



UNI EN ISO 9001-2008
CERTIFICATO N° I 121

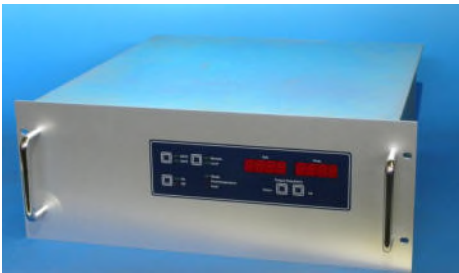
Sas di Sironi S. & C - Cod. Fis. / P.IVA 12717400159 – CCIAA (MI) n. 1577673
Italy - 20037 Paderno Dugnano (MI), Via Salvo D'Acquisto 50-52
Tel. +39/02/9103788 - Fax. +39/02/9102517 – E-mail: shandy@shandy.it Sito Web: www.shandy.it

FULLY STATIC electronic FREQUENCY CONVERTER

Adjustable output voltage

Static electronic voltage stabilizer

G M M G T M G T T



PRODUCT DESCRIPTION:

An extremely compact device with a high performance. Designed using the latest technologies, it's a very reliable and flexible equipment for the use as:

- Frequency converter
- Electronic voltage stabiliser
- Electronic voltage regulator

ELECTRONIC VOLTAGE REGULATOR

Comparable to a traditional motorized voltage regulator, with an electronic control circuit, but fully static and absolutely fast (reaction time is less than 1mS). The set voltage is maintained even if the load or the input voltage suddenly change. Through a 0-10V signal connected to the remote terminals or through the front panel buttons it is possible to change the output voltage from 0 to 270V. Dynamic response to the set voltage is 40µS.



ELECTRONIC STABILIZER

An output autotransformer guarantees the set voltage even to 270V in presence of a lower input voltage.

FREQUENCY CONVERTER

With any input frequency, the device supplies a 50Hz or a 60Hz output using the front selector or the remote control. (Different frequencies are available on request.)



Plate version (carter optional)

APPLICATIONS

This equipment may be used in many applications such as test benches of electric and electronic equipment (motors, resistors, etc.) or at the end of production lines to regulate/stabilize voltage and frequency for routing tests, to avoid continuous voltage variations or spikes which can determine the failure of the test or, at worst, the damage

of a product during the test. If equipped with an isolation transformer it can guarantee the total immunity of the load from noise or disturbances from the network.



gmm range with 110V input - 60Hz

SYSTEM ADVANTAGES

Why a static voltage stabilizer?

As for the electromechanical voltage stabilizers and the uninterruptible power supplies this equipment protects the load from the network, but with the following advantages:

- Strongly reduced size and weight
 - Total absence of moving parts, no need of maintenance, no periodic costs.
 - Improved efficiency, therefore less Energy consumption with the same load level.
 - Dynamic response speed (< 1 mS), better performance and extremely higher protection of the load
 - Improved output voltage accuracy, better than 1%
- Total elimination of network impurities (output voltage is generated starting from a DC voltage)
 - Absolute output frequency stability (0.001%).





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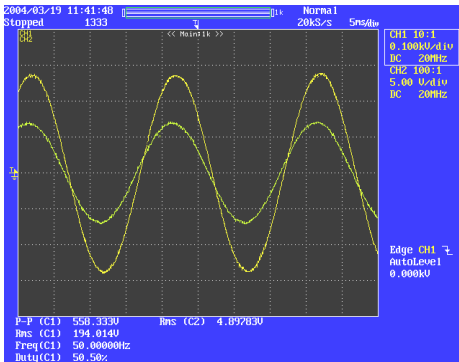
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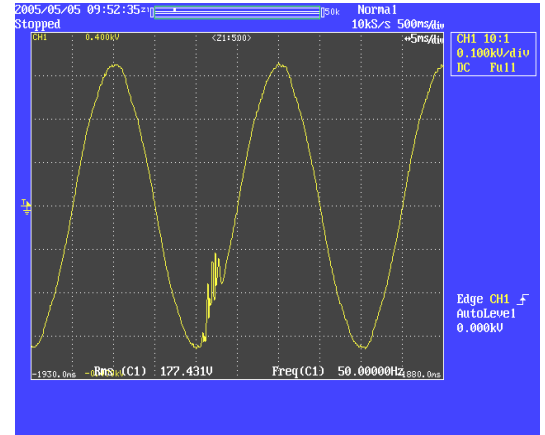
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Against a UPS

