

CATALOGO



CONVERTITORI DI FREQUENZA 50/60Hz SINUSOIDALI MONOFASE & TRI/MONOFASE TRIFASE/TRIFASE



SHT-POWER

Sede e Magazzino
VIA SALVO D'ACQUISTO 50/52
20037 PADERNO DUGNANO
E-Mail info@shtpower.com
shandy@shandy.it

Tel. **39.02.9103788
Fax **39.02.9102517
Siti internet www.shtpower.com
www.eurpow.com

EG1 - FC – GALAXY FC

ERT1 - FC – GALAXY-RT FC

EF1 - FC – FORTES FC

Frequency converters 50/60 Hz
Double conversion to Sinusoidal Wave
Single phase/Single phase and
Three phase/Single phase
Three phase/Three phase



Frequency converter 50/60 Hz
Single phase / single phase
Three phase / single phase
Three phase / three phase
Sinusoidal pure wave
EG1 – FC - GALAXY FC
ERT1 – FC – GALAXY-R FC

The EG1 FC– GALAXY FC series is available in power from 800 W to 80 KW with On-Line double digital control conversion technology; This series, for its versatility, is suitable for powering any electrical and electronic system

FEATURES

• OUTPUT POTENTIAL FACTOR ϕ 1.0

Comparing this UPS ON-LINE line with current marketing competition, we can say that GALAXY UPSs have the best output power factor 1.0. They offer high performance and efficiency for critical applications.

• LARGE INPUT RANGE (110 V -300 V)

Galaxy RT is able to provide stable and clean current to the equipment also connected in very critical and unstable environments.

• 50/60Hz FREQUENCY CONVERTER FUNCTION

Blocks the output frequency at 50Hz or 60Hz regardless of the input frequency and delays the By-Pass

• Emergency Power Off (EPO) FUNCTION

This function serves to the shutdown of the UPS from the staff in case of fire and other situation of emergency.

• SNMP+USB+RS-232 MULTIPLE COMMUNICATIONS

This function allows to use the communication from all USB, RS-232 and SNMP ports simultaneously.

• Power Factor Correction ON ALL PHASES FOR THREE/SINGLE PHASE 10KVA TO 80KVA

The PFC improves the quality of the absorbed current and increases the energy yield, with the consequent economics saving.

WARRANTY 12 MONTHES



EG1 - 1K/1.5K/2K/3K single phase ONLINE UPS DOUBLE CONVERSION

MODEL			EG1 1K-FC	EG1 1.5K-FC	EG1 2K-FC	EG1 3K-FC
POWER			800 VA / 800 W	1200 VA / 1200 W	1600 VA / 1600 W	2400 VA / 2400 W
INPUT						
Voltage Range	Low transfer		160 VAC / 140 VAC / 120 VAC / 110 VAC ± 5 % (Percent base network 100% - 80 % / 80 % - 70 % / 70 - 60 % / 60 % - 0)			
	Low line comeback		175 VAC ± 5 %			
	High line transfer		300 VAC ± 5 %			
	High line comeback		290 VAC ± 5 %			
Frequency range			40 Hz ~ 70 Hz			
Phase			Single phase with neutral			
Power factor P. F.			≥ 0.99			
OUTPUT						
Voltage			200/208/220/230/240VAC (Possible other tensions with transformers installed on board machine)			
AC voltage regulation			± 1%			
Frequency			50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz			
Crest current Ratio			3:1			
Harmonic distortion			≤ 2 % THD (Linear load) ≤ 2 % THD (Non-linear load)			
Wave form			Pure sinewave			
EFFICIENCY						
AC mode			~ 89%		~ 91%	
INDICATORS						
LCD Panel			UPS Status, Load Level, Battery Level, Input/Output Voltage, Bounce Time, Fault Condition			
ALARMS						
Overload			Double Sound every second			
Fault			Continuous sound			
DIMENSIONS AND WEIGHTS						
Tower	Standard Model	DimensionsP x L x H (mm)	397 X 145 X 220		421 X 190 X 318	
		Net weight(kg)	7		14	
ENVIRONMENTAL DATA						
Operating humidity			20-90 % RH @ 0- 40°C (Without condensation)			
Noise			< 45dBA @ 1 Metro			
INTERFACE						
Smart RS-232/USB			Windows family, Novell, Linux and FreeBSD			
Optional SNMP			Power management per SNMP manager e web browser			

