

Standard features

Voltage regulation	IGBT control (double conversion technology)
Voltage stabilisation	Independent phase control
Available nominal voltage*	220-230-240V (L-N) 380-400-415V (440-460-480V**) (L-L)
Output voltage accuracy	±0,5%
Frequency	50Hz ±5% or 60Hz ±5%
Correction time	<3 milliseconds
Admitted load variation	Up to 100%
Admitted load imbalance	100%
Cooling	Forced ventilation
Ambient temperature	0/+40°C
Max relative humidity	<95% (non condensing)
Admitted overload	150% for 1 minute (at nominal input voltage)
Colour	RAL 9005
Protection degree	IP 2X
User interface	10" colour touch panel, multilingual (On request remotely available by dedicated software connected to the same network Ethernet)
Installation	Indoor
Communication system	MODBUS TCP/IP
Oversvoltage protection	<ul style="list-style-type: none"> • Input class I surge arrestors • Output class II surge arrestors
Protection	Automatic by-pass protection

* 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.
** 60Hz only.



Ratings in relation to the input variation percentage

	±15%	±20%	±25%	±30%
160	120	95	80	
200	160	120	95	
250	200	160	120	
320	250	200	160	
400	320	250	200	
500	400	320	250	
630	500	400	320	
800	630	500	400	
1000	800	630	500	
1250	1000	800	630	
1600	1250	1000	800	
2000	1600	1250	1000	
2500	2000	1600	1250	
3200	2500	2000	1600	
4000	3200	2500	2000	



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.

Accessories

Interrupting devices

Short circuit output protection

Manual by-pass line

Total protection kit

Input isolating transformer

Integrated automatic power factor correction system

EMI/RFI filters

Up to IP55 protection degree for indoor and outdoor installation

In the Odyssey static stabilisers, the compensation of the input voltage fluctuation is managed by exploiting the double-conversion technology.

The traditional regulating system is replaced by the converters that generate the necessary voltage once the control system has detected an incorrect situation.

The main feature of such configuration is the fast response (<3msecs), which guarantees real-time correction and voltage steadiness on the load side.

The double conversion technology also ensures insulation from disturbances and distortions in the grid. Thanks to suitable electrolytic capacitors, high power loads demands can be met.

Odyssey maintains the usual operational features: the regulation is performed on each phase independently, the load can vary between 0 and 100% on each phase and the operation is not affected by the load power factor.

The unit can operate with or without the neutral wire.

Standard units cover a wide power range and offer a double input connection so that with the same unit two different input variations ($\pm 15/\pm 20\%$ or $\pm 25/\pm 30\%$) can be dealt with.

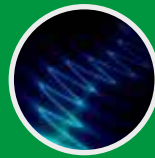
A 10" multilingual touchscreen on the front door works as user interface. By surfing the available menus, the electrical measures can be read and setting parameters adjusted.

The interface is fitted with an Ethernet communication port, which, via dedicated «client», allows remote monitoring.

Communication with the control system can be established also via RS485 serial bus and Modbus TCP/IP protocol.

The standard unit is housed in an IP21 metallic enclosure with RAL9005 finish for indoor installation.

Extracting fans ensure losses dissipation and unit cooling.



WIDE RANGE

$\pm 15\%$, $\pm 20\%$, $\pm 25\%$, $\pm 30\%$.
Output voltage accuracy: $\pm 0.5\%$.



TECHNOLOGY

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



SPEED

Response time: <3 milliseconds.



PROTECTION

The system is protected by class II output surge arrestors, class I input surge arrestors and automatic by-pass in case of internal failure.



USER INTERFACE

On the front panel a 10" multi-language touchscreen display provides for information on the stabiliser parameters, event log, etc.

On request, the interface can be replicated remotely via a dedicated software connected to the same Ethernet network.

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]	[%]	[ms]		[mm]	[kg]

