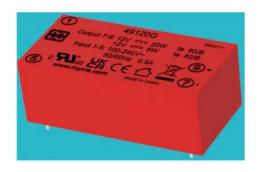
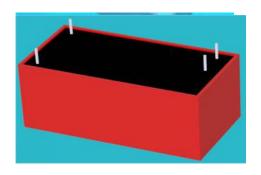


NEW 20W SERIES







DATA SHEET

MAIN FEATURES:

- 20W Small Compact Size PCB Mount
- Operating Altitude Up To 5000 meter
- Output Range: 3.3VDC- 30VDC
- Input Range: 85VAC 265VAC/47 63Hz or 120VDC 370VDC
- Very Low Standby Power Consumption ≤0.15W
- High Energetic Efficiency: Meets the requirements of Energy Star and the EC Code of Conduct
- Safety: Meets All Requirements of IEC/EN61558-2-16,
 IEC/EN60335-1, IEC/EN62368-1, UL62368-1, CSA C22.2 No.62368-1-14,
 CE,UKCA
- Materials: Uses UL 94-V0 Plastic and Resin EMC: Conducted and Radiated Emission conform to EN55032, FCC Part 15, CLASS B, EN/IEC61000-3-2 CLASS A, EN61000-3-3
- Immunity conforms to EN61000-4-2,EN/IEC61000-4-3,E61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8,EN61000-4-11



Part No	Power Rating Watts	Output Voltage (VDC)	Rated Output Current (mA)	Ambient Temp. (°C) Refer to "DERATING GRAPH"	Efficiency Typical	Input Range
49033G	13.5	3.3	4100	-25°C ~ +80°C	>75%@230VAC	
49050G	19	5	3800	-25°C ~ +80°C	>78%@230VAC	
49090G	20	9	2200	-25°C ~ +80°C	>81%@230VAC	85VAC-
49120G	20	12	1667 (1800Max)	-25°C ~ +80°C	>82%@230VAC	265VAC (120VDC-
49150G	20	15	1333 (1400Max)	-25°C ~ +80°C	>920/@220VAC	370VDC)
49180G	20	18	1111 (1140Max)	-25°C ~ +80°C	>83%@230VAC	
49240G	20	24	833 (900Max)	-25°C ~ +80°C		
49300G	20	30	667 (720Max)	-25°C ~ +80°C		

NOTE: Other output voltage are available upon request.

Please refer to MYRRA's website and catalogue for MYRRA SMPS application notes.

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NEW 20W SERIES

Power Supplies

Model: 20 Watt		Specifications	
	Rated Input Voltage	100~240 VAC or 140VDC-340VDC	
	Input Voltage Range	85~265VAC or 120VDC-370VDC	
	AC Input Frequency Range	47Hz~63Hz	
AC Input	Rated AC Input Frequency	50/60Hz	
Characteristics	Input Current	0.5A Max@85VAC~265VAC, at full load	
	Input Inrush Current	40A Max @100VAC 2 40VAC input, cold start, full load	
	Standby Power	0.15W Max (Meets the Requirements of Energy Star and the EC Code Of Conduct)	
	Output Voltage Accuracy	<u>+</u> 2% (9V,12V,15V,18V,24V,30V Types) <u>+</u> 3% (3.3V Types and 5V Types)	
	Output Voltage Line Regulation	+/- 1%	
	Output Voltage Load Regulation	+ 2% (9V,12V,18V,24V,30V Types) <u>+</u> 3% (3.3V Type,5V Type)	
	Ripple & Noise	Max 180mVp-p@ Rated AC input, at nominal line (The measuring will be terminated with a $47\mu F$ AL E-Cap and a $0.1\mu F$ Ceramic-Cap. An oscilloscope set at 20MHz bandwidth)	
DC Output	Dynamic Response	The output voltage shall not exceed \pm 10% rated output voltage @ 10% \leftarrow \rightarrow 90 % Load change, 1A/ μ S, 1KHz 50% duty cycle	
Characteristics	Hold Up Time	5mS min@ 100 VAC~240VAC, DC output with full load	
	Turn On Delay	3S max @ 85VAC~265VAC input and DC output with full load	
	Rise Time	50ms max @ 85VAC~265VAC input and DC output with full load	
	Overshoot	The output voltage shall not exceed +10% rated output voltage @ Power on and 85VAC~265VAC input, and DC with full load	
	Undershoot	The output voltage shall not exceed -10% rated output voltage @ Power off and 85VAC~265VAC input and DC output with full load	

