



EV Charging Solution Catalog



Stock Code
002335.SZ
Kehua EV Charger

An aerial photograph showing a two-lane asphalt road running vertically through a lush green forest. The road has a white dashed center line and a solid white edge line. A few cars are visible on the road. The surrounding forest is dense with various types of trees, including tall evergreens and shorter deciduous trees. The lighting suggests it's daytime, with sunlight filtering through the canopy.

35+ Years

Power conversion experience

2010

Shenzhen-A share listing

320,000m²

Manufacture area

2 million units

Annual production

Kehua EV Charging Solution

Kehua was established in 1988 and listed on the Shenzhen A-share market in 2010 with the stock code 002335. In 2001, Kehua established its subsidiary, Shenzhen Kehua Hengsheng Technology Co., Ltd. which committed to being a reliable EV charging equipment provider.

With over 35 years of technology accumulation in the power electronics industry and a team of over 1000 R&D engineers, Shenzhen kehua provides a total EV charging solution. The product portfolio includes DC charging modules, AC chargers, DC fast chargers for EV charging and swap stations, Megawatt charging systems, V2G charging equipment, and PV+ESS products. We have been awarded "the Best Charging and Swapping Equipment in China" and "Charging and Swapping Industry Influential Brands".

Kehua has five manufacturer bases covering an area of 320,000 m² with an annual production capacity of 2 million units. We have obtained certifications such as IATF 16949, ISO 14001, and ISO 9001. Additionally, our products are certified with CE and UL.

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EV3 Series 15kW Charging Module

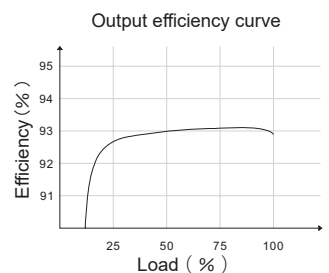
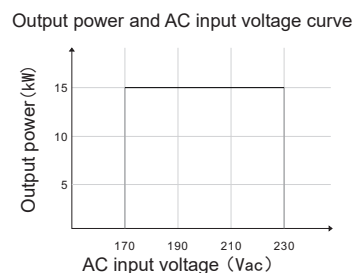
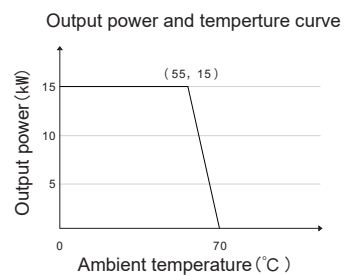
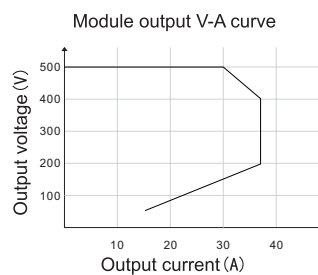
EV2501-015K-HR



Product Features

- Output voltage DC 150-500V to meet the requirements of most electric vehicles
- DC 400-500V wide voltage constant power output, the whole section is continuous, no switching, high reliability
- Module output peak current up to 37.5A, leading the industry
- High efficiency and low loss, peak efficiency high up to 93%, and stand-by power consumption less than 7.5W
- Equipped with leak circuit, which reduces the difficulty of pile design
- Module in-position detection, easy to install and maintain
- Unique three-proof design (moisture-proof, fungiproof and salt fog-proof), which guarantees long life cycle
- Hot-plug design, easy to maintain
- Module address intelligent recognition

Performance Curve



Technical Specification

MODEL	EV2501-015K-HR
AC INPUT	
AC input voltage range (V)	170~230Vac (3W+PE)
Max. input current (A)	56
Frequency range (Hz)	45~66
PF	≥0.99
THDi	≤5%
DC OUTPUT	
Efficiency	≥93%
DC output voltage range (V)	150~500
Constant power output voltage range (V)	400~500
Output power (kW)	15
Max. output current (A)	37.5
OTHER INFORMATION OF EQUIPMENT	
Stand-by power consumption (W)	≤7.5
Noise level (dB)	<65 (T=25°C; Line voltage Vin=200VAC; Rated output full load)
Current regulation accuracy	±1%(20%~100% load)
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	≤ ±5% 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	3s~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
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 70, and automatically recover when ≤65
Output current limit protection	Yes
Short-circuit protection	Yes
WORKING ENVIRONMENT	
Altitude (m)	≤2,000 (derate when altitude >2,000)
Working temperature (°C)	-20~70, derating output for temperature above 55
Storage temperature (°C)	-40~75
Humidity	5%~95%

- The size of the product shall be subject to the actual contract.
- Specification is subject to change without prior notice.

