

ORION

The ORION three-phase stabiliser covers the power rating range between 2kVA and 450kVA and allows for the choice of several input voltage variation percentages within a broad range (from +30% up to -45%).

For $\pm 15\%$; $\pm 20\%$ and $\pm 25\%$; $\pm 30\%$ range, the change of stabilisation is obtained through different internal connections.

These stabilisers can be provided with two types of regulation.

The regulation in the ORION A stabilisers is performed on the average three-phase voltage. These stabilisers are used with three-phase loads and two-phase loads with 50% maximum **balanced** input rated voltage. In this configuration, the voltage stabiliser does not require the neutral wire presence.

The regulation in the ORION Y stabilisers is independent on each phase. These stabilisers are used with three-phase loads and single-phase loads with 100% unbalance with unbalance input rated voltage. In this configuration, the voltage stabiliser requires the neutral wire presence.

Automatic circuit breakers are provided on the regulation circuit to protect against overload and short circuit on the voltage regulator.

The auxiliary circuit is protected by fuses.

The measuring instrumentation for the ORION stabilisers is installed on the cabinet door and consists of a **multi-task digital network analyser**. Such instrument is able to provide with information regarding the status of the line downstream the voltage stabiliser, such as phase and linked voltages, current, power factor, active power, apparent power, reactive power, etc.

By means of a changeover contact, the stabiliser control card allows for the acoustic signalling of the following alarms: minimum voltage, maximum voltage, internal overheating and overload on the voltage regulator.

The logic control is based on the microprocessor.

ORION A STANDARD FEATURES

FREQUENCY	47/65Hz
ADMITTED LOAD VARIATION	from 0 to 100%
ADMITTED LOAD UNBALANCE	up to 50%
MAINS WAVEFORM DISTORTION INCREMENT	< 0.2%
COOLING	Aided air
AMBIENT TEMPERATURE	-15/ +45 °C
STORAGE TEMPERATURE	-25/ +60°C
RELATIVE HUMIDITY	95%
ADMITTED OVERLOAD	200% 2min
COLOUR	RAL 7035
PROTECTION	IP 21
INSTALLATION	Indoor

RATING IN RELATION TO THE INPUT VARIATION PERCENTAGE

$\pm 15\%$	$\pm 20\%$	$\pm 25\%$	$\pm 30\%$	-25/+15%	-35/+15%	-45/+15%
5	4	3	2	4	3	2
10	7	4	3	7	4	3
15	10	7	4	10	7	4
20	15	10	7	15	10	7
30	20	15	10	20	15	10
45	30	20	15	30	20	15
60	45	30	20	45	30	20
75	60	45	30	60	45	30
105	75	60	45	75	60	45
135	105	75	60	105	75	60
175	135	105	75	135	105	75
230	175	135	105	175	135	105
300	230	175	135	230	175	135
450	300	230	175	300	230	175

Any other variation range not mentioned in the table above can be dealt with on request.

ORION A $\pm 20\%$ $\pm 15\%$ AUTOMATIC THREE-PHASE VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE $\pm 20\%$ $\pm 15\%$ [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE $\pm 0.5\%$ [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
A4-20	4	400	7	400	6	>95	12	22	82
A5-15	5	400	8	400	7	>95	16	22	82
A7-20	7	400	13	400	10	>96	12	22	82
A10-15	10	400	16	400	14	>96	16	22	82
A10-20	10	400	17	400	14	>97	12	22	109
A15-15	15	400	25	400	21	>97	16	22	109
A15-20	15	400	26	400	21	>98	12	23	145
A20-15	20	400	33	400	28	>98	16	23	145
A20-20	20	400	36	400	29	>98	12	23	170
A30-15	30	400	50	400	43	>98	16	23	170
A30-20	30	400	54	400	43	>98	12	23	190
A45-15	45	400	76	400	65	>98	16	23	190
A45-20	45	400	81	400	65	>98	14	24	320
A60-15	60	400	102	400	87	>98	18	24	320
A60-20	60	400	107	400	86	>98	14	24	380
A75-15	75	400	126	400	108	>98	18	24	380
A75-20	75	400	135	400	108	>98	14	25	460
A105-15	105	400	176	400	152	>98	18	25	460
A105-20	105	400	187	400	150	>98	14	25	507
A135-15	135	400	229	400	195	>98	18	25	507
A135-20	135	400	244	400	195	>98	14	25	850
A175-15	175	400	297	400	253	>98	18	25	850
A175-20	175	400	316	400	253	>98	14	26	930
A230-15	230	400	390	400	332	>98	18	26	930
A230-20	230	400	415	400	332	>98	14	26	760
A300-15	300	400	509	400	433	>98	18	26	760
A300-20	300	400	542	400	433	>98	14	50	1200
A450-15	450	400	765	400	650	>98	18	50	1200

