



Description

Powerland's "Falcon" Series 3kW~4.2kW DC/DC power supplies for E-Vehicles & Li-Ion batteries application are designed with extended protection functions, next-generation semiconductor power devices, and extraordinary thermal management. It is the industry's first design to cover the full input voltage range of the on-board air conditioning system, fitting a wide variety of electric vehicles.

Standard Version



IP67 Version



Applications

- Heavy Duty Truck and Bus
- EV & Air conditioning system

Features

- Full Input Voltage Coverage
- High Power Density and High Maintainability
- Ultra High Efficiency: Up to 96%
- Advanced EMI Design
- Suitable for High Inrush Current Application
- Designed with Next-Generation Semiconductor Devices
- Flexible Cooling Options
- CAN Communication
- All-Around Protections: OVP, OCP, SCP, OTP
- Optimized for Variable Motor Loads of EV Air Conditioning Systems

Specifications

Model	PLD3000- EVDYL02(A)-27	PLD3000- EVDYL02(A)-48	PLD4000- EVDYL02(A)- 27*	PLD4000- EVDYL02(A)-48*	PLD4200- EVDYL02(A)- 48*
Output Voltage	27.5V	54V	27.5V	48V	50.4V
Output Current	110A	55A	146A	83A	84A
Voltage Accuracy	±2%				
Output Power	3000W		4000W		4200W
Input Voltage	280~880V		380~880V		490~880V
Max. Input Current	10A		16A		18A
Max. Input Power	3600W		4600W		5200W
Efficiency	95%		95.5%		95.5%
Communication	CAN				
On/Off Control	Yes				
Protections	OVP, OCP, SCP, OTP				
Ingress Protection	Without (A)-IP54 with System With (A)-IP67 with System				
Working Temperature	-40~85°C		-40~70°C		
Cooling	Natural Cooling (With HS or Coolant Chilling baseplate)				
Max. Case Temperature	85°C		70°C		
EMI	CISPR 25/GB18655 (With System)				
Isolation	3500Vdc				
Dimensions (LxWxH)	258.5x164x54.5mm				
Weight	4kg (IP67 Version) 3.5kg (Regular Version)				
Life Time	80,000 Hours at 40°C, 540Vdc Input, and Full Load Output				

*Unless otherwise noted, the data are based on 25°C ambient temperature, 540V input voltage, and full load.