

PWR SERVO REGULATOR 1-2000 kVA



Output Voltage:

POWER Servo-Control system voltage regulator has consisted of trioidal transformer, auxiliary transformer and the servomotor controlling the variant transformer and the electronic circuits controlling this motor according to the output voltage. Together with the control system containing quick response time corrects the small voltage changes in the input of high starting torque DC motor string. When the servo-motor input voltage is out of the operating limits, it is disabled by the control circuit when the output voltage is set automatically to the desired value by the limit-switch. The energy of the motor is stopped with the help of the electronic braking circuit when the regulation is complete and it works silently.

Wide Model Option

There are more than 200 standard models, monophase form 1kVA up to 40 kVA. Triphase from 1kVA to 5.000 kVA.

Wide voltage option

The monophase in standard models is 150-250 volts input and 220 volts output. Triphase is 275-450 volts and the output is 380 volts. Manufacturing with the desired voltages can be performed upon the order.

Regulation speed

The regulation speed (average) for the standard models 80 volts/seconds and for the great powers 40-200 volts/seconds.

Output regulation

Within the capacity of the regulator in the loadings from 0 to maximum and in voltage changes during loadings it will not fluctuate, the network frequency will not be disrupted, the output will be fully sinusoidal, and the sensitivity can be adjusted between 1-5%. The power

Power Electronic voltage regulators are the devices containing advance technology manufactured to be used mainly in industry and military especially in main machines, elevators which are sensitive and requiring speed adjustment and in installations and organizations in aerial lines and those that have demurrage problems Protect yourself from voltage fluctuations with low and high voltage.



factor is not significant as long as it is within the kVA limits of the regulator.

Mechanical construction

All models can be used as they are manufactured heavy industry type. The burning and the wearing our processes have been prevented by the cooling, coiled brush system. The brushes do not cause spark/arc during the regulation.

High efficiency

Its average efficiency is more than 97%. The idle loss is minimum as the Power Electronic Regulators are manufactured with high quality silicon sheet and electrolyte copper.

Operating temperature

Extra air cooling is performed in closed areas for the regions over -10 OC to +40 OC or the regulators should be kept under their capacity. Care should be taken not to use the regulators in extreme humid and acidified environments.

Over voltage protection unit as standart

In case the voltage is over the voltage capacity of the regulator In case the network voltage is cut and comes back with a higher voltage when the regulator is enabled in low voltages, In case of a failure of the regulator due to its existence in a dirty environment and being lack of maintenance or providing irregular voltage. The regulator cuts the output voltage for 8 seconds, it provide output when the regulation is complete. It will not provide output in case of a failure.

Phase protection unit

In case one of the 3 phases is cut in triphase regulators, the output will be cut completely. It will be automatically enabled when the phase comes, the output will be provided.

3 Phase 3-6000 kVA

Phase	3 Phases
POWER	3 KVA 6 KVA 10.5 KVA 15 KVA 22.5 KVA 30 KVA 45 KVA 60 KVA 75 KVA 100 KVA 120 KVA 150 KVA 200 KVA 250 KVA 300 KVA 400 KVA 500 KVA 600 KVA 800 KVA 1000 KVA 1200 KVA 2000 KVA
INPUT	
Regulation Voltage Range	285 - 440 VAC
Operating Voltage Range	225 - 465 VAC
Frequency	45-65 Hz
OUTPUT	
Nominal Voltage	380 VAC RMS
Voltage Tolerance	± 1% (Selectable Between 1-8%)
Frequency Range	45-65 Hz
Regulation Speed	70 - 200 V/sn
THDv	0%
Overload Operation	1 second at 150% load / 1 millisecond at 200% load
GENERAL	
Technology	Microprocessor Controlled, Full Automatic Servo
Control	RISC Microprocessor, H-Bridge MOSFET PWM Motor Drive Technics
Independent Phase Regulation	Standard in 3 Phase Models
Efficiency	98%
Cooling	Temperature Controlled Cooling System
Protection	Output Short Circuit, Overload, Output High / Low Voltage, Over Temperature, Motor Fault, Ground-Neutral (Optional) Protection
Mechanic By-Pass	Manual Mains/Regulator Breaker
CONTROL PANEL	
Display	2x16 Character LCD Display, Special LCD for each phase (Optional)
Alert / Event Memory	Mimic Diagram, Fault Warning LEDs / Real Time 1024 pcs Event/Alert Memory
Monitorable Datas	True RMS Input/Output Voltage, Load Percentage, Frequency Measurement
COMMUNICATION	
Dry Contacts (Optional)	Regulator Normal Operation(NO,C,NC); High/Low Output Voltage Warning (NO,C,NC)
Remote Monitoring (Optional)	over Network/LAN (Optional)
ENVIRONMENT	
Operating Temperature Range	0 °C ~ 40 °C
Relative Humidity	< 95% (Non-Condensing)
Noise	<45 dB
Altitude	≤ 3000 m
Protection Class	IP20
STANDARDS	
International Standards	CE, ISO-9001

