

Technical Report No.: 64.290.22.30833.01

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Client:	Name:	INVT Solar Technology Co., Ltd.
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Factory:	Name:	Shenzhen INVT Electric Co., Ltd. (Baoan Factory)
	Address:	4th to 1st floors of Emerson Industrial Park, No. 3, Fengtang Avenue, Tangwei Community, Fuhai Street, Baoan District, Shenzhen
Test object:	Product:	Solar Inverter
	Model:	iMars XG3KTR, iMars XG4KTR, iMars XG5KTR, iMars XG6KTR, iMars XG8KTR, iMars XG9KTR, iMars XG10KTR, iMars XG11KTR, iMars XG12KTR, iMars XG15KTR1 iMars XG3KTR-S, iMars XG4KTR-S, iMars XG5KTR-S, iMars XG6KTR-S, iMars XG8KTR-S, iMars XG9KTR-S, iMars XG10KTR-S, iMars XG11KTR-S, iMars XG12KTR-S, iMars XG15KTR1-S iMars XG3KTR-AU, iMars XG4KTR-AU, iMars XG5KTR-AU, iMars XG6KTR-AU, iMars XG8KTR-AU, iMars XG9KTR-AU, iMars XG10KTR-AU, iMars XG11KTR-AU, iMars XG12KTR-AU, iMars XG15KTR1-AU
	Trademark:	
Test specification:		EN 50549-1:2019/AC:2019
Purpose of examination:		• Testing and evaluation according to the test specification
Test result:		The test results show that the presented product is in compliance with the above listed test specifications.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see testing and certification regulation, chapter A-3.4.

1. Description of the test object

1.1. Picture(s)



Over view (LCD cover board)



Over view (alternative LED cover board)



Terminal view (15K series)



Terminal view (3-12K series)



Inside view (15K series)



Inside view (3-12K series)

1.2. Function

1. All the models are three phase non-isolated type multi-functions Solar Inverter which will be installed and connected to the grid network or standalone after installation. The unit is defined as type A generator according to Regulation (EU) 2016/631 (NC RfG)
2. If certain functions are not permitted by local regulation, the function shall be disabled by hardware or software setting (if applicable) by the manufacturer before putting into the market. For example, it's not permissible to draw electricity from the grid and then feed it back in order to claim statutory reimbursement in some nations.
3. Low voltage electrical installations shall comply with national and local regulation. Only qualified electricians are allowed to install and maintain the converter.
4. In order to protect the inverter, user and installer, external DC and AC circuit breaker shall be equipped for all source port (battery, AC grid) at the end-use application.
5. The unit has below reactive power control modes, shall comply with national and local regulation:
 - 1) Q setpoint mode
 - 2) Q(U) mode
 - 3) Cos ϕ setpoint mode
 - 4) Cos ϕ (P)
6. RS 485-1 communication port is provided for remoted control.
7. Software version: GAAA1.0.

1.3. Consideration of the foreseeable use

- ☐ Not applicable
- ☒ Covered through the applied standard
- ☐ Covered by the following comment*
- ☐ Covered by attached risk analysis

1.4. Technical Data

Model:	iMars XG3KTR	iMars XG4KTR	iMars XG5KTR	iMars XG6KTR	iMars XG8KTR
PV input terminal parameters:					
Maximum input voltage	1100Vd.c.				
PV input operating voltage range	180-1000Vd.c.				
MPPT voltage range(Full load)	250-850Vd.c.				320-850Vd.c.
Maximum operating PV input current	14/14Ad.c.				
Maximum PV short circuit current	18/18Ad.c.				
AC output rating					
Rated output voltage	3/N/PE,230/400Va.c.				
Rated output frequency	50Hz				
Maximum continuous output current	4.8Aa.c.	6.4Aa.c.	8Aa.c.	9.6Aa.c.	12.8Aa.c.
Rated output active power	3kW	4kW	5kW	6kW	8kW
Maximum continuous output apparent power SEmax	3.3kVA	4.4kVA	5.5kVA	6.6kVA	8.8kVA
Power factor	0.9 leading ~ 0.9 lagging				

