

## **COMPANY**

The company was established in 1979 and dedicated to the control of power electronics.

We develop and manufacture tailor-made power supplies and dispose of standard products.

We can work together on the design and study of energy supplies for your products.

Our design and manufacturing processes enables us to a warranty of three years. The products

are in accordance with the norms of the CE.

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#### **PRODUCTS**

## Input network 230Vac and output voltage stabilized fixed

<u>Series</u>	Description	<u>Outputs</u>	Power (max)
<u>FA</u>	Linear desktop	13Vdc and 24Vdc	1200W
<b>GCR</b> (New)	Switching power with Rack	12Vdc, 24Vdc, 48Vdc, 72Vdc and 110Vd	c 6000W
<u>GT</u>	Switching power supply desktop	5Vdc, 12Vdc, 15Vdc, 24Vdc, 48Vdc	150W
<u>GD</u>	Switching power supply DIN rail	5Vdc, 12Vdc, 24Vdc and 48Vdc	120W
<u>GO</u>	Switching power supply open frame	5Vdc, 12Vdc, 15Vdc, 24Vdc, 48Vdc	120W
<u>BC</u>	Linear with adapter battery	13Vdc	140W
<u>CEB</u>	Linear automatic battery charger	13Vdc	650W
<u>GB</u>	Switching power SAI security, CCTV	12Vdc & 24Vdc	250W
<u>GW</u>	Switching power IP67 protection	12Vdc and 24Vdc	120W
<u>GP</u>	Switching power connecting PIN	12Vdc and 24Vdc	15W

## CONVERTERS ADJUSTABLE IN VOLTAGE AND CURRENT (Lab)

G283	Linear desktop	0-28Vdc and 0-3Adc	90W
<u>GVD</u>	Linear desktop	0-30Vdc; 0-60Vdc and 0-144Vdc	600W
<u>GSD</u>	Linear symmetrical desktop	±0-30Vdc - 0-5A	300W
GDL	Linear desktop	0-30Vdc and 0-60Vdc	1200W

## PRODUCTS AC/AC

<u>Series</u>	Description	<u>Outputs</u>	Power (max)
<b>GSM</b> (New)	Stabilisers single phase	230 Vac	50kVA
<b>GST</b> (New)	Stabilisers three phase	380 Vac	3000kVA
<b>GUM</b> (New)	UPS Single phase	380/400Vac	15kVA
<b>GUT</b> (New)	UPS Three phase	280/400Vac	80kVA
<b>GUTH</b> (New)	UPS Three phase	280/400Vac	300kVA
<b>GH</b> (New)	Variable Frequency Drive	48Vdc - 400Vdc	300kVA

#### PRODUITS DC/AC

<u>Series</u>	<u>Description</u>	<u>Inputs</u>	Power (max)
<u>GI</u>	Inverter CC/CA	19Vcc - 137Vcc	3kVA
<b>GIM</b> (New)	Inverter Single phase	48Vcc - 400Vcc	300kVA
<b>GIT</b> (New)	Inverter Three phase	48Vcc - 400Vcc	300kVA

## PRODUITS DC/DC

<u>Series</u>	<u>Description</u>	<u>Outputs</u>	Power (max)
<b>GCRDC</b>	Lifter Gear Converter	12Vcc, 24Vcc, 48Vcc,	400VA
GRDC	Linear Converter DC/DC	13.8Vcc, 40AVcc	560W

#### Tailor-made products

<u>Series</u>	<u>Description</u>	<u>Outputs</u>	Power (max)
GE	Switching and linear power supplies	To be agreed	To be agreed

At any standard product we can change its electrical, mechanical, environment and standards to fit your needs.



## POWER SUPPLY SERIE FA

#### **DESCRIPTION**

Due to its characteristics, low ripple and stability in the load, the equipments are suitable among other applications, for use in transmission equipment, nautical, radiocommunications and industry in general.

The criterion to apply powerful materials that are responsive at work desired has been the basis of their design, achieving a great robustness and an excellent performance.



All models have crowbar protection over-voltage at the output. This way preventing the equipment connected a possible malfunction by an outflow of circumstantial overvoltage.

In models with instruments, the output voltage can be varied by an external potentiometer. Sources from 240W power, heat dissipation are forced through a turbine.

Under request can vary tensions input and output as well as power. You can optionally incorporate other protections or controls and alarms.

			SPECIFIC CHA	RACTERIST	ICS		
MODEL	Output voltage ±0,2V	Nominal intensity	<b>DIMENSIONS mm</b> (width, height, depth)	MODEL	Output voltage ±0,2V	Nominal intensity	<b>DIMENSIONS mm</b> (width, height, depth)
G1303	13V	3A	125x96x190	G2403	24Vcc	3A	125x96x190
G1305	13V	5A	125x96x190	G2405	24Vcc	5A	125x96x190
G1307	13V	7A	125x96x190	G2407	24Vcc	7A	155x115x220
G1312	13V	12A	155x115x220	*G2410	24Vcc	10A	325x135x260
*G1320	13V	20A	325x135x260	*G2420	24Vcc	20A	325x135x260
*G1330	13V	30A	325x135x260	*G2430	24Vcc	30A	231x160x420
*G1350	13V	50A	482x177x340	*G2450	24Vcc	50A	482x177x340
*G13100	13V	100A	482x177x475	*G24100	24Vcc	100A	482x177x475

<sup>\*</sup> Equipment marked with an asterisk (\*) are available in version with analogy instruments, with the reference model finished in M

	TECHNICAL SPECIFI	CATIONS
Input	Voltage network	230Vac ±10% -50Hz
	Protection input	Fuse 5x20 type F
Output	Ripple	< 10mV RMS
	Line load regulation	0,5% typical
	Line network regulation	0,4% typical
	Protection of short circuit	Limitation Fold back
	Over voltage protection	"Crowbar"
Environment	Working temperature	0 +40°
	Humidity	20 ~ 90% non condensing
Enclosure	Protection	IP-20
Standards	Security	EN60950-1, UL60950-1,
apply	EMI	According EN55011, EN55022
	Immunity	According EN61000-4



## POWER SUPPLY SERIE GCR

#### **DESCRIPTION**

Appliance supported by RACK for varied uses within the communications, informatics and industrial sectors.

They are manufacture with switch technology obtaining a high degree of efficiency. Due to the application of the last technology we have reduced the weight and dimensions.

They are protected against overload and short circuit through a self-starter.

The input peak is limited; the tension is adjustable and is provided with a LED green sign which indicates the output activation.

Displays measurement and control sensor are procured.