Odyssey ±20%/±15%

120-20	±20	120	320-480	217	400	173	>98	<3	–	1200x800x2000	650
160-15	±15	160	340-460	272	400	231	>98	<3	–	1200x800x2000	650
160-20	±20	160	320-480	289	400	231	>98	<3	–	1200x800x2000	700
200-15	±15	200	340-460	340	400	289	>98	<3	–	1200x800x2000	700
200-20	±20	200	320-480	361	400	289	>98	<3	–	1200x800x2000	750
250-15	±15	250	340-460	425	400	361	>98	<3	–	1200x800x2000	750
250-20	±20	250	320-480	451	400	361	>98	<3	–	1200x800x2000	850
320-15	±15	320	340-460	543	400	462	>98	<3	–	1200x800x2000	850
320-20	±20	320	320-480	577	400	462	>98	<3	–	1200x1000x2200	1000
400-15	±15	400	340-460	679	400	577	>98	<3	–	1200x1000x2200	1000
400-20	±20	400	320-480	722	400	577	>98	<3	–	1200x1000x2200	1200
500-15	±15	500	340-460	849	400	722	>98	<3	–	1200x1000x2200	1200
500-20	±20	500	320-480	902	400	722	>98	<3	–	1200x1000x2200	1500
630-15	±15	630	340-460	1070	400	909	>98	<3	–	1200x1000x2200	1500
630-20	±20	630	320-480	1137	400	909	>98	<3	–	2400x1000x2200	2000
800-15	±15	800	340-460	1359	400	1155	>98	<3	–	2400x1000x2200	2000
800-20	±20	800	320-480	1443	400	1155	>98	<3	–	2400x1000x2200	2200
1000-15	±15	1000	340-460	1698	400	1443	>98	<3	–	2400x1000x2200	2200
1000-20	±20	1000	320-480	1804	400	1443	>98	<3	–	2400x1000x2200	2500
1250-15	±15	1250	340-460	2123	400	1804	>98	<3	–	2400x1000x2200	2500
1250-20	±20	1250	320-480	2255	400	1804	>98	<3	–	4200x1000x2200	3400
1600-15	±15	1600	340-460	2717	400	2309	>98	<3	–	4200x1000x2200	3400
1600-20	±20	1600	320-480	2887	400	2309	>98	<3	–	4200x1000x2200	3600
2000-15	±15	2000	340-460	3396	400	2887	>98	<3	–	4200x1000x2200	3600
2000-20	±20	2000	320-480	3609	400	2887	>98	<3	–	4200x1400x2200	4800
2500-15	±15	2500	340-460	4245	400	3609	>98	<3	–	4200x1400x2200	4800
2500-20	±20	2500	320-480	4511	400	3609	>98	<3	–	4200x1400x2200	5500
3200-15	±15	3200	340-460	5434	400	4619	>98	<3	–	4200x1400x2200	5500
3200-20	±20	3200	320-480	5774	400	4619	>98	<3	–	4200x1400x2200	6500
4000-15	±15	4000	340-460	6793	400	5774	>98	<3	–	4200x1400x2200	6500

The values listed in the table are referred to 400V 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]	[%]	[ms]		[mm]	[kg]

Odyssey ±30%/±25%

80-30	±30	80	280-520	165	400	115	>98	<3	–	1200x800x2000	650
95-25	±25	95	300-500	183	400	137	>98	<3	–	1200x800x2000	650
95-30	±30	95	280-520	196	400	137	>98	<3	–	1200x800x2000	700
120-25	±25	120	300-500	231	400	173	>98	<3	–	1200x800x2000	700
120-30	±30	120	280-520	247	400	173	>98	<3	–	1200x800x2000	750
160-25	±25	160	300-500	308	400	231	>98	<3	–	1200x800x2000	750
160-30	±30	160	280-520	330	400	231	>98	<3	–	1200x800x2000	850
200-25	±25	200	300-500	385	400	289	>98	<3	–	1200x800x2000	850
200-30	±30	200	280-520	412	400	289	>98	<3	–	1200x1000x2200	1000
250-25	±25	250	300-500	481	400	361	>98	<3	–	1200x1000x2200	1000
250-30	±30	250	280-520	516	400	361	>98	<3	–	1200x1000x2200	1200
320-25	±25	320	300-500	616	400	462	>98	<3	–	1200x1000x2200	1200
320-30	±30	320	280-520	660	400	462	>98	<3	–	1200x1000x2200	1500
400-25	±25	400	300-500	770	400	577	>98	<3	–	1200x1000x2200	1500
400-30	±30	400	280-520	825	400	577	>98	<3	–	2400x1000x2200	2000
500-25	±25	500	300-500	962	400	722	>98	<3	–	2400x1000x2200	2000
500-30	±30	500	280-520	1031	400	722	>98	<3	–	2400x1000x2200	2200
630-25	±25	630	300-500	1212	400	909	>98	<3	–	2400x1000x2200	2200
630-30	±30	630	280-520	1299	400	909	>98	<3	–	2400x1000x2200	2500
800-25	±25	800	300-500	1540	400	1155	>98	<3	–	2400x1000x2200	2500
800-30	±30	800	280-520	1650	400	1155	>98	<3	–	4200x1000x2200	3400
1000-25	±25	1000	300-500	1925	400	1443	>98	<3	–	4200x1000x2200	3400
1000-30	±30	1000	280-520	2062	400	1443	>98	<3	–	4200x1000x2200	3600
1250-25	±25	1250	300-500	2406	400	1804	>98	<3	–	4200x1000x2200	3600
1250-30	±30	1250	280-520	2578	400	1804	>98	<3	–	4200x1400x2200	4800
1600-25	±25	1600	300-500	3079	400	2309	>98	<3	–	4200x1400x2200	4800
1600-30	±30	1600	280-520	3299	400	2309	>98	<3	–	4200x1400x2200	5500
2000-25	±25	2000	300-500	3849	400	2887	>98	<3	–	4200x1400x2200	5500
2000-30	±30	2000	280-520	4124	400	2887	>98	<3	–	4200x1400x2200	6500
2500-25	±25	2500	300-500	4811	400	3609	>98	<3	–	4200x1400x2200	6500

The values listed in the table are referred to 400V nominal voltage