

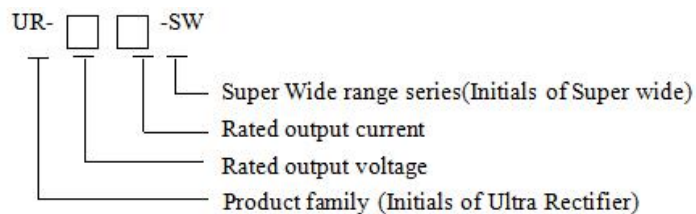
20KW Super wide constant power Charging Rectifier

UR100020-SW

20KW wide range constant power charging rectifier is specially developed for the EV DC super charger. Its output constant power range is very wide, can charge all electric buses and cars, product cost-effective.



Product Definition



Features

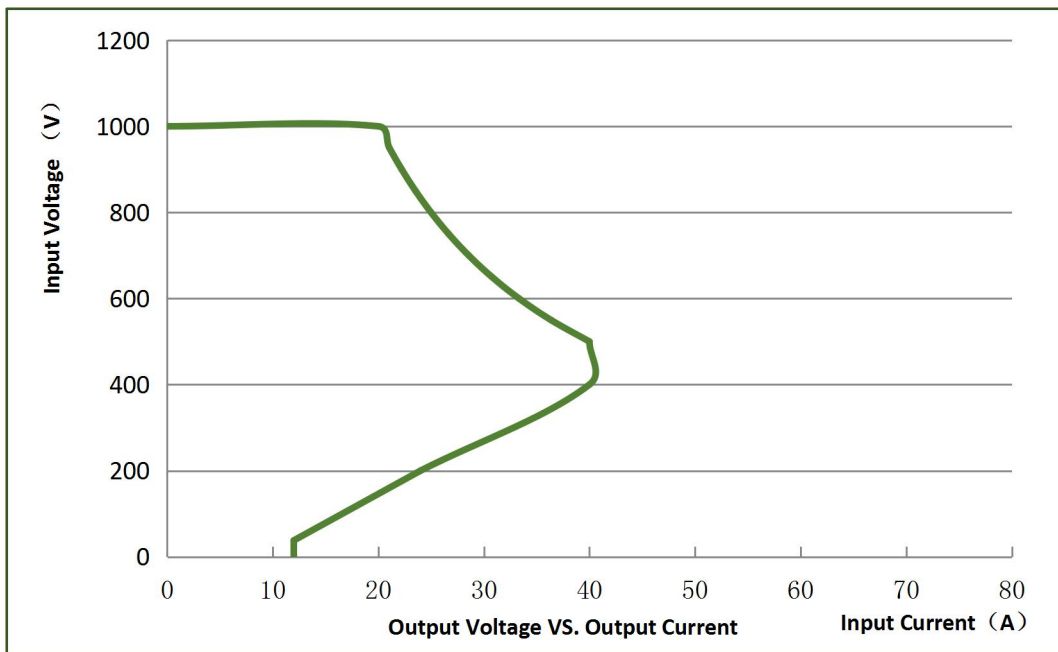
- ◆ Ultra high efficiency: the highest efficiency > 96%, rated efficiency > 95% ;
- ◆ Super small size: 248mm*84mm*460mm (height * width * depth) ;
- ◆ Ultra high power density: power density up to 45W/in³ ;
- ◆ Ultra wide output voltage range: 150VDC ~ 1000VDC ;
- ◆ Ultra small output ripple voltage: peak-to-peak ripple ≤ 2V ;
- ◆ Ultra small standby power consumption: standby power ≤ 11W ;
- ◆ Complete protection and alarm functions: input over/under voltage, output over voltage, over current, Over temperature protection, output under voltage alarm, output short circuit protection ;
- ◆ LED can display output voltage, output current, group address, protocol, module address, manual or automatic, fault information ;
- ◆ Support CAN, 485 bus communication, power modules can be grouped by controller ; ;
- ◆ Adopt DSP digital control and support voltage and current adjustment function ;
- ◆ Battery current reverse protection circuit inside, support hot swap ;
- ◆ Discharge circuit inside.