SPECIFIC CHARACTERISTICS					
Model	Nominal output	Adjustment range	Efficiency	Output maximal	Power
GC1512R	12Vdc	11 to 13.8	88	124A	1500W
GC1524R	24Vdc	21 to 26	90	62A	1500W
GC1548R	48Vdc	44 to 56	90	31A	1500W
GC1572R	72Vdc	67 to 75	90	21A	1500W
GC15110R	110Vdc	98 to 113	90	13.7A	1500W
GC2412R	12Vdc	11 to 13.8	88	166A	2390W
GC2424R	24Vdc	21 to 26	90	100A	2390W
GC2448R	48Vdc	44 to 56	90	50A	2390W
GC2472R	72Vdc	67 to 75	90	31.2A	2390W
GC24110R	110Vdc	98 to 113	90	21.7A	2390W
GC3012R	12Vdc	11 to 13.8	88	250A	3000W
GC3024R	24Vdc	21 to 26	90	125A	3000W
GC3048R	48Vdc	44 to 56	90	62A	3000W
GC3072R	72Vdc	67 to 75	90	41.6A	3000W
GC3110R	110Vdc	98 to 113	90	27.3A	3000W
GC6012R	12Vdc	11 to 13.8	88	500A	6000W
GC6024R	24Vdc	21 to 26	90	250	6000W
GC6048R	48Vdc	44 to 56	90	48	6000W

	TECHNICAL	. SPECIFICATIONS
Input	Input network	98-250Vca
	Frequency rang	43 to 63 Hz
	Starting current	<60A à 230Vca en frio (1500 to 3000w)
		<115A à 230Vca en frio (6000w)
Output	Marge voltage adjustable	See characteristics
	Ripple and Interference	<50 + <200 mVpp
	Charge regulation Network regulation	<1%
	Control Sensor	<0,2%
Protections	Overload Protection	130% nominal current
	Short-circuit Protection	Permanent / auto restoration
		·
Atmosphere	Work temperature	-15 à +50°C
		(>50 à 70°C 50% of the charge)
	Humidity	20 ~ 90% non condensable
Case	Degree of protection	IP 20
Applicable Norms	Security	EN60950-1, UL60950-1,
Applicable Norths	EMI	EN55011, EN55022
	Immunity	EN61000-4
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Installation II	Dielectric Strength	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1minute
Dimensions	Rack 3U	482.4x132.5x330 mm (width, height, depth)

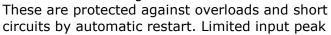
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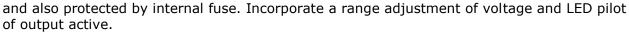


## POWER SUPPLY SERIE GT

#### **DESCRIPTION**

Desktop Power Supply, useful for applications in the field of communications, computing and general industry. They are based on switching technology achieving high efficiency with reduced dimensions and weight.





Whit the equipment also delivered the network cable CE standard 7/7 to IEC320.

The output connection is via jack removable strip of four terminals

# Under request can vary tensions input and output as well as power. We are able incorporate other protections or controls and alarms

	SPECIFIC CHARACTERISTICS					
Model	Nominal output	Adjustment range	Efficiency	Output maximal	Power	Fusible type F
GT06003	3Vdc	3 to 3,5	68	18A	60W	1a
GT09005	5Vdc	4,8 to 6,2	72	18A	90W	1 <sup>a</sup>
GT06012	12Vdc	12 to 15	80	5A	60W	1A
GT15012	12Vdc	12 to 15	80	12,5A	150W	2A
GT06024	24Vdc	24 to 29	80	2,5A	60W	1A
GT15024	24Vdc	24 to 29	82	6,25A	150W	2A
GT06048	48Vdc	48 to 58	85	1,25A	60W	1 <sup>a</sup>
GT15048	48Vdc	48 to 58	85	3A	150W	2 <sup>a</sup>

	TECHNICAL SPE	CIFICATIONS
Input	Voltage network Rank frequency Starting current Inrush	230Vac ±15% 47 to 63 Hz <16A to 230Vca cold
Output	Adjustable voltage Ripple & Noise Line load regulation Line network regulation	See characteristics <50 & <100 mVpp <1% <0,2%
Protections	Overload protection Protection of short circuit	130% of rated current Standing / auto restoration
Environment	Working temperature Humidity	-15 to +50°C (>50 to 70°C 50% charge) 20 ~ 90% non condensing
Enclosure	Protection	IP20
Standards apply	Security EMI Immunity	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4
Installation II	Dielectric withstand voltage	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1min
Dimensions	Box Desktop	175x65x118 mm (width, height, depth)



## POWER SUPPLY SERIE GD

#### **DESCRIPTION**

Switching technology equipment for set up with a standard DIN rail of 35mm – Height 7,5mm and 15mm

GD series is protected against overloads and short circuits by automatic restart. Limited input peak and also protected by internal fuse. Incorporate a range adjustment of voltage and LED pilot of output enabled.

The input and output connection is easy via jack removable strip of three and four terminals respectively



# Under request we are able to vary input and output tensions as well as Power.

	SPECIFIC CHARACTERISTICS						
Model	Nominal output	Adjustment range	Efficiency	Output maximal	Power	Fusible type F	<b>Dimensions mm</b> Width x height x depth
GD06012	12Vdc	12 to 15	80	5A	60W	1A	45 x 124 x 92
GD12012	12Vdc	12 to 15	87	10A	120W	2A	55 x 124 x 122
GD06024	24Vdc	24 to 29	80	2.5A	60W	1A	45 x 124 x 92
GD12024	24Vdc	24 to 29	82	5A	120W	2A	55 x 124 x 122
GD24024	24Vdc	24 to 28	89	10A	240W	3A	100 x 126 x 126
GD48024	24Vdc	24 to 28	89	20A	480W	5A	226 x 126 x 100
GD06048	48Vdc	48 to 53	89	1.25A	60W	1A	45 x 124 x 92
GD12048	48Vdc	48 to 53	89	2.5A	120W	2A	55 x 124 x 122
GD24048	48Vdc	48 to 53	89	5A	240W	3a	100 x 126 x 126
GD48048	48Vdc	48 to 53	89	10A	480W	5a	100 x 126 x 126

	TECHNICAL SPE	CIFICATIONS
Input	Voltage network	230Vac ±15%
	Rank frequency	47 to 63 Hz
	Starting current	<16A to 230Vca cold (60 and 120W)
Output	Adjustable voltage	<40A to 230Vca cold (240W) See characteristics
Output	Ripple & Noise	<50 & <100 mVpp
	Line load regulation	<1%
	Line network regulation	<0,2%
Protections	Overload protection	130% of rated current
	Protection of short circuit	Standing / auto restoration
Environment	Working temperature	-15 to +50°C
	Humidity	(>50 to 70°C 50% charge) 20 ~ 90% non condensing
	Trailinate,	20 Jo 70 Horr condensing
Enclosure	Protection	IP20
Standards	Security	EN60950-1, UL60950-1,
apply	EMI	According EN55011, EN55022
	Immunity	According EN61000-4
Installation II	Dielectric withstand voltage	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1min



## POWER SUPPLY SERIE GO

## **DESCRIPTION**

Switching technology equipment presented in an open chassis easy fixing and also channels DIN

GO series is protected against overloads and short circuits by automatic restart. Limited input peak and also protected by internal fuse. Incorporate a range adjustment of voltage and LED pilot of output enabled.