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NEW 20W SERIES

Power Supplies

	Efficiency	See table (Meets the requirements of Energy Star and the EC Code of Conduct)			
	Over Current Protection	The power supply shall automatic protection. The power supply shall auto-recovery normal operations after the deformation is removed. No excessive heat, odor, or plastic deformation shall occur with no safety hazard			
Protection Characteristics	Output Short Circuit Protection	The power supply shall withstand a continuous output short without damage in 24 hours; The short may be applied before power on, or after power on; The power supply shall resume normal operation after the short is removed, no excessive heat, odour or plastic deformation shall occur with no safety hazard.			
	Over temperature protection	The power supply shall shut down when the junction temperature of PWM controller exceeds the thermal shutdown temperature, typically $140^{\circ}\text{C} \pm 10^{\circ}\text{C}$			
	Operation Temperature	-25°C~+80°C (Refer to« DERATING GRAPH »)			
	Operation Humidity	10~90% RH (No Condensing) @ full load			
Environmental	Storage Temperature	-10°C~ +35°C			
	Storage Humidity	<75%RH			
	Cooling Method	Ordinary or thermostat			
	Dielectric Strength	Primary to Secondary : 4000VAC 5mA, 3 sec.			
	Radiation	Meets EN55032, FCC part 15 Class B. under 3dB margin			
	Conduction	Meets EN55032, FCC part 15 Class B. under 3dB margin			
Safety & EMC	Harmonic Current Distance	Meets EN/IEC61000-3-2:2019, Class A			
Requirement	Voltage Fluctuation and Flicker	Meets EN61000-3-3:2013			
	Electrostatic Discharge	Meets EN61000-4-2 : 2009, Contact Discharge <u>+</u> 4KV, Air Discharges <u>+</u> 8KV			
	RF Field Strength Susceptibility	Meets EN/IEC61000-4-3:2019			
	Electrical Fast Transient	Meets EN61000-4-4:2012, <u>+</u> 2KV			
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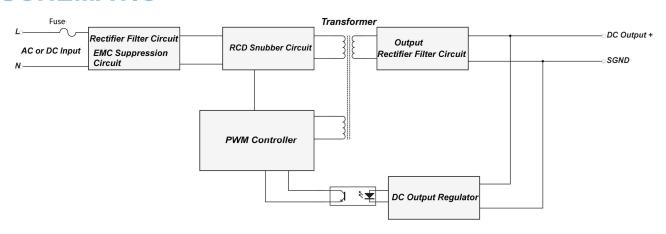
NEW 20W SERIES

	Lightning Surge	Meets EN61000-4-5:2014,+1KV (line to line)	
		Note: surge level can be extended to 6KV with an external circuit – please refer to Myrra's website and catalogue for MYRRA SMPS application notes	
Safety & EMC Requirements	Conducted Susceptibility	Meets EN61000-4-6:2014	
	Power Frequency Magnetic Field Susceptibility Test	Meeting EN61000-4-8:2010	
	Voltage Dips and interruptions	Meets EN61000-4-11:2004	
	Safety Standards	Meets all requirements of : UL62368-1, CSA C22.2 NO.62368-1-14, IEC/EC62368-1 IEC/EN60335-1	
		IEC/EN61558-2-16 CE,VDE,ENEC,UKCA UL certificate NO.E345767	
Reliability	MTBF	200K Hours Min. @230VAC input, 50deg.C Calculated according to MIL-HDBK-217-F2	
Requirement	Burn-in-Test	The unit shall be burned in 2~5hours under 230VAC input and DC with full load at and ambient temperature of 30~45 degrees C	
Mechanical	Physical size	The units do not including PINs of input and output, and dimension is: (L)54.5*(W)28.5*(H)24.5 (±0.5mm) (see appearance drawing)	
	Net Weight	Approximately 65 grams per product unit	
Guarantee	This product is in accordance with the European RoHS & REACH directives		

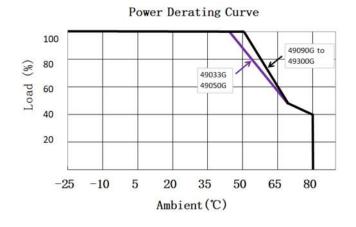


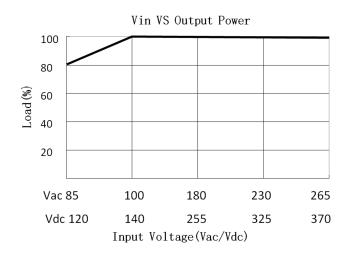
NEW 20W SERIES

SCHEMATIC



DERATING GRAPH

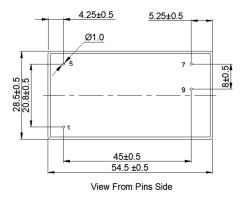


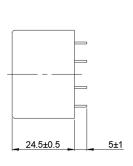


DIMENSIONS AND PINOUT 4 PINS

Pins 1: AC(L) Or DC(+) Input
Pins 5: AC(N) Or DC(-) Input

Pin 7 : DC Output 0VPin 9 : DC Output +V





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