Model:	iMars XG9KTR	iMars XG10KTR	iMars XG11KTR	iMars XG12KTR	iMars XG15KTR1
PV input terminal parameters:					
Maximum input voltage	1100Vd.c.				
PV input operating voltage range	180-1000Vd.c.				
MPPT voltage range(Full load)	400-850Vd.c.	450-850Vd.c.		480-850Vd.c.	500-850Vd.c.
Maximum operating PV input current	14/14Ad.c.				14/28Ad.c.
Maximum PV short circuit current	18/18Ad.c.				18/36Ad.c.
AC output rating					
Rated output voltage	3/N/PE,230/400Va.c.				
Rated output frequency	50Hz				
Maximum continuous output current	14.4Aa.c.	15.9Aa.c.	17.5Aa.c.	19.1Aa.c.	23.9Aa.c.
Rated output active power	9kW	10kW	11kW	12kW	15kW
Maximum continuous output apparent power SEmax	9.9kVA	11kVA	12.1kVA	13.2kVA	16.5kVA
Power factor	0.9 leading ~ 0.9 lagging				

Model:	iMars XG3KTR-S	iMars XG4KTR-S	iMars XG5KTR-S	iMars XG6KTR-S	iMars XG8KTR-S
PV input terminal parameters:					
Maximum input voltage	1100Vd.c.				
PV input operating voltage range	180-1000Vd.c.				
MPPT voltage range(Full load)	200-850Vd.c.				360-850Vd.c.
Maximum operating PV input current	18/18Ad.c.				

Maximum PV short circuit current	25/25Ad.c.				
AC output rating					
Rated output voltage	3/N/PE,230/400Va.c..				
Rated output frequency	50Hz				
Maximum continuous output current	4.8A	6.4A	8A	9.6A	12.8A
Rated output active power	3kW	4kW	5kW	6kW	8kW
Maximum continuous output apparent power SEmax	3.3kVA	4.4kVA	5.5kVA	6.6kVA	8.8kVA
Power factor	0.9 leading ~ 0.9 lagging				

Model:	iMars XG9KTR-S	iMars XG10KTR-S	iMars XG11KTR-S	iMars XG12KTR-S	iMars XG15KTR1-S
PV input terminal parameters:					
Maximum input voltage	1100Vd.c.				
PV input operating voltage range	180-1000Vd.c.				
MPPT voltage range(Full load)	360-850Vd.c.	380-850Vd.c.			450-850Vd.c.
Maximum operating PV input current	18/18Ad.c.				
Maximum PV short circuit current	25/25Ad.c.				
AC output rating					

Rated output voltage	3/N/PE,230/400Va.c.				
Rated output frequency	50Hz				
Maximum continuous output current	14.4Aa.c.	15.9Aa.c.	17.5Aa.c.	19.1Aa.c.	23.9Aa.c.
Rated output active power	9kW	10kW	11kW	12kW	15kW
Maximum continuous output apparent power S _{Emax}	9.9kVA	11kVA	12.1kVA	13.2kVA	16.5kVA
Power factor	0.9 leading ~ 0.9 lagging				

Model:	iMars XG3KTR- AU	iMars XG4KTR- AU	iMars XG5KTR- AU	iMars XG6KTR- AU	iMars XG8KTR- AU
PV input terminal parameters:					
Maximum input voltage	1100Vd.c.				
PV input operating voltage range	180-1000Vd.c.				
MPPT voltage range(Full load)	250-850Vd.c.				320- 850Vd.c.
Maximum operating PV input current	14/14Ad.c.				14/28Ad.c.
Maximum PV short circuit current	18/18Ad.c.				18/36Ad.c.
AC output rating					
Rated output voltage	3/N/PE,230/400Va.c.				

Rated output frequency	50Hz				
Maximum continuous output current	4.3Aa.c.	5.8Aa.c.	7.2Aa.c.	8.7Aa.c.	11.6Aa.c.
Rated output active power	3kW	4kW	5kW	6kW	8kW
Maximum continuous output apparent power S _{Emax}	3kVA	4kVA	5kVA	6kVA	8kVA
Power factor	0.9 leading ~ 0.9 lagging				

Model:	iMars XG9KTR- AU	iMars XG10KTR- AU	iMars XG11KTR- AU	iMars XG12KTR- AU	iMars XG15KTR1- AU
PV input terminal parameters:					
Maximum input voltage	1100Vd.c.				
PV input operating voltage range	180-1000Vd.c				
MPPT voltage range(Full load)	400- 850Vd.c.	450-850Vd.c.		480- 850Vd.c.	500- 850Vd.c.
Maximum operating PV input current	14/28Ad.c.				
Maximum PV short circuit current	18/36Ad.c.				
AC output rating					
Rated output voltage	3/N/PE,230/400Va.c.				
Rated output frequency	50Hz				
Maximum continuous output current	13Aa.c.	14.5Aa.c.	16Aa.c.	17.4Aa.c.	21.7Aa.c.