The input and output connection is easy via jack removable strip of three and four terminals respectively





## Under request we are able to vary input and output tensions as well as Power.

SPECIFIC CHARACTERISTICS							
Model	Nominal output	Adjustment range	Efficiency	Output maximal	Power	Fusible type F	<b>Dimensions mm</b> Width x height x depth
G006003	3,3Vdc	3 to 3,5	68	18A	60W	1A	108 x 50 x 72
G006005	5Vdc	4,8 to 6,2	72	12A	60W	1A	108 x 50 x 72
G006012	12Vdc	12 to 15	80	5A	60W	1A	108 x 50 x 72
GO12012	12Vdc	12 to 15	80	10A	120W	2A	108 x 60 x 100
G006024	24Vdc	24 to 29	80	2,5A	60W	1A	108 x 50 x 72
GO12024	24Vdc	24 to 29	82	5A	120W	2A	108 x 60 x 100
GO06048	48Vdc	48 to 58	85	1,25A	60W	2A	108 x 50 x 72
GO12048	48Vdc	48 to 58	85	2,5A	120W	2A	108 x 60 x 100

	TECHNICAL SPE	CIFICATIONS
Input	Voltage network Rank frequency Starting current	230Vac ±15% 47 to 63 Hz <16A to 230Vca cold
Output	Adjustable voltage Ripple & Noise Line load regulation Line network regulation	See characteristics <50 & <100 mVpp <1% <0,2%
Protections	Overload protection Protection of short circuit	130% of rated current Standing / auto restoration
Environment	Working temperature Humidity	-15 to +50°C (>50 to 70°C 50% charge) 20 ~ 90% non condensing
Standards apply	Security EMI Immunity	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4
Installation II	Dielectric withstand voltage	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1min



## POWER SUPPLY SERIE BC

## **DESCRIPTION**

They are stabilised and regulated power supplies. The negative has earth connection and can host the transmitting equipment.

They are fitted with buffer circuits for battery charging to prevent possible mains power failure by which they are suitable for employment equipment in transmission base and repeaters stations.

The criterion to apply resistant materials that are responsive to the desired work has been the basis of their design. Therefore they have achieved a great robustness and an excellent performance.

They are protected against short circuits and limited intensity through a switch located in the back. The intensity is 10A for equipment higher transmission power and 5A for low power.



They have crowbar circuit protection for preventing to of equipment connected possible malfunction by an outflow of circumstantial overvoltage.

In the subsequent panel are terminal connections batteries and transmitter equipment to facilitate its facility.

In the front panel there is start switch and indicators. The green pilot LED is of output voltage active and red LED when is working current limitation.

	TECHNICAL SPEC	IFICATIONS
Input	Voltage network Protection input	$230 extsf{Vac} \pm 10\%$ -50Hz Fuse 5x20 type M 1,5A
Output	Output voltage Protection "crowbar" Intensity Nominal Battery protection Ripple Line load regulation Line network regulation Protection of short circuit Against surges	13,5Vdc Fusible 5x20 Type F 10A Selectable 5/10A Fuse 5x20 Type F 10A Lower 10mV RMS 0,5% typical 0,4% typical Limitation Fold back "Crowbar"
Environment	Working temperature Humidity	$0 +40^{\circ}$ 20 ~ 90% non condensing
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP20
Dimensions	Totals (width – height – depth) Accommodation equipment	185 x 170 x 215 mm 180 x 60 x 180 mm



## POWER SUPPLY SERIE CEB

#### **DESCRIPTION**

The equipment consists of the main power supply and the automatic charger for batteries. The equipment includes two fixed, regulated dc outputs.





- The **main** output is fixed at 13.8Vdc.
- The **battery** output is fixed with a device that will determine when this should automatically go over to floating or standby voltage (13,6Vdc) from the charge voltage (14,4Vdc), depending on the charge level.

The batteries should be of the lead-acid type at 12V.

The output may be used simultaneously, and are isolated from the chassis from the ground terminal and electrically with respect to the mains supply.

#### **Protections:**

Against short circuits, by reversing polarity and against surges at the output by preventing possible deterioration equipment connected by a voltage surge circumstantial. Protection of minimum voltage battery, which disconnected to prevent its deterioration, when it detects that the tension is 10.5 Vdc.

	S	PECIFIC CH	IARACTE	RISTIC	S
Model	Output power	I output equipments	I output battery	Fan	Dimensions en mm width, height, depth
G0147FV	155W	7A	4A	NO	265x115x190
G01420FG	405W	20A	9A	SI	231x160x420
G01420FR	405W	20A	9A	SI	482x177x340
G01450FR	865W	50A	12A	SI	482x177x475
G01480FR	1400W	80A	20A	SI	482x177x475

	TECHNICAL SPECI	FICATIONS
Input	Voltage network Protection input	$230 \text{Vac} \pm 10\%$ - $50 \text{Hz}$ Breaker
Output	Ripple Line load regulation Line network regulation Protection of short circuit Against surges	Lower 10mV RMS 0,5% typical 0,4% typical Limitation Fold back "Crowbar"
Environment	Working temperature Humidity	$0 +40^{\circ}$ 20 $\sim$ 90% non condensing
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP20
Battery Charger	Reverse polarity protection  Discharge battery protection	Yes Limitation OF INTENSITY Minimum voltage



## POWER SUPPLY SERIE GB

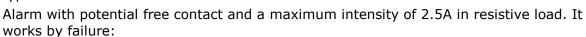
#### **DESCRIPTION**

UPS DC switching power supply technology for security systems against fire, closed circuit TV or others.

They are presented in a wall box with housing for battery and external LED showing the state of the UPS.

They have an automatic battery chargerefficient, which depending on the level of battery determines switching of voltage load at a voltage of floating or standby.

The batteries should be of the lead-acid type at 12V.



- No battery Battery very low Battery Discharging Battery Charging Overload
- Shorted battery charger Reverse Polarity Battery Failure to 230Vac network.
- Fuse battery-cast (6.3 A) Fuse 230Vac Network-cast (2A)

Under request can be varied autonomy hours, dimensions of the body, the battery and tensions entry, exit and power.