ORION A $\pm 30\%$ $\pm 25\%$ THREE-PHASE AUTOMATIC VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE $\pm 30\%$ $\pm 25\%$ [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE $\pm 0.5\%$ [V]	RATED				
A2-30	2	400	4	400					
A3-25	3	400	6	400					
A3-30	3	400	6	400					
A4-25	4	400	8	400					
A4-30	4	400	8	400					
A7-25	7	400	13	400					
A7-30	7	400	14	400					
A10-25	10	400	19	400					
A10-30	10	400	20	400					

ORION A +15%/-25% THREE-PHASE AUTOMATIC VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE +15% -25% [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE +/-0.5% [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
A4-15/25	4	400	8	400	6	>94	12	22	92
A7-15/25	7	400	13	400	10	>95	12	22	92
A10-15/25	10	400	19	400	14	>96	12	22	119
A15-15/25	15	400	27	400	22	>97	12	23	155
A20-15/25	20	400	39	400	29	>97	12	23	180
A30-15/25	30	400	57	400	43	>97	12	23	210
A45-15/25	45	400	87	400	65	>97	14	24	340
A60-15/25	60	400	116	400	87	>97	14	24	400
A75-15/25	75	400	144	400	108	>97	14	25	480
A105-15/25	105	400	202	400	152	>97	14	25	527
A135-15/25	135	400	260	400	195	>97	14	25	850
A175-15/25	175	400	337	400	253	>97	14	26	930
A230-15/25	230	400	443	400	332	>97	14	26	1100
A300-15/25	300	400	578	400	433	>97	14	50	1400

ORION A +15%/-35% THREE-PHASE AUTOMATIC VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE +15% -35% [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE +/-0.5% [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
A3-15/35	3	400	7	400	4	>94	10	22	92
A4-15/35	4	400	9	400	6	>95	10	22	92
A7-15/35	7	400	15	400	10	>96	10	22	119
A10-15/35	10	400	21	400	14	>97	10	23	155
A15-15/35	15	400	33	400	22	>97	10	23	180
A20-15/35	20	400	44	400	29	>97	10	23	210
A30-15/35	30	400	66	400	43	>97	11	24	340
A45-15/35	45	400	100	400	65	>97	11	24	400
A60-15/35	60	400	133	400	87	>97	11	25	480
A75-15/35	75	400	166	400	108	>97	11	25	527
A105-15/35	105	400	234	400	152	>97	11	25	850
A135-15/35	135	400	300	400	195	>97	11	26	930
A175-15/35	175	400	389	400	253	>97	11	26	1100
A230-15/35	230	400	511	400	332	>97	11	50	1400

ORION A +15%/-45% THREE-PHASE AUTOMATIC VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE +15% -45% [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE +/-0.5% [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
A2-15/45	2	400	5	400	3	>94	8	22	92
A3-15/45	3	400	8	400	4	>95	8	22	92
A4-15/45	4	400	10	400	6	>95	8	22	119
A7-15/45	7	400	18	400	10	>96	8	23	155
A10-15/45	10	400	25	400	14	>97	8	23	180
A15-15/45	15	400	39	400	22	>97	8	23	210
A20-15/45	20	400	52	400	29	>97	9	24	340
A30-15/45	30	400	79	400	43	>97	9	24	400
A45-15/45	45	400	118	400	65	>97	9	25	480
A60-15/45	60	400	158	400	87	>97	9	25	527
A75-15/45	75	400	196	400	108	>97	9	25	850
A105-15/45	105	400	276	400	152	>97	9	26	930
A135-15/45	135	400	354	400	195	>97	9	26	1100
A175-15/45	175	400	460	400	253	>97	9	50	1400



ORION Type

The technical data in the above tables are subject to change by the Company either r internal reasons or because of a specific request from the Customer
 Input output voltage 50Hz: 380/415V - Input output voltage 60Hz: 460/480V

ORION Y STANDARD FEATURES

FREQUENCY	47/65Hz
ADMITTED LOAD VARIATION	from 0 to 100%
ADMITTED LOAD UNBALANCE	up to 100%
MAINS WAVEFORM DISTORTION INCREMENT	< 0.2%
COOLING	Aided Air
AMBIENT TEMPERATURE	-15/+45 °C
STORAGE TEMPERATURE	-25/+60°C
RELATIVE HUMIDITY	95%
ADMITTED OVERLOAD	200% 2min
COLOUR	RAL 7035
PROTECTION	IP 21
INSTALLATION	Indoor

RATING IN RELATION TO THE INPUT VARIATION PERCENTAGE

±15%	±20%	±25%	±30%	-25/+15%	-35/+15%	-45/+15%
5	4	3	2	4	3	2
10	7	4	3	7	4	3
15	10	7	4	10	7	4
20	15	10	7	15	10	7
30	20	15	10	20	15	10
45	30	20	15	30	20	15
60	45	30	20	45	30	20
75	60	45	30	60	45	30
105	75	60	45	75	60	45
135	105	75	60	105	75	60
175	135	105	75	135	105	75
230	175	135	105	175	135	105
300	230	175	135	230	175	135
450	300	230	175	300	230	175

Any other variation range not mentioned in the table above can be dealt with on request.