EV3 Series 20kW Charging Module

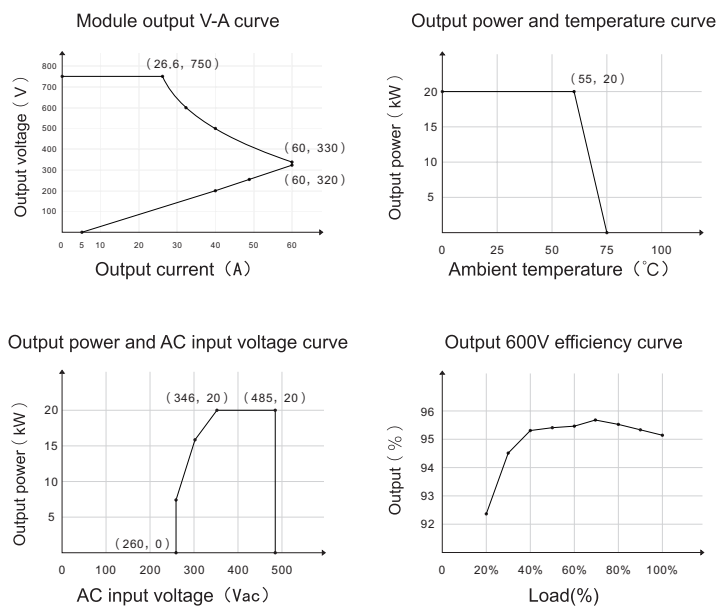
EV3751-020K-HR



Product Features

- Output voltage DC 200-750V to meet the requirements of most electric vehicles
- DC 330-750V wide voltage constant power output, the whole section is continuous, no switching, high reliability
- Module output peak current up to 60A, leading the industry
- High efficiency and low loss, peak efficiency high up to 95.5%, and stand-by power consumption less than 5.5W
- Equipped with leak circuit, which reduces the difficulty of pile design
- Module in-position detection, easy to install and maintain
- Unique three-proof design (moisture-proof, fungiproof and salt fog-proof), which guarantees long life cycle
- Hot-plug design, easy to maintain
- Module address intelligent recognition

Performance Curve



Technical Specification

MODEL	EV3751-020K-HR
AC INPUT	
AC input voltage range (V)	260~485Vac (3W+PE)
Max. input current (A)	36
Frequency range (Hz)	45~66
PF	≥0.99
THDi	≤5%
DC OUTPUT	
Efficiency	≥95.5%
DC output voltage range (V)	200~750
Constant power output voltage range (V)	330~750
Output power (kW)	20
Max. output current (A)	60
OTHER INFORMATION OF EQUIPMENT	
Stand-by power consumption (W)	≤5.5
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	3s~8s (stable rated input to required output voltage)
Dimension (W×D×H) mm	223×400×87
Weight (kg)	≤12
Input standby reactive power (Var)	350
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)	-20~75, derating output for temperature above 55
Storage temperature (°C)	-40~75
Humidity	5%~95%

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EV3 Series 20kW Charging Module

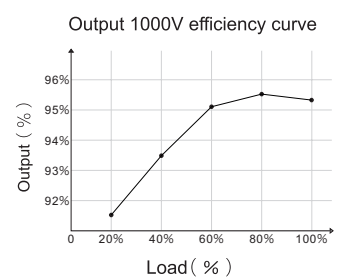
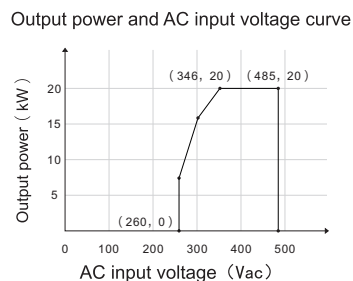
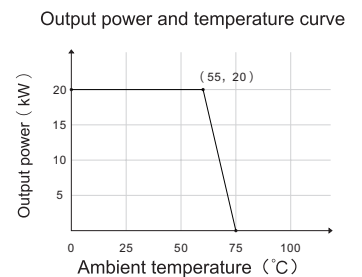
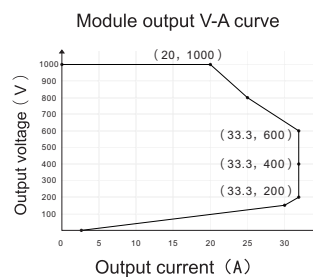
EV3102-020K-HR