SPECIFIC CHARACTERISTICS				
Model	Output voltage	Output intensity	Space for batteries	Dimensions of cabinet mm (W x H x D)
GB13024	24Vdc	5A	2 x 7Ah	343 x 95 x 258
GB14024	24Vdc	5A	2 x 17Ah	405 x 100 x 351

	TECHNIC	<b>AL SPECI</b>	FICATIONS
Input	Voltage network Starting current Rank frequency		230Vac ±15% <16A at 230Vac 43 to 63 Hz
Output	Output voltage  Ripple & Noise Line load regulation Line network regulat	In 12V In 24V ion	12 - 14,5 Vdc 26 - 29,0 Vdc <50 & <100 mVpp 1% maximum 1% maximum
Protections	Overload protection Protection of short circuit		130% of rated current Standing / auto restoration
Environment	Working temperature Humidity	2	-15 to +50°C (>50 to 70°C 50% charge) 20 ~ 90% non condensing
Standards apply	Security EMI Immunity Enclosure protection		EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP20
Installation II	Dielectric withstand vol	tage	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1min



## POWER SUPPLY SERIE GW

## **DESCRIPTION**

Switching power supply designed for lighting systems and other applications.

Finished in rectangular box and encapsulated with resin and fully waterproof to withstand bad weather.

They are protected against overloads and short circuits by automatic restart. They limit the input peak and a green LED that indicates output active.



The connection of input and output voltage is carried by wires 30cm long hose.

## Under request can vary tensions input and output as well as power.

SPECIFIC CHARACTERISTICS				
Model	Output voltage	Output intensity	Power	Dimensions mm width x height x depth
GW12012	12Vdc	10A	120W	202 x 52 x 75
GW12015	15Vdc	8A	120W	202 x 52 x 75
GW12024	24Vdc	5A	120W	202 x 52 x 75

	TECHNICAL SPECIF	ICATIONS
Input	Voltage network	230Vac ±15% 43 to 63 Hz
	Starting current	<16A at 230Vac
Output	Ripple & Noise	<50 & <100 mVpp
	Line load regulation	1% maximum
	Line network regulation	1% maximum
Protections	Overload protection	130% of rated current
	Protection of short circuit	Standing / auto restoration
Environment	Working temperature	-15 to +50°C
	House Salter	(>50 to 70°C 50% charge)
	Humidity	20 ~ 90% non condensing
Standards	Security	EN60950-1, UL60950-1,
apply	EMI	According EN55011, EN55022
	Immunity Englesure protection	According EN61000-4 IP67
	Enclosure protection	1707
Installation II	Dielectric withstand voltage	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1min



## POWER CONVERTER SERIE GP

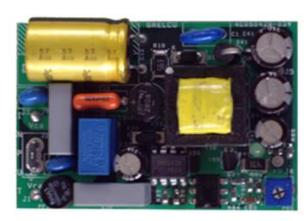
## **DESCRIPTION**

Switching power supply presented in an open small chassis

Universal connectivity network input and output through pins for welding in a printed circuit board.

Ripple and noise below 150mV RMS.

Under request we are able to modify input and output tensions as well as Power.



High energy efficiency of 80% and voltage adjustment incorporates.

SPECIFIC CHARACTERISTICS					
Model Output Output Power voltage intensity					
GP01512	12Vdc	1A	15W		
GP01524	24Vdc	0,5A	15W		

	TECHNICAL SPECIF	ICATIONS
Input	Voltage network Starting current Rank frequency	Universal 90-264 Vac <16A a 230Vac 43 a 63 Hz
Output	Adjustable voltage Ripple & Noise Line load regulation Line network regulation Overload protection Protection of short circuit	± 10% <50 & <100 mVpp 1% maximum 1% maximum 130% of rated current Standing / auto restoration
Environment	Working temperature Humidity	-15 to +50°C (>50 to 70°C 50% charge) 20 ~ 90% non condensing
Standards apply	Security EMI Immunity	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4
Installation II	Dielectric withstand voltage	I/P-O/P 2KVcc; I/P-FG 1,5KVcc -1min
Dimensions	Open frame	73 x 49 x 20mm



## POWER SUPPLY SERIE G283

## **DESCRIPTION**

Because of its features, size and easy handling this is the ideal instrument for professional centres, technical services and testing etc.

Its voltage range covers a broad spectrum of work.

These power supplies basically consist of a stabilised, regulated DC output from 0Vdc up to 28Vdc. Maximum current level is 3A, which can be regulated with the corresponding control that enables it operate as current generator.

The two digital indicators display simultaneous information about the voltage and intensity parameters, providing a clear indication of operation.

Current limitation is indicated by a red LED and voltage by a green LED.

The model G283DVSF is fitted with additional outputs of 5Vdc at 1A and  $\pm 15$ Vdc at  $\pm 0,5$ A, together with their corresponding LED indicators.

#### This model can be modified to suit the needs of educational institutions.





	,	SPECIFIC	<b>CHARACTERISTICS</b>		
Model	Output voltage	Output intensity	additional outputs	Dimensions (W x H x D)	Potency
G283 DV	0-28Vdc	0 to 3A		325x118x260	90w
G283 DVSF	0-28Vdc	0 to 3A	5Vdc/1A   ±15Vdc/±0.5A	325x118x260	105w

	TECHNICAL SPECIFICA	TIONS
Input	Voltage network Protection input	$230$ Vac $\pm 10\%$ - $50$ Hz Fuse $5$ x $20$ mm type F
Output	Line load regulation 0-100%    Line network regulation ±10%  Ripple Overload and short circuit protection	<10mV <10mV <5mVrms Fold back
Environment	Working temperature Humidity	0 +40° 20 ~ 90% non condensing
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP20
Instruments	Digital Voltmeter 3½. Resolution Error measured total Voltmeter Digital Ammeter 3½. Resolution Error measured total Ammeter	100mV ±200mV 10mA ±20mA



## POWER SUPPLY SERIE GVD

#### **DESCRIPTION**

The wide range of possibilities makes them a highly appreciated instrument.

Their most important characteristics are high stability in load and supply variations: low impedance and minimum ripple level.

The output is stable, which can be regulated from 0V up to 30Vdc or 58Vdc and from 5A to 20A of current, depending on the model.

Output voltage and current selection is controlled by a high precision multi-turn potentiometer.

The power supply is capable of simultaneous voltage and current reading.

