



3.1KW DC/DC 2 Output Converter -Module Model No. AT2D3K1-615S2427-M



Features

- 1 Output Power: 3.1KW
- 2 Input Voltage: 400~800VDC
- 3 Output Voltage with 2 output: 24VDC & 27VDC
- 4 Dimensions: 263x145x48mm
- 5 Weight: ≤ 2.5 KG
- 6 Cooling System: Module
- 7 Communication Method: CAN-BUS J1939
- 8 Enclosure: Aluminum alloy
- 9 With pre-charge & galvanically isolated
- 10 Software: Digital software design
- 11 Online Upgrade & Fault Diagnosis: Supported

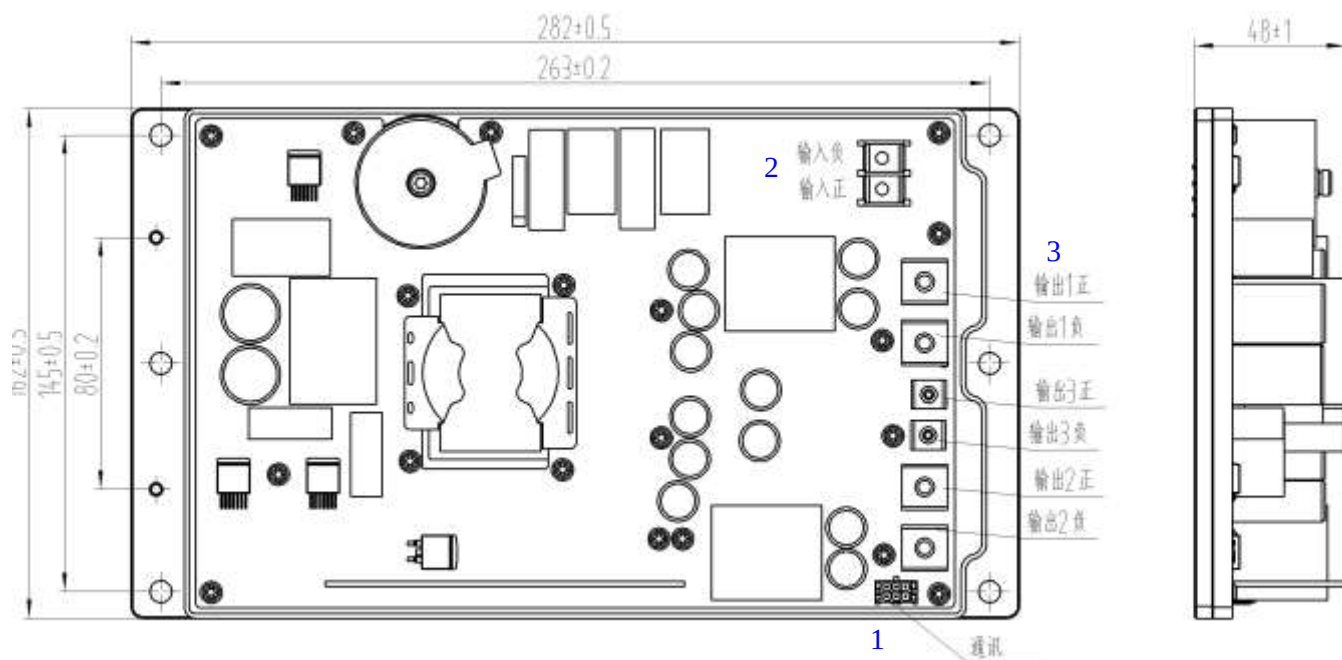
Specification

Description	Technical Specification	Remark
Operating Temperature	-40~75°C	
Storage temperature	-40°C~+100°C	5-95%RH
Relative humidity	5-95%	No condensation
Temperature coefficient	$\pm 0.02\%/^{\circ}\text{C}$	
Altitude	0-2000m	When the altitude is above 2000m, the power must be derated.
Atmospheric pressure	70~106Kpa	
Noise	< 42dB	
Sinusoidal vibration	Sinusoidal vibration: 10~55Hz: displacement 0.35mm; acceleration: 10m/s ² ; 3 axial directions, vibration time 30min	
Impact (collision)	Acceleration 150m/s ² ; pulse width 11ms; 3 axes 6 directions 10 times each	
fall	Drop height 1m	With packaging, free fall
Rated input voltage	615VDC	
Input Voltage Range	400~800VDC	Error ± 10 V
Maximum input current	10A	
Main Circuit Rated Output Voltage	24VDC	
Main Circuit Output Voltage Range	14-26VDC	Adjust by CAN
Main Circuit Rated Output Current	55A (Single)	
Main Circuit Maximum Output Current	60A (Single)	
Auxiliary Circuit Rated Output Voltage	28 $\pm$ 0.5V	
Auxiliary Circuit Maximum Output Current	12A	
Auxiliary Circuit Output Power	300W	



Rated Output Power	3100W	
Efficiency	≥93%	600Vdc input, ≥50%LOAD
Output Voltage Accuracy	±0.5V	
Wakeup Method	KL15(hardwire)	
Communication Method	CAN-BUS J1939	
Protection Characteristics	Input OVP/UVF, output OVP/UVF, input anti-reverse connection, output short circuit protection, OCP, OTP	
Input under voltage protection	375~390Vdc	Half load test
Input under voltage recovery	≤410Vdc	Half load test
Input overvoltage protection	790~820V	Half load test
Input overvoltage recovery	≤785Vdc	Half load test
Input reverse protection	No output, no damage	850Vdc input
Output overvoltage protection	29~33Vdc	Hiccup/lock, self-recovery
Output overcurrent protection	65-75A (single route)	
Auxiliary output overcurrent protection	12.5A	
Output short circuit protection	Long-term short circuit	Short circuit hiccups detected, self-recovery
Over temperature protection	When the internal temperature of the power supply is greater than 75°C, the output voltage decreases with the temperature. When the temperature is greater than 100°C, the power supply shuts down the output.	Detect the internal temperature of the module and recover automatically
EMC	GB/T 18655	

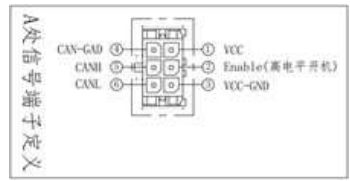
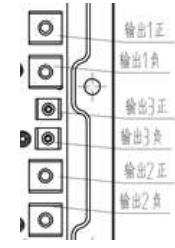
Structural Parameters (unit : mm)



Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	Molex	430251000	/
2	input	/	M4 BoltM8 Bolt	M4 Screw
3	Output	/	M5 BoltM8 Bolt	M5 Screw

Interface Definition

Signal Control(1)		Input(2)		Output(3)	
 A处信号端子定义					
1	VCC	1	Input +	1	Output 1+ (A group fan output positive)
2	EN1 enable (reserved)	2	Input -	2	Output - (negative pole of fan output)
3	VCC-GND			3	Output 2+ (positive output of fan in group B)
4	CAN-GND			4	Output 3+ Auxiliary 24V output positive
5	CANH			5	Output 3- Auxiliary 24V output negative pole
6	CANL				