

REG1K0100U/G, REG1K0110U

30kW/40kW1000V ACDC Power Module

Product Introduction

REG1K0100U/G, REG1K0110U is specifically designed for EV Fast DC chargers. It has the features of high efficiency, low fan noise, high power density and high reliability. By 3 phase 4 wire AC input, it can deliver up to 30kW/40kW DC output power and cover 150 to 1000VDC output voltage range. It has obtained EMC/EMI Class B, TUV CE and US, KC certifications.

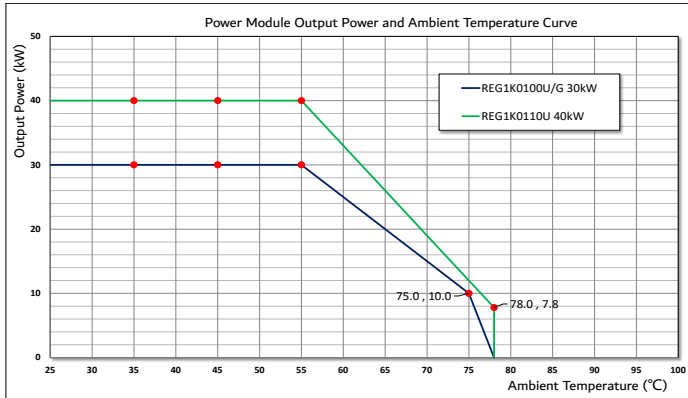
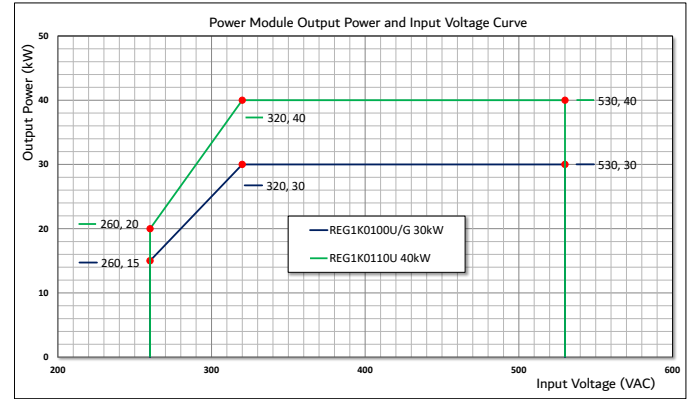
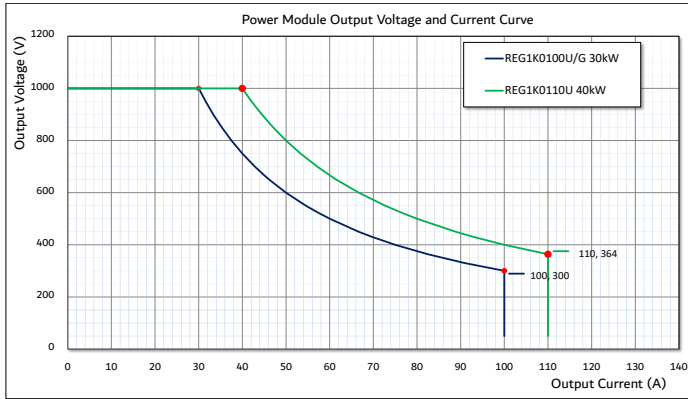


Main feature :

- Inside high frequency transformer isolation
- Full hot plug design
- TUV CE ,US and KC Certification
- Glue Filling, Conformal coating and special protection technology for high protection to improve the reliability
- Wide output voltage range, 150-1000VDC, suitable for a wide range of EVs
- Constant current for higher output power at low output voltage
- The ESTOP function can lower the output voltage to less than 60V in 300ms
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- Normal standby power consumption with 12W and Super low standby power consumption with 3W
- 3 phase without neutral eliminates the risk of high neutral current
- Super denoise mode can achieve less than 60 dB fan audio noise
- Dual DSP design provides full digital control and less components facilitate higher reliability
- Wide input voltage range, 260~530Vac, allows operation in most poor grid conditions
- Wide operating temperature range, -40°C--75°C

Application :

- DC Charger for EV with modular design, easy maintenance, cost efficiency, high power density and high quality



Technical Specification

REG1K0110U 40kW

REG1K0100G/U 30kW

Environmental	Ambient Temperature	- 40℃ ~ + 75℃, Power derating from 55℃		
	Storage Temperature	- 40℃ ~ + 70℃		
	Humidity	≤95%RH, non-condensing		
	Cooling	Fan cooling		
	Altitude	2000m		
Input Side	Frequency Range	45~65Hz		
	Input Voltage Range	3 L+PE, 260Vac ~ 530Vac		
	Power Factor	≥0.99 @full load output power, rated input voltage and frequency		
	Max Input Current	80A	58A	
	ITHD(Total harmonic distortion)	≤5% @50%~100% full load output power		
	Efficiency (peak)	≥95.5% @1000Vdc, full load power output	≥95.5% @1000Vdc, full load power output	
Output Side	Output Power	40kW @voltage >363.6Vdc	30kW @voltage >300Vdc	
	Voltage Range	150Vdc ~ 1000Vdc		
	Current Range	0~110A	0~100A	
	Current Sharing	< ±1%		
	Voltage Stabilization accuracy	< ±0.5%		
	Current Stabilization accuracy	≤±1% (output power in 20% ~ 100%)		
	Control	Communication	CAN bus, Max 32 power modules parallel	
Indication Light		Green LED: normal operation Yellow LED: alarm Red LED: failure		
Address Indication		Automatic address identification, Panel dial switch for group setting		
Noise Setting		Power mode with max 75 dB , Denoise mode with max 70 dB , Quiet mode with max 60 dB		
ESTOP/Super Standby		Quickly stop output less than 60V in 300ms. 3W standby power consumption, Outsides 12V DO control		
Alarm and protection	Input/output voltage protection	Over/under volt protection with automatic shutdown/restart when the volt returns to normal		
	Over current/short circuit protection	Automatic shutdown and lock, power off to start and unlock		
	Over temperature protection	Automatic shutdown, automatic restart when the temperature returns to normal		
EMC/EMI		EN61851-21-2, class B		
Safety		UL2202, EN61851-1, EN61851-23		
Reliability	MTBF	>300,000 h		
Mechanical	Dimension	110mm (H) ×385mm (W) ×395mm (D)		
	Weight	≤23.5 kg	≤22.5 kg	
Ordering Information	Type	REG1K0110U	REG1K0100U	REG1K0100G
Certification		TUV CE/US, KC	TUV CE/US	TUV CE, KC