* Product specifications may be subject to change without notice



EG1 6K/10K single phase ONLINE DOUBLE CONVERSION			
MODEL		EG1 6K-FC	EG1 10K-FC
PHASE		Single phase input / Single phase output	
NOMINAL POWER		3600 VA / 3600 W	6000 VA / 6000 W
POWER FOR 10 MIN		3960 VA / 3960 W	6600 VA / 6600 W
POWER POF 1 MIN		4680 VA / 4680 W	7800 VA / 7800 W
INPUT			
Voltage Range	Low transfer	176 VAC @ 100% of the load 110 VAC @ 50% of the load	
	Low line comeback	186 VAC @ 100% of the load 120 VAC @ 50% of the load	
	High line transfer	300 VAC	
	High line comeback	290 VAC	
Frequency range		46~54 Hz © 50Hz / 56~64 Hz © 60Hz	
Phase		Single phase with earth	
Power factor P. F.		≥ 0.99 @ 100% of the load	
OUTPUT			
Voltage		200/208/220/230/240VAC (Possible other tensions with transformers installed on board machine)	
AC voltage regulation		± 1%	
Frequency		50 Hz ± 0.1 Hz or 60 Hz ± 0.1 Hz	
Crest current Ratio		3:1	
Harmonic distortion		≤ 2 % THD (linear load) ≤ 4 % THD (no-linear load)	
Wave form		Pure sinewave	
EFFICIENCY			
AC mode		94%	
BATTERY			
INDICATORS			
Pannello LCD		UPS Status, Load Level, Battery Level, Input/Output Voltage, Bounce Time, Fault Condition	
ALLARMI			
Overload		Double Sound every second	
Fault		Continuous sound	
DIMENSIONI E PESI			
Standard Model	DimensionsP x L x H (mm)	592 X 250 X 576	
	Net weight(kg)	30	30
ENVIRONMENTAL DATA			
Operating humidity		20-90 % RH @ 0- 40°C (without condensation)	
Noise		< 55dBA @ 1 Metro	< 58dB @ 1 Metro
INTERFACE			
Smart RS-232		Windows family, Novell, Linux and FreeBSD	
USB			
Optional SNMP		Power management per SNMP manager e web browser	

* Product specifications may be subject to change without notice

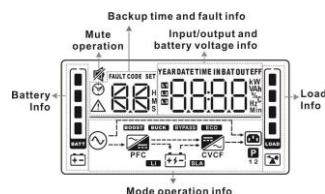


ERT1 1K/1,5K/2K/3K single phase ONLINE UPS DOUBLE CONVERSION Convertible Rack/Tower

MODEL		EGRT 1K (S)		EGRT 1.5K (S)	EGRT 2K (S)	EGRT 3K (S)
POWER		8000 VA / 800 W		1200 VA / 1200 W	1600 VA / 1600 W	2400 VA / 2400 W
INPUT						
Voltage Range	Nominal tension	200/208/220/230/240 Vac				
	Tension range	110-300Vac ± 5% @ 50% of the load 160-300Vac ± 5% @ 100% of the load				
	Low line comeback	170 VAC ± 5 %				
	High line comeback	290 VAC ± 5 %				
Frequency range		40 Hz ~ 70 Hz ± 5%				
Phase		Single phase with neutral				
Power factor P. F.		≥ 0.99 @ Nominaol tension (carico 100%)				
OUTPUT						
Voltage output tension		200/208/220/230/240 Vac				
AC voltage regulation (Batt. Mode)		± 1%				
Frequency Range (Synchronized)		47Hz ~ 53 Hz o 57Hz ~ 63 Hz				
Frequency Range (Batt. Mode)		50 Hz ± 0.1 Hz or 60Hz ± 0.1 Hz				
Crest current Ratio		3:1				
Harmonic distortion		≤ 2 % THD (linear load) ≤ 4 % THD (no-linear load)				
Transfer Time	AC mode to Battery Mode	Zero				
	inverter to bypass	4 ms (Typical)				
Wave form (Batt. Mode)		Pure sinewave				
EFFICIENCY						
AC mode		90%			91%	
Battery mode		~ 88 - 90%				
INDICATORS						
LCD Panel		UPS Status, Load Level, Battery Level, Input/Output Voltage, Bounce Time, Fault Condition				
ALARMS						
Overload		Sound every second				
Fault		Continuous sound				
DIMENSIONS AND WEIGHTS						
Standard Model	DimensionsP x L x H (mm)	410 x 438 x 88	410 x 438 x 88	510 x 438 x 88	630 x 438 x 88	
	Net weight(kg)	7.5	10.5	11	14	
ENVIRONMENTAL DATA						
Operating humidity		20-90 % RH @ 0- 40°C (without condensation)				
Noise		< 50dBA @ 1 Metro				
INTERFACE						
Smart RS-232/USB		Windows family, Linux , Unix, MEC				
Optional SNMP		Power management per SNMP manager e web browser				