Product Features

- Output voltage DC 150-1000V to meet the requirements of most electric vehicles
- DC 600-1000V wide voltage constant power output, the whole section is continuous, no switching, high reliability
- Module output peak current up to 33.3A, leading the industry
- High efficiency and low loss, peak efficiency high up to 95.5%, and stand-by power consumption less than 5W
- Equipped with leak circuit, which reduces the difficulty of pile design
- Module in-position detection, easy to install and maintain
- Unique three-proof design (moisture-proof, fungiproof and salt fog-proof), which guarantees long life cycle
- Hot-plug design, easy to maintain
- Module address intelligent recognition

Performance Curve



Technical Specification

MODEL	EV3102-020K-HR
AC INPUT	
AC input voltage range (V)	260~485Vac (3W+PE)
Max. input current (A)	36
Frequency range (Hz)	45~66
PF	≥0.99
THDi	≤5%
DC OUTPUT	
Efficiency	≥95.5%
DC output voltage range (V)	150~1000
Constant power output voltage range (V)	600~1000
Output power (kW)	20
Max. output current (A)	33.3
OTHER INFORMATION OF EQUIPMENT	
Stand-by power consumption (W)	≤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	223×400×87
Weight (kg)	≤12
Input standby reactive power (Var)	350
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)	-20~75, derating output for temperature above 55
Storage temperature (°C)	-40~75
Humidity	5%~95%

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EV3 Series 30kW Charging Module

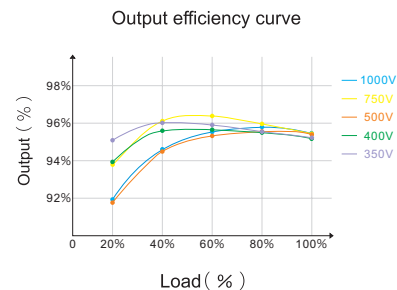
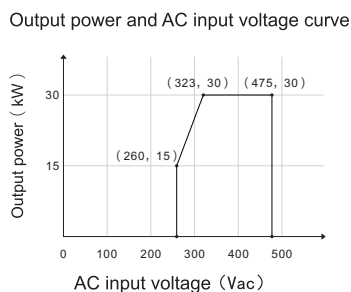
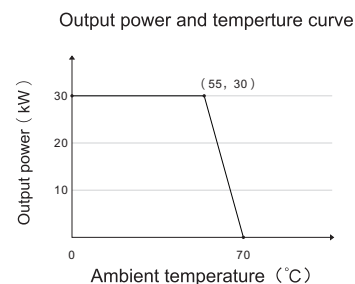
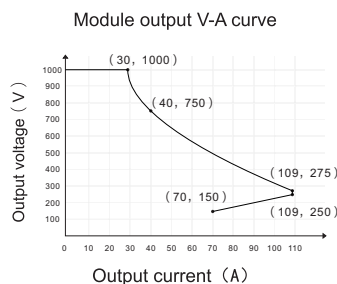
EV3102-030K-HR1



Product Features

- Output voltage DC 150-1000V to meet the requirements of most electric vehicles
- DC 275-1000V wide voltage constant power output, the whole section is continuous, high reliability
- Module output peak current up to 109A, leading the industry
- High efficiency and low loss, peak efficiency high up to 96%, and stand-by power consumption 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 advanced dipping process are for harsh environments and ensure the long service life
- Hot-plug design, easy to maintain
- Module address intelligent recognition
- Meet EMC Class B

Performance Curve



Technical Specification

MODEL	EV3102-030K-HR1
AC INPUT	
AC input voltage range (V)	260~475Vac (3W+PE)
Max. input current (A)	58
Frequency range (Hz)	45~66
PF	≥0.99
THDi	≤5%
DC OUTPUT	
Efficiency	≥96%
DC output voltage range (V)	150~1000
Constant power output voltage range (V)	275~1000
Output power (kW)	30
Max. output current (A)	109 (<30°C)/100 (≥30°C)
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(°C)	≤±0.02% (Reference value +20)
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 70, and automatically recover when ≤65
Output current limit protection	Yes
Short-circuit protection	Yes
WORKING ENVIRONMENT	
Altitude (m)	≤2,000 (derate when altitude >2,000)
Working temperature (°C)	-20~70, derating output for temperature above 55
Storage temperature (°C)	-40~75
Humidity	5%~95%

- The size of the product shall be subject to the actual contract.
- Specification is subject to change without prior notice.

