

Features

- IP66 Grade High Efficiency DC-DC Converter
- Output Over Voltage/ Over Current Protection
- Input Under Voltage/ Over Voltage Protection
- Output short circuit Protected (Current Limit)
- Operation up-to 50°C ambient
- Thermal Shutdown at 70°C Case Temperature
- Regulatory compliance (ARAI Certification pending)



Performance Specifications and Protections

Parameter	Value		Comment
	DC-0K18P667215	DC-0K24P667220	
Maximum Output Power (Peak)	180W (12V,15A[+/- 2%])	240W (12V,20A[+/-2%])	At 50°C ambient for 20 minutes
Output Power (Continuous)	120W (12V,10A[+/- 2%])	180W (12V,15A[+/-2%])	
Input Voltage Range	35-90V	35-90V	Hardware settings value
Output current (Peak)	15A @12V	20A @12V	For 15-20 minutes @35°C ambient
Output current (Continuous)	10A @12V	15A @12V	@40 °C ambient
Efficiency (@ 60Vdc input, 80% load)	≥90%	≥90%	
Input Over Voltage /Under Voltage Protection	35V /90V	35V /90V	Hardware settings value
Output Voltage Range	12.5-13.5V		Hardware settings value
Output Voltage Ripple	3% of rated output voltage		RMS Voltage ripple measured with resistive load
Output Current Ripple	5% of Max Current		RMS Current ripple measured with resistive load
Standby AC Power consumption	250mW		
Standby DC current from battery	< 1mA		
Output Overload Protection	-		
Maximum Input surge voltage	-		
CAN channel Interface with BMS and / or Vehicle ECU	-		
Isolation - Input to output	-		Non-isolated design
Isolation – Input and Output to Chassis	-		

Input and Environment Specification		
Parameter	Value	Comment
Absolute Maximum Input Voltage range	35V-90V DC	Under voltage lockout at 35VDC Overvoltage lockout at 90VDC
Operating temperature	-20 to 50°C	Thermal shutdown at 70°C case temperature
Storage temperature	-20 to 85°C	
Relative Humidity	0 to 95%	

Mechanical Packaging and Interconnection Requirement		
Parameter	Value	Comment
Mounting Holes	2 holes	
Mounting orientation	Table top / Wall Mount	
Input wire	350mm length, 1.5sqmm	Red color, 35-90Vdc Input
Ignition wire	350mm length, 1.5sqmm	Blue color, 35-90Vdc Input
Ground wire	350mm length, 1.5sqmm	Black color, 0Vdc Input/output
Output wire	350mm length, 1.5sqmm	Yellow color, 12.5Vdc Output
Cooling	Self Air cooling	
Enclosure material	Aluminum	
Overall dimension	81mm x 66mm x 43mm (120W) 92mm x 72mm x 47mm (180W)	
Weight	0.45 Kg ± 0.05 Kg (180W) 0.55 Kg ± 0.05 Kg (240W)	

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