GEMINI / GEMINI PLUS

SINGLE-PHASE 4-40kVA

Standard features

	Gemini	Gemini plus
Voltage regulation	IGBT controlled	
Selectable output voltage*	220-230-240V	
Output voltage accuracy	±0.5%	
Frequency	50Hz ±5% or 60Hz ±5%	
Admitted load variation	Up to 100%	
Cooling	Forced ventilation	
Ambient temperature	-25/+45°C	
Storage temperature	-25/+60°C	
Max relative humidity	<95% (non condensing)	
Admitted overload	150% 2sec.	
Colour	RAL 9005	
Protection degree	IP 21	
Instrumentation	Output digital voltmetre	
Installation	Indoor	
Overvoltage protection	Output class II surge arrestors	
Protection	• EMI/RFI filters • Automatic by-pass protection	• EMI/RFI filters • Input circuit breaker • Protection by-pass (automatic) • Maintenance by-pass (manual)

** Output voltage can be adjusted by choosing one of the indicated values.*
Such choice sets the new nominal value as a reference for all the stabiliser parameters.

Ratings in relation to the input variation percentage

±15%	±20%	±25%	±30%
10	7	5	4
15	10	7	5
20	15	10	7
30	20	15	10
40	30	20	15

Accessories

Interrupting devices

Load protection against over/undervoltage

Input isolating transformer

Up to IP55 protection degree for indoor and outdoor installation

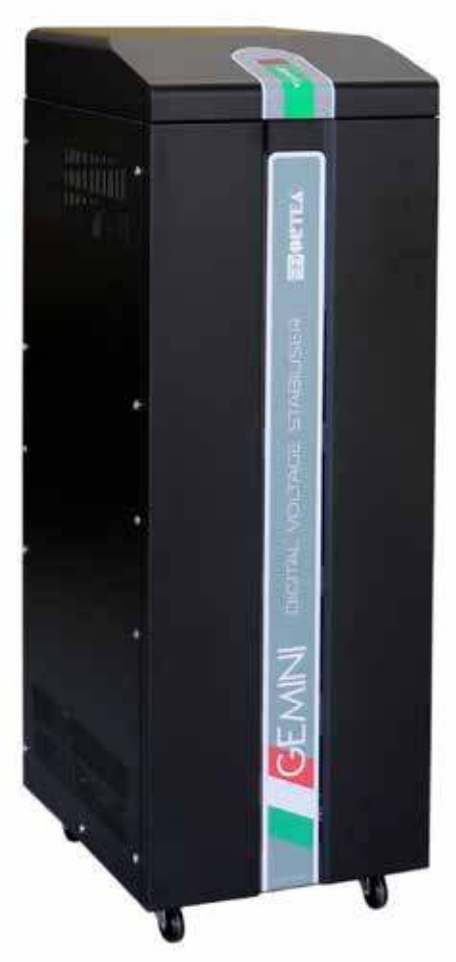
CE

All ORTEA equipments are designed and built in compliance with the Low Voltage and Electromagnetic Compatibility European Directives with regard to the CE marking requirements. ORTEA products are built with suitable quality components and that the manufacturing process is constantly verified in accordance with the Quality Control Plans which the Company applies in compliance with the ISO 9001 Standards. The commitment towards environmental issues and safety at work issues is guaranteed by the certification of the Management System according to the ISO14001 and OHSAS18001 Standards.
In order to obtain better performance, the products described in the present document can be altered by the Company at any date and without prior notice. Technical data and descriptions do not hold therefore any contractual value.

The Gemini series identifies the single-phase static stabilisers and is available in two configurations:

- **Gemini**. Base version fitted with class II output SPD, EMI/RFI filter and automatic bypass.
- **Gemini Plus**. Advanced version which in addition to the protections included in the base version, offers also input circuit breaker and manual maintenance bypass device.

Standard units cover a wide power range and offer a double input connection so that with the same unit two different input variations (±15%/±20% or ±25%/±30%) can be dealt with.
These percentages cover most of the common necessities, but different values can be requested.
The control unit (basically a single-phase inverter that generates the voltage destined to the series buck/boost transformer) is specifically designed for the static stabiliser.
The board manages voltage regulation, measurement of the electrical parameters and alarms.
A digital display on the front panel shows the output voltage and the alarm code (min/max output voltage, internal overheating, overload, shortcircuit, bypass status, etc.).



WIDE RANGE

±15%, ±20%, ±25%, ±30% .
Output voltage accuracy: ±0.5%.

TECHNOLOGY

IGBT-based control logic supported by a software specifically developed for Ortea.

SPEED

Response time: ≤10 milliseconds.

PROTECTION

The system is protected by EMI / RFI noise filters, class II output surge arrestors and automatic by-pass in case of internal failure.
In the Plus version, the protection is increased by the presence of an input switch and a maintenance by-pass.

INSTRUMENTATION

A digital display providing with output voltage and alarm readings is fitted on the front panel.

