

Model No. : ATD3K-540S27-M
Product Name : 3KW DC/DC Converter Module

Date	Apr. 28, 2020	Version	V02	Remark:	1.Revised in Red on Page 1, Page2 and Page 3. 2.Ladel and Package information Added.
Date	Jul. 8, 2020	Version	V03	Remark:	1.Model no. changed to ATD3K-540S27-M from AR3K-540S27M
Date	Aug. 8, 2024	Version	V04	Remark:	Revise as the red mark



3KW DC/DC Converter Module

Features

- 1 Charging Standard: N/A
- 2 Output Power : 3KW
- 3 Input Voltage : 400-750VDC
- 4 Output Voltage : 27.5VDC
- 5 Dimensions : 200X120X50mm
- 6 Cooling System : Module
- 7 Communication Method : CAN
- 8 Enclosure: Aluminum alloy made
- 9 Software: Digital software design
- 10 Weight: $\leq 1.8\text{KG}$

Applications



Electric Bus 12M Low Flow

Specification

Description		Technical specifications	Remark
Operating temperature		-40~85℃	
Rated output power		3KW(Continuous operation at full load)	Peak power 3.6KW
Input voltage range		400-750VDC	
Output rated voltage		27.5VDC	Adjustable voltage
Rated output current		110A	
Auxiliary power VCC		18-31VDC	
Efficiency		$\geq 93\%$	Rated voltage Full load
Output voltage ripple		$\leq 500\text{mVP-P}$	The bandwidth of the oscilloscope should be 20MHz, and the test terminal should be connected with 10uF electrolytic capacitor + 0.1uF disk capacitor
Protection characteristics		Input over and under voltage, output over and under voltage, input anti-reverse connection, output over current and short circuit protection, over temperature self-recovery	
Over temperature protection		When the temperature of the bottom plate reaches 85 ° C, the output will be derated. If the temperature exceeds 100 ° C, shut down; if the temperature is lower than 95 ° C, it can recover automatically.	
Dielectric strength	Input to output	3000VDC/1min 1mA max	
	Input to the outer casing	3000VDC/1min 1mA max	
Insulation resistance	Input to output	$\geq 20\text{M}\Omega$	
	Input to the outer casing	$\geq 20\text{M}\Omega$	
Battery compatibility	Radiation emission	GB/T 18655-2010 Class 3	
	Conducted emission	GB/T 18655-2010 Class 3	
	Static immunity	GB/T 19951-2005	Air discharge : 15KV · Contact discharge 8KV
	Radiation immunity	GB/T 18655-2010 Class 3	

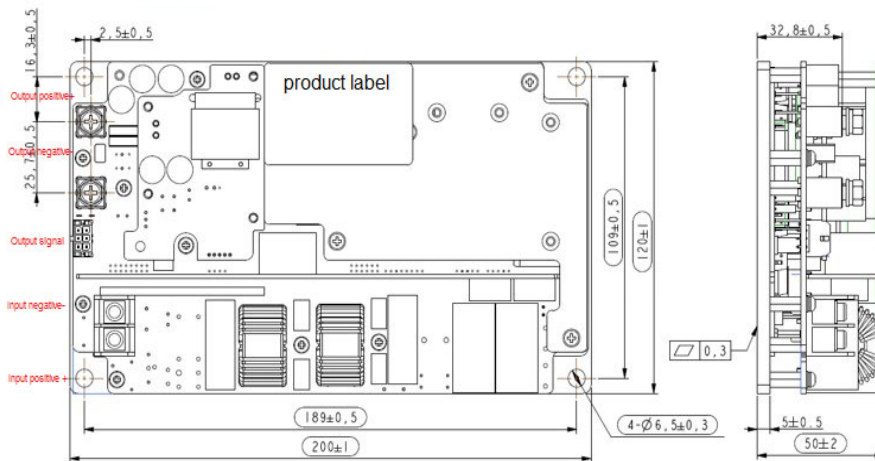




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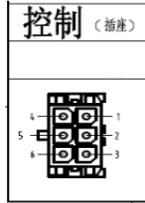


Structural parameters

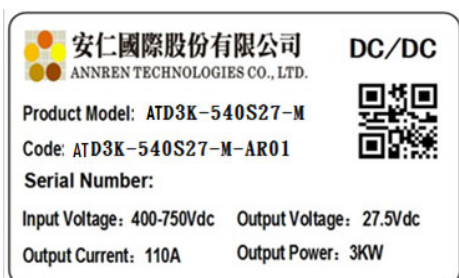


Connector information

Function	Maker	Receptacle model	Plug model
Control terminal	MOLEX	43045-0612	43025-0600
Input	/	M4 binding post	M4 screw
Output	/	M5 copper pillar	M5 screw

Maker	Model	Description		Remark
MOLEX	43045-0612	PIN1	VCC+	Control (Receptacle) 
		PIN2	Hardwire enable	
		PIN3	GND	
		PIN4	CAN-GND	
		PIN5	CAN-H	
		PIN6	CAN-L	
/	High voltage input	Input positive	IN +	It is recommended to use 2.5mm ² wire
		Input negative	IN -	
/	Low voltage output	output positive	OUT +	It is recommended to use 2.5mm ² wire
		output negative	OUT -	

Label



Package information

Carton size	200x120x50 (mm)
Weight (KG)	1.8KG

