



AHU SERIES

**THREE PHASE SERVO MOTOR CONTROL SYSTEM
AUTOMATIC VOLTAGE REGULATOR (AVR)**

3kVA - 100kVA

APPLICATIONS



*Technical Specification on Next Page

SALIENT FEATURES

Daxten Power AHU series automatic voltage regulators are used for regulation against three-phase line voltage fluctuations. In contrast to magnetic voltage stabilizers, this type is a real automatic voltage regulator with servomotor control, applicable to very low or high output power. One important feature is the overload capacity which may run to a multiple of the rated value for a short period of time without causing output voltage breakdown. Further advantages are the independence of load power factor, a small phase displacement and very high power efficiency. These regulators are used for three-phase applications and also for single phase. The circuit configuration of a three-phase regulator consists of ring-core variable transformer with servomotor, three auxiliary transformer and three-points regulating unit. The three DC servomotor is controlled by the regulating unit and connected to the ring-core variable transformer via a gear. The position of a carbon brush on the variable transformer is set by the servomotor. Dependent of its position, the auxiliary transformer primary winding is supplied with a voltage in phase with or dephased to the line voltage. Thereby, line over voltage and under voltage is compensated.

MODELS	AHU 3KVA	AHU 6KVA	AHU 10KVA	AHU 15KVA	AHU 20KVA
	AHU 30KVA	AHU 50KVA	AHU 60KVA	AHU 80KVA	AHU 100KVA

Technical Specification:

PRODUCT SERIES:	AHU SERIES									
Power Rating:	3kVA	6kVA	10kVA	15kVA	20kVA	30kVA	50kVA	60kVA	80kVA	100kVA
Current (amp)	12	24	40	60	80	120	200	240	320	400
Input Voltage:	154 - 286VAC / 266-494VAC / 380VAC $\pm 30\%$									
Output Voltage:	220VAC / 380VAC $\pm 1-5\%$ (Accuracy)									
Phase:	Three-phase									
Frequency:	50Hz/60Hz									
Response Time:	Within 0.3 sec.against 13% input voltage deviation									
Efficiency:	Better than 90%									
Power Factor:	Better than 95%									
Ambient Temperature:	$-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$									
Ambient Humidity:	Less than 90% (relative humidity)									
Temperature Rise:	Less than 75°C									
Cooling System:	Convection-cooled									
Control System:	DC servo-motor									
Style:	Stand-alone style									
Insulation Resistance:	More than 5 M ohm									
Dielectric Strength:	Tested at AC 1500V for 1 min									
Equipped with	Over and Under Voltage and Phase Failure Device									

Product specification are subject to change without further notice.