

REG75020SG

7kW750V Charger Power Module

Product Introduction

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REG75020SG is specially designed for EV DC chargers in the single phase commercial grid application. Easily integrated into the portable charger, high efficiency, high power density and high reliability.

Single phase AC input and DC output voltage range from 150 to 750VDC with constant 7kW output power upper 350V.





Main feature:

- Special portable application design, easy integration , easy assembly
- IP20, multi protective design, outdoor application consideration
- High efficiency over the full load range ,full load efficiency greater than 94 %
- Wide output voltage range,150-750VDC,suitable for a wide range of EVs
- 7KW constant power output from 350V to 750V
- Constant current for higher output power at low output voltage
- From -40°C to 55°C ambient temperature full power output
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- Wide input scale, 90Vac~280Vac, fit different grid environment
- Low standby power consumption, less than 8W

Application:

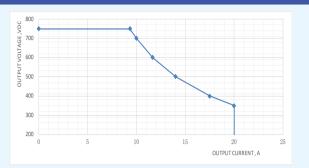
- Portable EV charger
- Commercial and Home application with no 3 phase grid



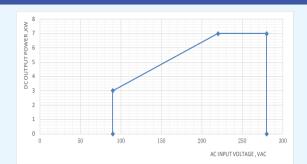
7kW750V Charger Module

INFY POWER

Output Voltage Vs Output Current Curve



Input Voltage Vs Output Power Curve



Portable Application

Portable Application



Technical Specific	cation	
Environmental	Ambient Temperature	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$, derating from 55°C
	Storage Temperature	- 40°C ∼ + 75°C
	Humidity	≤95%RH, non-condensing
	Cooling	Fan cooling
	Altitude	2000m
Input Side	Frequency Range	45~65Hz
	Input Voltage range	L+N+PE, 90Vac ~ 280Vac
	Power Factor	0.99
	ITHD(Total harmonic distortion)	≤5%
	Efficiency (top)	\geq 94%, @750Vdc/50%~100% Load current, Max point \geq 95.0%
	Output power	7kW@ voltage >350Vdc
	Voltage range	150Vdc ~ 750Vdc
Output Side	Current range	0~20A
Output sluc	Current sharing	< ±0.5
	Voltage stabilized accuracy	< ±0.5%
	Current stabilized accuracy	$\leq \pm 1\%$ (output power in 20% ~ 100%)
	Communication	CAN BUS
Control	Indication Light	Green LED: normal operation Yellow LED: alarm Red LED: failure
	Address Indication	Automatic address identification
	Input/output voltage protection	Over/under voltage will automatic shut down and restart when voltage return to normal
Alarm and protection	Over current/short circuit protection	Automatic shutdown and lock, need power off to restart to unlock
	Over temperature protection	Automatic shutdown, automatic restart when the temperature return to normal
Reliability and safety	MTBF	>500,000 h
	Safety/EMC/EMI	EN61851-21-2, class A, EN61851-1, EN61851-23
Mechanical	Dimension	87mm (H) ×178mm (W) ×385mm (D)
	Weight	≤7 kg
Ordering Information	Туре	REG75020SG EV charger power module
	Cable	/

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REG75030G

15kW750V Charger Power Module

Product Introduction

REG75030G is specially designed for EV DC chargers. It has high efficiency, high power factor, high power density and high reliability advantage. 3 phase 4 wire AC input, DC output voltage range is from 150 to 750VDC with 15kW output power, compliant with CE safety standard EN61851-1, EN61851-23 requirements, and EN61851-21-2 EMC standard.





Main feature:

- Inside high frequency transformer isolation
- Full hot plug design
- High efficiency over the full load range, full load efficiency higher than 95.5%
- Wide output voltage range, 150-750VDC, suitable for a wide range of EVs
- Constant current for higher output power at low output voltage
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- Low standby power consumption, less than 9W
- 3 phase without neutral eliminates the risk of high neutral currents
- 3 phase active power factor correction technology, reduces the harmonic interference to the grid
- Dual DSP design, provides the full digital control ,less components means higher reliability
- Wide input voltage range, 260~530Vac, allows operation in most poor grid conditions
- Wide operating temperature range, -40°C--+75°C

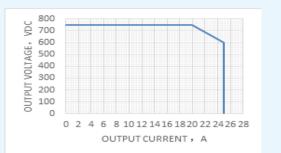
Application:

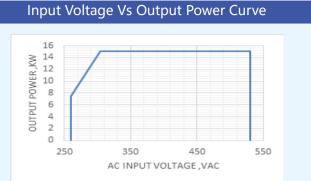
DC Charger for EV, with modular design, easily maintenance, cost efficiency, high power density and high quality



15kW750V Charger Power Module

Output Voltage Vs Output Current Curve





Ambient Temperature Vs Output Power Curve



Technical Specification

rechnical specific		
Environmental	Ambient Temperature	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$, derating from 55°C
	Storage Temperature	-40°C ∼ +75°C
	Humidity	≤95%RH, non-condensing
	Cooling	Fan cooling
	Altitude	2000m
	Frequency Range	45~65Hz
	Input Voltage range	3 L+PE, 260Vac ~ 530Vac
Input Side	Power Factor	0.99
input side	Max Input current	30A
	ITHD(Total harmonic distortion)	≤5%
	Efficiency (top)	\geq 94%, @750Vdc/50%~100% Load current, Max point \geq 95.5%
	Output power	15kW@ voltage >600Vdc
	Voltage range	150Vdc ~ 750Vdc
Output Side	Current range	0~25A
Output side	Current sharing	< ±0.5 A
	Voltage stabilized accuracy	< ±0.5%
	Current stabilized accuracy	$\leq \pm 1\%$ (output power in 20% ~ 100%)
	Communication	CAN bus, Max 48 power modules parallel
Control	Indication Light	Green LED: normal operation Yellow LED: alarm Red LED: failure
	Address Indication	Automatic address identification, Panel dial switch for group setting
	Input/output voltage protection	Over/under voltage will automatic shut down and restart when voltage return to normal
Alarm and protection	Over current/short circuit protection	Automatic shutdown and lock, need power off to restart to unlock
	Over temperature protection	Automatic shutdown, automatic restart when the temperature return to normal
	MTBF	>500,000 h
Reliability and safety	Safety	Compliant with CE
Mechanical	Dimension	84mm (H) ×226mm (W) ×395mm (D)
	Weight	≤11 kg
Ordering Information	Туре	REG75030G EV charger power module
	Cable	REG20KW11, REG20KW22



REG50045G

16kW500V Charger Power Module

Product Introduction

REG50045G is specially designed for EV DC chargers in Global market with CE and UL certicification. It has high efficiency, high power factor, high power density and high reliability advantage. 3 phase 4 wire AC input, DC output voltage range is from 150 to 500VDC with 16kW output power, compliant with UL safety standard UL2202, and EN61851-21-2 EMC standard.





Main feature:

- Inside high frequency transformer isolation
- Full hot plug design
- High efficiency over the full load range, full load efficiency higher than 95.5%
- Wide output voltage range, 150-500VDC, suitable for a wide range of EVs
- Constant current for higher output power at low output voltage
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- Low standby power consumption, less than 9W
- 3 phase without neutral eliminates the risk of high neutral currents
- 3 phase active power factor correction technology, reduces the harmonic interference to the grid
- Dual DSP design, provides the full digital control ,less components means higher reliability
- Wide input voltage range, 260~530Vac, allows operation in most poor grid conditions
- Wide operating temperature range, -40°C--+75°C

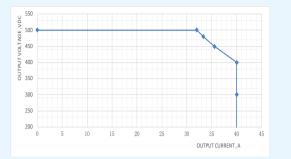
Application:

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



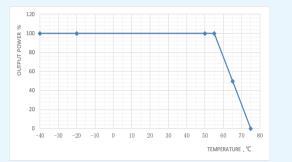
16kW500V Charger Power Module

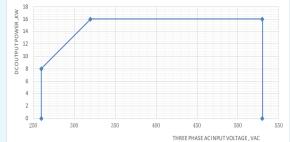
Output Voltage Vs Output Current Curve



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Ambient Temperature Vs Output Power Curve





