

# TECHNICAL FEATURES

## INPUT

Available nominal voltage*	380-400-415V (440-460-480V 60Hz only)
Maximum supply voltage	Max continuous voltage +10%
Frequency	50Hz ±5% or 60Hz ±5%
Power system	3 phases + N (no neutral wire on request)

## OUTPUT

Voltage	The same of input nominal voltage (output voltage can be adjusted)
Admitted load variation	Up to 100%
Admitted load imbalance	50%
Admitted overload	150% for 1 minute (at nominal input voltage)

## PERFORMANCE

Efficiency	>98%
SAG correction response	<3 milliseccs
Output voltage accuracy	±0,5%
SAG correction accuracy	±4%
Continuous regulation range	Oxygen 10-40: ±10%, Oxygen 15-50: ±15%

SAG correction capability	Input	Output	Time
Oxygen 10-40	-40%	100%	1 minuto
	-50%	90%	45 secondi
	-60%	80%	36 secondi
Oxygen 15-50	-50%	100%	1 minuto
	-60%	90%	45 secondi

## PROTECTION

Internal automatic by-pass	Thyristor switch with capacity of 150% of model rating
Overvoltage protection	Class I input surge arrester / Class II output surge arrester

## BUCK/BOOST TRANSFORMER

Type	Dry transformer
Frequency	50Hz or 60Hz

## ENVIRONMENT

Operating temperature range	0°C to 40°C (32°F to 104°F)
Operating altitude	< 1000m without derating (for higher altitudes contact us)
Inverter cooling	Forced Ventilation
Transformer cooling	Natural convection
Max relative humidity	<95% (non-condensing)
Pollution degree rating	2

\* 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.

## ENCLOSURE

Protection degree	IP2X (other on request)
Material	Electro-galvanized steel
Finish	Standard epoxy-polyester powder coating textured finish
Colour	RAL 9005
Enclosure access	Hinged doors with key lock

## SERVICE

Diagnostics	Non-volatile event & log
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## USER INTERFACE

HMI	10" colour touch panel, multilingual
Touch panel	Full parameters control, system & voltage event log
Remote duplication	On request by dedicated software connected to the same network (Ethernet)
Communication	Modbus TCP/IP

## POWER QUALITY EVENT MONITOR

Events recorded	Voltage SAG
Events detection	Input voltage
SAG threshold	Continuous (under minimum voltage)

## STANDARDS & CERTIFICATIONS

Quality	ISO9001
Environmental	ISO14001
Health & Safety	OHSAS18001
Marking	CE
Performance	IEC 61439-1/2



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 therefore do not hold any contractual value.

# OXYGEN RANGE

Type	Rated power	Input voltage range	Max input current (peak)	Output voltage	Rated output current	Eff.	Correction time	Cabinet dimensions*	Weight*
	[kVA]	[V]	[A]	[V]	[A]	[%]	[ms]	WxDxH [mm]	[kg]

Oxygen 10-40   input voltage compensation: $\pm 10\%$ continuous / $-40\%$ for 1 minute (100% nominal output voltage)									
<b>200-10-40</b>	200	360-440	321 (481)	400	289	>98	<3	1200x800x2000	800
<b>250-10-40</b>	250	360-440	401 (601)	400	361	>98	<3	1200x800x2000	900
<b>320-10-40</b>	320	360-440	513 (770)	400	462	>98	<3	1200x800x2000	1150
<b>400-10-40</b>	400	360-440	642 (962)	400	577	>98	<3	1200x1000x2200	1200
<b>500-10-40</b>	500	360-440	802 (1203)	400	722	>98	<3	1200x1000x2200	1400
<b>630-10-40</b>	630	360-440	1010 (1516)	400	909	>98	<3	2600x1400x2200	1600
<b>800-10-40</b>	800	360-440	1283 (1925)	400	1155	>98	<3	2600x1400x2200	1800
<b>1000-10-40</b>	1000	360-440	1604 (2406)	400	1443	>98	<3	4200x1000x2200	2100
<b>1250-10-40</b>	1250	360-440	2005 (3007)	400	1804	>98	<3	4200x1000x2200	2300
<b>1600-10-40</b>	1600	360-440	2566 (3849)	400	2309	>98	<3	4800x1400x2400	3200
<b>2000-10-40</b>	2000	360-440	3208 (4811)	400	2887	>98	<3	4800x1400x2400	3600
<b>2500-10-40</b>	2500	360-440	4009 (6014)	400	3609	>98	<3	4800x1400x2400	4000
<b>3200-10-40**</b>	3200	360-440	5132 (7698)	400	4619	>98	<3	4800x1400x2400	5000