ORION Y $\pm 20\%$ $\pm 15\%$ THREE-PHASE AUTOMATIC VOLTAGE STABILISER

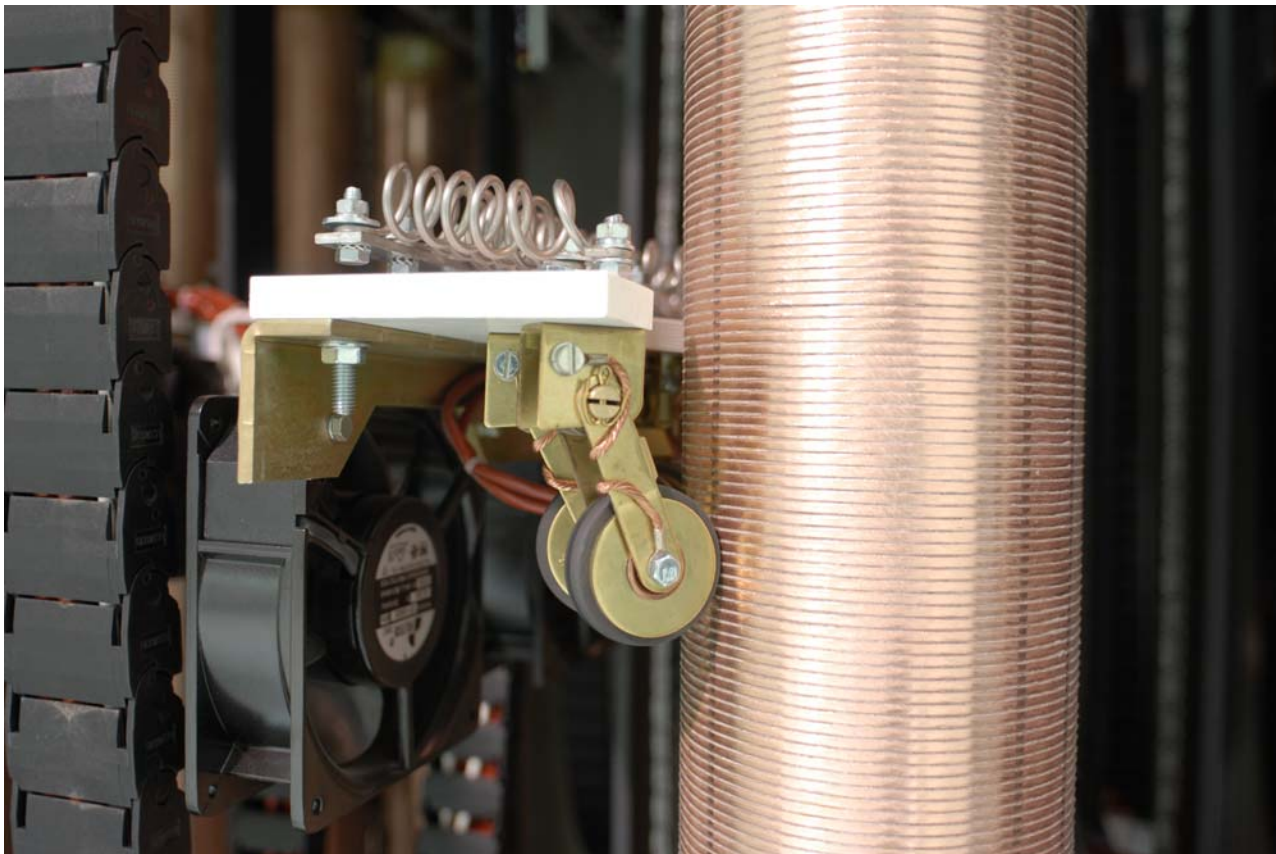
TYPE	RATED POWER [kVA]	INPUT VOLTAGE $\pm 20\%$ $\pm 15\%$ [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE $\pm 0.5\%$ [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
Y4-20	4	400	7	400	6	>95	12	22	90
Y5-15	5	400	8	400	7	>95	16	22	90
Y7-20	7	400	13	400	10	>96	12	22	90
Y10-15	10	400	16	400	14	>96	16	22	90
Y10-20	10	400	17	400	14	>97	12	22	110
Y15-15	15	400	25	400	21	>97	16	22	110
Y15-20	15	400	26	400	21	>98	12	23	155
Y20-15	20	400	33	400	28	>98	16	23	155
Y20-20	20	400	36	400	29	>98	12	23	180
Y30-15	30	400	50	400	43	>98	16	23	180
Y30-20	30	400	54	400	43	>98	12	23	200
Y45-15	45	400	76	400	65	>98	16	23	200
Y45-20	45	400	81	400	65	>98	14	24	380
Y60-15	60	400	102	400	87	>98	18	24	380
Y60-20	60	400	107	400	86	>98	14	24	430
Y75-15	75	400	126	400	108	>98	18	24	430
Y75-20	75	400	135	400	108	>98	14	25	490
Y105-15	105	400	176	400	152	>98	18	25	490
Y105-20	105	400	187	400	150	>98	14	25	580
Y135-15	135	400	229	400	195	>98	18	25	580
Y135-20	135	400	244	400	195	>98	14	26	950
Y175-15	175	400	297	400	253	>98	18	26	950
Y175-20	175	400	316	400	253	>98	14	26	1030
Y230-15	230	400	390	400	332	>98	18	26	1030
Y230-20	230	400	415	400	332	>98	14	26	860
Y300-15	300	400	509	400	433	>98	18	26	860
Y300-20	300	400	542	400	433	>98	14	50	1300
Y450-15	450	400	765	400	650	>98	18	50	1300

