

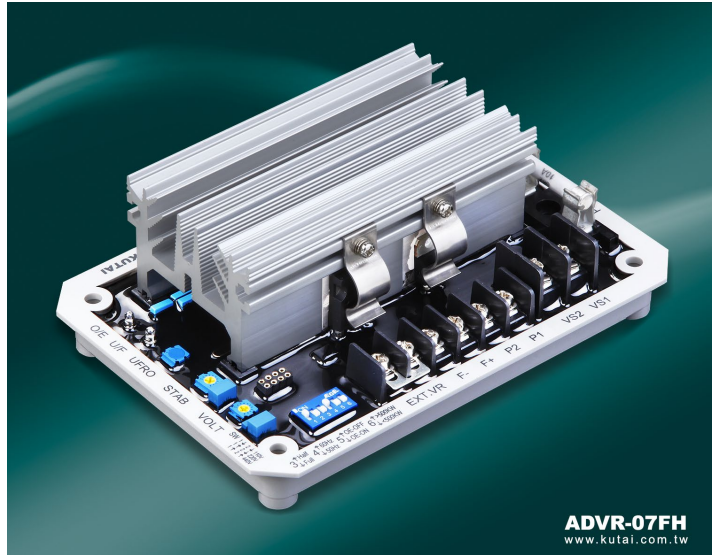
# ADVR-07FH

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

For Self-excited Brushless Generator

### Features

- Digital voltage sensing circuit and Under Frequency Protection circuit improve thermal drift characteristics
- Excitation output Half Wave / Full Wave selectable
- Soft start voltage ramping
- Over excitation protection
- EMI suppression
- Built-in high capacity fuse



### Specifications

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

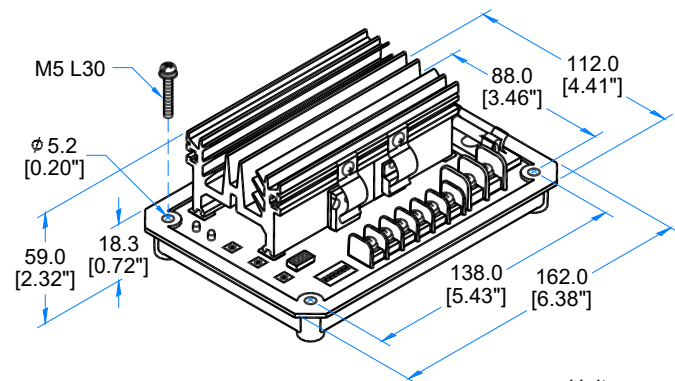
### Excitation Output, Resistance, O/E Voltage Protection and DIP SW Setting

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

### Dimensions



Unit : mm  
[inch]

### Environment

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

### Physical Specifications

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

### Accessories

<b>Jumper terminals</b>	x 1
<b>Jumper wire</b>	x 2



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