Oxygen 15-50   input voltage compensation: $\pm 15\%$ continuous / $-50\%$ for 1 minute (100% nominal output voltage)									
<b>200-15-50</b>	200	340-460	340 (577)	400	289	>98	<3	1200x800x2000	1150
<b>250-15-50</b>	250	340-460	425 (722)	400	361	>98	<3	1200x1000x2200	1200
<b>320-15-50</b>	320	340-460	543 (924)	400	462	>98	<3	1200x1000x2200	1400
<b>400-15-50</b>	400	340-460	679 (1155)	400	577	>98	<3	2600x1400x2200	1600
<b>500-15-50</b>	500	340-460	849 (1443)	400	722	>98	<3	2600x1400x2200	1800
<b>630-15-50</b>	630	340-460	1070 (1819)	400	909	>98	<3	2600x1400x2200	1900
<b>800-15-50</b>	800	340-460	1359 (2309)	400	1155	>98	<3	4200x1000x2200	2300
<b>1000-15-50</b>	1000	340-460	1698 (2887)	400	1443	>98	<3	4800x1400x2400	3200
<b>1250-15-50</b>	1250	340-460	2123 (3609)	400	1804	>98	<3	4800x1400x2400	3600
<b>1600-15-50</b>	1600	340-460	2717 (4619)	400	2309	>98	<3	4800x1400x2400	4000
<b>2000-15-50**</b>	2000	340-460	3396 (5774)	400	2887	>98	<3	4800x1400x2400	5000

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

\* Size and Weight may change

\*\* Available only for 480V / 60Hz

## Optional accessories

- Input automatic circuit breaker
- Short circuit output protection
- Manual maintenance by-pass
- Input isolating transformer
- EMI/RFI filters

# OXYGEN K RANGE

Type	Rated power	Input voltage range	Max input current (peak)	Output voltage	Rated output current	Eff.	Correction time	Cabinet dimensions*	Weight*
	[kVA]	[V]	[A]	[V]	[A]	[%]	[ms]	LxPxH [mm]	[kg]

## Oxygen 10-40 | input voltage compensation: $\pm 10\%$ continuous / $-40\%$ for 1 minute (100% nominal output voltage)

<b>200-10-40K</b>	200	360-440	321 (481)	400	289	>98	<3	1600x800x2000	925
<b>250-10-40K</b>	250	360-440	401 (601)	400	361	>98	<3	1600x800x2000	1025
<b>320-10-40K</b>	320	360-440	513 (770)	400	462	>98	<3	1600x800x2000	1275
<b>400-10-40K</b>	400	360-440	642 (962)	400	577	>98	<3	1800x1000x2200	1370
<b>500-10-40K</b>	500	360-440	802 (1203)	400	722	>98	<3	1800x1000x2200	1570
<b>630-10-40K</b>	630	360-440	1010 (1516)	400	909	>98	<3	3200x1400x2200	1800
<b>800-10-40K</b>	800	360-440	1283 (1925)	400	1155	>98	<3	3200x1400x2200	2000
<b>1000-10-40K</b>	1000	360-440	1604 (2406)	400	1443	>98	<3	4800x1000x2200	2300
<b>1250-10-40K</b>	1250	360-440	2005 (3007)	400	1804	>98	<3	5400x1000x2200	2930
<b>1600-10-40K</b>	1600	360-440	2566 (3849)	400	2309	>98	<3	6000x1400x2400	3840
<b>2000-10-40K</b>	2000	360-440	3208 (4811)	400	2887	>98	<3	6000x1400x2400	4300
<b>2500-10-40K</b>	2500	360-440	4009 (6014)	400	3609	>98	<3	6000x1400x2400	5000
<b>3200-10-40K**</b>	3200	360-440	5132 (7698)	400	4619	>98	<3	6800x1400x2400	6200

