EV3 Series 40kW SiC Charging Module
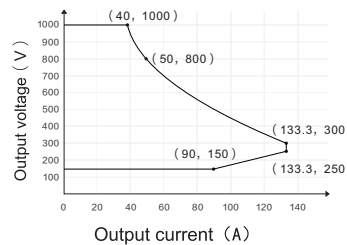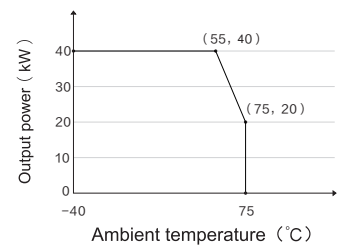
EV3102-040K-HR-UC

CE UL

Product Features

- Output voltage DC 150-1000V to meet the requirements of most electric vehicles
- DC 300-1000V wide voltage constant power output, the whole section is continuous,high reliability
- Module output peak current up to 133.3A, leading the industry
- With the SiC device, the peak efficiency of the charging module can reach 97%, which saves more power and energy, and stand-by powerconsumption less than 7.5W
- Equipped with leak circuit, which reduces the difficulty of pile design
- Module in-position detection, easy to install and maintain
- The unique three-proof design (moisture proof, fungi-proof,salt-fog-proof) and advance ddipping process are for harsh environments and ensure the long service life
- Ultra-wide operating temperature range -40~75°C, derating output above 55°C
- Four-dimensional intelligent fan control, three level intelligent noise reduction control, with lower noise
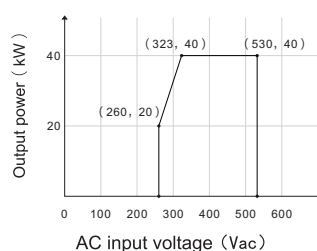
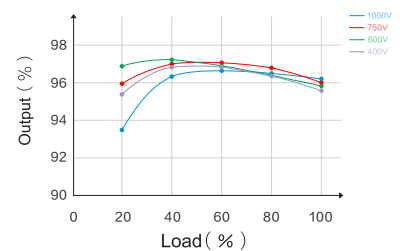## Performance Curve

Module output V-A curve

Output voltage（V）vs Output current（A）
(40, 1000)
(50, 800)
(133.3, 300)
(90, 150)
(133.3, 250)

Output power and temperture curve

Output power（kW）vs Ambient temperature（℃）
(55, 40)
(75, 20)

Output power and AC input voltage curve

Output power（kW）vs AC input voltage（Vac）
(323, 40)   (530, 40)
(260, 20)

Output efficiency curve

Output（%）vs Load（%）
1000V
750V
600V
400V

Specifications

MODEL	EV3102-040K-HR-UC
AC INPUT	
AC input voltage range (V)	260~530Vac (3W+PE)
Max. input current (A)	75
Frequency range (Hz)	45~66
PF	≥0.99
THDi	≤5%
DC OUTPUT	
Efficiency	≥97%
DC output voltage range (V)	150~1000
Constant power output voltage range (V)	300~1000
Output power (kW)	40
Max. output current (A)	133.3
OTHER INFORMATION OF EQUIPMENT	
Stand-by power consumption (W)	≤7.5
Noise level (dB)	<65 (Rated)
Current regulation accuracy	≤±1%
Voltage regulation accuracy	≤±0.5%
Output voltage error	≤±0.5%
Output current error	≤±0.3A, load current less than 30A; ≤±1%, load current no less than 30A, load current within 20%-100%
Starting impulse current	<110%
Temperature coefficient	≤±0.02% (Reference value +20°C)
Uniform flow unbalance	≤±3.0% (×20A) with load within the range of 50%~100%
Output ripple	Ripple voltage peak factor <1% Effective value coefficient <0.5%
Power overshoot range	No overshoot
Boot time	3~5s (stable rated input to required output voltage)
Dimension (W×D×H) mm	300×462×86
Weight (kg)	≤16.5
Input standby reactive power (Var)	750
EMC	Class B
CONFIGURATION AND PROTECTION	
Operation indicator	Power, alarm, fault
Communication	CAN (500kbps) + Digital enable signal
AC input three phase unbalance protection	Yes
AC input over/under voltage protection	Yes
DC output over/under voltage protection	Yes
Over-temperature protection(°C)	Protect on temperature over 75, and automatically recover when ≤70
Output current limit protection	Yes
Short-circuit protection	Yes
WORKING ENVIRONMENT	
Altitude(m)	≤2,000 (derate when altitude >2,000)
Working temperature(°C)	-40~75, rated output for temperature -20~55
Storage temperature(°C)	-40~75
Humidity	5%~95%

﹡ The product is being continuously updated, please refer to the latest information.