

SRV-SVRT SERIES

Power Management Instruments

MICROPROCESSOR CONTROLLED SERVO VOLTAGE REGULATOR



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FULL PROTECTION WITH MICROPROCESSOR CONTROLLED ARCHITECTURE LONGTERM OPERATIONAL EFFICIENCY

Servo Voltage Regulators are RISC microprocessor controlled devices. The microprocessor controlled PWM technology prevents the unnecessary movements of servo motor and the variable transformer. Due to its mechanical architecture there are no tap changes providing perfect instant current reaction and output voltage sensitivity. This brings low risk of break downs, long lasting operation and low maintenance

LOW OUTPUT VOLTAGE TOLERANCE

Servo Voltage Regulators operate mechanically at 100V/sec correction speed with low output voltage tolerance as low as $\pm 1\%$. Thus they are ideal solutions for protecting electronic loads. In general applications they are highly recommended for no critical loads such as lighting, and for stabilizing input voltage in buildings and factories.

ENERGY SAVING SOLUTION

The Servo Voltage Regulators are also ideal to be used in connection with generators where the network voltage is too low and fluctuation is high. Normally, a standalone generator starts operating below 200V, however a generator coupled with a Servo or Static Voltage Stabilizer kicks in below 165V since the Servo Voltage Regulator corrects the network voltage down to 165V level. Regulator's correction capability within this margin would prevent unnecessary operation of generators and increase system's efficiency.

FEATURES AT A GLANCE

- Measuring true RMS
- Controlling with RISC Microprocessor
- Perfect static and dynamic regulation
- Wide input operating voltage range 130-270 VAC
- Electronic protection against over-load and short circuit
- 220V $\pm 1\%$ static regulation 100V/Sec regulation speed
- Programmable upper and lower limit for protecting over voltage
- Load level, input and output voltage display

Regulator de tensiune cu servomotor

Specificatii tehnice

INTRARE	
Interval de reglare a tensiunii de intrare	285 - 440 VAC (3 phase), 165-255 VAC (1 phase)
Domeniul de functionare al tensiunii de intrare	230 - 470 VAC (3 phase), 130-270 VAC (1 phase)
Frecventa	50 Hz \pm %5
Protectie pe intrare	Over Current Thermic Fuse, Instant Over Voltage Protection, Optional MCB
Protectie instantanee la tensiune si pulsatii	IEEE 587 (4500 A, 110 Joules)
IESIRE	
Tensiunie iesire	380 VAC RMS \pm %1 (3 Phase), 220 VAC RMS \pm %1 (1 Phase)
Suprasarcina	10 Secunde at % 200 Load
Viteza de stabilizare	100 V/sec
THD	Egal cu THD pe intrare
Timp recuperare	500 ms (165-225 VAC)
Topologia de functionare	Complet automat, controlat prin microprocesor RISC
Protectie pe iesire	scurtcircuit, protectie electronica la suprasarcina, protectie la supratensiune si tensiune scazuta, MCB optional
DISPLAY CU OPERARE DIGITALA (0-45kVA)	
Indicatii si butoane	Voltmetru RMS real, Buton resetare alarme
Mesaje alarma	intrare ridicata/scazuta, iesire ridicata/scazuta, suprasarcina, protectie pe iesire, supratemperatura
Parametri afisati	iesire, intrare si sarcina
Reglajul tolerantei pe iesire	% 1,5 - 2,5 - 3,5 - 5 Ajustabil prin selector DIP
Prag inferior tensiune iesire	180 - 190 - 200 - 210 V Ajustabil prin selector DIP
Prag superior tensiune iesire	230 - 240 - 250 - 260 V Ajustabil prin selector DIP
DISPLAY CU OPERARE DIGITALA (60-600kVA)	
Indicatii si butoane	2x16 LCD, Buton operare meniu, Buton selectie,
Mesaje alarma	I/O Scazut/Ridicat, Sarcina > %100, Defect motor, Supratemperatura
Parametri afisati	Putere pe intrare, tensiune iesire si nivel sarcina
Reglajul tolerantei pe iesire	% 1-5 Ajustabil prin panoul operator
Durata stand-by	1 - 10 Sec. Ajustabila prin panoul operator
Prag superior tensiune iesire	230 - 250 VAC Ajustabil prin panoul operator
Prag inferior tensiune iesire	180 - 210 VAC Ajustabil prin panoul operator
Tensiune iesire	220 - 240 VAC Ajustabila prin panoul operator
Alarmer	La mesaje de alarma 2 Sunete scurte la 2 secunde Selectabil prin panoul operator
GENERAL	
Randament total	>% 98 (la sarcina maxima)
By-pass mecanic	Selector manual "Retea - Stabilizator"
Protectie perturbatii electromagnetice	FCC Part 15 Class B
Nivel protectie / Culoare	IP20 / RAL 7035 (standard); Optional IP31 / 42 cu acces frontal
COMUNICATIE	
RS232 (optional)	Compatibil cu Windows NT, XP, Vista; Remote ON-OFF; Parametrii cheie pot fi monitorizati prin retea locala si Internet
MEDIU	
Temperatura operare	-10 / +50 °C
Umiditate relativa	90%
Altitudine	Max. 3000 Mt.
Nivel zgomot	Max. 60 db
Standarde electrice	EN 50091-1 (Security) / EN 50091-2 (EMC)

*Productie customizata pana la 10000KVA

SARCINA PROTEJATA

Since Servo Motor is set in motion with PWM technique, Servo Regulator responds to voltage spikes at optimum pulses to prevent overshoot & undershoot type corrections. As a result, the load is safer against voltage surges and short circuit current. In addition optimum corrections extend the life of the variable transformer and the regulator itself.