The SF version has an additional output 5Vdc/1A and another symmetrical at±15Vdc/±1A







	SPECIFIC CHARACTERISTICS			
Model	Output voltage	Output current	Dimensions width, height, depth	Power
GVD305 *	0-30Vdc	0 a 5A	325x110x260	150w
GVD310 *	0-30Vdc	0 a 10A	325x135x260	300w
GVD3020	0-30Vdc	0 a 20A	231x160x420	600w
GVD605 *	0-60Vdc	0 a 5A	325x135x260	300w
GVD6010	0-60Vdc	0 a 10A	231x160x420	600w
GVD1442	0-144Vdc	0 a 2A	231x160x420	288w
GVD1444	0-144Vdc	0 a 4A	231x160x420	576w

	TECHNICAL SPECIFICATIONS			
Input	Voltage network Protection input	$230 \text{Vac} \pm 10\%$ -50Hz Fuse 5x20mm type F		
Output	Line load regulation 0-100%    Line network regulation ±10%  Ripple Overload and short circuit protection	<5mV <1mV <3mVrms Fold back		
Environment	Working temperature Humidity	$0 + 40^{\circ}$ 20 ~ 90% no condensable		
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP-20		
Instruments	Digital Voltmeter 3½. Resolution Error measured total Voltmeter Digital Ammeter 3½. Resolution Error measured total Ammeter	100mV ±200mV 10mA ±20mA		



## POWER SUPPLY SERIE GSD

## **DESCRIPTION**

This equipment consists of two main power supply units with the possibility of operating independently, series-tracking and parallel, which is selected by means of rotary switch:

 $\begin{array}{lll} \text{Independent} & 0\text{-}\ 30\text{Vdc}\ /\ 0\text{-}5\text{A} \\ \text{Parallel} & 0\text{-}\ 30\text{Vdc}\ /\ 0\text{-}10\text{A} \\ \text{Series} & 0\text{-}\ 60\text{Vdc}\ /\ 0\text{-}5\text{A} \\ \text{Tracking} & \pm 0\text{-}30\text{Vdc}\ /\ \pm 0\text{-}5\text{A} \\ \end{array}$ 

The selection of output voltage and current is controlled by their respective multi-turn potentiometers for each master and slave output.

It also has two additional outputs a 5Vcc/1A and another 12Vcc/1A.

The outputs are protected against short circuits and safety terminals used with pin Ø 4mm.



	TECHNICAL SPECIFICA	ATIONS
Input	Voltage network Protection input	230Vac $\pm 10\%$ -50Hz Fusible 5x20mm type F
Output	Line load regulation 0-100%    Line network regulation ±10%  Ripple Overload and short circuit protection	<5mV <1mV <3mVrms Fold back
Environment	Working temperature Humidity	$0 +40^{\circ}$ 20 ~ 90% no condensable
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP-20
Instruments	Digital Voltmeter 3½. Resolution Error measured total Voltmeter Digital Ammeter 3½. Resolution Error measured total Ammeter	100mV ±200mV 10mA ±20mA
Dimensions	Desktop	325x166x260 <sub>mm</sub> (width, length, depth)



## POWER SUPPLY SERIE GDL

#### **DESCRIPTION**

These a single stabilised, regulated dc output from 0V up 30Vdc/40A for model GDL3040 and 58Vdc/20A for model GDL6020.

Its wide variety of possibilities makes it a highly appreciated instrument in the science and technology fields.

The regulator provides extraordinary stability so that it performs exceptionally well as voltage or current generator.

The output voltage and current are controlled by multi-turn potentiometers, providing excellent precision.

They are fitted with mains input filters and

are electronically protected against short circuits and over-temperatures.

A LED indicator is provided for either voltage or current generator functions.

It includes two digital meters to provide the simultaneous display of both output voltage and current.

A remote sensor enables the selected voltage to be maintained at the load.

SPECIFIC CHARACTERISTICS			
Model	Output voltage	Output current	Dimensions width, height, depth
GDL3040	0-30Vdc	0 a 40A	490 x 200 x 500
GDL6020	0-60Vdc	0 a 20A	490 x 200 x 500

	TECHNICAL SPECIFICA	TIONS
Input	Voltage network Protection input	230Vac ±10% -50Hz Circuit Breaker 16A
Output	Line load regulation 0-100%    Line network regulation ±10%  Ripple Overload and short circuit protection	<20mV <5mV <5mVrms Fold back
Environment	Working temperature Humidity	$0 +40^{\circ}$ 20 ~ 90% no condensable
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, According EN55011, EN55022 According EN61000-4 IP-20
Instruments	Digital Voltmeter 3½. Resolution Error measured total Voltmeter Digital Ammeter 3½. Resolution Error measured total Ammeter	100mV ±200mV 10mA ±20mA



## **VOLTAGE STABILISERS SINGLE PHASE**

## **SERIE GES**



#### **DESCRIPTION**

GES Voltage regulators have a servo drive structure, microcontroller controlled by heavy duty devices which regulates mains voltage for critical loads. Ideal for applications in marine sector, monitoring and in all industries that are serve by reliability and a good quality current.

## **GENERAL CHARACTERISTICS**

- 1 phase in / 1 phase out (1-20kVA)
- Single Phase voltage stabilisers
- Wide power and voltage interval
- Fast Regulation
- High reliability thanks to Microprocessor and Smart Driver
- High Efficiency
- Load transfer to Bypass via pole charge switch
- Safe and economic usage
- Digitally displayed status, input & output measurements
- 2 years warranty
- 10 years spare part support
- Overcurrent and overload protection (optional)





	SPECIFIC CHARACTERISTICS			
Model	Power	Dimensions (W x H x D)	Weight (kg)	
GSM5K	5kVA	45x27x35	40	
GSM10K	10kVA	55x27x35	55	
GSM15K	15kVA	60x32x40	75	
GSM20K	20kVA	50x85x50	125	
GSM30K	30kVA	50x85x50	163	
GSM40K	40kVA	50x85x70	180	
GSM50K	50kVA	50x85x70	210	

Other powers are available under customer demand

	TECHNIC SPECIFICATIONS			
Input	Voltage Correct Interval Voltage Working Interval Optimal Frequency			
Output	Voltage Overloading Correction Speed Optimum Period Efficiency	220 VAC RMS ±2% 10 Sec. 200% Load 90 Volt/Sec 90 Volt/Sec (160 VAC - 260 VAC) >96%		
Protections	Line input protection Output Protection Enclosure	Overcurrent, Low and High Voltage protection Protects load by opening the circuit when overburden, short-circuit IP 20 // IP 25		
Environment	Working temperature Humidity Altitude Acoustic level	-25°C to +60°C < 90% DIN (40040) < 2000m < 50 dB (1 meter square)		
Standards	Security	CE, ISO9001, ISO14001		



## **VOLTAGE STABILISERS THREE PHASE**

## **SERIE GST**





## **DESCRIPTION**

Grelco Voltage regulators are servo drive structure, microcontroller controlled heavy duty devices which regulates mains voltage for critical loads. Ideal for applications in marine sector, monitoring and in all industries that are serve by reliability and a good quality current.

