



Automatic Voltage Regulator

10-13-20-30 kVA



High efficiency in each model

Electro-mechanic high-low voltage protection

Short circuit protection.

Ability to work with non-linear loads.

Wide input voltage range optional

Input surge arrestor protection

Optional : Isolating transformer at input

Manual By-pass.

e-SERIES AVR is used safely with any computer system, fax and photocopy machines, industrial, medical, laboratory, office appliances and household.

e-SERIES AVR protects your load from all fluctuations at the mains voltage and does the voltage regulation. It cuts the voltage outputs electro-mechanically when an increase or decrease occurs out of limits and prevents all the possible problems by electronic protection.

The booster transformers and sensitive variac do the voltage regulation. Servo system is based on the control of DC motor by thyristor and relays.

Output voltage is observed by a display. Over current protection is ensured by magnetic switch and inside cooling is assured by fan.

Class B insulation.

Insulation strenght of the regulator is 2000VAC/min.

Three phases e-series AVR model having three separate control circuits,individually regulate each phase and suitable for unbalanced lines between phases up to 100%.

Optional input Range 220 or 230 or 240 VAC \pm 20 or 25 or 30 or 40 %



e- series SPECIFICATIONS

MODEL			
	THREE PHASE		
OUTPUT POWER(KVA)	10	13	20
			30
INPUT			
Nominal Voltage	Three phase Wye 220 or 230 or 240VAC(L-N)/380 or 400 or 415VAC(L-L) (user configurable)		
Voltage Range	154-277VAC (L-N)/266-479VAC (L-L)		
Operational Voltage	120~300VAC Single Phase(The AVR start to monitor the input and output voltage)		
Frequency	47~ 63 Hz		
Input Circuit Breaker (A)	3x20	3x25	3x40
			3x 60
OUTPUT			
Voltage	Three phase Wye 220 or 230 or 240VAC(L-N)/ 380 or 400 or 415VAC 3 ph(user configurable)		
Voltage Tolerance	±%5 (±%3 factory set)		
Response Time	25V/sec		
Correction speed	<1 sec(when input voltage change 10 %)		
Power Factor	0.8		
Protections			
Maintenance	Manual Bypass		
Surge Protection	C class surge protection		
Over load protection	Input Circuit Breaker		
Over and under voltage protection(L-N)	Phase protection senses high or low voltage conditions monitor the output voltage (<190 / >240V) & cutoff the output		
Dry Contact	AC input breaker OFF and Earth ground protection		
GND Neutral Protection	When earth ground voltage exceed 10 V the AVR stop functioning(cut the output)		
DISPLAY			
Indicator and display	Leds and display for measurement reading(Voltage and current)		
EFFICIENCY			
	>96%		
Other Features			
Impedance	Low		
Insulator resistance	complete machine to ground ≥2MΩ		
AC input/output connection	terminal block(L1,L2,L3,N,Gd wire)		
Cooling	Fan		
Cabinet	Outdoor		Indoor
AUDIBLE NOISE			
From 1m	<55 dB (A)		
ENVIRONMENTAL CONDITIONS			
Protection	IP45		IP20
Temperature			
Operating	-10°C.....+50°C		
Storage	-30°C.....+75°C		
Relative Humidity			
Operating	%20.....%90		
Storage	%20.....%95		
PHYSICAL SPECIFICATIONS			
Weight(Kg)			
Dimensions(mm) WxDxH			