* (S) Identifies lon-lasting models

* Product specifications may be subject to change without notice

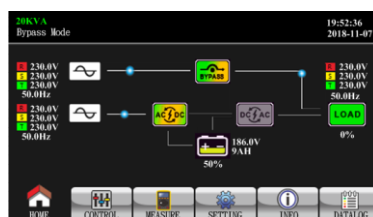


ERT1 6K/10K single phase ONLINE UPS DOUBLE CONVERSION Convertible Rack/Tower

MODEL		EGRT 6K (S)	EGRT 10K (S)
PHASE		Single phase input / Single phase output	
NOMINAL POWER		3600 VA / 3600 W	6000 VA / 6000 W
POWER FOR 10 MIN		3960 VA / 3960 W	6600 VA / 6600 W
POWER POOF 1 MIN		4680 VA / 4680 W	7800 VA / 7800 W
INPUT			
Voltage Range	Nominal tension	200/208/220/230/240 Vac	
	Tension range	110-300Vac $\pm$ 5% @ 50% of the charge 176-300Vac $\pm$ 5% @ 100% of the charge	
	Low line comeback	170 VAC $\pm$ 5 %	
	High line comeback	290 VAC $\pm$ 5 %	
Frequency range		46~54 Hz @ 50Hz / 56~64 Hz @ 60Hz	
Phases		Single phase with ground	
Power factor P.F.		$\geq$ 0.99 @ 100% of the charge	
OUTPUT			
Voltage output tension		200/208/220/230/240 Vac	
AC voltage regulation		$\pm$ 1%	
Frequency Range (Batt. Mode)		50 Hz $\pm$ 0.1 Hz or 60Hz $\pm$ 0.1 Hz	
Crest current Ratio		3:1	
Harmonic distortion		$\leq$ 2 % THD (linear load) $\leq$ 4 % THD (no-linear load)	
Wave form (Batt. Mode)		Pure sinewave	
EFFICIENCY			
AC mode		91%	
INDICATORS			
LCD Panel		UPS Status, Load Level, Battery Level, Input/Output Voltage, Bounce Time, Fault Condition	
ALARMS			
Overload		Double Sound every second	
Fault		Continuous sound	
DIMENSIONS AND WEIGHTS			
Standard Model	DimensionsP x L x H (mm)	610 X 438 X 88 (2U)	610 X 438 X 88 (2U))
	Net weight(kg)	17	20
ENVIRONMENTAL DATA			
Operating humidity		0-95 % RH @ 0- 40°C (without condensation)	
Noise		< 58dBA @ 1 Metro	< 60dB @ 1 Metro
INTERFACE			
Smart RS-232		Windows family, Novell, Linux and FreeBSD	
USB			
Optional SNMP		Power management per SNMP manager e web browser	

* (S) Identifies lon-lasting models

* Product specifications may be subject to change without notice

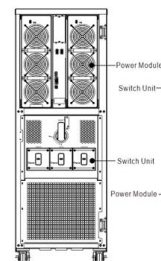
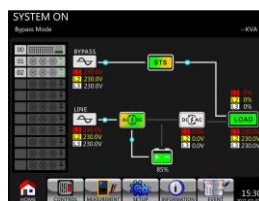


EG1 33 10K/20K three phase / single phase - three phase / three phase ONLINE EG1 33 30K/40K three phase / three phase ONLINE FREQUENCY CONVERTER

