

Servo Voltage Regulator
AVR SERIES

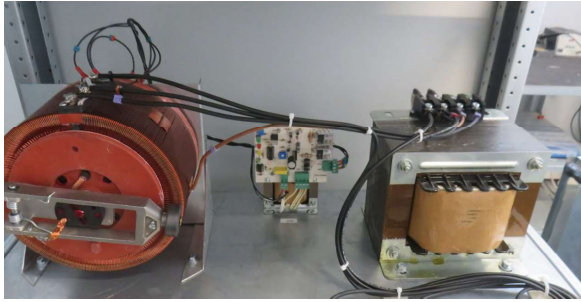
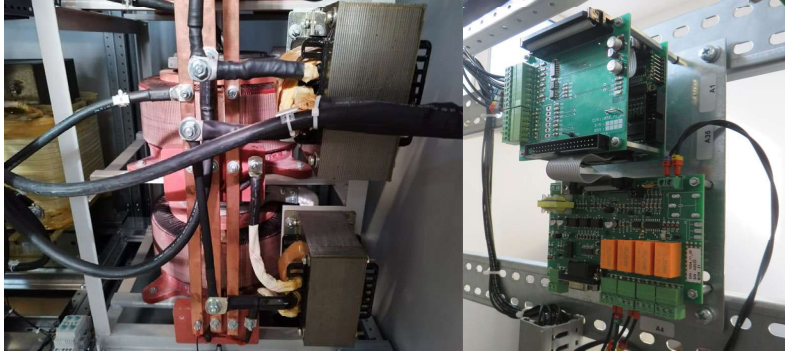


Microprocessor-controlled servo voltage stabilizer

Hannibal Servo Voltage Regulators consist of the Toroidal Variac, Booster Transformer, Servo Motor, and Microprocessor control circuit.

The microprocessor-based electronic card measures the mains voltage and adjusts the position of the supply with the servomotor so that the output voltage is 220 VAC or 380 VAC.

Protect the loads against voltage fluctuations and low or high voltage. It is ideal for industry and the military, especially for machines, and elevators that are sensitive and require fast regulation, and for the installations in locations with demurrage problems.



Add on Options

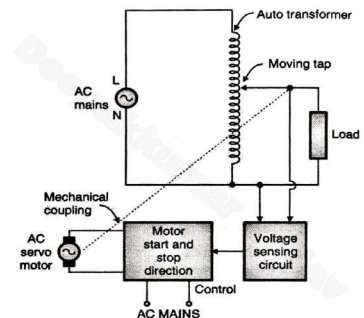
- Bypass line
- Fusible Surge Suppression
- Redundant Fans
- Natural Cooling + Smart Fan System
- Cabinet color can be chosen from RAL codes
- Cable Entry (Top/side/bottom/rear)
- Ingress Protection: up to IP66
- Touch Panel with Mimic Diagram
- Auxiliary Trip Contact
- Earth Fault Protection (adjustable)
- Phase Voltage/Sequence protection
- 500 Real Time Event Log with Detailed Parameters
- User Friendly Multilingual 320x240 Graphic Display Provides
- Operation Information
- Monitoring and Shutdown Software
- RS232 Serial and RS485 Ports
- Modbus RTU (Optional)
- 2 Communication Slots
- Remote Emergency Power Off (Optional)
- Remote Display Panel (Optional)
- Dry Contact (Optional)
- SNMP (Optional)

GENERAL SPECIFICATIONS

- Microprocessor Controlled
- Output Voltage Correction with $\pm 1\%$ Accuracy
- High Efficiency $>96\%$
- Over Current, High Temperature, High-Low Voltage and Short Circuit Protection
- 1min at 100%-125% load, 10sec at 125%+ load
- Input Voltage, Output Voltage-Current in User-Friendly Panel, Showing %Load and Transformer Temperature Values
- Advanced Alarm Menu
- Manual Bypass
- Chassis Technology Not Affected by Dust, Moisture, Vibration
- Fan Cooling System
- Compact Production with Quality Materials
- Minimum Risk of Failure
- CE Certified

Advantages of Servo Type AC Voltage Stabilizer :

- Smooth stepless variation in the output voltage.
- Good voltage regulation.
- Output voltage waveform is undistorted (sinusoidal output).



