

## EDM400 SERIES



400W EXTERNAL

DIMENSIONS:



8.74 x 4.4 x 1.77"  
(222 x 112 x 45mm)



520W 3s PEAK

BF RATED

CONNECTOR  
CUSTOMISATION

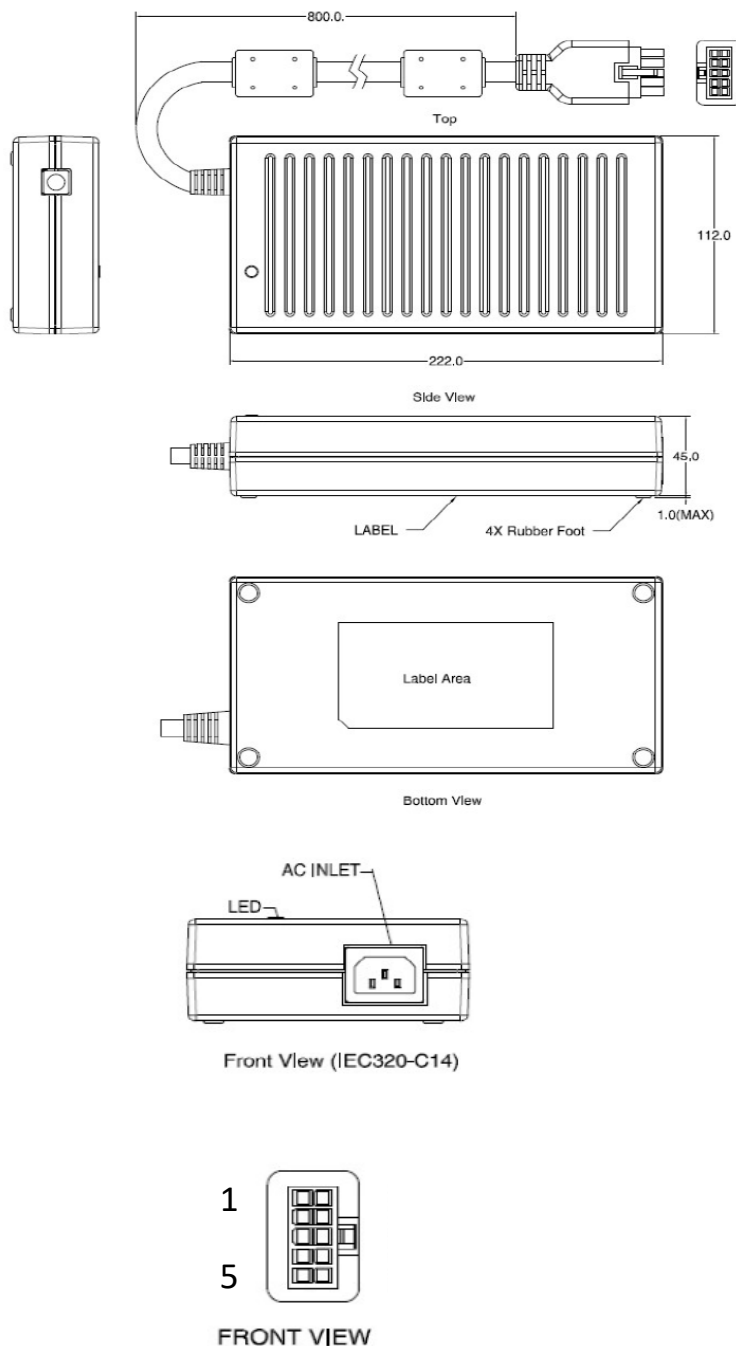
### Part numbers

EDM	400	12	-	S
Series	Power (W)	Output voltage		Options
		12 = 12VDC 19 = 19VDC 24 = 24VDC 28 = 28VDC 48 = 48VDC		S = Standard SW = Switch option

### Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 60601-1, 62368-1	<92%	Operational: -20 to 60°C

### Mechanical



Pin	Function
1	-DC
2	-DC
3	-DC
4	-DC
5	-DC
6	+DC
7	+DC
8	+DC
9	+DC
10	NC

### Notes

1. All dimensions in mm
2. Tolerance:  $\pm 1.5$ mm
3. 800mm output cable 8C +1 UL2464 16AWG
4. Output connector Molex 10 pin minifit. Pitch 4.2mm

