

PowerMaster Series Automatic Voltage Regulators – Stabilised Power Protection 5-3000kVA

➤ **Stability**

➤ **Regulation**

➤ **Industrial**



The PowerMaster AVR protects voltage fluctuations from the incoming supply affecting your load and is designed to maintain constant set voltage at all times.

The output voltage can be monitored via the front panel analogue voltmeter and certain models are provided with high and low voltage LED indicator alarms.

The PowerMaster range includes single and three phase models and can be supplied with phase or phase & neutral options.

Wide input voltage range models are available and the standard output voltage range of these may be altered upon request.

- Top servo motor designed voltage regulation system
- Single and 3 phase options
- Wide power and voltage interval
- High reliability thanks to Microprocessor and Smart Driver
- Fast regulation
- High efficiency
- Load transfer to bypass via pole change switch
- Safe and economic usage
- Overcurrent and overload protection
- True RMS digitally displayed status, input & output measurements
- Smart fan cooling system
- Smart short circuit protection on system output line

PowerMaster Series

Automatic Voltage Regulators – Stabilised Power Protection

1/1 – 5 – 50kVA

MODEL	AVR105	AVR107	AVR110	AVR115	AVR120	AVR125	AVR130	AVR140	AVR150
Power kVA	5	7.5	10	15	20	25	30	40	50
Regulator Input									
Input Voltage Settings	110 – 240 / 160 – 260 / 180 – 260 VAC								
Input Voltage Range	90 – 285 VAC								
Operation Frequency	47 - 65 Hz								
Line Input Protection	Overcurrent, Low and High voltage protection								
Regulator Output									
Output Voltage	220 / 230 / 240 VAC RMS \pm 1%								
Overloading	10 Sec. 200% Load								
Correction Speed	~ 90 Volt / Sec.								
Correction Range	~ 90 Volt / Sec. (160 VAC – 260 VAC)								
Output Protection	Protects load by opening the circuit when overburden, short circuit occurs. (Optional)								
General									
Working Principle	Servo Motor, Microprocessor Controlled, Full Automatic								
Cooling	Smart Fan System								
Measured Value Monitor.	RMS Panel Voltmeter (74 x 74mm) output voltage and line voltage monitoring								
Total Efficiency	> 96%								
Mechanical By-pass	"Manually Controlled Line – PAKO Switch Selects Voltage Regulator" Switch Turn On / Off								
Protection Level	IP 20								
Environmental									
Working Temperature	- 10°C / 50°C								
Storage Temperature	-25°C / 60°C								
Relative Humidity	< 90%, DIN (40040)								
Working Altitude	< 300m.								
Acoustic Level	< 50 dB (1m ²)								
Standards	CE / ISO 9001								
Dimensions									
W x D x H	55 x 37 x 30		60 x 42 x 32		50 x 50 x 75			50 x 60 x 75	
Weight (Kg)	30	34	47	55	95	110	130	155	180

PowerMaster Series

Automatic Voltage Regulators – Stabilised Power Protection

3/3 – 10 – 150kVA

MODEL	AVR310	AVR315	AVR322	AVR33030	AVR345	AVR360	AVR375	AVR3100	AVR3120	AVR3150
Power kVA	10.5	15	22.5	30	45	60	75	100	120	150
Regulator Input										
Input Voltage Settings	190 - 485 / 275 - 450 / 310 - 450 VAC									
Input Voltage Range	155 - 490 VAC									
Operation Frequency	47 - 65 Hz									
Line Input Protection	Overcurrent, Low and High voltage protection									
Regulator Output										
Output Voltage	380 / 400 / 415 VAC RMS \pm 1 %									
Overloading	10 Sec. 200% Load									
Correction Speed	~ 90 Volt / Sec.									
Correction Range	~ 90 Volt / Sec. (160 VAC – 250 VAC)									
Output Protection	Protects load by opening the circuit when overburden, short circuit occurs.									
General										
Working Principle	Servo Motor, Microprocessor Controlled, Full Automatic									
Cooling	Smart Fan System									
Measured Value Monitor.	RMS Panel Voltmeter (74 x 74mm) output voltage and line voltage monitoring									
Total Efficiency	> 96%									
Mechanical By-pass	"Manually Controlled Line – PAKO Switch Selects Voltage Regulator" Switch Turn On / Off									
Protection Level	IP 20									
Environmental										
Working Temperature	- 10°C / 50°C									
Storage Temperature	-25°C / 60°C									
Relative Humidity	< 90%, DIN (40040)									
Working Altitude	< 200m.									
Acoustic Level	< 50 dB (1m ²)									
Standards	CE / ISO 9001									
Dimensions										
W x D x H	40 x 63 x 110			40 x 63 x 119		88 x 60 x 140			93 x 65 x 165	
Weight (Kg)	95	105	125	145	165	260	280	310	400	425

PowerMaster Series

Automatic Voltage Regulators – Stabilised Power Protection

3/3 – 200 – 3000kVA

MODEL	AVR 3200	AVR 3250	AVR 3300	AVR 3400	AVR 3500	AVR 3600	AVR 3800	AVR 31000	AVR 31250	AVR 31500	AVR 31600	AVR 32000	AVR 32500	AVR 33000
Power kVA	200	250	300	400	500	600	800	1000	1250	1500	1600	2000	2500	3000
Regulator Input														
Input Voltage Settings	190 - 485 / 275 - 450 / 310 - 450 VAC													
Input Voltage Range	155 - 490 VAC													
Operation Frequency	47 - 65 Hz													
Line Input Protection	Overcurrent, Low and High voltage protection													
Regulator Output														
Output Voltage	380 / 400 / 415 VAC RMS \pm 1 %													
Overloading	10 Sec. 200% Load													
Correction Speed	~ 90 Volt / Sec.													
Correction range	~ 90 Volt / Sec. (160 VAC – 250 VAC)													
Output Protection	Protects load by opening the circuit when overburden, short circuit occurs.													
General														
Working Principle	Servo Motor, Microprocessor Controlled, Full Automatic													
Cooling	Smart Fan System													
Measured Value Monitor.	RMS Panel Voltmeter (74 x 74mm) output voltage and line voltage monitorisation													
Total Efficiency	> 97%													
Mechanical By-pass	"Manually Controlled Line – PAKO Switch Selects Voltage Regulator" Switch Turn On / Off													
Protection Level	IP 20													
Environmental														
Working Temperature	- 10°C / 50°C													
Storage Temperature	-25°C / 60°C													
Relative Humidity	< 90%, DIN (40040)													
Working Altitude	< 3000m.													
Acoustic Level	< 50 dB (1m ²)													
Standards	CE / ISO 9001													
Dimensions														
W x D x H	180 x 120 x 122			60 x 117 x 170	180 x 120 x 152		210 x 120 x 185		210 x 200 x 185		210 x 260 x 185		240 x 260 x 195	TBA
Weight (kg)	1050	1100	1200	1650	2000	2100	2900		3450	3900	4300	4750	6000	TBA