TECHNICAL SPECIFICATIONS Single Phase 1-150KVA

MODEL	1101	1102	1103	1105	1107	1110	1115	1120	1125	1130	1140	1150
POWER (kVA)	1	2	3.5	5	7.5	10	15	20	25	30	40	50
INPUT												
Input VAC Reg. Range	160-260VAC / 110 – 240 VAC											
Input VAC Op. Range	90- 285VAC											
Operation Frequency	50-60 ±5% Hz											
Line Input Protection	Over Current, Low and High Voltage protection											
OUTPUT												
Output Voltage	220/230/240 VAC RMS ±1%											
Overload	10 sec. %200 Load / 2min. 150%Load											
Correction Speed	90 Volt/ sec.											
Full Load Efficiency	Approx.>98%											
Upturn Period	~ 90 Volt/ sec. (160 VAC- 260VAC)											
Output Protection	Protects Load by opening the circuit when overburden, short circuit occurs											
Operation Topology	Servo Motor Microprocessor Controlled, Full automatic											
GENERAL & ENVIRONMENTAL												
Cooling	Smart Fan System											
Front Panel Display	AC Power Analyzer (1 Phase)											
Mechanical By-Pass	Manually Controlled Line (Selectable CB) / Autobypass (Optional)											
Protection Level	IP20 / IP22- IP66(OPT.)											
Working Temperature	-10°C/50°C											
Storage Temperature	-25°C/+60°C											
Relative Humidity	Max< 95%, (Non Condensing)											
Working Altitude	< 2000 m											
Acoustic Noise	< 50 dB											

TECHNICAL SPECIFICATIONS 3 Phase 1-150KVA

MODEL	3003	3006	3010	3015	3020	3030	3045	3060	3075	3100	3120.	3150.
Power (kVA)	3	6	10.5	15	22.5	30	45	60	75	100	120	150
INPUT												
Input VAC Reg. Range	275-450 VAC (190- 415 VAC OPT.)											
Input VAC Op. Range	155 – 490 VAC											
Operation Frequency	50-60 ±5% Hz											
Line Input Protection	Over Current, Low and High Voltage protection											
OUTPUT												
Output Voltage	380/400/415 VAC (RMS±1%)											
Overloading	10 sec. %200 Load / 2min. 150%Load											
Correction Speed	90 Volt/ sec.											
Full Load Efficiency	Approx.>98%											
Upturn Period	~ 90 Volt/ sec. (275 VAC- 450VAC)											
Output Protection	Protects Load by opening the circuit when overburden, short circuit occurs											
Operation Topology	Servo Motor Microprocessor Controlled, Full automatic											
GENERAL & ENVIRONMENTAL												
Cooling	Smart Fan System											
Front Panel Display	AC Power Analyzer (3 Phase)											
Mechanical By-Pass	Manually Controlled Line (Selectable CB) / Autobypass (Optional)											
Protection Level	IP 20											
Working Temperature	-10°C/50°C											
Storage Temperature	-25°C/+60°C											
Relative Humidity	Max < 95%, (Non Condensing)											
Working Altitude	< 2000 m											
Acoustic Noise	< 50 dB											

TECHNICAL SPECIFICATIONS 3 Phase 200-300KVA

MODEL	33 0200	33 0250	33 0300	33 0400	33 0500	33 0600	33 0800	33 1000	33 1250	33 1500	33 2000	33 2500	33 3000
POWER (kVA)	200	250	300	400	500	600	800	1000	1250	1500	2000	2500	3000
INPUT													
Inp VAC Reg. Range	275-450 VAC (190- 415 VAC OPT.)												
Operation Frequency	50-60 ±5% Hz												
Line Input Protection	Over Current, Low and High Voltage protection												
OUTPUT													
Output Voltage	380/400/415 VAC (RMS±1%)												
Overload	10 sec. %200 Load / 2min. 150%Load												
Correction Speed	90 Volt/ sec.												
Full Load Efficiency	Approx.>98%												
Upturn Period	~ 90 Volt/ sec. (275 VAC- 450VAC)												
Output Protection	Protects Load by opening the circuit when overburden, short circuit occurs												
Operation Topology	Servo Motor Microprocessor Controlled, Full automatic												
GENERAL & ENVIRONMENTAL													
Cooling	Smart Fan System												
Front Panel Display	AC Power Analyzer (3 Phase)												
Mechanical By-Pass	Manually Controlled Line (Selectable CB) / Autobypass (Optional)												
Protection Level	IP20												
Working Temperature	-10°C/50°C												
Storage Temperature	-25°C/+60°C												
Relative Humidity	Max < 95%, (Non Condensing)												
Working Altitude	< 2000 m												
Acoustic Noise	< 50 dB												