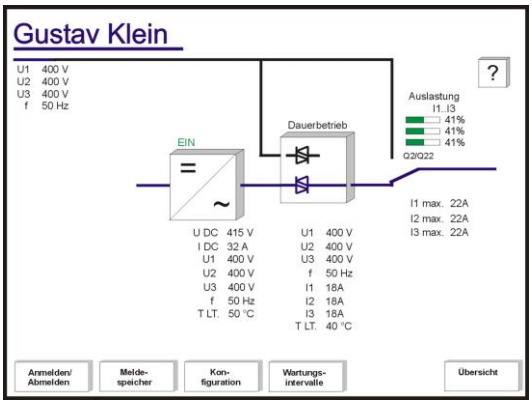
Inverter

Type WR-5080 and WR-5081

Equipment

- **Transistorized Inverter in PWM-technique**
- **Electronic bypass**
- **Manual bypass**
- **Analogue control boards with microprocessor supervision**
- **TFT-panel**
- **Power stacks with two-stage temperature supervision (failure monitoring/shut down)**
- **8 remote signals (potential-free change over contacts)**
- **Isolation transformer in the output**
- **RS232-interface (optional: Profibus, Modbus, SNMP, TCP / IP)**
- **high regulation dynamics (> 4ms)**
- **Parallel operation for up to 8 units (up to 1500 kVA system rating)**
- **High MTBF values (600 000 h)**



Technical data

Rated power		Up to 500 kVA 3~, Up to 200 kVA 1~, (power factor = 0,8 lag)	
Inverter design		Transistor, PWM, galvanically isolated	
DC-Input voltage		24, 48, 60, 110, 120, 220, 372 V up to 1000 V possible	
Bypass			
Input		3/N/PE AC 400/230 V ± 10 %; 50 Hz ± 5 %	
Inverter output			
Output voltage		3/N/PE AC 400/230 V (5081)	1/N/PE AC 230 V (5080)
Voltage tolerance	static dynamic asymmetrical load	±1 % ±4 % @ 100 % load variation ±2 % @ 100 % unbalance L-N (only 5081 = 3~)	
Adjustment range output voltage		±5 % (+5 % with restriction of nominal data)	
Regulation time (instant. value regulation)		< 4 ms	
Wave form		Sinusoidal	
Distortion factor		≤ 3 % @ linear load	
Frequency		50 Hz ± 0.1 % (synchronized by quartz) or synchronized by mains	
Synchronization range		±3 %	
Frequency slew rate		1 Hz/s	
Overload performance		1.50 ∗ I_{Nom} for 60 seconds; 1.25 ∗ I_{Nom} for 10 minutes; 1.10 ∗ I_{Nom} for 20 minutes	
Short circuit performance		Short circuit proof Short circuit current 2-4x I_{Nom} for 5 sec. Interruption (Inverter Stop) at 5 sec. acc. EN 62040-1	
Permissible power factor		0.0 inductive – 0.0 capacitive Reduced rating on deviation of cos φ) = 0,8 inductive	
Permissible crest factor of load current		≤ 2.3 @ nominal load	
Safety, Environment, Design			
Safety		1 acc. EN 60950-1	
Earth conductor current		< 5 % I_{Nom} typ. 50 mA	
Protection type		IP 20 (floor IP00) acc. EN 60529	
Permissible climate: Permissible temperature:		3K3 to IEC 60721-3-3 (85 % rel. humidity, no condensation) 0 °C to +40 °C	
Permissible installation height at rated load		1000m above sea level Min. air pressure 870 hPa	
Cabinet design		Steel sheet self-standing cubicle	
Remote signalling (terminal connection) 2 potential-free change over contacts each Contact rating	AC 250 V 6 A 1500 W DC 250 V 0,4 A 100 W DC 60 V 0,7 A 42 W DC 24 V 6 A 144 W	8 signals: • Inverter operation • Mains operation • Battery discharge • Warning deep discharge • Mains failure • failure • 2x reserve	
High voltage test			
Test voltage	– primary -secondary – primary/ secondary-body	5,3 kVDC 2,8 kVDC	
Applied directives and standards			
Low Voltage Directive: Electromagnetic compatibility: UPS: General and safety requirements: UPS: EMI UPS: Method of specifying the performance and test requirements: Further applicable standards in extracts: Degrees of protection provided by enclosures: Classification of environmental conditions:		2006/95/EG 2004/108/EG EN 62040-1; EN 62477-1 EN 62040-2 EN 62040-3 EN 60529 EN 60721	

Subject to change without notice (tech)

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