

# Voltage Stabilisers





Founded in 1969, ORTEA SpA is a leading company in manufacturing and engineering voltage stabilisers and magnetic components.

Over forty years in the business and ongoing technical research have made of ORTEA a competitive and technologically advanced company. Close co-operation between design, production and marketing enables to meet the requirements of a constantly growing number of customers.

In 1996 ORTEA joined ICAR Group, made of Italian and European industrial units specialised in manufacturing capacitors and power factor correction systems.

Beside standard production, ORTEA can be extremely flexible in developing and manufacturing special equipment according to User's specification. All this thanks to the experience gained over many years of applied technological development.

Such development includes IT tools that enable the technical staff to elaborate electrical and mechanical designs for each «custom product» on a quick and cost-effective basis.



The belief that product quality and Customer satisfaction are the core of a modern organisation, led to the implementation of an ISO9001:2008 certified Company Managing System.

The achievement of the ISO14001:2004 and OHSAS18001:2007 accreditation was a natural integration in order to optimise the Company's performance, showing at the same time the commitment towards environmental and safety at work issues.







ORTEA is well established in the global market. Thanks to strategically positioned offices and distributors and efficient commercial relations, ORTEA's products are installed and working in a large number of countries.



- ▲ ORTEA headquarters (Italy)
- ▲ ORTEA branches (Russia, Ivory Coast, Kenya, Venezuela)



## Vega

single-phase  
**0.3-25kVA**



### Standard features

<b>Selectable output voltage (dip-switch)*</b>	220-230-240V
<b>Frequency</b>	50/60Hz $\pm 5\%$
<b>Admitted load variation</b>	Up to 100%
<b>Cooling</b>	Natural ventilation
<b>Ambient temperature</b>	-25/+45°C
<b>Storage temperature</b>	-25/+60°C
<b>Max relative humidity</b>	95%
<b>Admitted overload</b>	200% 2 min.
<b>Harmonic distortion</b>	None introduced
<b>Colour</b>	RAL 7035
<b>Protection degree</b>	IP21
<b>Instrumentation</b>	Output digital voltmeter
<b>Installation</b>	Indoor

\* The 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.

### Accessories

<b>Interrupting devices</b>
<b>Load protection against over/undervoltage</b>
<b>Manual by-pass line</b>
<b>Input isolating transformer</b>
<b>SPD surge arrestor</b>
<b>EMI/RFI filters</b>
<b>IP54 protection degree for indoor and outdoor installation</b>

### Rating in relation to the input variation percentage

	<b><math>\pm 15\%</math></b>	<b><math>\pm 20\%</math></b>	<b><math>\pm 25\%</math></b>	<b><math>\pm 30\%</math></b>	<b>+15%/-25%</b>	<b>+15%/-35%</b>	<b>+15%/-45%</b>
<b>1</b>		0.7	0.5	0.3	0.7	0.5	0.3
<b>2.5</b>		2	1.5	1	2	1.5	1
<b>5</b>		4	3	2	4	3	2
<b>7</b>		5	4	3	5	4	3
<b>10</b>		7	5	4	7	5	4
<b>15</b>		10	7	5	10	7	5
<b>20</b>		15	10	7	15	10	7
<b>25</b>		20	15	10	20	15	10



All ORTEA stabilisers 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 9001:2008 Standards. The commitment towards environmental issues and safety at work matters is guaranteed by the certification of the Management System according to the ISO14001:2004 and OHSAS18001:2007 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 hold therefore any contractual value.



## Vega single-phase 0.3-25kVA

Vega stabilisers are available for different ranges of input voltage fluctuation.

Standard models 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.

An **automatic circuit breaker** is mounted on the regulation circuit **to protect** against overload and short circuit on the voltage regulator, whilst the auxiliary circuit is protected by **fuses**.

A **digital display** on the front panel shows the output voltage and the alarms (min/max output voltage, gearmotor lock, internal overheating, regulator overload)

The control logic is based on a digital **microprocessor**.

