

Inductive Automatic Voltage Regulator

CE



APH series is a cost-effective inductive type automatic voltage regulator with output power up to 600kVA and strong overload capability to sustain impulse loads. These features make it widely applied in motor industries, CNC machines, transportation system, production equipment, and factory for power conditioning purpose.

Applying electromagnetic inductive design, APH is different from conventional voltage regulators that it does not have carbon brush, which makes it easier to maintain. As the grid's voltage fluctuates, APH uses the internal rotation of the motor to adjust the angel of compensation transformer to step up or step down the output voltage and stabilize the voltage to the load.

APH series are three-phase voltage regulators with output power range from 10kVA to 1000kVA, input voltage range of -13% to +18% (or optional -22% to +30%), and voltage regulation of $\pm 2\%$. The APH units have strong overload capability for different types of loads.

Product Features

- Inductive type voltage regulator without carbon brush for easy maintenance.
- High output power range: three-phase 10-600kVA.
- High overload capability: 125% for 40minutes, 150% for 20 minutes, 175% for 10minutes and 200% for 5 minutes.
- Sustainable for impulse load, capable to sustain surge, non-linear load.
- Comprehensive protection includes over voltage, over current, over load, input under voltage and over temperature.
- High cost-effective for high power conditioning.
- Optional surge protection with different levels.

Output Power

10kVA~600kVA

Applications

- ☐ Aerospace & Defense
- ☐ Industrial Power Supply
- ☐ IT / SMT Production Line
- ☐ Medical Industry
- ☐ Transportation
- ☐ Communication Industry

QR Code



Product
Info.

SPECIFICATIONS

APH Series Three-Phase Output (10kVA - 75kVA)

Model	APH-330010	APH-330015	APH-330020	APH-330030	APH-330045	APH-330060	APH-330075
Capacity	10kVA	15kVA	20kVA	30kVA	45kVA	60kVA	75kVA
AC INPUT							
Phase	3 Ø 3W+G (Option : 3 Ø 4W+G)						
Voltage ^{*1}	220V / 380V						
Voltage Range	-13% ~ +17% (Option : -22% ~ +30%)						
Frequency	47Hz ~ 63Hz						
AC OUTPUT							
Phase	3 Ø 3W+G (Option : 3 Ø 4W+G)						
Voltage ^{*2}	220V / 380V or 230V / 400V (Option : 240V / 415V)						
Accuracy	± 2% (± 2% ~ ± 5% adjustable)						
Voltage Modulation	≥ 4V/S						
Power Factor	± 0.7 ~ 1						
Overload Capacity	125%- 4min,150%- 20min,175% - 10min,200% - 5min						
Total Harmonic Distortion(THD)	Additional distortion ≤ 1%						
Efficiency	≥ 97%(Full load)						
METER & INDICATOR							
Voltmeter	LED digital meter for voltage of each phase; Accuracy ≤ 1%						
Ammeter	LED digital meter for voltage of each phase; Accuracy ≤ 1%						
Error	Error code and message available when a abnormal condition occurs						
LED Indicator	NORMAL,ABNORMAL,OVER VOLTAGE,UNDER VOLTAGE,OVER LOAD,AUTO / MANUAL Mode						
PROTECTION							
Over/Under Voltage	Sound-light alarm with output shutdown						
Missing Phase	Sound-light alarm with output shutdown						
Incorrect Phase Sequence	Sound-light alarm with output shutdown						
Over Load	Sound-light alarm						
Over Heating	Sound-light alarm						
Bypass Swtich	Manual bypass switch (option)						
GENERAL							
HMI	LED display for meter and auto/manual voltage adjustment						
Audible Noise (1 meter)	≤ 55dB						
Cooling System	Fan cooling						
Connections	Terminal						
Environment	Opertional Temperature : -5℃ ~ 40℃ , Humidity : < 95% (Non-condensing) , Altitude : 1000m						
Dimension (H x W x D)	750 x 400 x 550 mm			950 x 450 x 600 mm			
	29.52 x 15.74 x 21.65 inch			37.4 x 17.71 x 23.62 inch			
Weight	150kg	160kg	165kg	240kg	260kg	280kg	295kg
	330.6lbs	352.7lbs	363.7lbs	529.1lbs	573.2lbs	617.2lbs	650.3lbs

*1 Please contact for other voltage specification.

*2 The rated input voltage is 380V.

* all specifications are subject to change without notice.

SPECIFICATIONS

APH Series Three-Phase Output (100kVA - 600kVA)

Model		APH-330100	APH-330125	APH-330150	APH-330200	APH-330250	APH-330300	APH-330350	APH-330400	APH-330500	APH-330600
Capacity		100kVA	125kVA	150kVA	200kVA	250kVA	300kVA	350kVA	400kVA	500kVA	600kVA
AC INPUT											
Phase		3 Ø 3W+G (Option : 3 Ø 4W+G)									
Voltage ^{*1}		220V / 380V									
Voltage Range		-13% ~ +17% (Option : -22% ~ +30%)									
Frequency		47Hz ~ 63Hz									
AC OUTPUT											
Phase		3 Ø 3W+G (Option : 3 Ø 4W+G)									
Voltage ^{*2}		220V / 380V or 230V / 400V (Option : 240V / 415V)									
Accuracy		± 2% (±2% ~ ±5% Adjustable)									
Voltage Modulation		≥4V/S									
Power Factor		± 0.7 ~ 1									
Overload Capacity		125%- 4min,150%- 20min,175% - 10min,200% - 5min									
Total Harmonic Distortion(THD)		Additional distortion≤ 1%									
Efficiency		≥97% (Full load)									
METER & INDICATOR / INTERFACE											
STD LED MODEL	Voltmeter	LED digital meter for voltage of each phase; Accuracy ≤ 1%									
	Ammeter	LED digital meter for voltage of each phase; Accuracy ≤ 1%									
	Error	Error code and message available when a abnormal condition occurs									
	LED Indicator	NORMAL,ABNORMAL,OVER VOLTAGE,UNDER VOLTAGE,OVER LOAD,AUTO / MANUAL Mode									
LCD MODEL ^{*3}	HMI	LCD & Light,button									
	Measurement	Input line Voltage, Input Frequency, Line Voltage, Phase Voltage, Current, Frequency, VA, W, PF, Load% and Internal Temperature									
	Redundant Control	Redundant Circuit Control									
	Event History	Event Memory for up to 200 events									
	Communication	RS-485									
PROTECTION											
Over/Under Voltage		Sound-light alarm									
Missing Phase		Sound-light alarm									
Incorrect Phase Sequence		Sound-light alarm									
Over Load		Sound-light alarm									
Over Heating		Sound-light alarm									
Bypass Switch		Manual bypass switch (option)									
GENERAL											
HMI		LED display for meter and auto/manual voltage adjustment									
Audible Noise (1meter)		≤ 55dB						≤ 60dB			
Cooling System		Fan cooling									
Connections		Terminal				Copper bar					
Environment		Opertional Temperature : -5°C ~ 40°C Humidity : < 95% (Non-condensing) · Altitude : 1000 m									
Dimension (H x W x D)		600 x 900 x 1500 mm				600 x 1100 x 1800 mm				-	
		23.6 x 35.4 x 59 inch				23.6 x 43.3 x 70.9 inch				-	

*1 Please contact for other voltage specification.

*2 The rated input voltage is 380V.

*3 To purchase this model, please contact us for details.

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