

Single phase output
up to 5000VA / 6000VA dyn.

1Ph Sine wave inverter for
high voltage battery 300/450/>600V_{DC}
traction line 600/750V_{DC}



- Cascaded double stage-FE topology
- For direct traction line contact
- EN50163/VDE 0115-102 - traction line supply
- 1050V/5min-1270V/20ms-1950V/2ms
- Regulated synthetic sine wave output
- Access to intermediate level UZK (370V_{DC})
- Input and output EMC filter
- Speed monitored ventilation
- Over all efficiency > 92%

for rolling stock, vehicles, ship building, special technology



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Series WER.H750 isolated

Main points:

Input

- External fuse (customer)
- Adapted input filter >15Ω
- Inrush current limitation
- Integral power run-up to intermediate capacity and 1/2ph-sine wave
- Under and over voltage switch-off with delayed re-start
- Power connection:
WAGO Cage Clamp 4mm²
- Signal connection:
Phoenix plug 2,5mm²

Output intermediate circuit (UZK)

- No-load, short circuit proof
- UZK-regulation = f (Tu/lout/Uin) ±2,5%
- For external loads up to 40 % of over all power with controlled run-up (on request)
- Isolated auxiliary voltage
- Clamp: WAGO Cage Clamp 4mm²

Output 1/2 Ph-voltage (N/L)

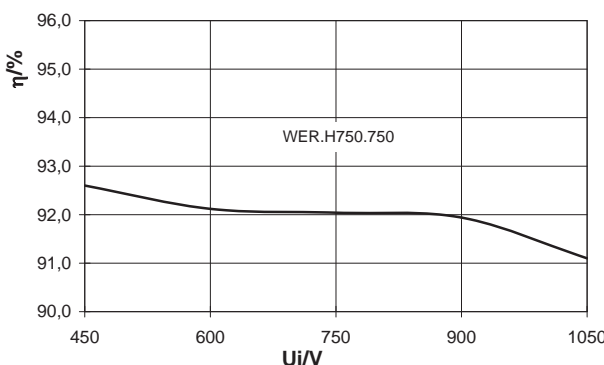
- Regulated synthetic sine wave
- 1ph output / 2ph on request (IT-grid)
- Amplitude run-up with f=constant
- I²t and dyn. over load protection
- No-load, short circuit proof
- Stability ±2,5 % = f (Ta/lout)
- Failure signalling (diverse)
- 5V auxiliary output isolated
- Inhibit for AC-output (AC-off)
- Clamp: WAGO Cage Clamp 4mm²

General:

- Increased isolation acc. EN50124
- Air/creepage distances Inp.-outp.: 8mm
- Isolation test voltage: 2,5kV AC
- Ambient temperature -25/+70°C
- Derating from Ta>50°C / 1%/°C
- EMC acc. EN50121-3-2
- Speed monitored fan operation with optical indication
- Inside temperature-monitoring housing and on PCB
- Safety acc. EN60950
- Dimension: approx (493 x 422 x 195)mm
- Weight approx. 30kg
- CE-Conformity on request

Input	Output			
U _i	UZK	U _{out} / f	P _{out} stat/dyn	Model number
V DC	VDC	Vrms	KVA	
210 - 420*	185	115/60	3,0/5,0	WER.H750.300.115.30/50*
500V / 20ms	370	230/50	3,0/5,0	WER.H750.300.230.30/50*
300V-battery				
310 - 585	185	115/60	5,0/6,0	WER.H750.450.115.50/60
1050 / 2ms	370	230/50	5,0/6,0	WER.H750.450.230.50/60
450V battery				
450 - 850	185	115/60	5,0/6,0	WER.H750.600.115.50/60
950 / 100ms	370	230/50	5,0/6,0	WER.H750.600.230.50/60
400V_{AC}-rectified	(3Ph-pre-connected rectifier see product line L)			
Generator voltage				
600V-battery				
450 - 1000	185	115/60	5,0/6,0	WER.H750.750.115.50/60
1050V/5Min	370	230/50	5,0/6,0	WER.H750.750.230.50/60
1270V/20ms				
1950/2ms				
600/750V traction line				
Modification costs for possible changes above values:			on request	
Projecting costs:			on request	
2Ph output for IT-grid (Option)			on request	
* option (Layout change)			on request	

Efficiency

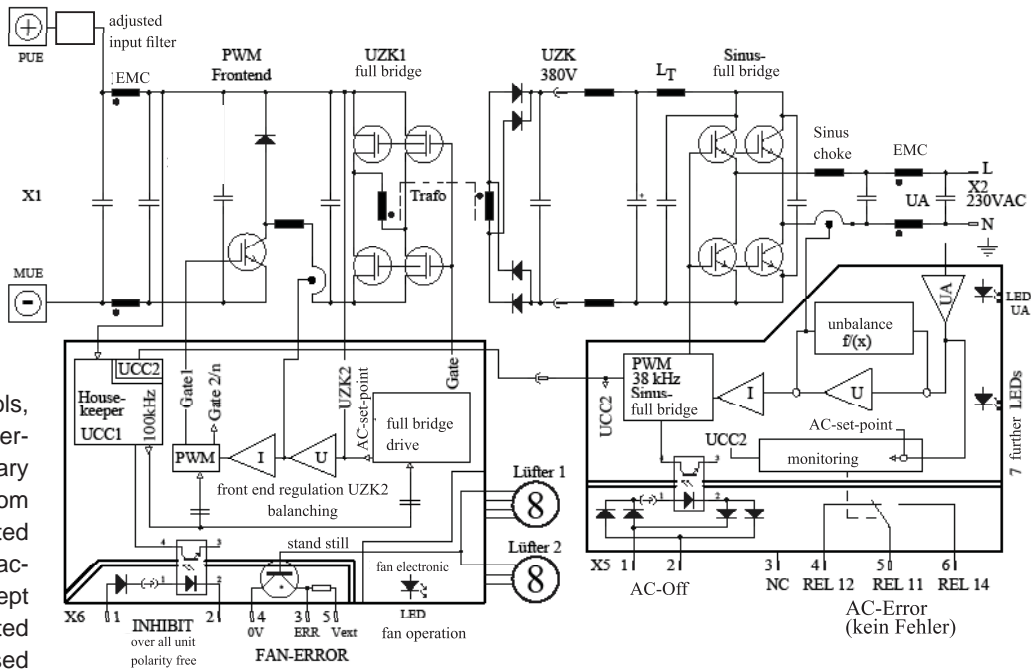


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The **WER.H750** series is designed to generate a single or double phase sine wave output out of traction line or high voltage batteries, including long term transients without current reflection. The sinus output is regulated, dynamical and continuous short circuit proof and any current shape and phase position is possible. Equipment such as pumps, control units, tools, kitchen devices, fans for emergency ventilation and stationary systems can be supplied from traction line. With an adapted input filter all requirements according EN50121-3-2 are kept and inrush currents are limited with >15Ω. The unit is realised with a double voltage cascaded, with compelled balancing and double current cascaded input-FE-Power step, working PMW-valuated to a current and flank resonant full bridge. The secondary sided intermediate level is ±2,5% stable (but not regulated). This intermediate level, which is isolated to the input, optionally can be used for further loads such as battery charges up to 40% of the over all power (The intermediate level is galvanically connected to the AC-output).



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