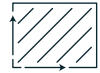


EDF150 SERIES



150W EXTERNAL

DIMENSIONS:



6.69 x 3.35 x 1.73"
(170 x 85 x 44mm)

LEVEL VI EFFICIENCY

EN55032 LEVEL B

CONNECTOR
CUSTOMISATION

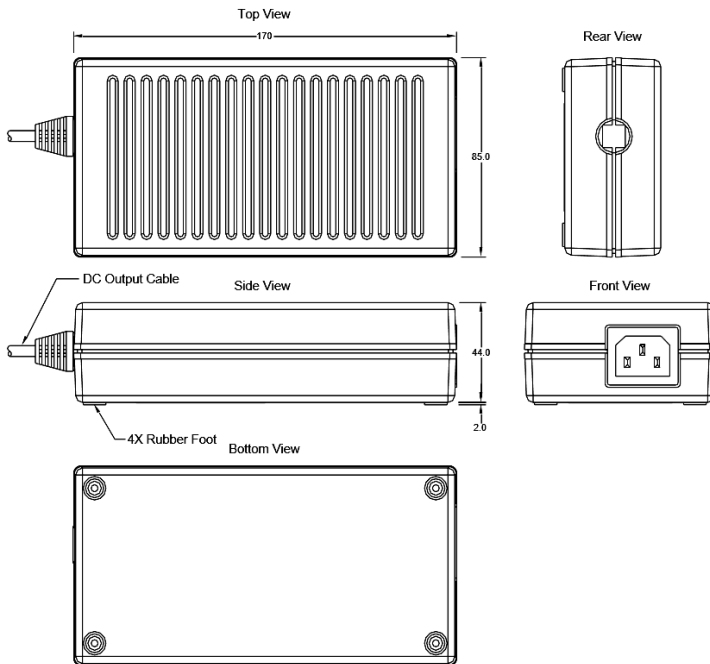
Part numbers

EDF	150	12	-	C14
Series	Power (W)	Output voltage		Options
		12 = 12VDC 16 = 16VDC 19 = 19VDC 24 = 24VDC 36 = 36VDC 48 = 48VDC		-C14 inlet

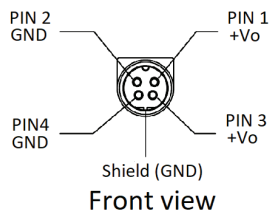
Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 62368-1	>92%	Operational: 0 to 60°C

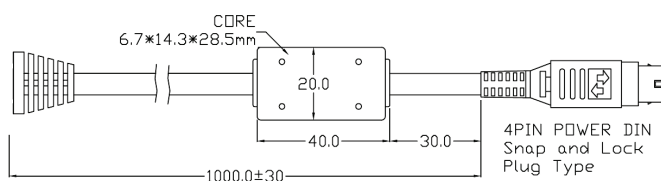
Mechanical



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



Alternative pin outs available -no MOQ



Notes

1. All dimensions in mm
2. Tolerance: $\pm 0.5\text{mm}$
3. AC Inlet: IEC320-C14
4. 16 AWG DC output cables used on 36 & 48V units, 14 AWG on 12V - 24V unit.
5. Negative DC output is tied to AC earth, for floating outputs please contact sales
6. Output connector part number KPPX-4P, mating part board mount KPJX, panel mount KPJX-PM and cable mount KPJX-CM

Weight

780g

EDF150 SERIES

Models & Ratings

Model Number ⁽¹⁾	Output Power	Output voltage	Output current
EDF15012	140W	12V	11.67A
EDF15016	150W	16V	9.38A
EDF15019	150W	19V	7.9A
EDF15024	150W	24V	6.25A
EDF15036	150W	36V	4.17A
EDF15048	150W	48V	3.13A

1. Efficiency calculated at average load, 115/230 VAC
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	See derating curve on page 5
Input frequency	47		63	Hz	
Power factor	0.9		0.95		0.9 at 230VAC, 0.95 at 115VAC full load
Input current (rms)	1.25		2.5	A	2.5A at 90VAC, 1.25A at 264VAC
Inrush current	<75		<150	A	25°C cool start
No load input power		<150		mW	

Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	12		48	VDC	
Total regulation			±6	%	Line regulation 1%. Load regulation 5%
Minimum load	0			%	
Transient response			+/-10	%	50% load change. 200mA/uS slope 10ms response time
Ripple & noise	240		480	mVp-p	12V -240mV, 16V - 320mV, 19V - 380mV, 24V , 36V, 48V - 480mV All models measured with 10uF and 0.1uF capacitor in parallel at output connector. 20 MHz bandwidth
Hold up time		>16		mS	At full load 115VAC
Leakage current	0.163		0.44	mA	264VAC line-output and neutral-output. Max figure is with no PE connected
Earth leakage current		<440		uA	
Switching frequency	45		55	KHz	

Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload	110		160	%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection	110		130	%	Shutdown & latch off. AC recycle

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 62368-1				
Isolation	4242 VDC/ 2121 VDC			VAC	Primary-secondary / Primary to frame ground 4 sec
Power density			3.87	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	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	
Conducted	EN61000-4-6	2	A	
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	0		60	°C	See derating curve below
Storage temperature	-10		85	°C	
Cooling					Convection cooled
Temperature coefficient		0.05		%/°C	
Storage humidity	10		90	% RH	
MTBF		>140		kHrs	As per MIL-STD 217

Derating curve