MODEL		EG1 33-10K-FC	EG1 33-20K-FC	EG1 33-30K-FC	EG1 33-40K-FC
PHASE		Treephase input monophase or treephase output settable		Triphase input / triphase output	
POWER		10 KVA / 10 KW	20 KVA / 20 KW	30 KVA / 30 KW	40 KVA / 40 KW
INPUT					
Nominal voltage		3 x 400Vac (Triphase with neutral on earth)			
Volt Range		305 - 478 VAC (F/F) @ 100% of charge 190 - 520 VAC (F/F) @ 50% of charge			
Range Frequency		46~64 Hz			
Phases		Triphase with neutral on earth			
Power factor P.F.		≥ 0.99 @ 100% of charge			
OUTPUT					
Output voltage		3 x 360* - 380 - 400 - 415V Treephase with neutral 1 x 208 – 220 – 230 – 240V Monophase		3 x 360* - 380 - 400 - 415V Triphase with neutral	
Tolerance Volt		± 1%			
Frequency(Range FC Mode)		50 Hz ± 0.1 Hz o 60 Hz ± 0.1 Hz			
Crest current Ratio		3:1			
Harmonic distortion		≤ 2 % THD (linear charge) ≤ 5 % THD (not linear charge)			
Wave form		SINUSOIDAL PURE			
Overcharge	Line mode	100%~110%: 60min; 110%~125%: 10min; 125%~150%:1min;>150% immediately			
EFFICIENCY					
With present line		95.5%			
INDICATORS					
Panel LCD		4.3” coloredTouch, condition UPS, charge level, battery level, Voltage input/output, discharge time batt. Fault condition			
DIMENSIONS AND WEIGHTS					
Standard Model	Dimension, P x L x H (mm)	627 X 250 X 827		815 X 300 X 1000	
	Nett weight (kg)	55	59	65	69
ENVIRONMENTAL DATA					
Operating humidity		0-90 % RH @ 0- 40°C (without condense)			
Noise		< 60dBA @ 1 Metr	< 65 ~ 70 dB @ 1 Metr		
INTERFACE					
USB / RS232		Windows family, Linux, Unix and MAC			
Optional SNMP		Power management per SNMP manager e web browser			

* When output voltage is aduste on 3 x 360 VAC, output power will be reduced to 90%

Product specifications may be subject to change without notice



EF1 33 80K/120K three phase / three phase ONLINE FREQUENCY CONVERTER

MODEL		EF1 33-80K (S)	EF1 33-120K (S)
PHASE		Triphase input / triphase output	
POWER		80 KVA / 80 KW	120 KVA / 120 KW
PARALLEL CAPABIUTY		4 UNIT	
INPUT			
Nominal voltage		3 x 400Vac (Triphase with neutral on earth)	
Volt Range		305 - 478 VAC (F/F) @ 100% of charg 190 - 520 VAC (F/F) @ 50% of charge	
Range Frequency		46~54 Hz @ 50Hz / 56~64 Hz @ 60Hz	
Phases		Triphase with neutral on earth	
Power factor P.F.		< 0.99 @ 100% of charge	
Harmonic Distordon (THDi)		< 4% at full linear load	
OUTPUT			
Output voltage		380 - 400 - 415V Triphase with neutral	
Voltage Regulation (Steady state)		≤ 1% Typical (balanced load) ≤ 2% Typical (unbalanced load)	
Frequency Range		50 Hz ± 0.1 Hz o 60 Hz ± 0.1 Hz	
Crest current Ratio		3:1	
Harmonic distortion		≤ 2 % THD (linear charge) ≤ 4 % THD (not linear charge)	
Wave form (Batt. Mode)		SINUSOIDAL PURE	
Overcharge	Line mode	100%~110%: 60min; 110%~125%: 10min; 125%~150%:1min;>150% immediatly	
EFFICIENCY			
With present line		95,5%	
With power from eco mode		98,5%	
INDICATORS			
Panel LCD		7” coloredTouch, condition UPS, charge level, battery level, Voltage input/output, discharge time batt. Fault condition	
DIMENSIONS AND WEIGHTS			
(S) long run	Dimension, P x L x H (mm)	1000 X 430 X 1200	
Model	Nett weight (kg)	125	173
ENVIRONMENTAL DATA			
Operating humidity		0-90 % RH @ 0- 40°C (without condense)	
Noise		< 65 ~ 75 dB @ 1 Metr	
Altitude **		< 1000 Metr for normal power	
INTERFACE			
USB		Windows family, Linux, Unix and MAC	
Optional SNMP		Power management per SNMP manager e web browser	
STANDARD			
Safety		IEC/EN 62040-1	
EMC		IEC/EN 62040-2 Category C3	

Product specifications may be subject to change without notice

**If the UPS is installed or used in a place where the altitude is above than 1000m, the output power must be derated one percent per 100m.

Product specifications are subject to change without further notice.