Input Voltage Vs Output Power Curve

Technical Specification

rechnical specific	alion	
	Ambient Temperature	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$, derating from 55°C
Environmental	Storage Temperature	-40°C ∼ +75°C
	Humidity	≤95%RH, non-condensing
	Cooling	Fan cooling
	Altitude	2000m
	Frequency Range	45~65Hz
	Input Voltage range	3 L+PE, 260Vac ~ 530Vac
Input Side	Power Factor	0.99
input side	Max Input current	32A
	ITHD(Total harmonic distortion)	≤5%
	Efficiency (top)	≥94%, @500Vdc/50%~100% Load current, Max point≥95.5%
	Output power	16kW@ voltage >400Vdc
	Voltage range	150Vdc ~ 500Vdc
Output Side	Current range	0~40A
Output side	Current sharing	< ±0.5 A
	Voltage stabilized accuracy	< ±0.5%
	Current stabilized accuracy	$\leq \pm 1\%$ (output power in 20% ~ 100%)
	Communication	CAN bus, Max 48 power modules parallel
Control	Indication Light	Green LED: normal operation Yellow LED: alarm Red LED: failure
	Address Indication	Automatic address identification, Panel dial switch for group setting
	Input/output voltage protection	Over/under voltage will automatic shut down and restart when voltage return to normal
Alarm and protection	Over current/short circuit protection	Automatic shutdown and lock, need power off to restart to unlock
	Over temperature protection	Automatic shutdown, automatic restart when the temperature return to normal
	MTBF	>500,000 h
Reliability and safety	Safety	TUV UL/CE certicification
	EMC/EMI	EN61851-21-2, class B
Mechanical	Dimension	85mm (H) ×226mm (W) ×395mm (D)
	Weight	≤11 kg
Ordering Information	Туре	REG50045G EV charger power module
	Cable	REG20KW11, REG20KW22



REG1K025G

20kW1000V Charger Power Module

Product Introduction

REG1K025G is specially designed for EV DC chargers. It has high efficiency, high power factor, high power density and high reliability advantage. 3 phase 4 wire AC input, DC output voltage range is from 150 to 1000VDC with 20kW output power, compliant with CE safety standard EN61851-1, EN61851-23 requirements, and EN61851-21-2 EMC standard.





Main feature:

- Inside high frequency transformer isolation
- Full hot plug design
- High efficiency over the full load range, full load efficiency higher than 95%
- Wide output voltage range, 150-1000VDC, suitable for a wide range of EVs
- Constant current for higher output power at low output voltage
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- Low standby power consumption, less than 10W
- 3 phase without neutral eliminates the risk of high neutral currents
- 3 phase active power factor correction technology, reduces the harmonic interference to the grid
- Dual DSP design, provides the full digital control ,less components means higher reliability
- Wide input voltage range, 260~530Vac, allows operation in most poor grid conditions
- Wide operating temperature range, -40°C--+75°C

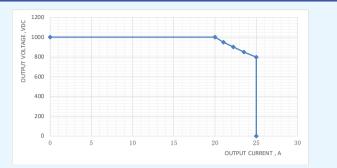
Application:

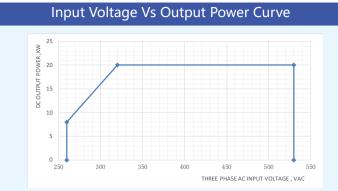
DC Charger for EV, with modular design, easily maintenance, cost efficiency, high power density and high quality



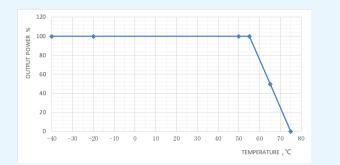
20kW1000V Charger Power Module

Output Voltage Vs Output Current Curve





Ambient Temperature Vs Output Power Curve



Technical Specification

rechnical specific	alion	
Environmental	Ambient Temperature	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$, derating from 55°C
	Storage Temperature	- 40°C ∼ + 75°C
	Humidity	≤95%RH, non-condensing
	Cooling	Fan cooling
	Altitude	2000m
	Frequency Range	45~65Hz
	Input Voltage range	3 L+PE, 260Vac ~ 530Vac
Input Side	Power Factor	0.99
input side	Max Input current	38A
	ITHD(Total harmonic distortion)	≤5%
	Efficiency (top)	\geq 95%, @1000Vdc/50%~100% Load current, Max point \geq 95.5%
	Output power	20KW@ voltage >800Vdc
	Voltage range	150Vdc ~ 1000Vdc
Output Side	Current range	0~25A
Output Side	Current sharing	< ±0.5 A
	Voltage stabilized accuracy	< ±0.5%
	Current stabilized accuracy	$\leq \pm 1\%$ (output power in 20% ~ 100%)
	Communication	CAN bus, Max 48 power modules parallel
Control	Indication Light	Green LED: normal operation Yellow LED: alarm Red LED: failure
	Address Indication	Automatic address identification, Panel dial switch for group setting
	Input/output voltage protection	Over/under voltage will automatic shut down and restart when voltage return to normal
Alarm and protection	Over current/short circuit protection	Automatic shutdown and lock, need power off to restart to unlock
	Over temperature protection	Automatic shutdown, automatic restart when the temperature return to normal
Reliability and safety	MTBF	>500,000 h
	Safety	Compliant with CE
Mechanical	Dimension	84mm (H) ×226mm (W) ×395mm (D)
	Weight	≤11 kg
Ordering Information	Туре	REG1K025G EV charger power module
	Cable	REG20KW21E, input cables, 1.8M; REG20KW32, output cables, 1.8M



