

Inverter in IGBT technology

Type: *WG*

Sinus wave inverters are used in all ranges where AC users have to be supplied during breakdown of the common power supply. The inverter is converting the DC power of the battery into a sinus wave alternating voltage with constant frequency.

In our inverter of the series *WG* we have combined the most reliable and robust IGBT-technology with state of the art monitoring and display and we have designed a series of units, which meets with highest quality the needs of nowadays industrial inverter units.

Due to the high frequency control the inverter is able to supply non-linear loads at a minimum output voltage distortion as well as keeping the output voltage constant, even at high load changes.

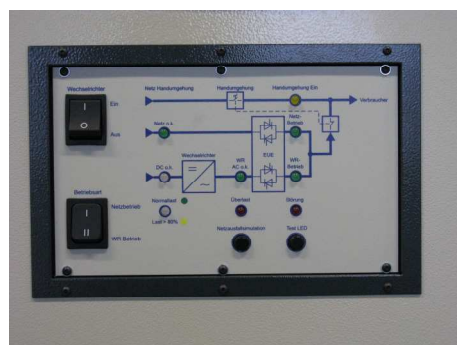
Via the separate mains input the inverter can be equipped with static bypass (EUE), mechanical bypass (MUE) and with service bypass. Operation is possible either in continuous or standby mode. A complete visualization on the front door is given by a block diagram with integrated LED's as well as a multifunctional digital display with LCD and push buttons.



Inverter WG

Your advantages:

- **Best price - performance ratio**
- **Highest reliability:**
 - using the latest and state-of-the-art robust IGBT technology
 - industrial specification
 - high overload capability, short circuit current up to 500%
 - extreme long life time
- **Detailed displays:**
 - mimic diagram with integrated LED's
 - LCD multifunctional display with all relevant system values or analog measuring instruments
- **Made in Germany**



Mimic diagram with static bypass EUE

Type table of inverter WG with single phase output 220/230 VAC

Three phase inverters (3 x 380/400 VAC) and types with input voltage 24 - 60VDC upon request

Typ	Output power [kVA]	Input voltage [VDC]	Input current		Mounting plate type (*)	Cabinet	
			no load [A]	full load [A]		without / with static bypass type	EUE type
WG 0.5/110s	0,5	110	0,2	4,3	MP 1	WS 2	WS 3
WG 1.0/110s	1,0	110	0,3	8,6	MP 1	WS 2	WS 3
WG 1.5/110s	1,5	110	0,3	12,7	MP 1	WS 2	WS 3
WG 2.0/110s	2,0	110	0,4	16,9	MP 1	WS 2	WS 3
WG 3.0/110s	3,0	110	0,4	25	MP 2	WS 2	ST 5.21
WG 4.0/110s	4,0	110	0,5	35	MP 2	WS 2	ST 5.21
WG 5.0/110s	5,0	110	0,5	41	-	ST 5.20	ST 5.21
WG 6.0/110s	6,0	110	0,7	49	-	ST 5.20	ST 5.21
WG 8.0/110s	8,0	110	0,8	66	-	ST 8.21	ST 8.21
WG 10.0/110s	10,0	110	0,9	82	-	ST 8.21	ST 8.21
WG 12.0/110s	12,0	110	1,0	96	-	ST 8.21	ST 8.21
WG 15.0/110s	15,0	110	1,1	121	-	ST 10.21	ST 10.21
WG 20.0/110s	20,0	110	1,3	160	-	ST 10.21	ST 10.21
WG 25.0/110s	25,0	110	1,8	200	-	ST 11.21	ST 11.21
WG 30.0/110s	30,0	110	2,0	240	-	ST 11.21	ST 11.21
WG 40.0/110s	40,0	110	2,8	320	-	ST 11.21	ST 11.21
WG 0.5/220s	0,5	220	0,2	2,1	MP 1	WS 2	WS 3
WG 1.0/220s	1,0	220	0,2	4,2	MP 1	WS 2	WS 3
WG 1.5/220s	1,5	220	0,2	6,2	MP 1	WS 2	WS 3
WG 2.0/220s	2,0	220	0,3	8,2	MP 1	WS 2	WS 3
WG 3.0/220s	3,0	220	0,3	12	MP 2	WS 2	ST 5.21
WG 4.0/220s	4,0	220	0,4	17	MP 2	WS 2	ST 5.21
WG 5.0/220s	5,0	220	0,4	20	-	ST 5.20	ST 5.21
WG 6.0/220s	6,0	220	0,4	24	-	ST 5.20	ST 5.21
WG 8.0/220s	8,0	220	0,5	32	-	ST 8.21	ST 8.21
WG 10.0/220s	10,0	220	0,6	40	-	ST 8.21	ST 8.21
WG 12.0/220s	12,0	220	0,6	47	-	ST 8.21	ST 8.21
WG 15.0/220s	15,0	220	0,7	59	-	ST 10.21	ST 10.21
WG 20.0/220s	20,0	220	0,9	78	-	ST 10.21	ST 10.21
WG 25.0/220s	25,0	220	1,3	98	-	ST 11.21	ST 11.21
WG 30.0/220s	30,0	220	1,4	117	-	ST 11.21	ST 11.21
WG 40.0/220s	40,0	220	1,8	156	-	ST 11.21	ST 11.21
WG 50.0/220s	50,0	220	2,0	195	-	ST 11.21 + 10.21	ST 11.21 + 10.21
WG 60.0/220s	60,0	220	2,8	234	-	ST 11.21 + 10.21	ST 11.21 + 10.21
WG 80.0/220s	80,0	220	3,8	312	-	2 x ST 11.21	2 x ST 11.21

(*) Mounting plate dimensions: MP 1: W 360 x L 570 mm
MP 2: W 740 x L 522 mm

Specifications and options

We offer you the adequate solution for a multitude of applications::

- Industrial UPS
- Complete power systems with rectifier, inverter, DC/DC converter and AC and DC distributions
- Special output voltage like 110VAC and others
- Static (or mechanical) and manual bypass
- Multifunctional digital display of output voltage, current, frequency, active, reactive and apparent power, power factor and hours of operation
- Output transformer with galvanic isolation is a standard feature,, additional transformers in the bypass are available
- Other mechanical solutions like cabinet protection IP 3x or 4x and special cabinet colours



Inverter WG

Technical Data of the inverter WG

	WG
Input DC	
Input voltage	110VDC, 220VDC +/-20%
Input current	see type table
Efficiency	86 - 92%, acc. to type
Output AC	
Output voltage	230VAC +/-1%, sinus wave
Output current	see type table
Output frequency	50 (60) Hz +/-1%, quartz- or mains controlled
Dynamic stability	<5% U(nom) within 5ms (load changes 10%-90%-10%)
Harmonic distortion	<3% with linear load
Over load capacity	150% 60s, 120% 20 min.
Short circuit current	500% I(nom) 500ms, short circuit proof
General data	
Ambient temperature	operation 0°C to +40°C / storing -20 to +70°C
Relative humidity	<90%, not condensing
Operation altitude	≤1000m a.s.l.
Audible noise	55 - 65dBA, acc. to type
Cooling	self cooling, with fans acc. to type
Electromagnetic compatibility (EMC)	IEC / EN 61000-6
Cabinet protection	IP 20
Colour	RAL 7035 (light grey) powder coated
Certificates	ISO 9001, CE