

360W DC/DC Converter Caesar Series Data Sheet

Description:

This 360W Caesar Series can be used as a DC/DC converter or AC/DC Power Supply*. It is designed with ultra-high efficiency and has a metal case enclosure. The extraordinary performances of low power dissipation and fan-less design provide high reliability and long lifetime. This series offer solid and safe power conversions for applications such as e-vehicles, e-bikes, e-motorcycles, e-boat, e-machines, etc. (*Consult Factory or see Charger section on website)

Features:

- DC Input Voltage range from 100~400Vdc
- Output Power: 230~360W
- Isolated Input/Output design
- Easily parallel for power scalability and redundancy
- High Efficiency: Up to 95.5% @ 220Vac
- All-Around Protections: UVLO, OVP, OCP, SCP, OTP
- Safety Certifications: CTUVUS, FCC, CE, CB, CCC
- Ultra-High Power Density: 27W/inch³
- Wide Working Temperature Tc: -20°C~85°C
- IP60 Ingress Grade

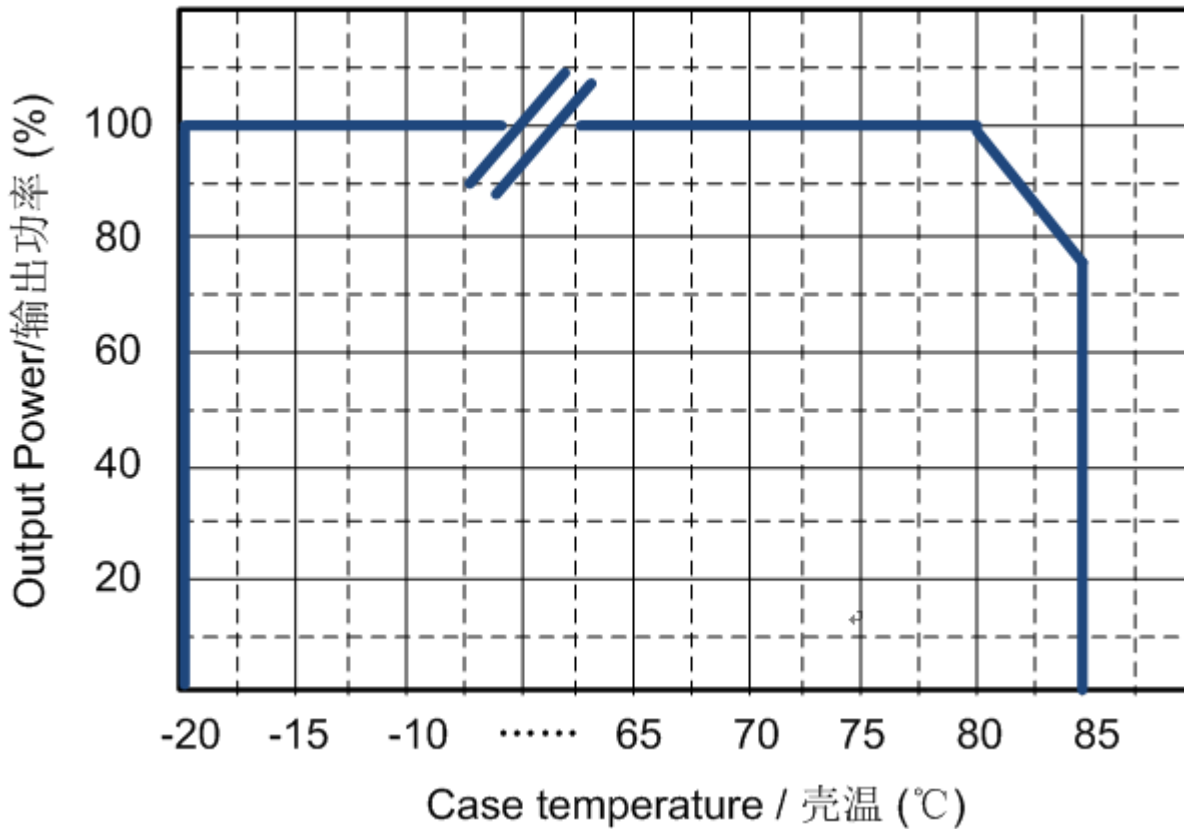


Specifications

Model*	EVD-250-360-05-A (PLD360-PDD050)	EVD-250-360-12-A (PLD360-PDD120)	EVD-250-360-15-A (PLD360-PDD150)	EVD-250-360-20-A (PLD360-PDD200)	EVD-250-360-24-A (PLD360-PDD240)	EVD-250-360-28-A (PLD360-PDD280)	EVD-250-360-36-A (PLD360-PDD360)	EVD-250-360-48-A (PLD360-PDD480)
Output Voltage	5V	12V	15	20V	24V	28V	36V	48V
Max. Current Out	45A	21.5A	17.3A	16A	13.3A	11.4A	8.9A	7.5A
Voltage Accuracy	±3%							
Output Power (DC/DC)	230W @ 200~400Vdc	260W @ 200~400Vdc		320W @ 200~400Vd			360W @ 200~400Vdc	
	168W @ 100~199Vdc	180W @ 100~199Vdc		220W @ 100~199Vdc			240W @ 100~199Vdc	
Input Voltage	100~400Vdc							
Efficiency	93%	94%		95%			95.5%	
Protections	UVLO, OVP, OCP, SCP, OTP							
Working Temp.	Tc=80°C							
Cooling	Natural Cooling							
EMI	EN55032 Class A							
Surge Protection	Line to Line: 1kV/ Line to Earth 2kV							
Isolation	Primary to Secondary: 3000Vac/10mA max./60s							
Dimensions	182 x 48.6 x 27.5 mm							
Weight	540g							