EV3 Series 30kW Charging Module

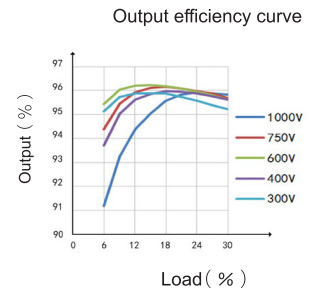
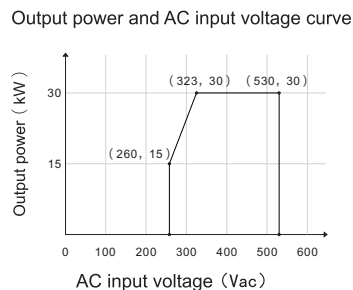
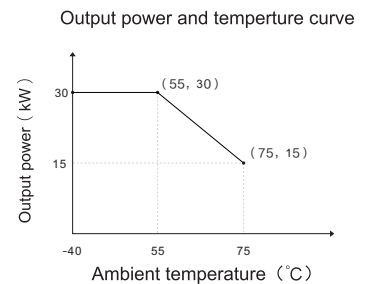
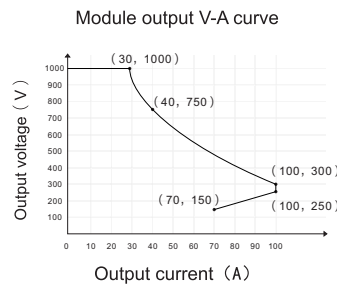
EV3102-030K-HR1(UL)



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 100A, leading the industry
- High efficiency and low loss, peak efficiency high up to 96%, and stand-by power consumption 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 advanced dipping process are for harsh environments and ensure the long service life
- Hot-plug design, easy to maintain
- Module address intelligent recognition

Performance Curve



Technical Specification

MODEL	EV3102-030K-HR1(UL)
AC INPUT	
AC input voltage range (V)	260~530Vac (3W+PE)
Max. input current (A)	58
Frequency range (Hz)	45~66
PF	≥0.99
THDi	≤5%
DC OUTPUT	
Efficiency	≥96%
DC output voltage range (V)	150~1000
Constant power output voltage range (V)	300~1000
Output power (kW)	30
Max. output current (A)	100
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
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, derating output for temperature above 55
Storage temperature (°C)	-40~75
Humidity	5%~95%

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- Specification is subject to change without prior notice.

EV3 Series 40kW Charging Module

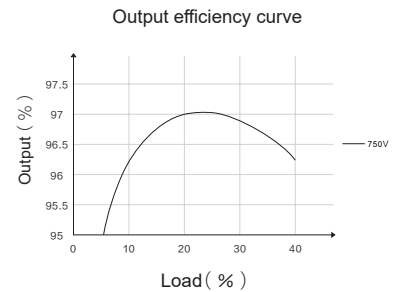
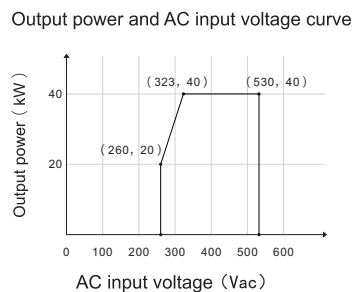
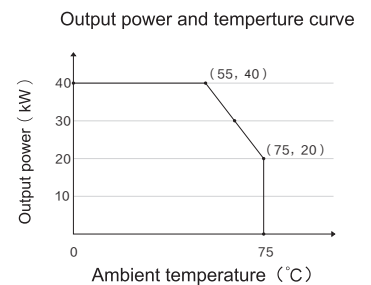
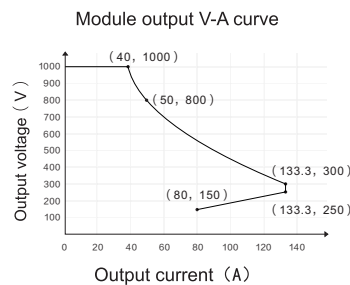
EV3102-040K-HR-UC



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 power consumption 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 advanced dipping 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



Technical Specification

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)	600
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 size of the product shall be subject to the actual contract.
- Specification is subject to change without prior notice.