Rated output active power	9kW	10kW	11kW	12kW	15kW
Maximum continuous output apparent power SEmax	9kVA	10kVA	11kVA	12kVA	15kVA
Power factor	0.9 leading ~ 0.9 lagging				

1.5. Rating Label

invt Grid-tied Solar Inverter	
iMars XG3KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	4.8A
Rated Power	3000W
Max. Output Power	3300VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG4KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	6.4A
Rated Power	4000W
Max. Output Power	4400VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
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INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG5KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	8A
Rated Power	5000W
Max. Output Power	5500VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG6KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	9.6A
Rated Power	6000W
Max. Output Power	6600VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG8KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	12.8A
Rated Power	8000W
Max. Output Power	8800VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
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invt Grid-tied Solar Inverter	
iMars XG9KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	14.4A
Rated Power	9000W
Max. Output Power	9900VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
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invt Grid-tied Solar Inverter	
iMars XG10KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	15.9A
Rated Power	10000W
Max. Output Power	11000VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
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INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG11KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	17.5A
Rated Power	11000W
Max. Output Power	12100VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG12KTR	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/14A
Isc PV	18A/18A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	19.1A
Rated Power	12000W
Max. Output Power	13200VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG15KTR1	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	14A/28A
Isc PV	18A/36A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	23.9A
Rated Power	15000W
Max. Output Power	16500VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG3KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	4.8A
Rated Power	3000W
Max. Output Power	3300VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG4KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	6.4A
Rated Power	4000W
Max. Output Power	4400VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG5KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	8A
Rated Power	5000W
Max. Output Power	5500VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
	
Made in China	
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invt Grid-tied Solar Inverter	
iMars XG6KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	9.6A
Rated Power	6000W
Max. Output Power	6600VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG8KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	12.8A
Rated Power	8000W
Max. Output Power	8800VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG9KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	14.4A
Rated Power	9000W
Max. Output Power	9900VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG10KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	15.9A
Rated Power	10000W
Max. Output Power	11000VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG11KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	17.5A
Rated Power	11000W
Max. Output Power	12100VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG12KTR-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	19.1A
Rated Power	12000W
Max. Output Power	13200VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG15KTR1-S	
DC Input	
Vmax. PV	1100V
MPPT Range	180V-1000V
Max. Current	18A/18A
Isc PV	25A/25A
AC Output	
Nominal Voltage	3/N/PE,230V/400V
Max. Current	23.9A
Rated Power	15000W
Max. Output Power	16500VA
Frequency	50Hz/60Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter topology	Non-isolated
Ingress protection	IP66
 Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG3KTR-AU	
DC Input	
Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./14Ad.c.
Isc PV	18Ad.c./18Ad.c.
AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	4.3Aa.c.
Rated Apparent Power	3000VA
Max. Output Power	3000VA
Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG4KTR-AU	
DC Input	
Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./14Ad.c.
Isc PV	18Ad.c./18Ad.c.
AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	5.8Aa.c.
Rated Apparent Power	4000VA
Max. Output Power	4000VA
Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG5KTR-AU	
DC Input	
Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./14Ad.c.
Isc PV	18Ad.c./18Ad.c.
AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	7.2Aa.c.
Rated Apparent Power	5000VA
Max. Output Power	5000VA
Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG6KTR-AU	
DC Input	
Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./14Ad.c.
Isc PV	18Ad.c./18Ad.c.
AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	8.7Aa.c.
Rated Apparent Power	6000VA
Max. Output Power	6000VA
Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG8KTR-AU	
DC Input	
Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./28Ad.c.
Isc PV	18Ad.c./36Ad.c.
AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	11.6Aa.c.
Rated Apparent Power	8000VA
Max. Output Power	8000VA
Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

invt Grid-tied Solar Inverter	
iMars XG9KTR-AU	
DC Input	
Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./28Ad.c.
Isc PV	18Ad.c./36Ad.c.
AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	13Aa.c.
Rated Apparent Power	9000VA
Max. Output Power	9000VA
Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov
Environment	
Temperature	-30°C ~ +60°C
Protective Class	I
Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66
	
Made in China	
INVT Solar Technology (Shenzhen) Co.,Ltd.	

