

90 Watts

- US DoE Energy efficiency level VI
- EU CoC Tier 2 requirements, ErP stage 2
- EN55032 Level B conducted & radiated
- IEC62368-1
- Single outputs 12 to 48V
- 5 Year warranty



The EDA90 range of external AC-DC power adapters are compliant with the latest energy efficiency Level VI standard, CoC tier 2 and ErP stage 2. The units offer 84-90 watts of output power with output voltages available between 12 and 48VDC. The range is reliable, cost competitive, and comes with an impressive FiDUS 5 year warranty.

Dimensions:

2.51 x 5.94 x 1.42" (64.0 x 151.0 x 36mm)

Models & Ratings

Model Number ⁽¹⁾	Output Power	Output voltage	Output Current
EDA9012-C14	84W	12V	7.00A
EDA9015-C14	90W	15V	6.00A
EDA9018-C14	90W	18V	5.00A
EDA9019-C14	90W	19V	4.74A
EDA9024-C14	90W	24V	3.75A
EDA9030-C14	90W	30V	3.00A
EDA9048-C14	90W	48V	1.88A

Notes

1. 16V, 20V & 56V unit also available on request, -C6 IEC inlet also available on request
2. Alternative output connectors available for production quantities. Contact sales for details
3. For UK/ US/ EU mains power cable please order UK-C14, US-C14 or EU-C14 separately

Key specifications

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
AC Input range	90		264	VAC	No derating
Operating temperature	0		60	°C	100% power at 40°C, derating to 50% power at 60°C
Efficiency	89			%	
Dimensions	2.51 x 5.94 x 1.42" (64.0 x 151.0 x 36mm)				
EMC	EN55032 Level B Conducted and Radiated. EN61000-3 and EN61000-4, harmonics, flicker, Surge, EFT, ESD, conducted and radiated				

Safety Approvals

	Safety standard	Notes & Conditions
UL	UL 60950-1: 2nd edition, UL 62368-1	
CB	IEC 60950-1:2005 /A2:2013, IEC 62368-1	PSE, BSMI
TUV	EN 60950-1:2006 /A2:2013, EN 62368-1	
CE		2011/65/EU RoHS Directive and 2014/35/EU Low voltage directive
Equipment protection class		Class I

Input

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Input voltage	90		264	VAC	No derating
Input frequency	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current			1.2	A	
Inrush current			80	A	High line. Full load, 25°C cool start, Vin=230VAC
No load input power			0.15	W	230VAC

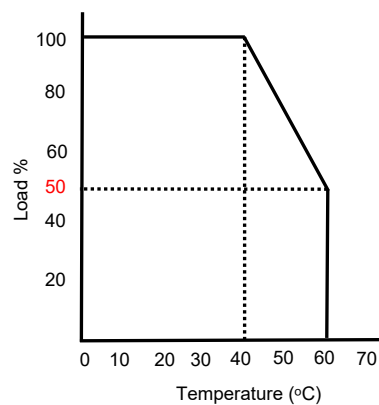
Output

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Output voltage	12		48	VDC	16V, 20V & 56V units also available on request
Total regulation		±5		%	
Minimum load	0			%	
Transient response		0.5		ms	50% load change
Ripple & Noise		2		%Pk-Pk	All models measured with 10uF and 0.1uf capacitor. 20 MHz bandwidth
Hold up time	10			ms	At full load
Overload protection			170	%	Automatic recovery
Short circuit protection					Automatic recovery
Over voltage protection			150	%	Latch off reset

Environmental

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Operating temperature	0		60	°C	100% load at 40°C, derating to 50% load at 60°C
Storage temperature	-20		80	°C	
Cooling					Convection cooled
Operating Humidity	20		80	% RH	
Storage Humidity	10		90	% RH	

Derating curve



General

Parameter	Minimum	Typical	Maximum	Units	Notes & Conditions
Efficiency	89			%	
Isolation	Input to Output: 3000, 1500 Input to Ground			VAC	For 1 minute
Insulation resistance		10		MOhm	500Vdc input to output and output to ground
Power density			4.25	W/In ³	
MTBF	300			KHrs	As per Telcordia SR-332
Weight		460		g	

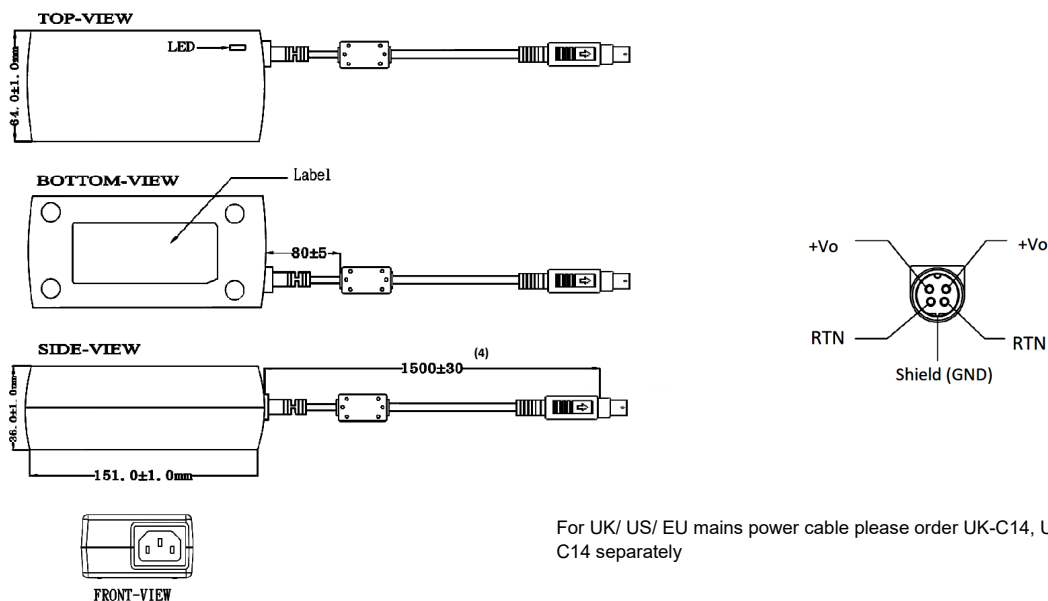
EMC: Emissions

	Standard	Test level	Criteria	Notes & Conditions
Conducted	EN55032	B		
Radiated	EN55032	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

EMC: Immunity

	Standard	Test level	Criteria	Notes & Conditions
ESD	EN61000-4-2	2,3	A	Contact: 4KV, Air: 8KV
Radiated	EN61000-4-3	2	A	3V/m
EFT	EN61000-4-4	2	A	1KV
Surges	EN61000-4-5	Installation Class 3	A	Line to Neutral 1KV, Line/Neutral to PE 2KV
Conducted	EN61000-4-6	2	A	3Vrms
PFMF	EN61000-4-8	1	A	1A/m
Dips and interruptions	EN61000-4-11	>95% interruption 250 periods, >95% dip 0.5 periods, 30% dip 25 periods. Perf criteria: B,A,A		

Mechanical Details



For UK/ US/ EU mains power cable please order UK-C14, US-C14 or EU-C14 separately

Notes

- All dimensions in mm
- Output connector : Kycon 4 pole power adapter, mates with board mount KPJX, panel mount KPJX-PM and cable mount KPJX-CM
- Negative DC output is bonded to AC earth. For floating negative DC output please contact sales
- Output cable for 12V units is reduced to 1200mm for energy efficiency. 12V AWG14, 15V AWG16 all other voltages AWG18.