EV3 Series 30kW V2G Module

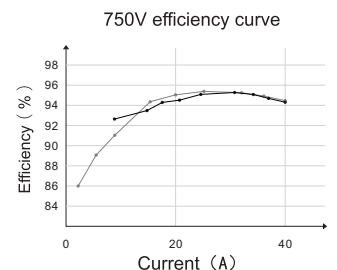
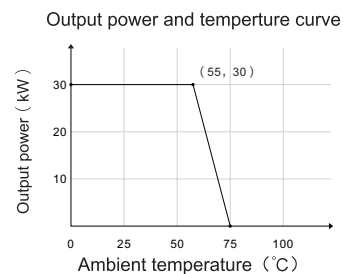
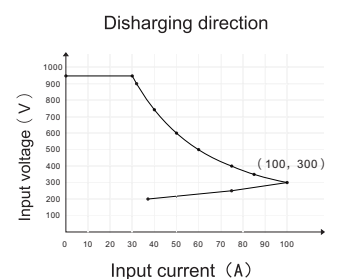
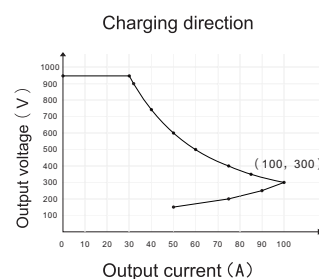
EV3102-030K-GR



Product Features

- A bidirectional converter for connecting the battery or EV to the AC grid, specially designed for V2G applications
- DC 300-950V wide voltage constant power output or input, the whole section is continuous, no switching, high reliability
- Wide voltage range in AC2DC and DC2AC mode, suitable for multiple battery packs
- Smooth transition with less than 10ms when power flow changes direction
- Module peak current up to 100A, leading the industry
- High efficiency and low loss, peak efficiency high up to 95%
- Equipped with leak circuit, which reduces the difficulty of pile design
- Unique three-proof design (moisture-proof, fungiproof and salt fog-proof) and advanced dip coating process, which guarantee long life cycle
- Hot-plug design and module address intelligent recognition, easy to maintain

Performance Curve



Technical Specification

MODEL	EV3102-030K-GR
AC2DC MODE-AC INPUT	
AC input voltage range (V)	323~437Vac
Frequency range (Hz)	45~55
AC2DC MODE-DC OUTPUT	
Output power (kW)	30
DC output voltage range (V)	150~950
Constant power output voltage range (V)	300~950
Max. input current (A)	100
DC2AC MODE-DC INPUT	
DC input voltage range (V)	200~950
Max. input current (A)	100
DC2AC MODE-AC OUTPUT	
AC output voltage range (V)	323~437Vac
Frequency range (Hz)	49~51
Power factor	>0.99 (100% load)
THDi	≤5% (50% load)
Current direct component	<0.5%
OTHER INFORMATION OF EQUIPMENT	
Efficiency	≥95%
Stand-by power consumption (W)	≤15
Noise level (dB)	<65 (Rated)
Current regulation accuracy	≤±1%
Voltage regulation accuracy	≤±0.5%
Starting impulse current	<110%
Temperature coefficient	≤±0.02% (Reference value +20°C)
Power overshoot range	No overshoot
Boot time	3~8s (stable rated input to required output voltage)
Dimension (W×D×H) mm	385×500×110
Weight (kg)	≤26
CONFIGURATION AND PROTECTION	
Operation indicator	Power, alarm, fault
Communication	CAN(125kbps) + Digital enable signal
AC input three phase unbalance protection	Yes
Input over/under voltage protection	Yes
Output over/under voltage protection	Yes
Over-temperature protection (°C)	Protect on temperature over 75, and automatically recover when ≤70
Current limit protection	Yes
Short-circuit protection	Yes
WORKING ENVIRONMENT	
Altitude (m)	≤2,000 (derate when altitude >2,000)
Working temperature (°C)	-25~75, derating output for temperature above 55
Storage temperature (°C)	-40~75
Humidity	5%~95%

- The size of the product shall be subject to the actual contract.
- Specification is subject to change without prior notice.