Technical Report



Product Service

invt Grid-tied Solar Inverter iMars XG10KTR-AU		invt Grid-tied Solar Inverter iMars XG11KTR-AU		invt Grid-tied Solar Inverter iMars XG12KTR-AU		invt Grid-tied Solar Inverter iMars XG15KTR1-AU	
DC Input		DC Input		DC Input		DC Input	
Vmax. PV	1100Vd.c.	Vmax. PV	1100Vd.c.	Vmax. PV	1100Vd.c.	Vmax. PV	1100Vd.c.
MPPT Range	180Vd.c.-1000Vd.c.	MPPT Range	180Vd.c.-1000Vd.c.	MPPT Range	180Vd.c.-1000Vd.c.	MPPT Range	180Vd.c.-1000Vd.c.
Max. Current	14Ad.c./28Ad.c.	Max. Current	14Ad.c./28Ad.c.	Max. Current	14Ad.c./28Ad.c.	Max. Current	14Ad.c./28Ad.c.
Isc PV	18Ad.c./36Ad.c.	Isc PV	18Ad.c./36Ad.c.	Isc PV	18Ad.c./36Ad.c.	Isc PV	18Ad.c./36Ad.c.
AC Output		AC Output		AC Output		AC Output	
Nominal Voltage	3/N/PE,230/400Va.c.	Nominal Voltage	3/N/PE,230/400Va.c.	Nominal Voltage	3/N/PE,230/400Va.c.	Nominal Voltage	3/N/PE,230/400Va.c.
Rated Current	14.5Aa.c.	Rated Current	16Aa.c.	Rated Current	17.4Aa.c.	Rated Current	21.7Aa.c.
Rated Apparent Power	10000VA	Rated Apparent Power	11000VA	Rated Apparent Power	12000VA	Rated Apparent Power	15000VA
Max. Output Power	10000VA	Max. Output Power	11000VA	Max. Output Power	12000VA	Max. Output Power	15000VA
Frequency	50Hz	Frequency	50Hz	Frequency	50Hz	Frequency	50Hz
Power Factor Range	0.80un ~ 0.80ov	Power Factor Range	0.80un ~ 0.80ov	Power Factor Range	0.80un ~ 0.80ov	Power Factor Range	0.80un ~ 0.80ov
Environment		Environment		Environment		Environment	
Temperature	-30°C ~ +60°C	Temperature	-30°C ~ +60°C	Temperature	-30°C ~ +60°C	Temperature	-30°C ~ +60°C
Protective Class	I	Protective Class	I	Protective Class	I	Protective Class	I
Inverter Topology	Non-isolated	Inverter Topology	Non-isolated	Inverter Topology	Non-isolated	Inverter Topology	Non-isolated
Overvoltage Category	II(DC), III(AC)	Overvoltage Category	II(DC), III(AC)	Overvoltage Category	II(DC), III(AC)	Overvoltage Category	II(DC), III(AC)
Ingress Protection	IP66	Ingress Protection	IP66	Ingress Protection	IP66	Ingress Protection	IP66
   INVT Solar Technology (Shenzhen) Co.,Ltd.		   INVT Solar Technology (Shenzhen) Co.,Ltd.		   INVT Solar Technology (Shenzhen) Co.,Ltd.		   INVT Solar Technology (Shenzhen) Co.,Ltd.	

2. Order

2.1. Date of Purchase Order, Customer's Reference

2022-04-12

2.2. Test Sample(s)

- Reception date(s): 2022-05-13
- Location(s) of reception: TÜV SÜD Testing Center, D1 building, No. 63 Chuangqi Road, Shilou Town, Panyu District, Guangzhou 511447, P.R. China
- Condition of test sample(s): Intact

2.3. Date(s) of Testing

2022-05-14 to 2022-07-15

2.4. Location(s) of Testing

TÜV SÜD Testing Center, D1 building, No. 63 Chuangqi Road, Shilou Town, Panyu District, Guangzhou 511447, P.R. China

2.5. Points of Non-Compliance or Exceptions of the Test Procedure

- None

3. Test Results

- "Decision rule according to IEC Guide 115:2021, clause 4.4.3, 4.5.1 was applied."

3.1. Positive Test Results

Test specification(s)	Report no. / Rev. No.	Date	Remark
Grid Code compliance	64.290.22.30407.01	2022-07-30	-

4. Remarks

4.1. General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

5. Documentation

- None

6. Summary

The test specifications are met.

Technical Report



Product Service

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch TÜV SÜD Group

Tested by:

Derek Li

printed name, function & signature

Approved by:

Iris Zheng

printed name, function & signature



--- End of Report ---