## **GENERAL CHARACTERISTICS**

- 3 phase in / 3 phase out (3-3000kVA)
- Three Phase voltage stabilisers
- Wide power and voltage interval
- Fast Regulation
- High reliability thanks to Microprocessor and Smart Driver
- High Efficiency
- Load transfer to Bypass via pole charge switch
- Safe and economic usage
- Digitally displayed status, input & output measurements
- 2 years warranty
- Overcurrent and overload protection (optional)





	SPECIFIC	CHARACTERISTICS	
Model	Power	Dimensions (W x H x D)	Weight (kg)
GST22K5	22.5kVA	50x110x44	154
GST30K	30kVA	60x119x44	183
GST45K	45kVA	60x119x44	237
GST60K	60kVA	85x140x64	330
GST75K	75kVA	85x140x64	356
GST100K	100kVA	85x140x64	456
GST120K	120kVA	90x163x69	545
GST150K	150kVA	90x163x69	565
GST200K	200kVA	60x172x70	1050
GST250K	250kVA	60x172x70	1150
GST300K	300kVA	60x172x70	1250
GST400K	400kVA	60x170x117	1500
GST500K	500kVA	60x170x117	2000
GST600K	600kVA	60x170x117	2500
GST800K	800kVA	70x185x80	2750
GST1000K	1000kVA	70x185x80	3500
GST1200K	1250kVA	70x185x80	3750
GST1600K	1600kVA	140x175x100	4500
GST2000K	2000kVA	140x175x100	5500
GST2500K	2500kVA	140x205x100	7000
GST3000K	3000kVA	140x205x100	8500

	TECHNICAL S	SPECIFICATIONS
Input	Voltage Correct Interval Voltage Working Interval Optimal Frequency	
Output	Voltage Overloading Correction Speed Optimum Period Efficiency	380 VAC RMS ±2% 10 Sec. 200% Load 90 Volt/Sec 90 Volt/Sec (160 VAC - 250 VAC) >97%
Protections	Line input protection Output Protection Enclosure	Overcurrent, Low and High Voltage protection Protects load by opening the circuit when overburden, short-circuit IP 20 // IP 25 (Available IP 21, 23, 44, 54)
Environment	Working temperature Humidity Altitude Acoustic level	-25°C to +60°C < 90% DIN (40040) < 2000m < 50 dB (1 meter square)
Standards	Security	CE, ISO9001, ISO14001



## UPS SINGLE PHASE

## **SERIE GUM**



GUM UPS series are a single phase in/single phase out, IGBT rectifier, Intelligent Power Module technology based, high input power factor, low THDI and DSP controlled. It is manufacture with different autonomies in order to have a perfect match with the client's needs

## **GENERAL SPECIFICATIONS**

- UPS topology
- IPM power module
- High input power factor > 0,98
- DSP controlled system
- Full digital control system
- Tower and rack type options
- PID control system
- Low input current value (THDI < 5%)</li>
- High efficiency (up to 93%)
- Cold start function
- Static by-pass system
- VAT transfer (Voltage adaptive transfer)
- Output overload and short circuit protection
- External REPO input
- 128 events (5000 alarms) memory
- Clock, calendar and operating hour meter
- Advanced automatic battery test
- Boost charge system
- Temperature compensated charge system
- RS232 port and dry contact relays
- Easy output voltage and frequency selection
- 10 years spare parts support
- Manufactured according to EC Directive; EN62040
- Optional SNMP adaptor
- Optional maintenance by-pass switch
- Optional split by-pass system





	SPECIFIC CHARACTERISTICS			
Model	Power (kVA)	Output Power (kVA)	Dimensions (W x H x D)	Weight (without battery)
GUM06K	6	4.2	215x430x600	23
GUM06KR*	6	4.2	430x600x215	23
GUM10K	10	7	590x215x780	39
GUM10KR*	10	7	430x600x215	39
GUM15K	15	10.5	590x215x780	40

<sup>\*</sup>R Finished with Rack assembly

	TECHNICAL SP	ECIFICATIONS
Input	Maximum voltage	17-225 Vac Single Phase
	By-pass voltage	220/230 VAC ± 10%
	Input frequency	50Hz. Or 60Hz.
	Frequency tolerance	40Hz – 65Hz
	Power factor	>0.98 at full load
	THDI	< 5% at full load
Output	Voltage	380/400 Vac 3P + N
	Crest factor	3:1
	Frequency	50Hz / 60Hz
	Frequency tolerance	Line synchronized: $\pm$ 1%, free running: $\pm$ 0,1%
	Efficiency (at full load)	Up to 92%
	Signal distortion THD	Linear load: <3% Non linear load: <5%
	Connections	Hardwired $+ 2 \times IEC$ sockets on the rea (optional)
Protection	Overload	100% - 125% load 10min, 126%-150% load 1min > 150% load: by pass
	Short circuit	Electronic
	Enclosure protection	IP20
Batteries	Туре	Sealed Lead Acid – Maintenance Free
	Battery housing	Internal < 10kVA External > 10KVa
	Number	20x12V standard (16 to 24 selectable)
	Float charging voltage	270 VDC (20x12V for battery) adjustable
	End of discharge voltage	200 VDC (20x12V for battery) adjustable
	Temperature	25°C
	Boost charge	Available
	Battery test	Automatic or Manual
Environment	Working temperature	0°C to 40°C
	Humidity	90% non condensed
Standards	Security	EN62040-1, EN62040-2,
apply	Serial Communication	RS232 standard or RS485 (optional)
	Software	T-Mon UPS Management Software
	Ventilation	Forced air cooling
	Altitude	< 2000m
	Acoustic noise	<50 dBA



## **UPS THREE PHASE**

## **SERIE GUT**



## **DESCRIPTION**

Series GUT is a double conversion uninterruptable power supply with the latest technology of the market. Consider as a state of art with PWM and IGBT technology, producing microprocessor controlled and pure sine wave output to critical loads. It is manufacture with different autonomies in order to have a perfect match with the client's needs

## **GENERAL CHARACTERISTICS**

- Output isolation transformer
- Up to 95% efficiency
- Static by-pass
- LCD front panel
- 128 events alarm memory (up to 4000 alarms)
- RS232 and relay contacts
- Custom input and output voltage ranges
- SNMP compatible communication
- T-MON remote monitoring software
- Parallel operation up to 4 devices
- High performance at nonlinear loads
- Custom input voltage and frequency ranges
- 2 years warranty
- Manufactured according to EC Directive; EN62040
- Other powers and voltage available under command





	SPECIFIC CHARACTERISTICS				
Model	Power (kVA)	Output Power (kVA)	Dimensions (W x H x D)	Weight (without battery)	
GUT10K	10	8	1150x505x655	220	
GUT15K	15	12	1150x505x655	260	
GUT20K	20	16	1150x505x655	284	
GUT30K	30	24	1150x505x655	305	
GUT40K	40	32	1390x575x820	404	
GUT60K	60	48	1390x575x820	496	
GUT80K	80	64	1450x720x820	580	

