IDA50 SERIES

50W EXTERNAL

DIMENSIONS:

4.53 x 1.99 x 1.24"
(115 x 48.5 x 31.6mm)

COMPACT SIZE | **CLASS I OR II** | **LEVEL VI**

EN55032 LEVEL B | **CONNECTOR CUSTOMISATION** | **ErP STAGE 2**

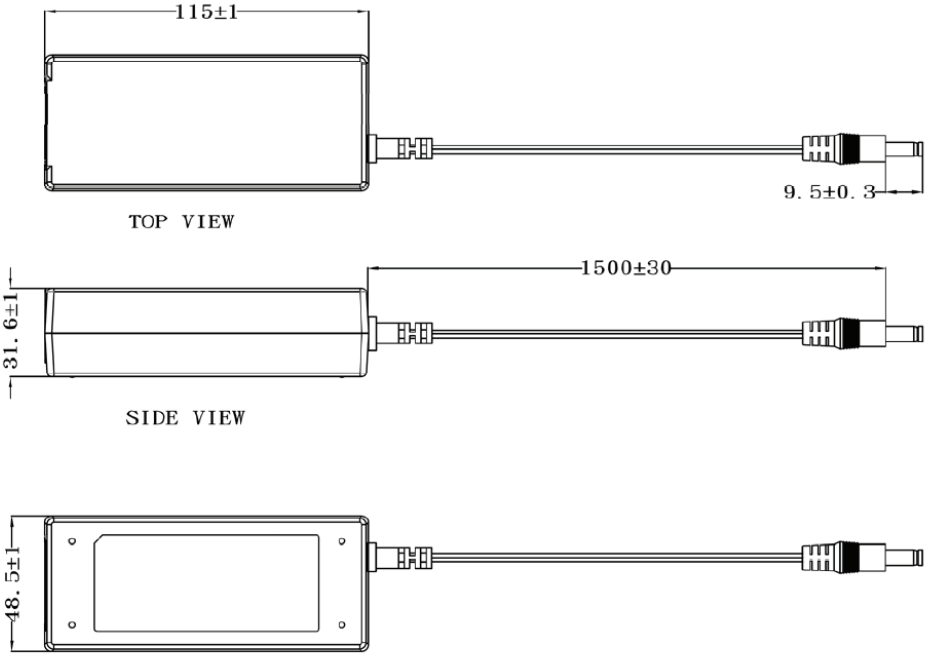
Part numbers

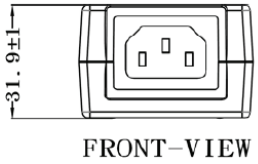
IDA	50	12	-	C14
Series	Power (W)	Output voltage		Options
		09 = 09VDC 12 = 12VDC 15 = 15VDC 18 = 18VDC 19 = 19VDC 24 = 24VDC 48 = 48VDC		-C14 inlet -C6 inlet -C8 inlet (class II)

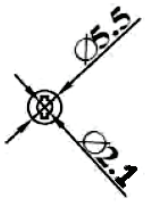
Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 62368-1	>88%	Operational: -20 to 60°C

Mechanical







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

Notes
1. All dimensions in mm 2. Output connector : 2.1 / 5.5 tuning fork style 3. Negative DC output is AC earth bonded. For floating negative DC output please contact sales 4. UL2468 cable; 9V AWG18 (1M), 12-19V AWG18, 24V AWG20, 48V AWG 22

Weight	210g

Models & Ratings

Model Number(1)	Output Power	Output voltage	Output current
IDA5009-C14	45W	9V	5.00A
IDA5012-C14	50W	12V	4.20A
IDA5015-C14	50W	15V	3.34A
IDA5018-C14	50W	18V	2.78A
IDA5019-C14	50W	19V	2.64A
IDA5024-C14	50W	24V	2.10A
IDA5048-C14	50W	48V	1.05A

1. -C6 or -C8 (class II) 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.

Input

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Input voltage	90		264	VAC	100-240VAC nominal. See derating curve on page 5
Input frequency	50		60	Hz	
Power factor					EN61000-3-2 class A compliant
Input current (rms)			1.2	A	
Inrush current			80	A	High line. Full load, 25°C cool start, Vin=230VAC
No load input power			0.21	W	230VAC

Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	9		48	VDC	±5% accuracy
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
Leakage current	0.25		3.5	mA	0.25mA 2 pin, 3.5mA 3 pin

Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload			228	%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection			180	%	Latch off reset

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 62368-1				
Isolation	Input to Output: 3000, Input to Ground: 1770			VAC	For 1 minute
Insulation resistance		10		MOhm	500Vdc input to output and output to ground
Power density			4.47	W/In3	

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			

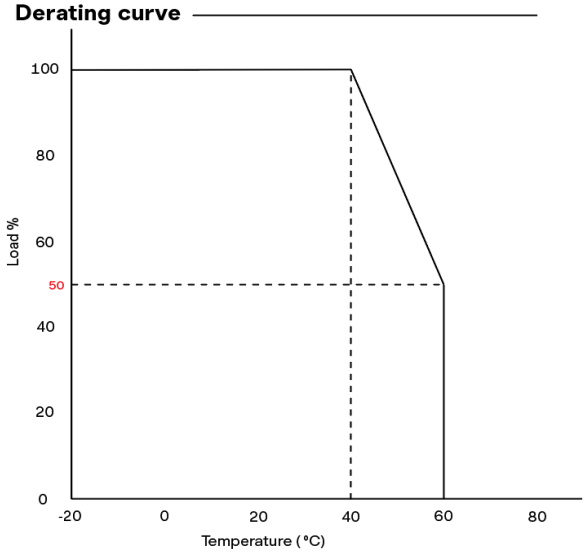
EMC: Immunity

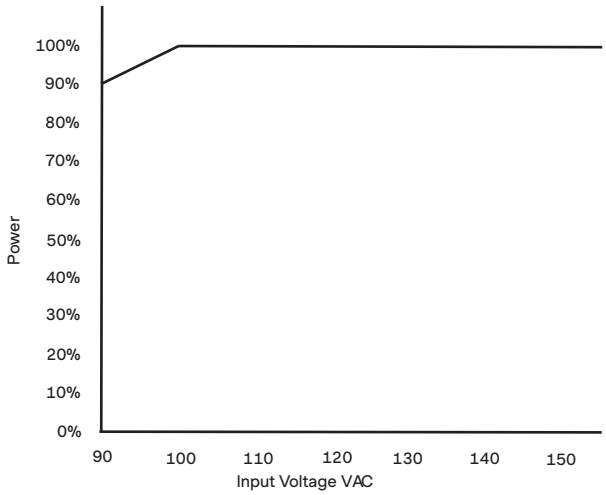
	Standard	Test level	Criteria	Notes/Conditions
ESD	EN61000-4-2	2, 3	A	Contact: 4KV, Air: 8kV
Radiated	EN61000-4-3	2	A	3V/m
EFT	EN61000-4-4	2	A	±1kV
Surges	EN61000-4-5	Installation class 3	A	Line to Neutral 1kV, Line/Neutral to PE 2kV
Conducted	EN61000-4-6	2	A	3Vrms
PFMF	EN61000-4-8	1	A	1A/m
Dips and interruptions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

Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-20		60	°C	See derating curve below
Storage temperature	-20		80	°C	
Cooling					Convection cooled
Operating humidity	20		80	% RH	
Storage humidity	10		90	% RH	
MTBF	300			kHrs	As per Telcordia SR-332

Derating curve





19th September 2023