



Product Service

Compliance Document

No. D 075386 0299 Rev. 00

Holder of Attestation: **Shenzhen Kstar New Energy Company Limited**

The 9th Floor, R&D Building
Kstar Industrial Park, Guangming Hi-tech Industrial Zone
518107 Shenzhen, Guangdong Province
PEOPLE'S REPUBLIC OF CHINA

Product: **Converter**
(Energy Storage Inverter & Hybrid Inverter)

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Test report no.: 64290253044301

Date, 2025-10-13

(Billy Qiu)



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Model(s):

Hybrid Inverter:

KAC50DP2, KAC49.9DP2, KAC40DP2,
KAC30DP2, KAC29.9DP2, KAC25DP2,
KAC20DP2,
KAC50DP2-S0, KAC49.9DP2-S0,
KAC40DP2-S0, KAC30DP2-S0,
KAC29.9DP2-S0, KAC25DP2-S0,
KAC20DP2-S0

Energy Storage Inverter:

KAC50D2, KAC49.9D2, KAC40D2, KAC30D2,
KAC29.9D2, KAC25D2, KAC20D2,
KAC50D2-S0, KAC49.9D2-S0, KAC40D2-S0,
KAC30D2-S0, KAC29.9D2-S0, KAC25D2-S0,
KAC20D2-S0

Parameters:

For Hybrid Inverter:

Model	KAC50DP2	KAC49.9DP2	KAC40DP2	KAC30DP2
PV terminal parameters				
Maximum input voltage [V _{DC}]	1000	1000	1000	1000
Rated input voltage [V _{DC}]	720	720	720	720
MPPT input voltage range [V _{DC}]	250-950	250-950	250-950	250-950
MPPT input voltage range (full load) [V _{DC}]	620-800	620-800	500-800	400-800
MPPT tracker number	4	4	4	4
Maximum input current [A _{DC}]	45/45/45/45	45/45/45/45	45/45/45/45	45/45/45/45
Maximum PV short circuit current [A _{DC}]	60/60/60/60	60/60/60/60	60/60/60/60	60/60/60/60
Battery input/output parameters				
Battery type	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V _{DC}]	900	900	900	900
Battery rated voltage [V _{DC}]	720	720	720	720
Battery voltage range [V _{DC}]	330-900	330-900	280-900	250-900



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Maximum charge/discharge power [W]	50000	49900	40000	30000
Maximum charge/discharge current [A _{DC}]	80*2	80*2	72*2	65*2
Grid terminal input parameters				
Rated input voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50	50
Maximum continuous input current from grid to battery [A _{AC}]	80	72	64	48
Maximum continuous input current [A _{AC}]	160	144	128	96
Maximum continuous input power from grid to battery [W]	50000	49900	40000	30000
Maximum continuous input active power [W]	100000	99800	80000	60000
Maximum continuous input apparent power [VA]	110000	99800	88000	66000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			
Grid terminal output parameters				
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50	50
Rated output current [A _{AC}]	72	72	58	43
Maximum continuous output current [A _{AC}]	80	72	64	48
Rated output active power [W]	50000	49900	40000	30000
Maximum output active power [W]	50000	49900	40000	30000
Maximum continuous output apparent power [VA]	55000	49900	44000	33000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			



