

3 - TECHNICAL CHARACTERISTICS

The table below shows the main technical characteristics of the equipment.

Characteristic	GRTD-1100		
Rated output current	5A (Note: DC power input, rated output 3A)		
Forced output current for 1 minute	7A		
Rated sensing voltages, using external power input or PMG (rms voltage)	Rated voltage	Voltage Range	Jumper
	110Vac	Range 95Vac/300Vac	ON
	220Vac	Range 95Vac/300Vac	ON
	380Vac	Range 300Vac/600Vac	OFF
	440Vac	Range 300Vac/600Vac	OFF
	480Vac	Range 300Vac/600Vac	OFF
Minimum generator voltage (residual voltage)	Voltage in which the power input has 15 Vac or 21 Vdc		
	Three-phase (15 up to 300V)		
Power input connection	Single-phase (15 up to 300V)		
	DC Power Supply (24Vdc up to 220Vdc)		
Sensing connection	Three-Phase (with neutral) / Single-Phase (with neutral)		
Sensing frequency operation range	35Hz up to 75Hz		
Controlled rectifier gain ration (no load)	Three-phase connection: x 1,32		
Maximum field voltage	With three-phase power input: x 1,32		
Static regulation	< 0,5%		
Power input frequency	45Hz up to 180Hz		
Voltage adjustment range (<i>Software</i>)	Residual voltage up to Maximum Rated Sensing Voltage. Note: voltages read correctly between the ranges adjusted with sensing jumper.		
U/F Limiter	Frequency adjusted from 0 up to 75Hz and drop adjustable from 2V/Hz up to 50V/Hz		
Operation temperature	-40°C up to 60°C		
Storage temperature	-20°C up to 40°C		
Communication LED	Indication of Communication		
Alarm LED	Indication of Alarm Alarm which will actuate configurable according to the costumer need.		
Approximate weight	810g +/-50g		
Digital input	Enable (ON/OFF, enable parallel, voltage adjustment, enable function 2)		
Analogue input	Configurable 4-20mA, +/-10Vdc and 0-10Vdc or Potentiometer (5k, 3W)		
Analogue input for field current	Potentiometer (5K) – Maximum variation 5A, with value set at field current reference		
Communication	RS232 – MODBUS protocol		
Variation of analogue input	Variation: +/-15% of reference voltage		
Ramp	Can be configurable from 0 up to 10s		

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Relay output	2 Relays configurable for which alarm will actuate according to customer need
Parallel operation	CT 5A
Power factor correction (according to the model)	Varies from 0 up to 20 % of reference voltage
Droop	Varies from 0 up to 20 % of reference voltage
Protections	Overvoltage
	Field overcurrent (analogue detection)
Limiters	Field overcurrent (software detection)
	Overexcitation (% of firing angle)
	U/F
Alarms	Low frequency
	Field overcurrent
	U/F
	Power firing limit
	Overvoltage
	Drive fault
	Spinning Diode

Table 3.1 - Technical characteristics of regulator

Technical Characteristics