Type	Input variation	Rated power	Input voltage range	Max input current	Output voltage	Rated output current	Eff.	Correction time	Cabinet type	Cabinet dimensions WxDxH	Weight
	[%]	[kVA]	[V]	[A]	[V]	[A]	[%]			[mm]	[kg]
Gemini ±20%/±15%											
ES7-20	±20	7	184-276	38	230	30	>98	one cycle	13	300x560x300	30
ES10-15	±15	10	195-265	51	230	43	>98	one cycle	13	300x560x300	30
ES10-20	±20	10	184-276	54	230	43	>98	one cycle	13	300x560x300	35
ES15-15	±15	15	195-265	77	230	65	>98	one cycle	13	300x560x300	35
ES15-20	±20	15	184-276	82	230	65	>98	one cycle	22	410x530x1200	50
ES20-15	±15	20	195-265	103	230	87	>98	one cycle	22	410x530x1200	50
ES20-20	±20	20	184-276	109	230	87	>98	one cycle	23	410x680x1200	110
ES30-15	±15	30	195-265	154	230	130	>98	one cycle	23	410x680x1200	110
ES30-20	±20	30	184-276	163	230	130	>98	one cycle	23	410x680x1200	125
ES40-15	±15	40	195-265	205	230	174	>98	one cycle	23	410x680x1200	125

The values listed in the table are referred to 230V nominal voltage

Gemini ±30%/±25%											
ES4-30	±30	4	161-300	25	230	17	>98	one cycle	13	300x560x300	30
ES5-25	±25	5	172-288	29	230	22	>98	one cycle	13	300x560x300	30
ES5-30	±30	5	161-300	31	230	22	>98	one cycle	13	300x560x300	35
ES7-25	±25	7	172-288	41	230	30	>98	one cycle	13	300x560x300	35
ES7-30	±30	7	161-300	43	230	30	>98	one cycle	22	410x530x1200	50
ES10-25	±25	10	172-288	58	230	43	>98	one cycle	22	410x530x1200	50
ES10-30	±30	10	161-300	62	230	43	>98	one cycle	23	410x680x1200	110
ES15-25	±25	15	172-288	87	230	65	>98	one cycle	23	410x680x1200	110
ES15-30	±30	15	161-300	93	230	65	>98	one cycle	23	410x680x1200	125
ES20-25	±25	20	172-288	116	230	87	>98	one cycle	23	410x680x1200	125

The values listed in the table are referred to 230V nominal voltage

Type	Input variation	Rated power	Input voltage range	Max input current	Output voltage	Rated output current	Eff.	Correction time	Cabinet type	Cabinet dimensions WxDxH	Weight
	[%]	[kVA]	[V]	[A]	[V]	[A]	[%]			[mm]	[kg]
Gemini plus ±20%/±15%											
ESP7-20	±20	7	184-276	38	230	30	>98	one cycle	13	300x560x300	32
ESP10-15	±15	10	195-265	51	230	43	>98	one cycle	13	300x560x300	32
ESP10-20	±20	10	184-276	54	230	43	>98	one cycle	13	300x560x300	40
ESP15-15	±15	15	195-265	77	230	65	>98	one cycle	13	300x560x300	40
ESP15-20	±20	15	184-276	82	230	65	>98	one cycle	22	410x530x1200	57
ESP20-15	±15	20	195-265	103	230	87	>98	one cycle	22	410x530x1200	57
ESP20-20	±20	20	184-276	109	230	87	>98	one cycle	23	410x680x1200	120
ESP30-15	±15	30	195-265	154	230	130	>98	one cycle	23	410x680x1200	120
ESP30-20	±20	30	184-276	163	230	130	>98	one cycle	23	410x680x1200	135
ESP40-15	±15	40	195-265	205	230	174	>98	one cycle	23	410x680x1200	135

The values listed in the table are referred to 230V nominal voltage

Gemini plus ±30%/±25%											
ESP4-30	±30	4	161-300	25	230	17	>98	one cycle	13	300x560x300	32
ESP5-25	±25	5	172-288	29	230	22	>98	one cycle	13	300x560x300	32
ESP5-30	±30	5	161-300	31	230	22	>98	one cycle	13	300x560x300	40
ESP7-25	±25	7	172-288	41	230	30	>98	one cycle	13	300x560x300	40
ESP7-30	±30	7	161-300	43	230	30	>98	one cycle	22	410x530x1200	57
ESP10-25	±25	10	172-288	58	230	43	>98	one cycle	22	410x530x1200	57
ESP10-30	±30	10	161-300	62	230	43	>98	one cycle	23	410x680x1200	120
ESP15-25	±25	15	172-288	87	230	65	>98	one cycle	23	410x680x1200	120
ESP15-30	±30	15	161-300	93	230	65	>98	one cycle	23	410x680x1200	135
ESP20-25	±25	20	172-288	116	230	87	>98	one cycle	23	410x680x1200	135

The values listed in the table are referred to 230V nominal voltage