ADVR-07FH

Universal Hybrid Analog-Digital Single Phase 7Amp Automatic Voltage Regulator

For Self-excited Brushless Generator

Features

- Excitation output Half Wave / Full Wave selectable
- Soft start voltage ramping
- Over excitation protection
- EMI suppression
- Built-in high capacity fuse
- Digital circuit for voltage sensing and under frequency protection
- Effectively minimize the output voltage variations and under frequency knee point drifted affected by temperature changes



Specifications			
Sensing Input	Voltage 90 to 540 Vac 1 phase 2 wire	Soft Start Ramp Time	3 Seconds +/- 10%
(Average Readings)	Frequency 50 / 60 Hz DIP switch setting	Response Time	Less than 20 ms
	Adjustment 90 - 130 Vac @ 110 Vac	EMI	Built-in electromagnetic interference filter
	175 - 270 Vac @ 220 Vac	Voltage Thermal Drift	Less than 3% from -40 to +70 °C
	350 - 540 Vac @ 440 Vac	U/F Knee Point Thermal Drift	Less than +/- 0.1 Hz from -40 to +70 $^{\circ}\text{C}$
Power Input	Voltage 60 to 300 Vac 1 phase	Static Power Dissipation	Max. 4 watts
	Frequency 40 to 60 Hz	External Voltage Adjustment	Max. +/- 10% @ 1 K Ω 1 watt potentiometer
Build Up Voltage	Residual voltage at power input > 5 Vac @ 25 Hz	Under Frequency Protection	50 Hz system knee point presets at 45 Hz
Voltage Regulation	Less than +/- 0.5% (with 4% engine governing)	(Factory Presets)	60 Hz system knee point presets at 55 Hz
Excitation Output, Resistance, O/E Voltage Protection and DIP SW Setting			

	DIP SW3	Power Input	Excitation Output *1	Exciter Resistance	O/E Voltage Protection *2
Helf Weye	ON	110 Vac	Continuous 31 Vdc 7A Max. 45 Vdc 10A 10 Sec	Min.4.5 Ohm, Max.100 Ohm	Excitation Voltage 43V +/-10%
Half Wave	ON	220 Vac	Continuous 63 Vdc 7A Max. 90 Vdc 10A 10 Sec	Min.9 Ohm, Max.100 Ohm	Excitation Voltage 85V +/-10%
Full Marin	055	110 Vac	Continuous 63 Vdc 7A Max. 90 Vdc 10A 10 Sec	Min.9 Ohm, Max.100 Ohm	Excitation Voltage 85V +/-10%
Full Wave O	OFF	220 Vac	Continuous 125 Vdc 7A Max. 180 Vdc 10A 10 Sec	Min.18 Ohm, Max.100 Ohm	Excitation Voltage 170V +/-10%

^{*1} Fuse specification 6.3 x 32 mm 10A Fast Blow type.

^{*2} Excitation output will be turned off in 10 seconds time delay, Inverse-time curve. This function can be turned OFF.

	4.	
M5 L30		88.0 112.0 [4.41"]
\$ 5.2 [0.20"]		
59.0 [0.72"] [2.32"]		138.0 162.0
[2.32]		[5.43"] [6.38"]
		Unit : mm [inch]

Operating Temperature	-40 to +70 °C
Storage Temperature	-40 to +85 °C
Relative Humidity	Max. 95%
Vibration	5.5 Gs @ 60 Hz

Physical Specifications		
Dimension	162.0 (L) x 112.0 (W) x 59.0 (H) mm	
	6.38 (L) x 4.41 (W) x 2.32 (H) inch	
Weight	640 g +/-2%	
	1.41 lb +/-2%	

Accessories		
Jumper terminals	x 1	
Jumper wire	x 2	



Dimensions

KUTAI ELECTRONICS INDUSTRY CO., LTD.

TEL: +886-7-8121771 FAX: +886-7-8121775 Website: www.kutai.com.tw Headquarters: No.3, Lane 201, Chien Fu St., Chyan Jenn Dist., Kaohsiung 806037, TAIWAN