Applications



Shell (China) Public Charging Station
Mobility Hub



BP (China) Public Charging Station
Mobility Hub



PetroChina
Super Charging and Battery Swapping Demonstration Station
Mobility Hub



Changxia Expressway (TotalEnergies & Three Gorges Corporation)
Public Charging Station
Mobility Hub



Shell (China) & BYD Public Charging Station
Mobility Hub



Xiaoju (Didi) Public Charging Station
Mobility Hub

Applications



Shanghai Xinzhuang Bus Charging Station
e-Bus Depot



Yancheng Bus Charging Station (Stable Operation for 8 Years)
e-Bus Depot



Yunnan Highway Service Station
Highway Corridor



Guangdong Highway Service Station
Highway Corridor



Shenzhen Longgang Truck Charging Station
Fleet Charging



Shanghai Tobacco Group Charging Station
Workplace Charging

Applications



Guangdong Power Grid
PV-ESS-EV Charging



Inner Mongolia
Mobile Storage and Charging Vehicle
ESS-EV Charging



State Grid
PV-ESS charging discharging inspection station
V2G



Auto Group A
Battery Swap Station



China State Shipbuilding Corporation
Onshore Charging

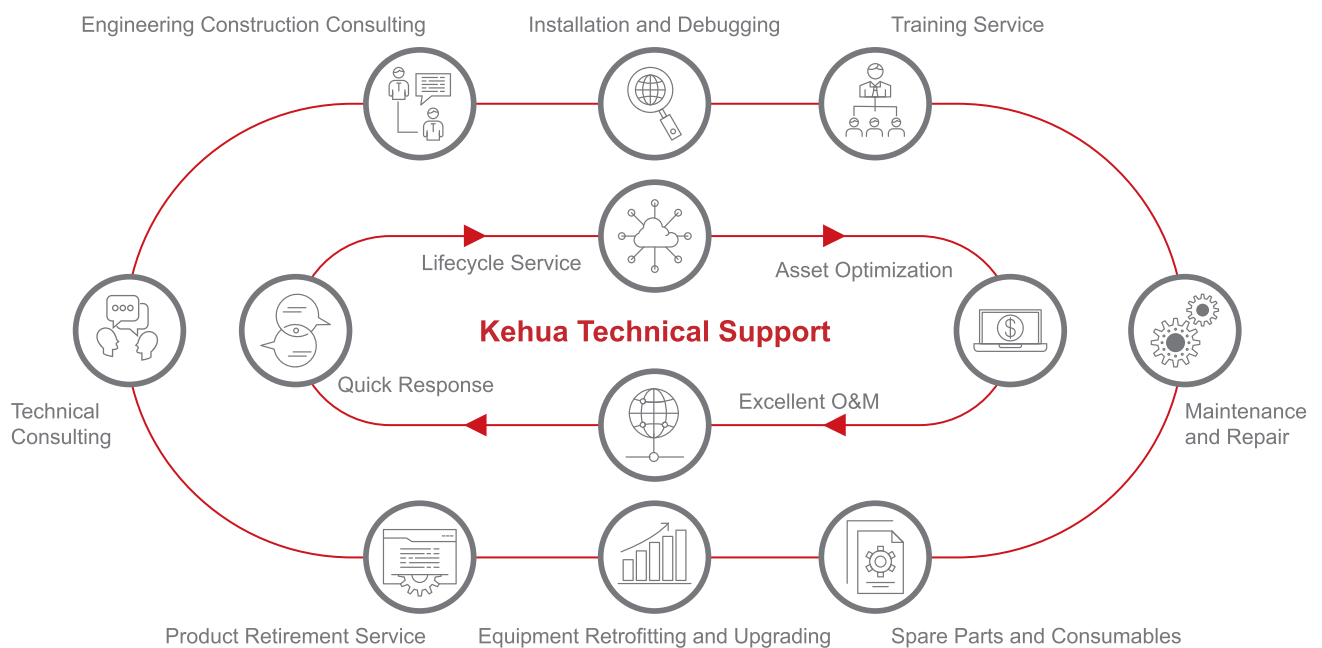


Xinjiang Public Charging
Extreme Climate Regions -42°C~40°C

Main Partners



After-sales Service



Distribution of Branches and Service Outlets





Reliable • Flexible • Responsible

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