## Oxygen 15-50 | input voltage compensation: $\pm 15\%$ continuous / $-50\%$ for 1 minute (100% nominal output voltage)

<b>200-15-50K</b>	200	340-460	340 (577)	400	289	>98	<3	1600x800x2000	1275
<b>250-15-50K</b>	250	340-460	425 (722)	400	361	>98	<3	1800x1000x2200	1325
<b>320-15-50K</b>	320	340-460	543 (924)	400	462	>98	<3	1800x1000x2200	1525
<b>400-15-50K</b>	400	340-460	679 (1155)	400	577	>98	<3	3200x1400x2200	1770
<b>500-15-50K</b>	500	340-460	849 (1443)	400	722	>98	<3	3200x1400x2200	2000
<b>630-15-50K</b>	630	340-460	1070 (1819)	400	909	>98	<3	3200x1400x2200	2100
<b>800-15-50K</b>	800	340-460	1359 (2309)	400	1155	>98	<3	4800x1000x2200	2500
<b>1000-15-50K</b>	1000	340-460	1698 (2887)	400	1443	>98	<3	6000x1400x2400	3830
<b>1250-15-50K</b>	1250	340-460	2123 (3609)	400	1804	>98	<3	6000x1400x2400	4240
<b>1600-15-50K</b>	1600	340-460	2717 (4619)	400	2309	>98	<3	6000x1400x2400	4650
<b>2000-15-50K**</b>	2000	340-460	3396 (5774)	400	2887	>98	<3	6000x1400x2400	5730

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

\* Size and Weight may change

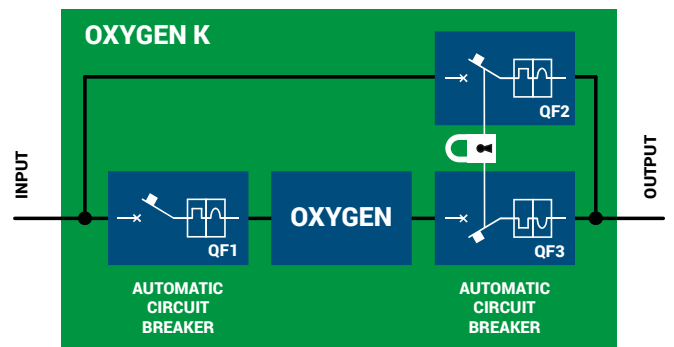
\*\* Available only for 480V / 60Hz

Compared to the standard model, the K model is equipped with:

- Input automatic circuit breaker
- Output automatic circuit breaker
- Manual by-pass line with interlocked automatic circuit breaker

## Optional accessories

- Input isolating transformer
- EMI/RFI filters



# CABINET SIZE

Type	Dimensions [mm]		
	W	D	H
11	210	400	200
12	300	460	300
13	300	560	300
21	300	500	900
22	410	530	1200
23	410	680	1200
31	600	600	1600
32	600	600	2000
33	800	600	2000
35	800	600	1800
36	1200	600	1600
37	1200	600	2000
40	600	800	1600
41	1000	800	1800
42	800	800	2000
43	1200	800	1600
44	2000	800	2000
46	1800	800	1600
47	1600	800	1800
48	2200	800	1800
49	2200	800	2000
50	2400	800	1800

Type	Dimensions [mm]		
	W	D	H
51	600	800	1800
52	1800	800	2000
53	1200	800	2000
54	600	800	2000
55	1200	800	1800
56	1800	800	1800
57	2400	800	2000
58	3000	800	2000
59	3600	800	2100
60	600	1000	1800
61	1200	1000	1800
62	1800	1000	2000
63	2400	1000	2000
64	3000	1000	2000
65	3600	1000	2000
66	4200	1000	2000
67	1200	1000	2000
68	800	1000	2000
70	3600	1000	2100
71	4200	1000	2100
72	4800	1000	2100
73	5400	1000	2100

Type	Dimensions [mm]		
	W	D	H
74	6000	1000	2100
75	6600	1000	2100
76	7200	1000	2100
80	3600	1400	2200
81	4200	1400	2200
82	4800	1400	2200
83	5400	1400	2200
84	6000	1400	2200
85	6600	1400	2200
86	7200	1400	2200
87	7800	1400	2200
86	7200	1400	2200
88	7000	1400	2200
89	8000	1400	2200
90	4200	2000	2400
91	5400	2000	2400
92	6000	2000	2400
93	6600	2000	2400
94	7200	2000	2400
95	8400	2000	2400