	TECHN	ICAL SPECIFICATIONS
Input	Maximum voltage	380/400 VAC 3P + N + E ± 15%
	By-pass voltage	$380/400 \text{ VAC } 3P + N + \pm 10\%$
	Input frequency	50Hz. (60Hz. On request) ± 5%
Output	Output voltage	380/400 Vac 3P + N
	Power factor	0,8
	Voltage stability	Balanced load: $\pm 1\%$ , Unbalanced load: $\pm 2\%$ , free running: $\pm 0,2\%$
	Voltage recovery time	After step load: max 25min
	Crest factor	3:1
	Frequency	50Hz
	Frequency tolerance	Line synchronized: $\pm$ 2%, free running: $\pm$ 0,2%
	Efficiency (at full	89 - 91% <24kVa
	load) Signal distortion THD	90 - 92% >24kVa Linear load: <3%
	Signal distortion The	Non linear load: <5%
Protection	Overload	100% - 125% load: 10min, 125%-150% load: 1min > 150%load: by pass
	Short circuit	Electronic
	Enclosure protection	IP20
Batteries	Туре	Sealed Lead Acid – Maintenance Free
	Quantity	30
	Float charging voltage	405 VDC
	End of discharge	300 VDC
	voltage Temperature	25°C
	Battery protection	Automatic circuit breaker
	Battery test	
	battery test	Automatic every 72h
Environment	Working temperature	0°C to 40°C
	Humidity	90% non condensing
Standards	Security	EN62040-1, EN62040-2,
apply	Serial Communication	Dry contacts & RS232
	Software	T-Mon UPS Management Software
	Ventilation	Forced air cooling
	Altitude	< 2000m
	Acustic noise	<56 dBA for < 60KVA <60 dBA for > 60KVA

Other extra features available according to the need of the client



## **UPS SERIE GUTH**



## **DESCRIPTION**

Series GUTH is a double conversion uninterruptable system with the latest technology of the market. Consider as a state of art with PWM and IGBT technology, producing microprocessor controlled and pure sine wave output to critical loads. It is manufacture with different autonomies in order to have a perfect match with the client's needs

## **GENERAL CHARACTERISTICS**

- Output isolation transformer
- Up to 91% efficiency
- Static by-pass
- LCD front panel
- 128 events alarm memory (up to 4000 alarms)
- RS232 and relay contacts
- Custom input and output voltage ranges
- SNMP compatible communication
- T-MON remote monitoring software
- Parallel operation up to 4 devices
- High performance at nonlinear loads
- Custom input voltage and frequency ranges
- 2 years warranty
- Manufactured according to EC Directive; EN62040



## ELECTRONICA DE POTENCIA POWER SUPPLY ELECTRONIQUE DE PUISSANCE

	SPECIFIC CHARACTERISTICS				
Model	Power (kVA)	Output Power (kVA)	Dimensions (W x H x D)	Weight (kg) (without battery)	
GUTH100K	100	80	1650x1110x810	750	
GUTH120K	120	96	1650x1110x810	765	
GUTH160K	160	128	1730x1195x870	802	
GUTH200K	200	160	1730x1195x870	970	
GUTH250K	250	200	1880x1565x925	1328	
GUTH300K	300	240	1880x1565x925	1370	

	TECHN	ICAL SPECIFICATIONS	S	
Input	Maximum voltage	380/400 VAC 3P + N + E ±	15%	
	By-pass voltage	$380/400 \text{ VAC } 3P + N + \pm 10$	0%	
	Input frequency	50Hz. (60Hz. On request) $\pm$	5%	
Output	Output voltage	380/400 Vac 3P + N		
	Power factor	0,8		
	Voltage stability	Balanced load: ±1%, Unbala ±5%	nnced load: ± 2%, step load:	
	Voltage recovery time	After step load: max 25min		
	Crest factor	3:1		
	Frequency	50Hz		
	Frequency tolerance	Line synchronized: ± 2%, from	ee running: ±0,2%	
	Efficiency (at full load)	-		
	Signal distortion THD	Linear load: <3% Non linear load: <5%		
Protection	Overload	100% - 125% load: 10min, 125%-150% load: 1min 150% load: by pass		
	Short circuit	Electronic		
	Enclosure protection	IP20		
Batteries	Туре	Sealed Lead Acid – Maintena	ince Free	
	Quantity	30 < 250KVa	32 > 250KVa	
	Float charging	405 VDC < 250KVa	432 VDC > 250KVa	
	voltage End of discharge voltage	300 VDC < 250KVa	320 VDC > 250KVa	
	Temperature	25°C		
	Battery protection	Automatic circuit breaker		
	Battery test	Automatic every 72h		
Environment	Working temperature	0°C to 40°C		
	Humidity	90% non condensing		
Standards	Security	EN62040-1, EN62040-2,		
apply	Serial Communication	Dry contacts & RS232		
	Software	T-Mon UPS Management Sof	tware	
	Ventilation	Forced air cooling		
	Altitude	< 2000m		
	Acoustic noise	<65 dBA for < 160KVA	<70 dBA for > 160KVA	

Other extra features available according to the need of the client



## FREQUENCY CONVERTER SERIE GH

## **DESCRIPTION**

The GH series is used for converting either 50Hz, 60Hz or 400Hz, utility line power to 50Hz, 60Hz or 400Hz power to run your mission critical equipment. All Grelco solid state frequency converters use IGBT technology and are designed for continuous operation

## **GENERAL SPECIFICATIONS**

- Detailed monitoring by alphanumeric LCD panel
- 2 microprocessors
- 128 long event recording with RTC
- Separate battery supported clock and calendar
- RS232 or DRY contact relays
- Custom input voltage and frequency ranges
- 3 phase or single phase options
- SNMP communication
- 2 years warranty



	TECH	INICAL SPECIFICATIONS
Input	Voltage	220/230V single phase – 380/400V 3 phasé ±15%
	Frequency	50Hz / 60Hz /400Hz (±5%)
Output	Power (kVA)	5kVA – 300kVA
	Voltage	120/208V 60/400Hz - 230/400V, 50/60Hz (others available)
	Voltage regulation	Balanced load: ±1%, Unbalanced load: ± 2%
	Frequency	50Hz/60Hz
	Frequency stability	free running: ±0,2%
	Efficiency	85% to 90%
	Waveform	Sinusoidal
	Load power factor	0.7 (single phase) – 0.8 (three phase)
	Signal distortion THD	Linear load: <3%
Protection	AC output voltage	AC voltage low and high protection
	Short Circuit	Yes
	Overload	Yes
	Tolerance	Yes

Other characteristics available under demand



## **POWER INVERTER SERIE GI**



## **DESCRIPTION**

This is an appropriate AC voltage UPS for applications in marine areas, motoring and in general for any need of tension inversion with reliability and a good quality of current.

Other powers and tensions are manufactured under request.