- Saving in costs as it does not include batteries which are not necessary for the purpose of this equipment
- No maintenance cost due to battery replacement.
- Care of environment as batteries are harmful for the environment
- Total elimination of network impurities (output voltage is generated starting from a DC voltage)



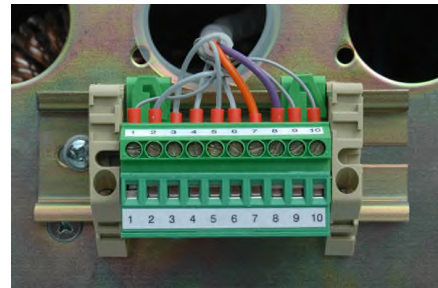
output wave form



typical network disturbances



GMM range control panel



remote control panel
(for GMM07 model replaced by DB15 connector)



Control panel GTM-GTT range



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PUSH - BUTTONS

ON/OFF	On/off
50/60Hz	OUTPUT FREQUENCY CHANGE 50/60Hz
LOCAL/REMOTE	Choice of the control of the converter using the remote terminal blocks or through the front panel
SELECT	Cyclic display of voltage / current on each phase
DOWN	Decrease output voltage
UP	Increase output voltage

SIGNALS

ON	Green	Unit operates correctly and has executed the start-up sequence
OFF	Red	Input voltage is not correct or unit has a failure. In the second case the "FAULT" led is also ON.
FAULT	Red	a. Inverter Temperature over 70°C. Output voltage is cut off. It is possible to reset the unit operating an restart procedure. If problem persists the clearings of the unit should be revised. b. Unit Failure. It lights on immediately after a restart sequence in case of inverter failure.
50Hz/60Hz	Green	Output frequency 50Hz
	Yellow	Output frequency 60Hz
LOCAL	Green	control of the converter through the front panel enabled
REMOTE	Yellow	Control of the converter through the remote terminal block enabled
OVERTEMP.	Red	Internal temperature reached 70°C and the correct performance of the unit is not guaranteed. Output voltage is arrested and the FAULT led and OFF led are switched ON
READY	Green	Converter is ready to supply load after the start-up procedure
VOLT	Green	Displays output voltage
AMP	Green	Displays load current
R	Green	phase "R" (U) is displayed
S	Green	phase "S" (V) is displayed
T	Green	phase "T" (W) is displayed



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SINGLE PHASE INPUT/OUTPUT										
PART NO	kVA (max)	Output (230Vac)			Crest factor	Input voltage range	Output voltage range	Output frequency Hz	Dimensions mm.	Weight kg.
		Power (kW) Cos-phi 0,8	Nom.(A) dist.<2%	Max (A) 6" dist.<10%						
GMM03P GMM03/H	3	2.4	11	16.5	4:1	190-267Vac	0-270Vac	50/60	(plate) H420xL470xP240 (rack 19" 4U-460) H180xL485xP560	17 18
GMM05P GMM05/H	5	4	18.5	27,5	4:1	190-267Vac	0-270Vac	50/60	(plate) H420xL470xP240 (rack 19" 5U-460) H180xL485xP560	21 22
GMM07P GMM07/H	7.5	6	28	41.5	4:1	190-267Vac	0-270Vac	50/60	(plate) H420xL680xP270 (rack 19" 6U-560) 264xL485xP560	27 29
GMM10/H GMM10T	10	8	37	55.5	4:1	190-267Vac	0-270Vac	50/60	(rack 19" 6U+5U-460) (tower) 550x1100x800	46 86