All Vega stabilisers are fitted with the **same control card**, thus simplifying maintenance operations and spare parts storage.



### Wide range

- symmetrical:  **$\pm 15\%$ ,  $\pm 20\%$ ,  $\pm 25\%$ ,  $\pm 30\%$**  (other on request)
  - asymmetrical:  **$+15\%/-25\%$ ,  $+15\%/-35\%$ ,  $+15\%/-45\%$**  (other on request)
- Output voltage accuracy:  **$\pm 0.5\%$** .



### Technology

Control logic based on digital **microprocessor** operating with a software specifically developed for Ortea.



### Long life

Ortea system voltage regulator with **rollers** (without brushes, which are subject to heavy wear & tear).



### Protection

The voltage regulator is protected by a **circuit breaker** with magneto thermal release.  
The auxiliary circuit is protected by **fuses**.



### Instrumentation

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

# Vega

single-phase  
0.3-25kVA

Type	Input voltage variation range	Rating	Input voltage range	Maximum input current	Output voltage $\pm 0.5\%$	Output current	Efficiency	Speed regulation	Cabinet	Weight
	[%]	[kVA]	[V]	[A]	[V]	[A]	[%]	[ms/V]	Type	[kg]

Input voltage variation range  $\pm 20\%/\pm 15\%$  (the values listed in the table are referred to 230V nominal voltage)

<b>0.7-20</b>	$\pm 20$	0.7	184-276	3.8		3		12		
<b>1-15</b>	$\pm 15$	1	195-265	5	230	4.3	>96	16	12	16
<b>2-20</b>	$\pm 20$	2	184-276	11		8.7		12		
<b>2.5-15</b>	$\pm 15$	2.5	195-265	13	230	11	>96	16	12	24
<b>4-20</b>	$\pm 20$	4	184-276	21		17		12		
<b>5-15</b>	$\pm 15$	5	195-265	26	230	22	>96	16	12	28
<b>5-20</b>	$\pm 20$	5	184-276	28	230	22	>98	12	13	41
<b>7-15</b>	$\pm 15$	7	195-265	35		30		16		
<b>7-20</b>	$\pm 20$	7	184-276	38		30		12		
<b>10-15</b>	$\pm 15$	10	195-265	51	230	43	>98	16	13	47
<b>10-20</b>	$\pm 20$	10	184-276	54		43		12		
<b>15-15</b>	$\pm 15$	15	195-265	76	230	65	>98	16	13	55
<b>15-20</b>	$\pm 20$	15	184-276	81		65		12		
<b>20-15</b>	$\pm 15$	20	195-265	102	230	87	>98	16	22	92
<b>20-20</b>	$\pm 20$	20	184-276	109		87		12		
<b>25-15</b>	$\pm 15$	25	195-265	128	230	109	>98	16	22	115

Input voltage variation range  $\pm 30\%/\pm 25\%$  (the values listed in the table are referred to 230V nominal voltage)

<b>0.3-30</b>	$\pm 30$	0.3	161-300	1.9		1.3		8		
<b>0.5-25</b>	$\pm 25$	0.5	172-288	2.9	230	2.2	>96	10	12	16
<b>1-30</b>	$\pm 30$	1	161-300	6.2		4.3		8		
<b>1.5-25</b>	$\pm 25$	1.5	172-288	8.7	230	6.5	>96	10	12	24
<b>2-30</b>	$\pm 30$	2	161-300	12		8.7		8		
<b>3-25</b>	$\pm 25$	3	172-288	17	230	13	>96	10	12	28
<b>3-30</b>	$\pm 30$	3	161-300	19		13		8		
<b>4-25</b>	$\pm 25$	4	172-288	23	230	17	>98	10	13	41
<b>4-30</b>	$\pm 30$	4	161-300	25		17		8		
<b>5-25</b>	$\pm 25$	5	172-288	29	230	22	>98	10	13	47
<b>5-30</b>	$\pm 30$	5	161-300	31		22		8		
<b>7-25</b>	$\pm 25$	7	172-288	40	230	30	>98	10	13	56
<b>7-30</b>	$\pm 30$	7	161-300	44		30		8		
<b>10-25</b>	$\pm 25$	10	172-288	57	230	43	>98	10	22	92
<b>10-30</b>	$\pm 30$	10	161-300	62		43		8		
<b>15-25</b>	$\pm 25$	15	172-288	87	230	65	>98	10	22	115