Electrical Parameters

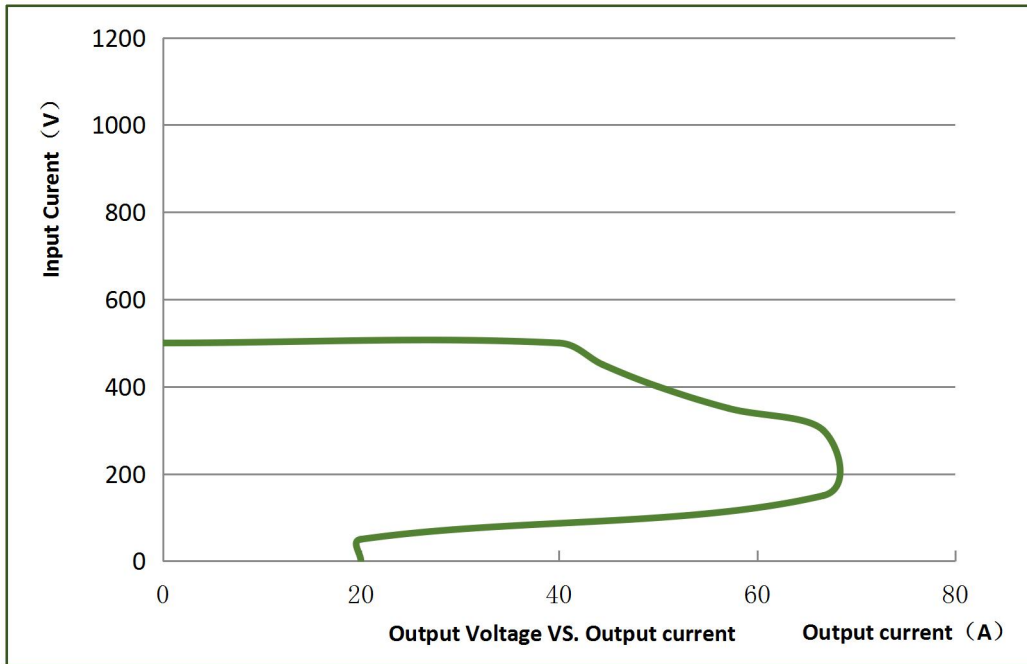
Item	Parameter	
	Model	
	UR100020-SW	
DC output	Rated Output	1000V/20A
	Constant power	20KW @ 300-1000V
	Output voltage range	150~1000VDC
	Limited current range	0.5A ≤ I ≤ 66.7A
	Output overvoltage protection	1010±5V
	Output under voltage alarm	190V±2V
	Short circuit protection	Output current decreases when short circuit occurs.
	Voltage stabilized accuracy	≤±0.5%
	Load sharing	≤±3%
	Max. startup overshoot	≤±1%
	Current stabilized accuracy	≤±1%
	Startup Time	Normally 3s≤t≤8s
	Efficiency	Highest efficiency>96%, rated efficiency>95%
AC input	Input voltage	260VAC~485VAC (3phase without neutral)
	Input frequency	45Hz~65Hz
	THD	≤5%
	Power factor	Rated output load PF ≥ 0.99
	Max. input current	<40A
	Input under voltage protection	255V ±5V
	Input over voltage protection	490V ±5V
	Input Power Derating	260V ±5V < Vin < 304V ±5V, Linear derating from 100% to 50%.

Communication & Alarm	Communication	CAN & 485
	Max. Number of parallel machines	60pcs
	Alarm and status	Report to monitor via CAN bus or 485 bus ; Display it on LED panel
Operating Environment	Operating temperature	-30°C~70°C, derating from 55°C
	Over temperature protection	On temperature >70°C±4°C or <-40°C±4°C, module will shut down automatically
	Storage temperature	-40°C~85°C
	Humidity	≤95% RH, without condensation
	Pressure/Altitude	79kPa~106kPa/2000m
Physical Characteristics	Acoustic Noise	<60dB
	Cooling	Fan cooling
	Dimensions	248mm (H) *84mm (W) *460mm (D)
	Weight	<15Kg
	MTBF	>500000 hrs (40°C)

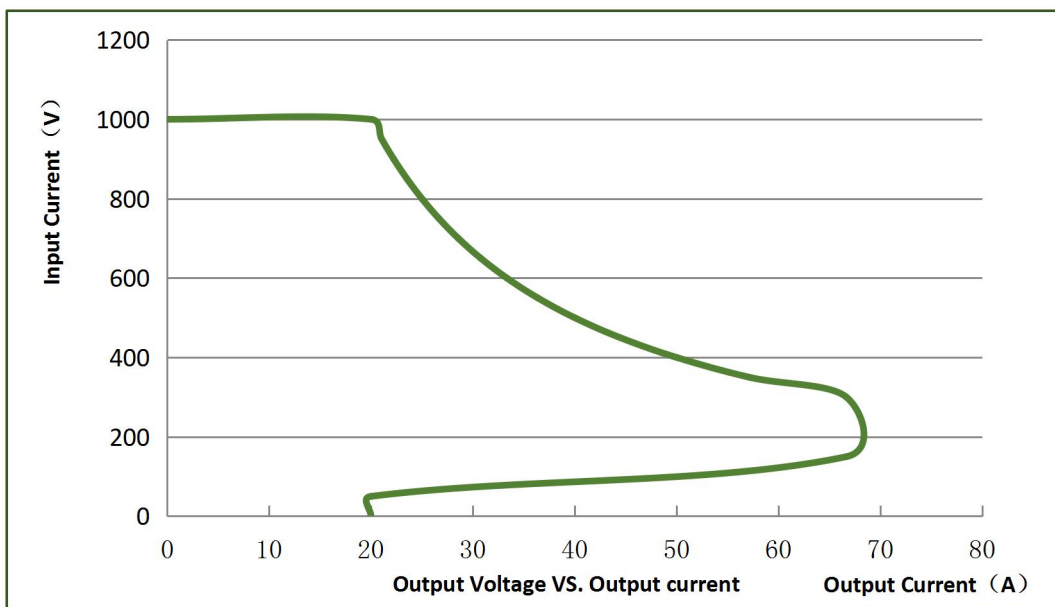
UR100020-SW Main Features



High Voltage Mode



Low Voltage Mode



Maximum Output Power

High Voltage Mode + Low Voltage Mode = Maximum Output Power