INPUT 110Va.c. - 60Hz SINGLE PHASE / SINGLE PHASE OUTPUT										
PART NO	kVA (max)	Output (230Vac)			Crest factor	Input voltage range	Output voltage range	Output frequency Hz	Dimensions mm.	Weight kg.
		Power (kW) Cos-phi 0,8	Nom.(A) dist.<2%	Max (A) 6" dist.<10%						
GMM03R /110	3	2.4	11	16.5	4:1	85 – 125Vac 60Hz	0-270Vac	50/60	(rack 19" 6U-460) H270xL485xP560	24
GMM05R /110	5	4	18.5	27,5	4:1	85 – 125Vac 60Hz	0-270Vac	50/60	(rack 19" 6U-460) H270xL485xP560	29

THREE PHASE INPUT / SINGLE PHASE OUTPUT										
PART NO	kVA (max)	Output (400Vac)			Crest factor	Input voltage range	Output voltage range	Output frequency Hz	Dimensions mm.	Weight kg.
		Power (kW) Cos-phi 0,8	Nom.(A) dist.<2%	Max (A) 6" dist.<10%						
GTM07P GTM07R	7.5	6	18.5	27	4:1	350-440Vac	0-400Vac	50/60	(plate) H420xL680xP270 (rack 19" 6U-460) H270xL485xP560	38 40
GTM10P GTM10R	10	8	25	37	4:1	350-440Vac	0-400Vac	50/60	(plate) H810xL430xP240 (rack 19" 6U-460) H270xL485xP560	47 50
GTM15P GTM15T	15	10	37.5	56	4:1	350-440Vac	0-400Vac	50/60	(plate) H810xL420xP270 (TOWER) H1100xL550xP800	50 100
GTM25T	25	20	62.5	94	4:1	350-440Vac	0-400Vac	50/60	(TOWER) H1600xL600xP800	120



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THREE PHASE INPUT / THREE PHASE OUTPUT										
PART NO	kVA (max)	Output (470Vac)			Crest factor	Input voltage range	Output voltage range	Output frequency Hz	Dimensions mm.	Weight kg.
		Power (kW) Cos-phi 0,8	Nom.(A) dist.<2%	Max (A) 6" dist.<10%						
GTT09T	9	7.2	3X11	3X16.5	4:1	350-440Vac	0-470Vac	50/60	(TOWER) H1100X1550xP800	150
GTT15T	15	12	3X18.5	3X27.5	4:1	350-440Vac	0-470Vac	50/60	(TOWER) H1100X1550xP800	160
GTT21T	21	16.8	3X28	3X41.5	4:1	350-440Vac	0-470Vac	50/60	(TOWER) H1100X1550xP800	180
GTT30T	30	24	3X37	3X56	4:1	350-440Vac	0-470Vac	50/60	(TOWER) H1100X1550xP800	240
GTT45T	45	36	3X55	3X82.5	4:1	350-440Vac	0-470Vac	50/60	Cabinet 800x800 x h.2000	300
GTT60T	60	48	3X74	3X111	4:1	350-440Vac	0-470Vac	50/60	Cabinet 800x800 x h.2000	340
GTT80T	80	64	3X98	3X147	4:1	350-440Vac	0-470Vac	50/60	Cabinet 1000x800 x h.2000	380
GTT100T	100	80	3X123	3X184.5	4:1	350-440Vac	0-470Vac	50/60	Cabinet 1000x800 x h.2000	440

Acceptable load unbalance with network neutral: up to 100% - without network neutral: 30%

PLEASE ASK FOR A QUOTE FOR HIGHER RATINGS OR SPECIAL OUTPUT VOLTAGE – FREQUENCIES