ORION Y $\pm 30\%$ $\pm 25\%$ THREE-PHASE AUTOMATIC VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE $\pm 30\%$ $\pm 25\%$ [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE $\pm 0.5\%$ [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
Y2-30	2	400	4	400	3	>96	8	22	90
Y3-25	3	400	6	400	4	>96	10	22	90
Y3-30	3	400	6	400	4	>96	8	22	90
Y4-25	4	400	8	400	6	>97	10	22	90
Y4-30	4	400	8	400	6	>97	8	22	110
Y7-25	7	400	13	400	10	>98	10	22	110
Y7-30	7	400	14	400	10	>98	8	23	155
Y10-25	10	400	19	400	14	>98	10	23	155
Y10-30	10	400	20	400	14	>98	8	23	180
Y15-25	15	400	29	400	22	>98	10	23	180
Y15-30	15	400	31	400	22	>98	8	23	200
Y20-25	20	400	38	400	29	>98	10	23	200
Y20-30	20	400	41	400	29	>98	9	24	380
Y30-25	30	400	57	400	43	>98	11	24	380
Y30-30	30	400	61	400	43	>98	9	24	430
Y45-25	45	400	86	400	65	>98	11	24	430
Y45-30	45	400	93	400	65	>98	9	25	490
Y60-25	60	400	115	400	86	>98	11	25	490
Y60-30	60	400	123	400	87	>98	9	25	580
Y75-25	75	400	144	400	108	>98	11	25	580
Y75-30	75	400	154	400	108	>98	9	26	950
Y105-25	105	400	203	400	152	>98	11	26	950
Y105-30	105	400	217	400	152	>98	9	26	1030
Y135-25	135	400	260	400	195	>98	11	26	1030
Y135-30	135	400	278	400	195	>98	9	26	860
Y175-25	175	400	337	400	253	>98	11	26	860
Y175-30	175	400	361	400	253	>98	9	50	1300
Y230-25	230	400	443	400	332	>98	14	50	1300

ORION Y +15%/-45% THREE-PHASE AUTOMATIC VOLTAGE STABILISER

TYPE	RATED POWER [kVA]	INPUT VOLTAGE +15% -45% [V]	MAX INPUT CURRENT [A]	OUTPUT VOLTAGE +/-0.5% [V]	RATED OUTPUT CURRENT [A]	EFFICIENCY [%]	RESPONSE TIME [ms/V]	CABINET	WEIGHT [kg]
Y2-15/45	2	400	5	400	3	>94	8	22	100
Y3-15/45	3	400	8	400	4	>95	8	22	100
Y4-15/45	4	400	10	400	6	>95	8	22	120
Y7-15/45	7	400	18	400	10	>96	8	23	165
Y10-15/45	10	400	25	400	14	>97	8	23	190
Y15-15/45	15	400	39	400	22	>97	8	23	220
Y20-15/45	20	400	52	400	29	>97	9	24	400
Y30-15/45	30	400	79	400	43	>97	9	24	450
Y45-15/45	45	400	118	400	65	>97	9	25	510
Y60-15/45	60	400	158	400	87	>97	9	25	600
Y75-15/45	75	400	196	400	108	>97	9	26	950
Y105-15/45	105	400	276	400	152	>97	9	26	1030
Y135-15/45	135	400	354	400	195	>97	9	26	1200
Y175-15/45	175	400	460	400	253	>97	9	50	1550



The technical data in the above tables are subject to change by the Company either for internal reasons or because of a specific request from the Customer
 Input output voltage 50Hz: 380/415V - Input output voltage 60Hz: 460/480V