

# AVR 33

## 10.5 - 2000 kVA

Three-phase automatic voltage regulator with servo motor technology. It offers enhanced power protection on professional and industrial facilities from the dangerous supply network voltage fluctuations. The AVR offers high performance (Power Factor = 1), easy operation and maintenance. The compact design and solid construction, offer long lasting durability and compact footprint.



## AUTOMATIC VOLTAGE REGULATOR

*3 phase in / 3 phase out*

### GENERAL SPECIFICATIONS

- Wide power and voltage interval
- Fast Regulation
- High reliability thanks to the Microprocessor design and Smart Driver
- High efficiency Power Factor = 1
- Load transfer to Bypass via pole charge switch
- Safe and cost effective usage
- Over-current and overload protection
- Digitally displayed status, input & output measurements

# AVR 33

AUTOMATIC VOLTAGE REGULATOR *3 phase in / 3 phase out* 10.5 - 160 kVA



MODEL	33010	330015	330020	330030	330045	330060	330075	330100	330120	330150	330160
<b>TESCOM Code</b>	AVR.0155	AVR.0156	AVR.0157	AVR.0158	AVR.0159	AVR.0160	AVR.0161	AVR.0162	AVR.0163	AVR.0164	AVR.0165
Power kVA	10.5	15	22.5	30	45	60	75	100	120	150	160
<b>REGULATOR INPUT</b>											
In.Vol.Correct.Interval	285 - 440 VAC (Optional: 190-415 VAC)										
Operation Frequency	47...65 Hz										
Line Input Protection	Overcurrent, Low and High voltage protection										
Current at Input	21.2	30	45	60	91	121	151	202	242	303	323
<b>REGULATOR OUTPUT</b>											
Output Voltage	380 / 400 / 415 VAC RMS $\pm$ 1 %										
Overloading	10 Sec. 200 % Load										
Correction Speed	~ 90 Volt / Sec.										
Upturn Period	~ 90 Volt / Sec. ( 160 VAC - 250 VAC)										
Output Protection	Protects load by opening the circuit when overburden short circuit occurs.										
Current at Output	15.9	22.5	34	45	67	90	112	151	181	227	242
<b>WORKING PRINCIPLE</b>											
Servo Motor, Microprocessor Controlled, Full Automatic											
<b>GENERAL</b>											
Cooling	Smart Fan System										
Measured Value Monitor.	TRUE RMS Panel Voltmeter (74x74mm) output voltage and line voltage monitoring										
Total Harmonic Distortion	-										
Total Efficiency	> 97 %										
Mechanical By-pass	"Manually Controlled Line - PAKO Switch Selects Voltage Regulator" Switch Turn On / Off										
Protection Level	IP 20										
<b>ENVIRONMENTAL</b>											
Working Temperature	-10 °C / 50 °C										
Storage Temperature	-25 °C / 60 °C										
Relative Humidity	< 90 %, DIN ( 40040 )										
Working Altitude	< 2000 m.										
Acoustic Level	< 55 dB										
Documents	CE // TUV Austria Hellas (ISO 9001)										
<b>DIMENSIONS</b>											
WxDxH (mm)	405x640x1170			405x640x1270		605x890x1400			660x940x1650		
Weight (kg)	118.75	131.25	156.25	181.25	206.25	325	350	387.5	500	531.25	562.5

# AVR 33

AUTOMATIC VOLTAGE REGULATOR *3 phase in / 3 phase out* 200 - 2000 kVA



MODEL	330200	330250	330300	330400	330500	330600	330800	331000	331250	331500	331600	332000
<b>TESCOM Code</b>	AVR.0165	AVR.0166	AVR.0167	AVR.0168	AVR.0169	AVR.0170	AVR.0171	AVR.0172	AVR.0173	AVR.0174	AVR.0175	AVR.0176
Power kVA	200	250	300	400	500	600	800	1000	1250	1500	1600	2000
<b>REGULATOR INPUT</b>												
In.Vol.Correct.Interval	285 - 440 VAC (Optional: 190-415 VAC)											
Operation Frequency	47...65 Hz											
Line Input Protection	Overcurrent, Low and High voltage protection											
Current at Input	404	505	606	808	1010	1212	1616	2020	2525	3030	3232	4040
<b>REGULATOR OUTPUT</b>												
Output Voltage	380 / 400 / 415 VAC RMS $\pm$ 1 %											
Overloading	10 Sec. 200 % Load											
Correction Speed	~ 90 Volt / Sec.											
Upturn Period	~ 90 Volt / Sec. ( 160 VAC - 250 VAC)											
Output Protection	Protects load by opening the circuit when overburden short circuit occurs.											
Current at Output	303	378	454	606	757	909	1212	1515	1893	2272	2424	3030
<b>WORKING PRINCIPLE</b>												
Servo Motor, Microprocessor Controlled, Full Automatic												
<b>GENERAL</b>												
Cooling	Smart Fan System											
Measured Value Monitor.	DELTA TRUE RMS Panel Voltmeter (74x74mm) output voltage and line voltage monitorization											
Total Harmonic Distortion	-											
Total Efficiency	> 97 %											
Mechanical By-pass	"Manually Controlled Line - PAKO Switch Selects Voltage Regulator" Switch Turn On / Off											
Protection Level	IP 20											
<b>ENVIRONMENTAL</b>												
Operating Temperature	-10 °C / 50 °C											
Storage Temperature	-25 °C / 60 °C											
Relative Humidity	< 90 %, DIN ( 40040 )											
Operating Altitude	< 2000 m.											
Acoustic Level	< 55 dB											
Certification	CE // TUV Austria Hellas (ISO 9001)											
<b>DIMENSIONS</b>												
WxDxH (mm)	1200x800x2000			1800x1210x1730	2100x1440x2080		2100x2140x1830	2400x2040x2080	2400x2640x1880	2400x2640x2080		4200x2540x2080
Weight (kg) P.F 1	1312.5	1375	1500	2062.5	2500	2625	3625	4312.5	4875	5375	5500	7500