## Recommended Application Circuit

Suggested fuse rating: 1A Slow Blow, 250V IEC60127-2/3, UL/ VDE recognized

An external MOV is required for 230VAC operation. The varistor should comply with IEC-61051-2



Add C1 to reduce output ripple (use low ESR type)