General			
Temperature (Tc)	MIN	-20	°C
	MAX	+85	
Temperature (Storage)	MIN	-40	°C
	MAX	+85	
Relative Humidity (Operating)	20% RH to 90% RH, No condensation.		
Relative Humidity (Storage)	5% RH to 95%RH. No condensation.		
Weatherproof	IP60		

Temperature Derating



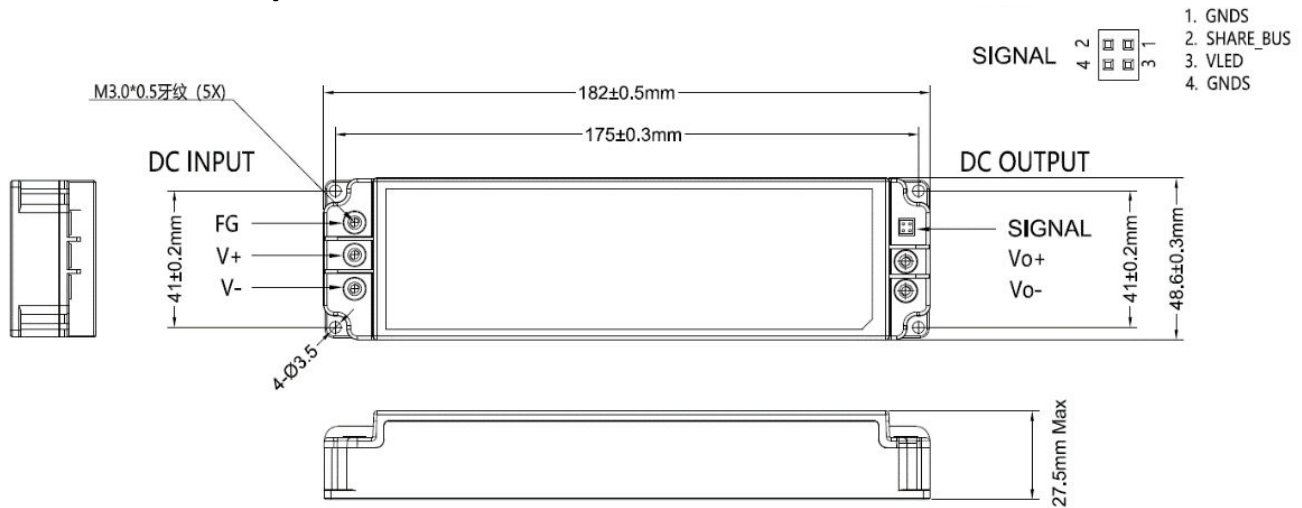
Protections (All Models)	
Short Circuit Protection (SCP)	Latch Mode The power supply shall enter latch mode after protection, and shall return to normal operation after the fault condition is removed and the AC input is powered off and on again.
Over Voltage Protection (OVP)	Enters Auto recovery mode when output voltage triggers over voltage protection. The power supply will return to normal operation when the fault condition is removed.
Over Temperature Protection (OTP)	The power supply shall enter auto-recovery mode during over temperature protection, and return to normal operation after the fault condition is removed.
Over Current Protection (OCP)	When the output current is between 105% to 188% of the rated output current, the power supply shall enter auto-recovery mode, and return to normal operation after the fault condition is removed.
UVLO	When the input voltage falls below 80Vac. The power supply shall shut down, and return to normal operation after the input voltage goes back within the range.

Regulatory	
Agency Approval	CTUVUS, FCC, CE, CB, CCC
Dielectric Strength (Hi-pot) Production test is 3 seconds	Primary to Secondary: 3000Vac / 10mA Max / 60seconds Primary to Earth: 1500Vac 10mA max./60 seconds Secondary to Earth: 500Vac 10mA max./60 seconds

Electromagnetic Compatibility EMI/EMC	
EMI, RFI	Comply with EN55032 CLASS A
Immunity:	
EN61000-3-2	Harmonic current emission
EN61000-3-3	Voltage Fluctuations and Flicker
EN61000-4-2	ESD 8kV Air Discharge, 4kV Contact Discharge, Criteria B
CISPR 16-2-1:	Radio-Frequency Electromagnetic Field Susceptibility Test-Rs Level 3, Criteria B
EN61000-4-4	Electrical Fast Transient/Burst-EFT 2KV, Criteria B.
EN61000-4-5	Surge Immunity Test, AC power line: line to line 1kV, line to each 2kV Criteria B
EN61000-4-6	Conducted Radio Frequency Disturbance Test-CS Level 3, Criteria B
EN61000-4-11	Voltage Dips, Criteria B


Notes: Specification is subject to change without notice.

MECHANICAL (Dimension and Outline Drawing)



PINOUT

Output Pins Description

No.	Name	Function	Drawing
1, 4	GNDS	Signal ground	
2	SHARE_BUS	Current-sharing bus signal	
3	DC_OK	High (3~3.5V): When the power supply is good. Low (-0.5~0.5V): When the power supply is not good.	

Output Connector

Type	Brand	Part Number
Socket	CHANGJIANG CONNECTORS CO LTD or equivalent	A2006WR-2X2P, or equivalent
Plug (customer)	CHANGJIANG CONNECTORS CO LTD or equivalent	A2006H-2X2P, or equivalent