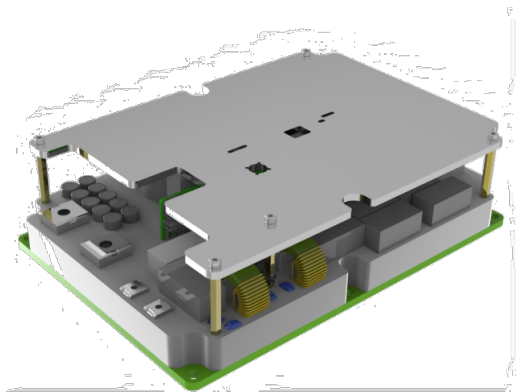




6KW DCDC Converter-Module Model No. ATD6K640S27-TR2481-M



Features

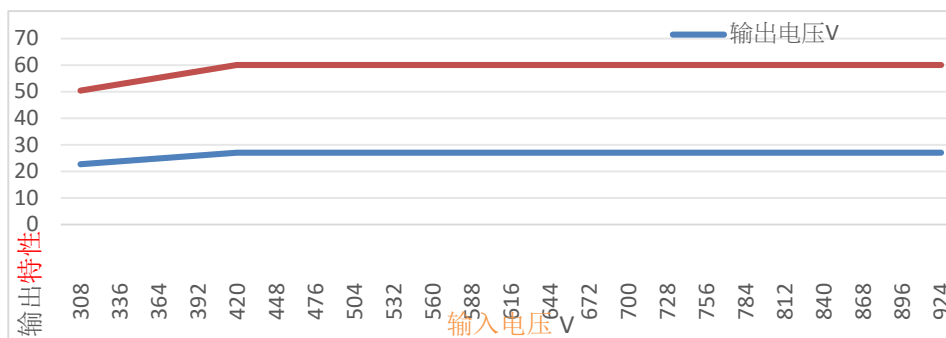
- 1 Output Power: 6KW
- 2 Input Voltage Range: 400~900VDC
- 3 Output Voltage Range: 27VDC
- 4 Dimensions: 230 x 160 x 60mm
- 5 Weight: 3.5Kg±0.3KG
- 6 Cooling System: Excluded
- 7 Unified Diagnostic System: Supported (Basic SID)
- 8 With Pre-charge feature & galvanic isolated
- 9 Software: Digital software design
- 10 Online Upgrade & Fault Diagnosis: Supported

Specification

Description	Technical Specification	Remark
Rated Input Voltage	640V	
Input Voltage Range	400~900VDC	
Input Pre-charge	120R	Precharge resistance
Efficiency	≥92%	
Output Voltage Range	0~32V	
Rated Output Voltage	27V	
Output Current Range	0~220A	
Rated Power	6KW	
Communication Method	CAN-BUS	
Control method	Hard wire high level enable control; CAN communication enable control	
Quiescent Current	< 100uA	
Output ripple and noise	≤200mVp-p	
Protection Characteristics	Input OVP/UVP, output OVP/UVP, input anti-reverse connection, output short circuit protection, OCP, OTP	
EMC	EMI: Chapter 4 of GB/T17619-1998	
	EMS: Chapter 12 and Chapter 14 of GB18655-2002	
Operating Temperature	-40°C ~ +85°C	
Storage temperature	-40~+95°C	

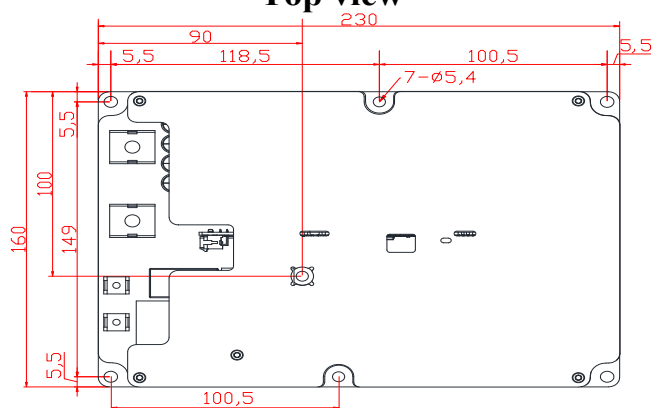


Output characteristic curve

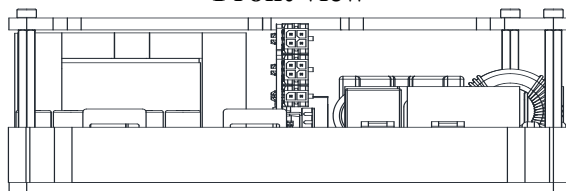


Structural Parameters (unit : mm)