REG1K0100G/REG1K0100U

30kW1000V Charger Power Module

Product Introduction

REG1K0100G/U is specially designed for EV DC chargers. It has high efficiency, low fan noise, high power density and high reliability advantage. 3 phase 4 wire AC input, DC output voltage range is from 150 to 1000VDC with 30kW output power, EMC/EMI satisfy TUV CE certicification with class B level, and safety satisfy both TUV UL and CE certicification.



Main feature:

- Inside high frequency transformer isolation
- Full hot plug design
- TUV CE/UL, KC Certicification, EMC class B level
- Air duct isolation design for high protection and high reliability for harsh environment
- Wide output voltage range, 150-1000VDC, suitable for a wide range of EVs
- Constant current for higher output power at low output voltage
- Super denoise mode can get less 55 dB fan audio noise
- An internal patented intelligent discharge circuit automatically discharges residual charge, simplifying system designs
- Low standby power consumption with 12W. Super standy power consumption with 2W.
- 3 phase without neutral eliminates the risk of high neutral currents
- 3 phase active power factor correction technology, reduces the harmonic interference to the grid
- Dual DSP design, provides the full digital control ,less components means higher reliability
- Wide input voltage range, 260~530Vac, allows operation in most poor grid conditions
- Wide operating temperature range, -40°C--+75°C

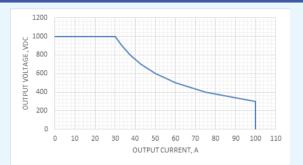
Application:

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

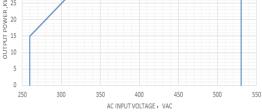


30kW1000V Charger Power Module

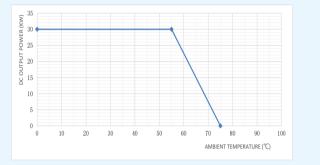
Output Voltage Vs Output Current Curve



Input Voltage Vs Output Power Curve 35 30 ₹ 25



Ambient Temperature Vs Output Power Curve



Technical Specification

E-mail: contact@Infypower.com

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Environmental	Ambient Temperature	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$, derating from 55°C
	Storage Temperature	$-40^{\circ}C \sim +70^{\circ}C$
	Humidity	≤95%RH, non-condensing
	Cooling	Fan cooling
	Altitude	2000m
	Frequency Range	45~65Hz
	Input Voltage range	3 L+PE, 260Vac ~ 530Vac
Input Side	Power Factor	0.99
input side	Max Input current	58A
	ITHD(Total harmonic distortion)	≤5%
	Efficiency (top)	≥95%, @350~500V/680~1000Vdc/60%~100% Load current, Max point≥95.5%
	Output power	30kW@ voltage >300Vdc
	Voltage range	150Vdc ~ 1000Vdc
Output Side	Current range	0~100A
Output side	Current sharing	< ±1 A
	Voltage stabilized accuracy	< ±0.5%
	Current stabilized accuracy	$\leq \pm 1\%$ (output power in 20% ~ 100%)
	Communication	CAN bus, Max 48 power modules parallel
	Indication Light	Green LED: normal operation Yellow LED: alarm Red LED: failure
Control	Address Indication	Automatic address identification, Panel dial switch for group setting
	Noise Setting	Power mode with max 75 dB , Denoise mode with max 65 dB , Quiet mode with max 55 dB
	Super Standby	Outerside 12V or 5V DO control
	Input/output voltage protection	Over/under voltage will automatic shut down and restart when voltage return to normal
Alarm and protection	Over current/short circuit protection	Automatic shutdown and lock, need power off to restart to unlock
	Over temperature protection	Automatic shutdown, automatic restart when the temperature return to normal
EMC/EMI	TUV CE certification	EN61851-21-2, class B
Safety	TUV UL/CE certification	UL2202, EN61851-1, EN61851-23
Reliability	MTBF	>300,000 h
Mechanical	Dimension	110mm (H) ×385mm (W) ×395mm (D)
	Weight	≤22.5 kg
Ordering Information	Туре	CE/KC Version: REG1K0100G CE/UL Version: REG1K0100U
	Cable	REG30KW31E-18, REG30KW42-18

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