### Weight

1630g

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### Models & Ratings

Model Number	Output Power	Output voltage	Peak power		Output current	Peak current		Ripple & Noise
			115VAC	230VAC		115VAC	230VAC	
EDM40012S-C14	380W	12V	480W	520W	31.66A	40A	43.33A	120mV
EDM40019S-C14	400W	19V			21.05A	25.62A	27.36A	190mV
EDM40024S-C14	400W	24V			16.66A	20A	21.66A	240mV
EDM40028S-C14	400W	28V			14.28A	17.14A	18.57A	300mV
EDM40048S-C14	400W	48V			8.33A	10A	10.83A	300mV

1. Ripple and noise tested under full load condition, 20MHZ 47uF 0.1uF caps

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

3. For switch option replace S with SW

### 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)	2.1		4.2	A	4.2A at 115VAC, 2.1A at 230VAC
Inrush current	<35		<70	A	<35A peak at 115VAC & <70A peak at 230VAC. 25°C cool start
No load input power		<0.5		W	

### Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	12		48	VDC	±5% accuracy
Total regulation		±5		%	0-60°C
Minimum load	0			%	No load power <0.5W. No minimum load.
Hold up time		>10		mS	At full load 115VAC

### Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload	105		150	%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection	104		134	%	Automatic recovery

### Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 60601-1, 62368-1				Medical and I.T.
Isolation	Input to Output: 5656			VDC	Input to ground 2121 VDC Use DC for production testing
Power density			5.87	W/In3	

### EMC: Emissions

	Standard	Test level	Criteria	Notes/Conditions
Conducted	EN55011/22	B		
Radiated	EN55011/22	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

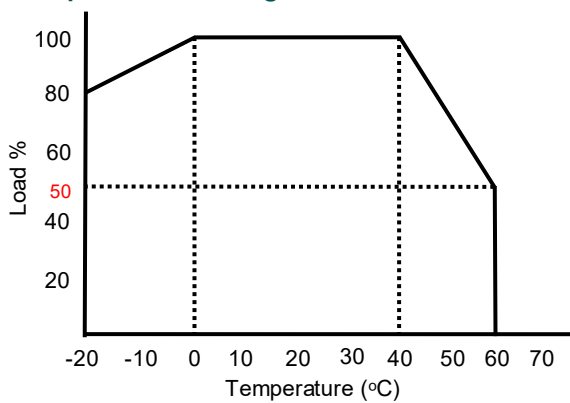
### EMC: Immunity

	Standard	Test level	Criteria	Notes/Conditions
ESD	EN61000-4-2	3	A	Medical: Contact: 8kV, Air: 15kV ITE: Contact: 4kV, Air: 8kV
Radiated	EN61000-4-3		A	Medical: 3-28V/m, 80-2700MHz, 1KHz 80% AM modulation ITE: 3V/m, 80-1000MHz, 1KHz sine wave 80% AM modulation
EFT	EN61000-4-4	3	A	Medical: 2kV 100KHz ITE: 1kV 5KHz
Surges	EN61000-4-5	Installation class 3	A	2KV L/N to GND, 1KV L to N both at 0°, 90°, 180°, 270° ITE: 0.5, 1, 2, 3, 4KV L/N to GND, Medical: 0.5, 1, 2KV L to N
Conducted	EN61000-4-6		A	Medical: 3-6Vrms, 1KHz 80 AM modulation 150KHZ-80MHz ITE: 3Vrms, 1KHz 80 AM modulation 150KHZ-80MHz
Dips and interruptions	EN61000-4-11	100% for 0.5 & 1 cycle, 30% for 25/30 cycles, interrupt 250/300 cycles. Perf criteria: B,C,C		

### Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-20		60	°C	See derating curve below
Storage temperature	-20		85	°C	0-95% non-condensing
Cooling					Convection cooled
Temperature coefficient			±0.05	%/°C	
Storage humidity			95	% RH	
MTBF		>230		kHrs	As per MIL-HDBK-217F. At 25°C

Temperature Derating Curve



AC Input Derating Curve