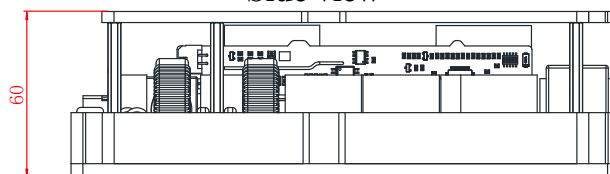
Top view



Front view



Side view

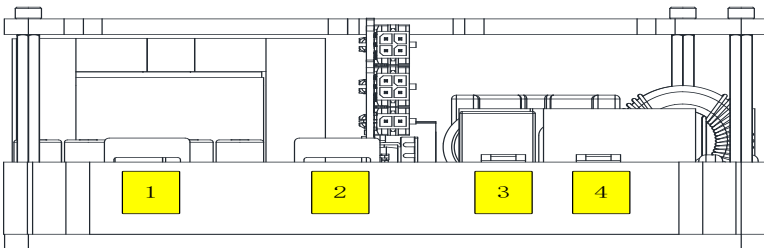
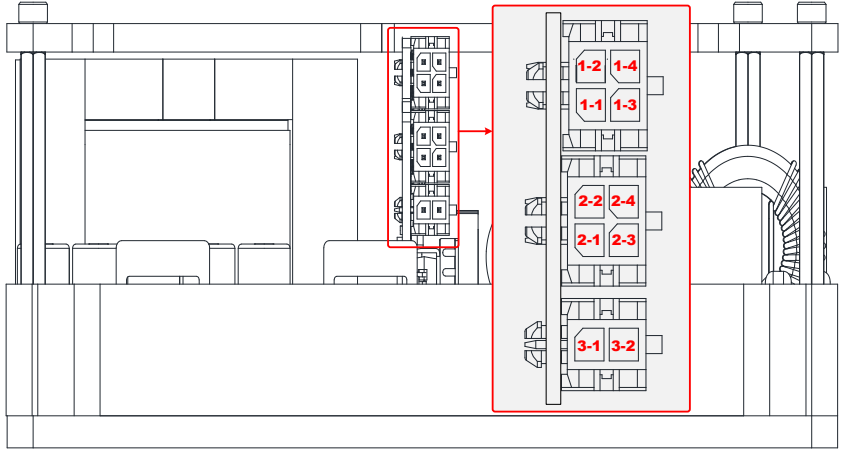


Connector Model

Function	Brand	Socket Model	Plug Model
Signal control	Molex	0430450400 (4P) x2	0430250400 (4P)
		0430450200 (2P)	0430250200 (2P)
HV Input	/	M4 terminal x2	Cooper lug & M4 screw
LV output	/	M8 terminal x2	Cooper lug& M8 screw



Interface Definition

HV Input & LV output					
					
Posi tion	Definition	Pin description	Socket Model		Plug Model
1	VO+	DC-DC output +		Pitch: 8.25mm Rated current: 150A Screw hole diameter: M8 Screw torque: 28 lbf·in	Cooper Lug & M8 screw
2	VO-	DC-DC output -			
3	VI+	DC-DC Input +		Spacing: 5.00mm Rated current: 80A Screw hole diameter: M4 Screw torque: 13 lbf·in	Cooper Lug & M4 screw
4	VI-	DC-DC Input -			
Signal Control					
					
Position		Definition	Pin description		
1	1	CAN-L	CANL signal		
	3	CAN-H	CANH signal		
	2	12V/24V LVDC GND	12V/24V auxiliary power supply ground (shared with the negative pole of the power output)		
	4	12V/24V LVDC input	12V/24V auxiliary power supply input		
2	1	FAN- 12V0.3A	12V/0.3A fan 1 driver port negative		
	3	FAN+ 12V0.3A	12V/0.3A fan 1 driver port positive		
	2	FAN- 12V0.3A	12V/0.3A fan 2 driver port negative		
	4	FAN+ 12V0.3A	12V/0.3A fan 2 driver port positive		
3	1	Enable signal input GND	Hard wire enable signal input reference ground (note 1)		
	2	Enable signal input	Hardwired enable signal input (8-32V)		