

DA1000Z-240AEV-R



1000W Extended Temperature Range Power Supply



Features

- Extended operating temperature range of -40°C to 70°C
- Fan-less aluminum case filled with heat conductive glue
- Able to withstand 10G vibration
- Power on LED indicator
- Short Circuit, Over Current, Over Voltage, and Over Temperature Protections
- Adjustable output through potentiometer

Applications

- Light Box Billboards
- LED Displays
- Industrial Automation Equipment
- High-Performance Audio/Visual Equipment
- Test and Measurement

Description

The DA1000Z-240AEV-R stands as a robust 1000W industrial AC/DC power supply, built for its resilience in extreme temperature conditions. Encased in robust aluminum and fully potted with heat-conductive compound ensuring exceptional durability. With an AC input voltage range spanning from 90 to 305VAC, it delivers a stable output voltage of 24V. Able to achieve up to 93% efficiency, this power supply operates reliably in temperatures ranging from -40°C to 70°C without the need for additional fans.

The DA1000Z-240AEV-R is equipped with comprehensive protection features and boasts an impressive 10G anti-vibration capability, meeting stringent international safety standards such as TUV BS EN/EN62368-1 and UL62368-1. Serving as an ideal power supply solution for industrial applications, the DA1000Z-240AEV-R delivers high performance and reliability.

DA1000Z-240AEV-R



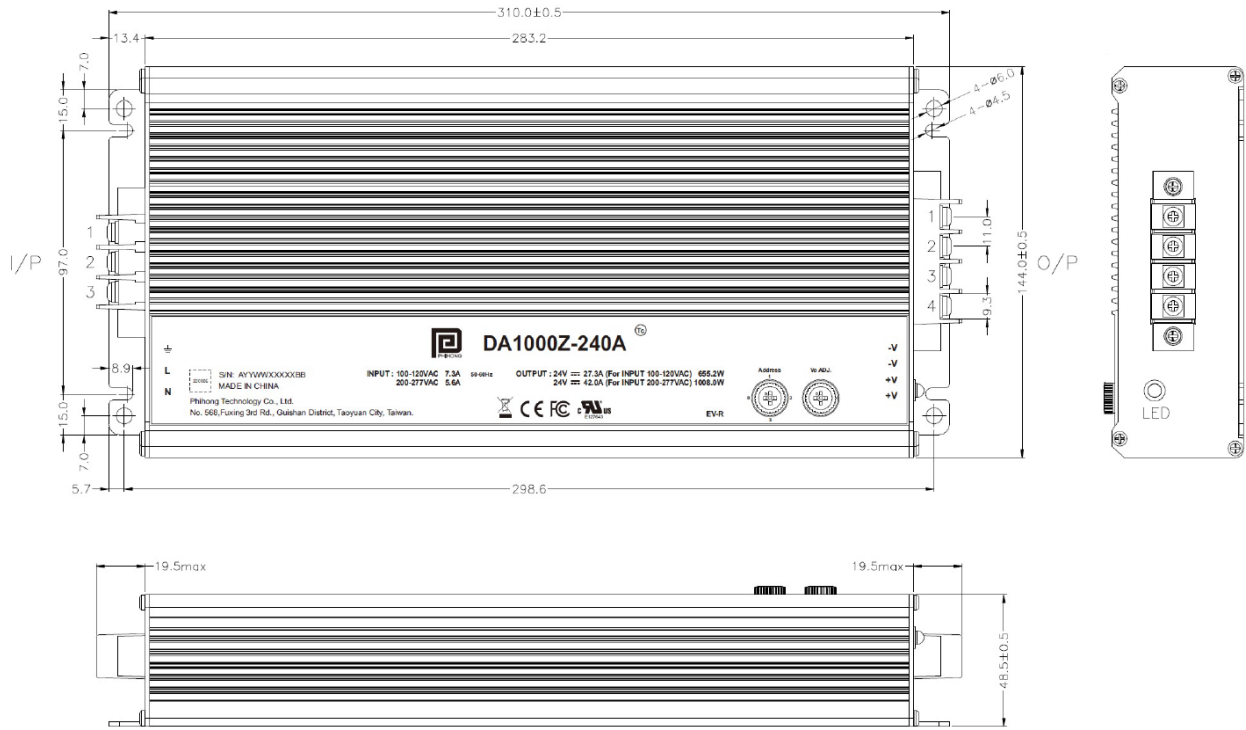
Specifications¹

Model		DA1000Z-240AEV-R
Output	DC Output Voltage	24V ±0.1V
	DC Output Voltage Adj. Range	24V~26V ±0.5V
	Line Regulation	±0.5%
	Load Regulation	±0.5%
	Output Current	0~27.3A at 100~120VAC input 0~42A at 200~277VAC input
	Output Power	655.2W at 100~120VAC input 1008.0W at 200~277VAC input
	Ripple & Noise P-P(max) ²	200mV
Input	AC Input Voltage Range	90 to 305VAC
	AC Input Frequency	47 to 63Hz
	AC Input Current	7.5A (RMS) max. at 100VAC, 4.2A (RMS) Max. at 277VAC
	AC Inrush Current	60A max. @230VAC/50Hz, cold start
	Power Factor	>0.9 at full load at Nominal voltage
	Input Power Saving	15W max. @230Vac/50Hz
	Efficiency ³	>90% at 115VAC, >93% at 230VAC
	Leakage Current	0.75mA max. at 230VAC/50Hz
Protection	Over-Voltage	30~35V (Output latch)
	Short Circuit	Auto-recovery, no damage (Output latch)
	Over-Current	29.4A~35.5A at 115VAC (Output latch) 45A~60A at 230VAC (Output latch)
Environmental	Operating Temperature ⁴	-40°C to 70°C
	Non-Operating Temperature	-40° to +80°C
	Operating Humidity	20% to 95% RH
Safety Approvals and EMC	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC, 10mA max. 1 min.
	Insulation Resistance	Primary to Secondary: Min. 100M OHM at 500 VDC
	Standards	UL62368-1, TUV BS EN/EN62368-1
	EMI Emissions	FCC Part 15 Class B, ISED ICES-003(B), CISPR 32
	Harmonic Current Emissions	IEC 61000-3-2
	Voltage Fluctuations & Flicker	IEC 61000-3-3
Mechanical	Immunity	EN 55035/CISPR 35: IEC 61000-4-2 (+/-8kV air, +/- 4kV contact), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (2KV L-L, 4KV N-FG), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
	Dimensions (L x W x H)	310.0mm (12.20in) x 144.0mm (5.66in) x 48.5mm (1.90in)
	Connector	Terminal Strip
	Weight	3,750g
MTBF	Telcordia	≥200Khrs min. at 230VAC with 80% load by SR332 at 25°C
Notes	<ol style="list-style-type: none"> The specifications defined are at ambient temperature of 25C, unless otherwise specified. 20MHz bandwidth frequency oscilloscope, add a 0.1µF multilayer Cap. and Low ESR Electrolytic Cap. (47µF) at output connector terminals (nominal line voltage, full load). At full load and measured after 30 minutes burn-in. Refer to derating curve. 	

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Outline Drawing



Derating Curve