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Model	KAC50DP2 -S0	KAC49.9DP2 -S0	KAC40DP2 -S0	KAC30DP2 -S0
PV terminal parameters				
Maximum input voltage [V_{DC}]	1000	1000	1000	1000
Rated input voltage [V_{DC}]	720	720	720	720
MPPT input voltage range [V_{DC}]	250-950	250-950	250-950	250-950
MPPT input voltage range (full load) [V_{DC}]	620-800	620-800	500-800	400-800
MPPT tracker number	4	4	4	4
Maximum input current [A_{DC}]	45/45/45/45	45/45/45/45	45/45/45/45	45/45/45/45
Maximum PV short circuit current [A_{DC}]	60/60/60/60	60/60/60/60	60/60/60/60	60/60/60/60
Battery input/output parameters				
Battery type	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V_{DC}]	900	900	900	900
Battery rated voltage [V_{DC}]	720	720	720	720
Battery voltage range [V_{DC}]	330-900	330-900	280-900	250-900
Maximum charge/discharge power [W]	50000	49900	40000	30000
Maximum charge/discharge current [A_{DC}]	80*2	80*2	72*2	65*2
Grid terminal input parameters				
Rated input voltage [V_{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50	50
Maximum continuous input current from grid to battery [A_{AC}]	80	72	64	48
Maximum continuous input current [A_{AC}]	80	72	64	48
Maximum continuous input power from grid to battery [W]	50000	49900	40000	30000
Maximum continuous input active power [W]	50000	49900	40000	30000
Maximum continuous input apparent power [VA]	55000	49900	44000	33000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			



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Grid terminal output parameters				
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50	50
Rated output current [A _{AC}]	72	72	58	43
Maximum continuous output current [A _{AC}]	80	72	64	48
Rated output active power [W]	50000	49900	40000	30000
Maximum output active power [W]	50000	49900	40000	30000
Maximum continuous output apparent power [VA]	55000	49900	44000	33000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			

Model	KAC29.9DP2-S0	KAC25DP2-S0	KAC20DP2-S0
PV terminal parameters			
Maximum input voltage [V _{DC}]	1000	1000	1000
Rated input voltage [V _{DC}]	720	720	720
MPPT input voltage range [V _{DC}]	250-950	250-950	250-950
MPPT input voltage range (full load) [V _{DC}]	400-800	350-800	300-800
MPPT tracker number	4	4	4
Maximum operating PV input current [A _{DC}]	45/45/45/45	45/45/45/45	45/45/45/45
Maximum PV short circuit current [A _{DC}]	60/60/60/60	60/60/60/60	60/60/60/60
Battery input/output parameters			
Battery type	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V _{DC}]	900	900	900
Battery rated voltage [V _{DC}]	720	720	720
Battery voltage range [V _{DC}]	250-900	210-900	200-900
Maximum charge/discharge power [W]	29900	25000	20000
Maximum charge/discharge current [A _{DC}]	65*2	60*2	55*2



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Grid terminal input parameters			
Rated input voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50
Maximum continuous input current from grid to battery [A _{AC}]	43	40	32
Maximum continuous input current [A _{AC}]	43	40	32
Maximum continuous input power from grid to battery [W]	29900	25000	20000
Maximum continuous input active power [W]	29900	25000	20000
Maximum continuous input apparent power [VA]	29900	27500	22000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		
Grid terminal output parameters			
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50
Rated output current [A _{AC}]	43	36	29
Maximum continuous output current [A _{AC}]	43	40	32
Rated output active power [W]	29900	25000	20000
Maximum output active power [W]	29900	25000	20000
Maximum continuous output apparent power [VA]	29900	27500	22000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		



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For Energy Storage Inverter:

Model	KAC50D2	KAC49.9D2	KAC40D2	KAC30D2
Battery input/output parameters				
Battery type	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V _{DC}]	900	900	900	900
Battery rated voltage [V _{DC}]	720	720	720	720
Battery voltage range [V _{DC}]	330-900	330-900	280-900	250-900
Maximum charge/discharge power [W]	50000	49900	40000	30000
Maximum charge/discharge current [A _{DC}]	80*2	80*2	72*2	65*2
Grid terminal input parameters				
Rated input voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50	50
Maximum continuous input current from grid to battery [A _{AC}]	80	72	64	48
Maximum continuous input current [A _{AC}]	160	144	128	96
Maximum continuous input power from grid to battery [W]	50000	49900	40000	30000
Maximum continuous input active power [W]	100000	99800	80000	60000
Maximum continuous input apparent power [VA]	110000	99800	88000	66000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			
Grid terminal output parameters				
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50	50
Rated output current [A _{AC}]	72	72	58	43
Maximum continuous output current [A _{AC}]	80	72	64	48
Rated output active power [W]	50000	49900	40000	30000
Maximum output active power [W]	50000	49900	40000	30000
Maximum continuous output apparent power [VA]	55000	49900	44000	33000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			



