

CERTIFICATE

Kehua Data Co., Ltd.

NO. 457, MALONG ROAD, TORCH HIGH-TECH INDUSTRIAL
ZONE, XIAMEN,
FUJIAN, CHINA

is authorized to provide the product(s) mentioned below with the mark as illustrated:



Description of product(s) (details see Annex 2):

PV Grid-tied Inverter

It is certified by **TÜV NORD CERT GmbH** that the product(s) described above has(have) been assessed according to the certification program mentioned below and found in compliance with the requirements of below specified certification fundamental(s). This certification is based on evaluation results as documented in test report(s) referenced below and production site(s) audit results as documented in factory inspection report(s) referenced in Annex 1. This certificate is valid in conjunction with these quoted report(s).

Certification program:	P33-VA-01 Rev. 02 / 04.20	
Certification fundamental(s):	IEC 62109-1:2010; IEC 62109-2:2011	
Registered no.:	44 780 21 406749 - 218	
Manufacturer and factory(-ies):	See Annex 1	
Report no.:	492011753.001	Valid from: 2021-10-18
File no.:	PVP06028/21B-01	Valid until: 2026-10-17



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Certification Body
Balance of System (BOS) for Photovoltaics



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to Certificate registration no. 44 780 21 406749 - 218

Manufacturer:

Kehua Data Co., Ltd.

NO. 457, MALONG ROAD, TORCH HIGH-TECH INDUSTRIAL ZONE, XIAMEN,
FUJIAN, CHINA

Factory(-ies):

Factory :

ZHANGZHOU KEHUA ELECTRIC TECHNOLOGY CO., LTD.

NO.11, JINXING ROAD, XIANGCHENG DISTRICT, ZHANGZHOU CITY,
FUJIAN PROVINCE, CHINA

Factory inspection report no.: 862010484.002

Remark:

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

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to Certificate registration no. 44 780 21 406749 - 218

Description of product(s):

Model type	SPI75K-B		
General information			
Type of Inverter	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category	PV Input: II AC Output: III	Pollution degree	External:3 Internal:2
Operating Temperature	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	9*50A
MPP voltage range	200~1000V	Number of MPPT tracking	9
Max input current.....	9*30A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	75kW	Max. apparent power	75kVA
Max. output current	108.3A	Power factor.....	[-0.80, 0.80]



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Model type	SPI75K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude.....	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	7*50A
MPP voltage range	200~1000V	Number of MPPT tracking	7
Max input current.....	7*30A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	75kW	Max. apparent power	75kVA
Max. output current	108.3A	Power factor.....	[-0.80, 0.80]



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Model type	SPI75K-B		
General information			
Type of Inverter	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category	PV Input: II AC Output: III	Pollution degree	External:3 Internal:2
Operating temperature	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD	V1.00
PV input			
Vmax	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current	6*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power	75kW	Max. apparent power	75kVA
Max. output current	108.3A	Power factor	[-0.80, 0.80]



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Model type	SPI75K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D).....	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	4*50A
MPP voltage range	200~1000V	Number of MPPT tracking	4
Max input current.....	4*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60
Rated output power.....	75kW	Max. apparent power	75kVA
Max. output current.....	108.3A	Power factor.....	[-0.80, 0.80]



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Model type	SPI80K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	9*50A
MPP voltage range	200~1000V	Number of MPPT tracking	9
Max input current.....	9*30A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	80kW	Max. apparent power	88kVA
Max. output current	127.0A	Power factor	[-0.80, 0.80]



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Model type	SPI80K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D).....	1030*610*345mm
Firmware of control board.....	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current.....	6*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	80kW	Max. apparent power.....	88kVA
Max. output current.....	127.0A	Power factor	[-0.80, 0.80]



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Model type	SPI90K-B		
General information			
Type of Inverter	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category	PV Input: II AC Output: III	Pollution degree	External:3 Internal:2
Operating temperature	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD	V1.00
PV input			
Vmax	1100V	Isc	9*50A
MPP voltage range	200~1000V	Number of MPPT tracking	9
Max input current	9*30A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power	90kW	Max. apparent power	99kVA
Max. output current	142.9A	Power factor	[-0.80, 0.80]



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Model type	SPI90K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class.....	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude.....	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board.....	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current.....	6*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	90kW	Max. apparent power	99kVA
Max. output current.....	142.9A	Power factor	[-0.80, 0.80]



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Model type	SPI100K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board.....	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	9*50A
MPP voltage range	200~1000V	Number of MPPT tracking	9
Max input current.....	9*30A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	100kW	Max. apparent power	110kVA
Max. output current.....	158.8A	Power factor	[-0.80, 0.80]



