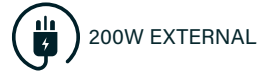
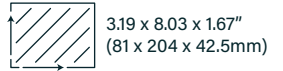


MDA200 SERIES



DIMENSIONS:



COMPACT SIZE

CLASS I OR II

LEVEL VI

EN55011 LEVEL B

CONNECTOR
CUSTOMISATION

IEC60601-1

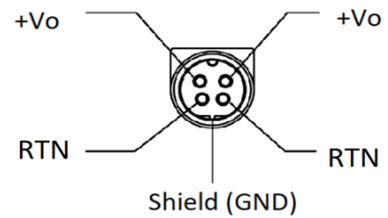
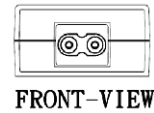
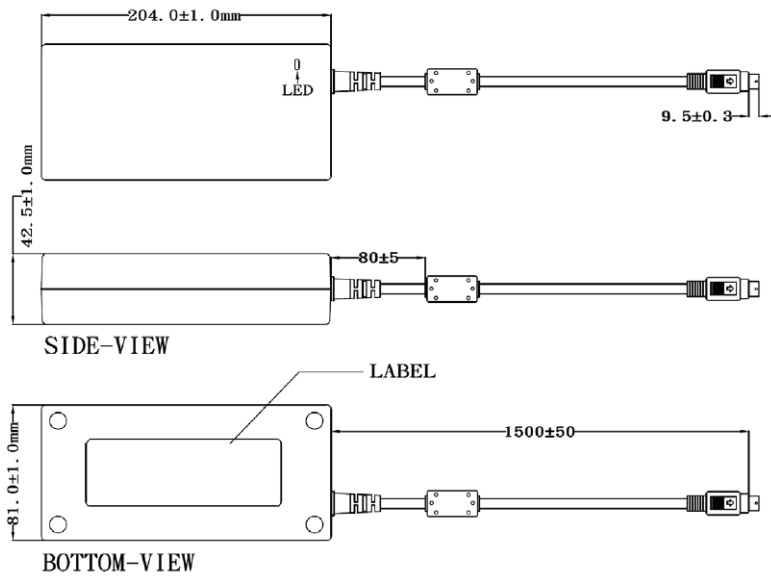
Part numbers

MDA	200	12	-	C8
Series	Power (W)	Output voltage		Options
		12 = 12VDC 15 = 15VDC 18 = 18VDC 19 = 19VDC 24 = 24VDC 48 = 48VDC		-C8 inlet -C14 inlet -C18 inlet

Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-264VAC	UL/IEC/EN 60601-1	>88%	Operational: 0 to 60°C

Mechanical



For UK/ US/ EU mains power cable please order UK-C8, US-C8 or EU-C8 separately

Notes

1. All dimensions in mm
2. Output connector : Kycon 4 pin non locking mould
3. Cable for 12V and 15V is only 1200mm long for energy efficiency. All units use AWG16

Weight

880g

MDA200 SERIES

Models & Ratings

Model Number ⁽¹⁾	Output Power	Output voltage	Output current
MDA20012-C8	192W	12V	16.00A
MDA20015-C8	195W	15V	13.00A
MDA20018-C8	198W	18V	11.00A
MDA20019-C8	198W	19V	10.50A
MDA20024-C8	199W	24V	8.30A
MDA20048-C8	200W	48V	4.17A

1. C14 & C18 Class I IEC inlet also available on request (15V Class II only).
2. Alternative output connectors available for production quantities. Contact sales for details.
3. For UK/ US/ EU mains power cable please order UK-C8, US-C8 or EU-C8 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	47		63	Hz	
Power factor					EN61000-3-2 class A compliant
Input current (rms)	1		2.5	A	2.5A for class I & 2.4A class II
Inrush current			100	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	12		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

Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload			170	%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection			150	%	Latch off reset

Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 60601-1				
Isolation	Input to Output: 4000			VAC	For 1 minute
Insulation resistance		10		MOhm	500Vdc input to output and output to ground
Power density			4.68	W/In3	

EMC: Emissions

	Standard	Test level	Criteria	Notes/Conditions
Conducted	EN55011	B		
Radiated	EN55011	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, B	Contact: 8KV, Air: 15kV
Radiated	EN61000-4-3	3	A	3-28V/m, 80MHz-2700MHz, 1kHz 80% AM modulation
EFT	EN61000-4-4	3	A	2kV 100KHz
Surges	EN61000-4-5	Installation class 3	A	Line to Neutral 1kV both at 0°, 90°, 180°, 270° Line to Ground 2KV
Conducted	EN61000-4-6	3	A	3/6Vrms, 1KHz 80 AM modulation 150KHZ-80MHz
PFMF	EN61000-4-8	4	A	30A/m
Dips and interruptions	EN61000-4-11	100% for 0.5 & 1 cycle, 30% for 25 cycles: 240 VAC A,A,A, 100VAC A,A,A interrupt 250,300 cycles and 30% for 30 cycles: 240VAC B,A,A, 100VAC B,A,A		

Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	0		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