SPECIFIC CHARACTERISTICS				
Model	Input Voltage	Output Voltage	Output current	Power
GI3K24	19-30Vdc	230Vac	10.5A	2350VA
GI3K48	38- 59.8Vdc	230Vac	13A	3000VA
GI3K72	69-90Vdc	230Vac	13A	3000VA
GI3K110	78-137Vdc	230Vac	13A	3000VA

	TECHNICAL SPECIFI	CATIONS
Output	Signal distorsion THD Ripple level (triple) HF Line load regulation Line network regulation	230Vac 50-60Hz Sinusoidal <2% 2% 3.5% 1.8%
Protections	Overload protection Protection of short circuit	
Controls	Inhibition RS232 Alarm Three phase Synchronisation	4-24V
Environment	Working temperature Humidity	-20 to +52°C 20 ~ 90% non condensing
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, EN55011, EN61000-6-4 EN61000-6-2 IP20
Dimensions	Total (wide, height, depth)	231x159x199m m



## SINGLE PHASE INVERTER SERIE GIM

## **DESCRIPTION**

GIM Power Inverters (48VDC to 400VDC) single phase, provide premium power that is identical to or even better than power supplied by your electric company. They produce low distortion sinus waveform output to your mission critical equipment.

## **GENERAL SPECIFICATIONS**

- Detailed monitoring by alphanumeric LCD panel
- 2 microprocessors
- 128 long event recording with RTC
- RS232 or DRY contact relays
- 3 phase or single phase options
- SNMP communication
- 2 years warranty



TECHNICAL SPECIFICATIONS			
Input	Voltage	48 VDC to 400 VDC	
Output	Power (kVA)	3kVA - 300kVA	
	Voltage	230/400V, 50/60Hz Single phase	
	Voltage regulation	Balanced load: ±1%, Unbalanced load: ± 2%	
	Frequency	50Hz/60Hz	
	Frequency stability	free running: ±0,2%	
	Efficiency	98%	
	Waveform	Sinusoidal	
	Load power factor	0.8	
	Signal distortion THD	Linear load: <3%	
Protection	Overcurrent	Electronic protection	
	AC output voltage	AC voltage low and high protection	
	DC input	3 level alarms	
Standards apply	Power Module	IGTB or IPM module	
Standards apply			
	Front panel	Alphanumeric LCD 2x16 characters	
	Control Buttons	3 or 5 buttons	

Other characteristics available under demand (by-pass isolation, parallel operation, alarm buzzer, remote REPO input, RS232 interface...)



## THREE PHASE INVERTER SERIE GIT

## **DESCRIPTION**

GIM Power Inverters (48VDC to 400VDC) three phase, provide premium power that is identical to or even better than power supplied by your electric company. They produce low distortion sinus waveform output to your mission critical equipment.

## **GENERAL SPECIFICATIONS**

- Detailed monitoring by alphanumeric LCD panel
- 2 microprocessors
- 128 long event recording with RTC
- RS232 or DRY contact relays
- 3 phase or single phase options
- SNMP communication
- 2 years warranty



	TECHNICAL	SPECIFICATIONS
Input	Voltage	48 VDC to 400 VDC
Output	Power (kVA)	3kVA - 300kVA
о пор по	Voltage	230/400V, 50/60Hz three phase
	Voltage regulation	Balanced load: $\pm 1\%$ , Unbalanced load: $\pm 2\%$
	Frequency	50Hz/60Hz
	Frequency stability	free running: ±0,2%
	Efficiency	98%
	Waveform	Sinusoidal
	Load power factor	0.8
	Signal distortion THD	Linear load: <3%
Protection	Overcurrent	Electronic protection
	AC output voltage	AC voltage low and high protection
	DC input	3 level alarms
Standards apply	Power Module	IGTB or IPM module
	Front panel	Alphanumeric LCD 2x16 characters
	Control Buttons	3 or 5 buttons

Other characteristics available under demand (by-pass isolation, parallel operation, alarm buzzer, remote REPO input, RS232 interface...)



# REDUCER & BOOSTER CONVERTER SERIE GCRDC



## **DESCRIPTION**

It is a reducing-lift appropriate constant voltage for applications in marine areas, motoring and in general for any necessity of reduction and voltage rise with reliability and high quality stream.

Other powers and tensions are manufactured on request.

SPECIFIC CHARACTERISTICS				
Model	Input Voltage	Output Voltage	Output current	Power
GCRDC20012	9-15Vdc	24Vac	16.6A	200W
GCRDC20048	9-15Vdc	48Vac	4.16A	200W
GCRDC24012	19-30Vdc	12Vac	20A	240W

TECHNICAL SPECIFICATION		
Output	Ajustable marge Ripple R&N Line load regulation Line network regulation Sensor Inhibition	±20% Less than 150mVpp 0.2% 0.2% 0.3V 5/24v
Protections	Overload protection Protection of short circuit Galvanic isolation	
Environment	Working temperature Humidity	-23 to +80°C 20 ~ 90% non condensing
Standards apply	Security EMI Immunity Enclosure protection	EN60950-1, UL60950-1, EN55011, EN61000-6-4 EN61000-6-2 IP20
Dimensions	Total (wide, height, depth)	231 x 159 x 199 mm



## LINEAR CONVERTER SERIE GRDC



## **SPECIFICATIONS**

It is a linear converter of voltage of 24Vdc to 12Vdc suitable for applications in the marine, automotive and generally any need to reduce tension with reliability and power quality.

Under request can vary tensions input and output as well as power

They can also amend to suit the function we want and can incorporate other protections, controls or alarms.

## **DESCRIPTION**

They are robust in order to tolerate the required power. To force the convection of heat, use a turbine with encapsulated metal TO3 transistors, controlled by thermostat.

In addition to the electronic protection has a protective circuit-breaker switch start-up. A pilot "led" green indicates the efflux.

The input and output terminals are floating on the chassis that can be connected to ground.

TECHNICAL SPECIFICATIONS		
Input	Maximum voltage	28Vdc
	Input protection	breaker switch
Output	Output voltage	13,8Vdc
	Intensity Nominal	40A
	Battery protection	Contra reverse polarity
	Ripple	Lower to 10mV RMS
	Line load regulation	0,5% typical
	Line network regulation	0,4% typical
	Protection of short circuit	Limitation "Fold back"
Environment	Working temperature	0 +40°
	Humidity	20 ~ 90% non condensing
Standards	Security	EN60950-1, UL60950-1,
apply	EMI	According EN55011, EN55022
	Immunity	According EN61000-4
	Enclosure protection	IP20
Dimensions	Totals (width - height - depth)	231 x 159 x 199mm



## SPECIAL EQUIPMENT GE







## **TAILOR-MADE PRODUCTS**

We are at your disposal to advise and help resolve doubts or problems in resolving power needs. Technological progress and experience are effectively applied in the design of projects.

The flexibility of production facilities enable us to work for companies and institutions from various sectors such as Telecommunications, Security, Alternative Energy, Automotive, Education and Industry in general.

Our Technical Support Department helps to maintain and to support appropriate to any contingency.



Sample a variety of applications in open circuits, materials, desks, racks

Power, UPS, battery chargers, controllers, test equipment, control etc.

At any standard product also we can change its electrical, mechanical, environment and standards to fit your needs

CONTACT US WITHOUT OBLIGATION.