

Date	Jul.16th, 2020	Version	V01	Remark	Model No. changed to ATD300-540S12-A from AR-300-540S12-N-AR01
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Product Name	300W DC/DC CONVERTER
Model No.	ATD300-540S12-A
Power	300W
Input Voltage	200~800VDC
Output Voltage	12VDC
Output Current	25A
Efficiency	≥92%
Module Low Voltage (VDC)	\
Module Low Current (A)	\
Size (mm)	208x129x45mm
Cooling System	Natural air cooling
IP Rating	IP67
Scope	Various new energy vehicles
Hardware	Small size, light weight and stable performance
Firmware	Full digital software design, redundant protection function design

Features

- ◆ **Output power: 300W W**
- ◆ **Input voltage: 200-800VDC**
- ◆ **Output voltage: 12VDC**
- ◆ **Communication method: CAN**
- ◆ **Weight: < 1.5KG**

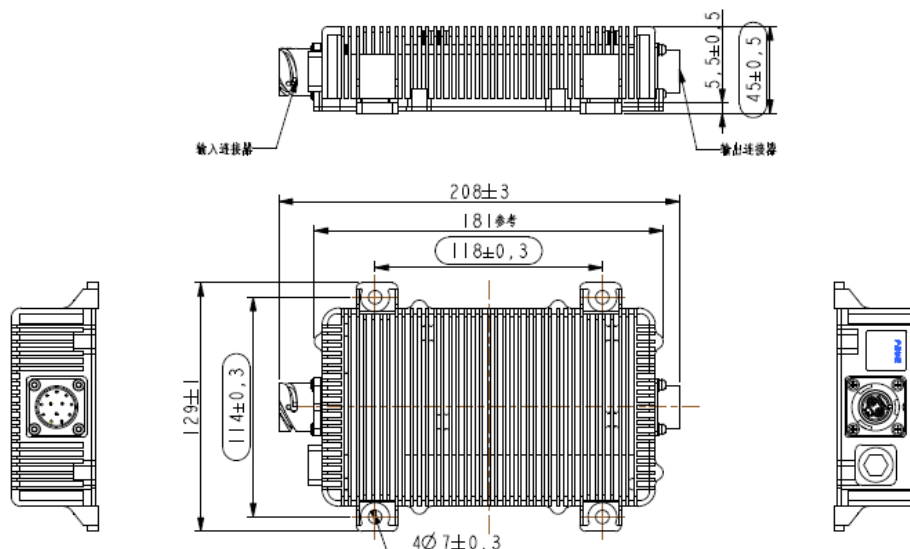


Main technical parameters

Item	Technical specifications	Remark
Rated output power	300KW (Continuous operation at full load)	Peak power 360W
Input voltage range	200-800VDC	Rated input 540VDC
Output rated voltage	12±0.5VDC	Adjustable
Rated output current	25A	
Effectiveness	≥92%	Rated voltage full load
Output voltage ripple	≤500mV _{PK-PK}	

No-load power consumption		< 10W	Input power consumption of high voltage input when not loaded
Sleep power		< 60mW	Power consumption of high voltage input during sleep state
Auxiliary source power consumption		< 4W	Input power consumption when auxiliary power supply is working
Protection characteristics		Input over-voltage, output over-voltage, input anti-reverse connection, output over-current and short-circuit protection, over-temperature self-recovery	
Dielectric strength	Input to output	3000VDC/1min 1mA max	
	Input to the outer casing	3000VDC/1min 1mA max	
Insulation resistance	Input to output	≥20MΩ	
	Input to the outer casing	≥20MΩ	
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	
CAN byte speed		250Kbps/500Kbps	

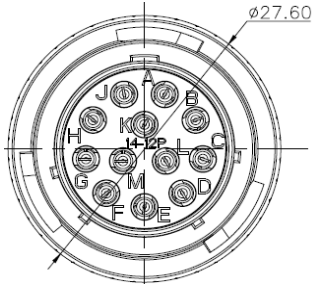
Structural parameters

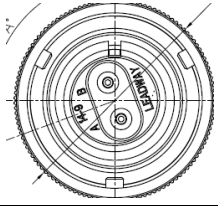


Connector information:

Position	Socket model	Function	Brand	Plug model
A	L52-STP083-12P-W	Control terminal	LeadWay	L52-STP063-12S-W
B	L52-BT6106-09OX-C	High voltage input	LeadWay	L52-BT6105-09SX-C

Interface definition:

Vendor	Model	Description		Remarks
Lead Way	L52-STP083-12 P-W	A	12+ low voltage output positive /25A	
		B	12-low voltage output negative / 25A	
		C	12-low voltage output negative / 25A	
		D	12+ low voltage output positive /25A	
		E	AUX1 (Auxiliary 1) / 20mA	
		F	DISABLE (disable output 12V) / 20mA	
		G	ALARM (hardwire alarm) 10mA	
		H	CANL (CAN communication low) / 100mA	
		J	CANH (CAN communication high) / 100mA	
		K	12-low voltage output negative / 25A	
		L	12+ low voltage output positive /25A	
		M	AUX2 (Auxiliary 2) / 20mA	

	L52-BT6106-0 90X-C	A	High voltage input is positive	
		B	High voltage input negative	

Label