# Vega

single-phase  
0.3-25kVA

Type	Input voltage variation range	Rating	Input voltage range	Maximum input current	Output voltage $\pm 0.5\%$	Output current	Efficiency	Speed regulation	Cabinet	Weight
	[%]	[kVA]	[V]	[A]	[V]	[A]	[%]	[ms/V]	Type	[kg]

Input voltage variation range **+15%/-25%** (the values listed in the table are referred to 230V nominal voltage)

<b>0.7-15/25</b>	+15/-25	0.7	172-265	4	230	3	>96	12	12	17
<b>2-15/25</b>	+15/-25	2	172-265	12	230	8.7	>96	12	12	25
<b>4-15/25</b>	+15/-25	4	172-265	23	230	17	>96	12	12	29
<b>5-15/25</b>	+15/-25	5	172-265	29	230	22	>98	12	13	42
<b>7-15/25</b>	+15/-25	7	172-265	40	230	30	>98	12	13	48
<b>10-15/25</b>	+15/-25	10	172-265	57	230	43	>98	12	13	56
<b>15-15/25</b>	+15/-25	15	172-265	87	230	65	>98	12	22	92
<b>20-15/25</b>	+15/-25	20	172-265	116	230	87	>98	12	22	115

Input voltage variation range **+15%/-35%** (the values listed in the table are referred to 230V nominal voltage)

<b>0.5-15/35</b>	+15/-35	0.5	150-265	3.4	230	2.2	>96	10	12	17
<b>1.5-15/35</b>	+15/-35	1.5	150-265	10	230	6.5	>96	10	12	25
<b>3-15/35</b>	+15/-35	3	150-265	20	230	13	>96	10	12	29
<b>4-15/35</b>	+15/-35	4	150-265	26	230	17	>98	10	13	42
<b>5-15/35</b>	+15/-35	5	150-265	34	230	22	>98	10	13	48
<b>7-15/35</b>	+15/-35	7	150-265	46	230	30	>98	10	13	56
<b>10-15/35</b>	+15/-35	10	150-265	66	230	43	>98	10	22	92
<b>15-15/35</b>	+15/-35	15	150-265	100	230	65	>98	10	22	115

Input voltage variation range **+15%/-45%** (the values listed in the table are referred to 230V nominal voltage)

<b>0.3-15/45</b>	+15/-45	0.3	126-265	2.4	230	1.3	>96	8	12	17
<b>1-15/45</b>	+15/-45	1	126-265	7.8	230	4.3	>96	8	12	25
<b>2-15/45</b>	+15/-45	2	126-265	16	230	8.7	>96	8	12	29
<b>3-15/45</b>	+15/-45	3	126-265	24	230	13	>98	8	13	42
<b>4-15/45</b>	+15/-45	4	126-265	31	230	17	>98	8	13	48
<b>5-15/45</b>	+15/-45	5	126-265	40	230	22	>98	8	13	56
<b>7-15/45</b>	+15/-45	7	126-265	55	230	30	>98	8	22	92
<b>10-15/45</b>	+15/-45	10	126-265	78	230	43	>98	8	22	115



Via dei Chiosi, 21  
20873 Cavenago di Brianza MB - ITALY  
Phone: +39.02.95.917.800  
Fax: +39.02.95.917.801  
Mail: [sales@ortea.com](mailto:sales@ortea.com)

[www.ortea.com](http://www.ortea.com)