

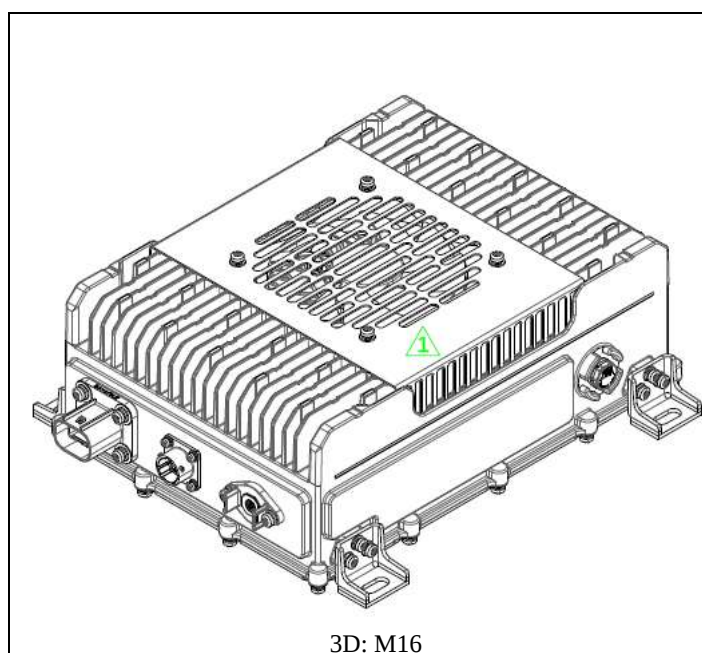


10(20)(30)KW Series DC/DC Converter Bidirectional Fan Cooled System

Products Portfolio

Items	Model No.	Rated Power(KW)	Va Voltage Range & Rated (VDC)	Va Current Range(A)	Vb Voltage Range & Rated (VDC)	Vb Current Range(A)
1	ATRDB10K1-xxxSxxxF	10	0-100 / xxx	0-150	0-100 / xxx	0-150
2	ATRDB20K5-xxxSxxxF	20	0-500 /xxx	0-120	0-500 / xxx	0-120
3	ATRDB30K10-xxxSxxxF	30	0-1000 / xxx	0-80	0-1000 / xxx	0-80

The rated voltage will be adjusted as per requirement. And then the model no. will be modified accordingly.



3D: M16

Features

1. Dimensions(mm) (LxWxH): 305 x 271 x 114
2. Weight(KG): 13.5 ± 0.5
3. Cooling System: Fan
4. IP Rating: IP67
5. CAN compatibility: CAN2.0 B
6. Enclosure: Aluminum alloy
7. Isolated: Non Supported
8. Software: Digital software design
9. Online Upgrade & Fault Diagnosis: Supported

Specification

Description		Remark
Efficiency	≥97%	Rated input voltage, load > 30%
Output Voltage Accuracy	±1%	
Communication Method	CAN 2.0 BUS	
Isolation	Non supported	

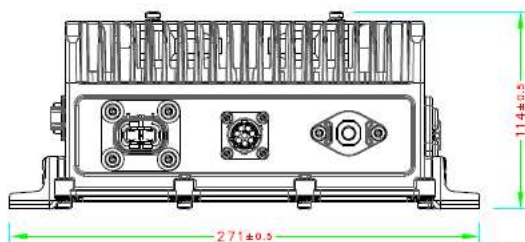
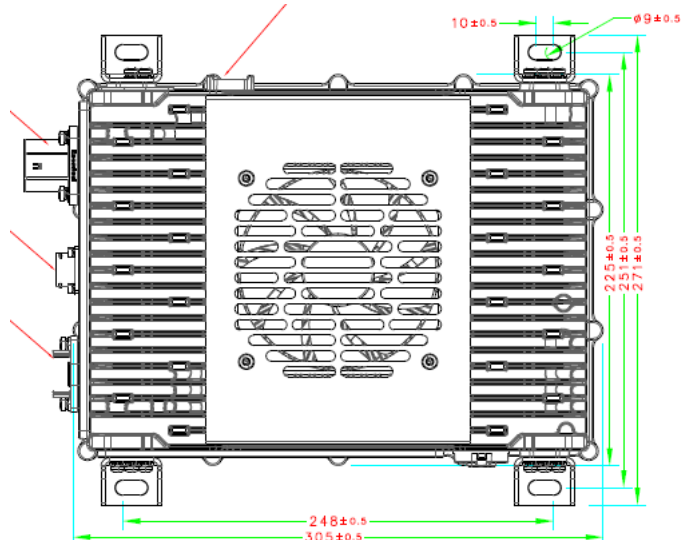
Operating Environment

The operating environment conditions of this assembly are as follows:

Items	Descriptions		Remark
1.	Operating Temperature(°C)	-40~85	The power will be derated when the temperature exceeds 65°C
2.	Storage Temperature(°C)	-40~95	
3.	relative humidity(%RH)	5~95	No condensation, no frost



4.	Vibration level	ISO 16750-3,2012 (E)	After X,Y,Z three directions of sweep frequency vibration testing, no damage for parts , no loose for fastening piece
5.	Noise level(dB)	< 60	
6.	Salt spray level	GB/T 2423.17	
7.	Altitude(M)Max	3000	GB/T16935.1-2008
8.	Fall	Wiring harness according to QC/T417.1-2001 Housing according to GB/T 2423.8-1995	Appearance, structure and performance are normal
9.	Protection Characteristics	Input OVP/UVP, output OVP/UVP, input anti-reverse connection, output short circuit protection, OCP, OTP	
10.	Electromagnetic immunity	GB/T17619-1998 chap4	
11.	Electromagnetic disturbance	GB18655-2002chap 12 chap14	



The pin defintion will be modified accroding to the approval sheet.

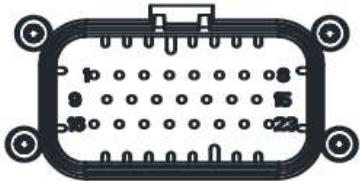
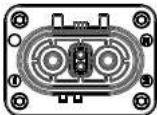
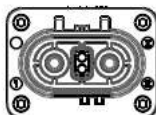


Connector Model: Adjustable as per requirement

Connector Model

Position	Function	Brand	Socket Model	Plug Model
1	Signal control	TBD		
2	HV DC input			
3	HV BUS Output			
4				

Interface Definition

Signal Control(1)		HV DC Input(2)		HV BUS Output (3)	
					
1	CANH	1	INPUT +	1	OUTPUT +
2	CANL	2	INPUT -	2	OUTPUT -
3	Enable(out)	3	HVIL +	3	HVIL +
4	GND	4	HVIL -	4	HVIL -
5	TBD				
6	TBD				
7	WAKEUP IN				
8	BAT+				
9	BAT-				

The pin definition will be modified according to the approval sheet.

Cable Current Rating Table for reference only. The actual current-carrying capacity shall be based on the cable manufacturer's specifications

CURRENT (A)	CABLE SIZE (MM2)	CURRENT (A)	CABLE SIZE (MM2)	CURRENT (A)	CABLE SIZE (MM2)
7	0.75	60	10	250	70
22	2.5	80	16	300	95
25	3	125	25	350	120
30	4	150	35		
40	6	200	50		