

Thyristor-Rectifier

Type GR-3811 and GR-3812



Equipment

- Thyristor rectifier 6-pulse (12-pulse)
- Input contactor for rectifier
- Automatic charging
- Analogue control boards with microprocessor supervision (GR-3811)
- GR-3811 TFT-panel with touchscreen, GR-3812 with LCD
- Power stacks with two-stage temperature supervision (failure monitoring/shut down)
- Isolation transformer in the input
- 8 remote signals (floating change over contacts)
- RS232-interface (Profibus, Modbus, SNMP optional)

Proven technology

- High MTBF values (400 000 h)
- User-friendly control functions with integrated processor (GR-3811)
- Temperature-regulated charging voltage
- 3 charging characteristics (automatic)
- Fanless design (natural air cooling by convection)



GR-3811



GR-3812

Technical data

Rated voltage	24 / 48 / 60 / 110 / 120 / 220 / 372 V	
Rated current	Up to 1500 A	
Rectifier design	Galvanically isolated ,Thyristor 6-puls, >500A 12-pulse	
Input voltage	3/N/PE AC 400/230 V +/-10%	
Voltage output tolerance	± 1 %	
Frequency	50 Hz ± 5 %	
Charging characteristics	IU acc. DIN 41772 3 characteristics (float, boost and equalizing charge)	
Ripple with battery disconnected	<5% rms, <2% rms with additional filter	
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 environmental conditions:		
Storage acc. EN 60721-3-1 (long term)	1K2 / 1M3	0 to +40 °C
Transport acc. EN 60721-3-2 (short term storage.)	2K2 / 2M2	-25 to +60 °C
Operation acc. EN 60721-3-3	3K3 / 3M2	0 to +40 °C
	<ul style="list-style-type: none"> • 85 % rel. humidity, without condensation • Degree of pollution: 2 	
Permissible installation height at rated load	1000m above sea level Min. air pressure 870 hPa	
Installation site	Operating site with restricted access Installation on concrete or other non-flammable surface	
Connection	In front, at bottom; access after opening the door	
Instrumentation / control unit	Type: 3811 Coloured TFT-panel with touch screen Type: 3812 LCD-Display	
Remote signalling (terminal connection)	8 signals:	
2 floating change over contacts each	<ul style="list-style-type: none"> • Operation • Battery discharge • Warning deep discharge • Mains failure • Failure • 3 x reserve 	
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	
High voltage test		
Test voltage	- primary / secondary - primary / body - secondary / body	5,3 kVDC 2,3 kVDC 2,8 kVDC
Applied directives and standards		
Low Voltage Directive	2006/95/EG	
Electromagnetic compatibility	2004/108/EG	
UPS: General and safety requirements	EN 62040-1 EN 62477-1	
UPS: EMI	EN 62040-2	
UPS: Method of specifying the performance and test requirements	EN 62040-3	
Characteristic curves for charging equipment	DIN 41772	
Further applicable standards in extracts:		
Degrees of protection provided by enclosures	EN 60529	
Classification of environmental conditions	EN 60721	

Subject to change without notice (tech)

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