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Model	KAC29.9D2	KAC25D2	KAC20D2
Battery input/output parameters			
Battery type	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V _{DC}]	900	900	900
Battery rated voltage [V _{DC}]	720	720	720
Battery voltage range [V _{DC}]	250-900	210-900	200-900
Maximum charge/discharge power [W]	29900	25000	20000
Maximum charge/discharge current [A _{DC}]	65*2	60*2	55*2
Grid terminal input parameters			
Rated input voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50
Maximum continuous input current from grid to battery [A _{AC}]	43	40	32
Maximum continuous input current [A _{AC}]	87	80	64
Maximum continuous input power from grid to battery [W]	29900	25000	20000
Maximum continuous input active power [W]	59800	50000	40000
Maximum continuous input apparent power [VA]	59800	55000	44000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		
Grid terminal output parameters			
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50
Rated output current [A _{AC}]	43	36	29
Maximum continuous output current [A _{AC}]	43	40	32
Rated output active power [W]	29900	25000	20000
Maximum output active power [W]	29900	25000	20000
Maximum continuous output apparent power [VA]	29900	27500	22000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		



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Model	KAC50D2-S0	KAC49.9D2-S0	KAC40D2-S0	KAC30D2-S0
Battery input/output parameters				
Battery type	Lithium-ion	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V _{DC}]	900	900	900	900
Battery rated voltage [V _{DC}]	720	720	720	720
Battery voltage range [V _{DC}]	330-900	330-900	280-900	250-900
Maximum charge/discharge power [W]	50000	49900	40000	30000
Maximum charge/discharge current [A _{DC}]	80*2	80*2	72*2	65*2
Grid terminal input parameters				
Rated input voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50	50
Maximum continuous input current from grid to battery [A _{AC}]	80	72	64	48
Maximum continuous input current [A _{AC}]	80	72	64	48
Maximum continuous input power from grid to battery [W]	50000	49900	40000	30000
Maximum continuous input active power [W]	50000	49900	40000	30000
Maximum continuous input apparent power [VA]	55000	49900	44000	33000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			
Grid terminal output parameters				
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50	50
Rated output current [A _{AC}]	72	72	58	43
Maximum continuous output current [A _{AC}]	80	72	64	48
Rated output active power [W]	50000	49900	40000	30000
Maximum output active power [W]	50000	49900	40000	30000
Maximum continuous output apparent power [VA]	55000	49900	44000	33000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)			



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Model	KAC29.9D2-S0	KAC25D2-S0	KAC20D2-S0
Battery input/output parameters			
Battery type	Lithium-ion	Lithium-ion	Lithium-ion
Maximum voltage [V _{DC}]	900	900	900
Battery rated voltage [V _{DC}]	720	720	720
Battery voltage range [V _{DC}]	250-900	210-900	200-900
Maximum charge/discharge power [W]	29900	25000	20000
Maximum charge/discharge current [A _{DC}]	65*2	60*2	55*2
Grid terminal input parameters			
Rated input voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated input frequency [Hz]	50	50	50
Maximum continuous input current from grid to battery [A _{AC}]	43	40	32
Maximum continuous input current [A _{AC}]	43	40	32
Maximum continuous input power from grid to battery [W]	29900	25000	20000
Maximum continuous input active power [W]	29900	25000	20000
Maximum continuous input apparent power [VA]	29900	27500	22000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		
Grid terminal output parameters			
Rated output voltage [V _{AC}]	3P+N+PE, 230/400	3P+N+PE, 230/400	3P+N+PE, 230/400
Rated output frequency [Hz]	50	50	50
Rated output current [A _{AC}]	43	36	29
Maximum continuous output current [A _{AC}]	43	40	32
Rated output active power [W]	29900	25000	20000
Maximum output active power [W]	29900	25000	20000
Maximum continuous output apparent power [VA]	29900	27500	22000
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		

**Tested
according to:**

C10/11:2024