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Model type	SPI100K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude.....	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current.....	6*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	100kW	Max. apparent power	110kVA
Max. output current	158.8A	Power factor	[-0.80, 0.80]



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Model type	SPI110K-B		
General information			
Type of Inverter	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category	PV Input: II AC Output: III	Pollution degree	External:3 Internal:2
Operating temperature	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD	V1.00
PV input			
Vmax	1100V	Isc	9*50A
MPP voltage range	200~1000V	Number of MPPT tracking	9
Max input current	9*30A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power	110kW	Max. apparent power	121kVA
Max. output current	174.7A	Power factor	[-0.80, 0.80]



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Model type	SPI110K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current.....	6*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	110kW	Max. apparent power	121kVA
Max. output current	174.7A	Power factor	[-0.80, 0.80]



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Model type :	SPI125K-B		
General information			
Type of Inverter..... :	Non-Isolated	Separated by :	Non Transformer
Safety Class :	Class I	IP grade :	IP66
Over-voltage Category..... :	PV Input: II AC Output: III	Pollution degree..... :	External:3 Internal:2
Operating temperature..... :	-35 to 60°C (>45 derating)	Altitude :	4000m(>3000m derating)
Weight..... :	80kg	Dimension (W x H x D) :	1030*610*345mm
Firmware of control board :	V1.00	Firmware of LCD..... :	V1.00
PV input			
Vmax..... :	1100V	Isc :	9*50A
MPP voltage range :	200~1000V	Number of MPPT tracking :	9
Max input current..... :	9*30A		
AC output			
Rated Output Voltage :	230/400Vac 3W+N+PE	Rated Output Frequency :	50/60Hz
Rated output power..... :	125kW	Max. apparent power..... :	137.5kVA
Max. output current..... :	198.5A	Power factor :	[-0.80, 0.80]



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Model type	SPI125K-B		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current.....	6*40A		
AC output			
Rated Output Voltage	230/400Vac 3W+N+PE	Rated Output Frequency	50/60Hz
Rated output power.....	125kW	Max. apparent power	137.5kVA
Max. output current	198.5A	Power factor	[-0.80, 0.80]



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Model type	SPI136K-BHV		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	10*50A
MPP voltage range	200~1000V	Number of MPPT tracking	10
Max input current.....	10*30A		
AC output			
Rated Output Voltage	310/540Vac 3W+PE	Rated Output Frequency	50/60Hz
Rated output power.....	136kW	Max. apparent power	149.6kVA
Max. output current.....	159.9A	Power factor	[-0.80, 0.80]



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Model type	SPI136K-BHV		
General information			
Type of Inverter	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category	PV Input: II AC Output: III	Pollution degree	External:3 Internal:2
Operating temperature	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD	V1.00
PV input			
Vmax	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current	6*40A		
AC output			
Rated Output Voltage	310/540Vac 3W+PE	Rated Output Frequency	50/60Hz
Rated output power	136kW	Max. apparent power	149.6kVA
Max. output current	159.9A	Power factor	[-0.80, 0.80]



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Model type	SPI150K-BHV		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	10*50A
MPP voltage range	200~1000V	Number of MPPT tracking	10
Max input current.....	10*30A		
AC output			
Rated Output Voltage	310/540Vac 3W+PE	Rated Output Frequency	50/60Hz
Rated output power.....	150kW	Max. apparent power	165kVA
Max. output current	176.4A	Power factor	[-0.80, 0.80]



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Model type	SPI150K-BHV		
General information			
Type of Inverter.....	Non-Isolated	Separated by	Non Transformer
Safety Class	Class I	IP grade	IP66
Over-voltage Category.....	PV Input: II AC Output: III	Pollution degree.....	External:3 Internal:2
Operating temperature.....	-35 to 60°C (>45 derating)	Altitude	4000m(>3000m derating)
Weight.....	80kg	Dimension (W x H x D)	1030*610*345mm
Firmware of control board.....	V1.00	Firmware of LCD.....	V1.00
PV input			
Vmax.....	1100V	Isc	6*50A
MPP voltage range	200~1000V	Number of MPPT tracking	6
Max input current.....	6*40A		
AC output			
Rated Output Voltage	310/540Vac 3W+PE	Rated Output Frequency	50/60Hz
Rated output power.....	150kW	Max. apparent power	165kVA
Max. output current.....	176.4A	Power factor	[-0.80, 0.80]



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Remark:

For detailed product information, please refer to CDF (Constructional Data Form) in Annex 1 of test report.

A handwritten signature in blue ink, appearing to read "Kannplausch".

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