# ADVR-083

Hybrid Analog / Digital Single Phase / Three Phase sensing Automatic Voltage Regulator 8Amp AVR for **Brushless Generator** 

#### Features

- Voltage Sensing Input and Power Input can be single-phase or 3-phase
- Over Excitation Protection // Under Frequency Protection // Soft Start voltage ramping
- Can be used with generators operating parallel
- Built-in high capacity protection fuse
- Built-in EMI suppression
- Can be used together with KUTAI Auxiliary Excitation Booster to increase motor starting capability of self-excited (shunt) generators
- Digital circuit for voltage sensing and under frequency protection

Frequency 50/60 Hz

• Effectively minimize the output voltage variations and under frequency knee point drifted affected by temperature changes

Voltage and Frequency DIP switch settings

Voltage 90 to 520 Vac 1 phase / 3 phase

Voltage 60 to 300 Vac 1 phase / 3 phase



	Analogue Voltage Input	Input resistance greater than 2K ohms		
		Input range +/-5 Vdc or 0 to 10 Vdc		
	Build Up Voltage Grea	ter than 5Vac 25Hz residual volts input power		
	Soft Start Ramp Time	4 seconds +/-10%		
	Voltage Regulation Les	s than +/-0.5% (with 4% engine governing)		
	Typical System Response	Less than 20 milliseconds		
	EMI	Built-in Harmonic suppression		
	Static Power Dissipation	Max. 6 watts		
5	Under Frequency Protection (Factory Presets)			
		50 Hz system knee point at 45 Hz		
5		60 Hz system knee point at 55 Hz		
,	Over Excitation Protection	n 25 to 105% of input power (adjustable)		
	The OE function can be turned off after 10 seconds delay			
meter	Voltage Thermal Drift	Less than 3% from -40 to +70 °C		
	Under-Frequency Knee Point Thermal Drift			
		Less than +/-0.1 Hz from -40 to +70 °C		

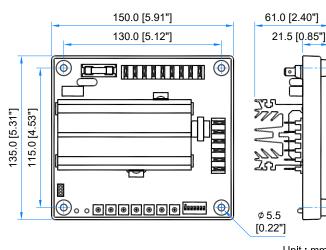
## **Power Input**

Specifications Sensing Input

(Average Reading)

	Frequency	40 to 500 Hz			
Excitation Output	Output 110V 1 phase Continuous 63 Vdc 8A				
		Max. 90 Vdc 10A for 10 seconds			
	220V 1 phas	e Continuous 125 Vdc 8A			
		Max. 180 Vdc 10A for 10 seconds			
	220V 3 phas	e Continuous 150 Vdc 8A			
		Max. 215 Vdc 10A for 10 seconds			
R	esistance Mir	n. 15 ohms Max. 100 ohms @ 220V			
	Fuse Spec.	Slow blow 5 x 20 mm 10A			
External Volts Adjus	stment Max	+/-10% @ 1K ohm 1 watt potentiomete			
Quadrature Droop I	nput	CT N:5A or N:1A			
		Burden greater than 5 VA			

#### Dimensions





[inch]

### Environm

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

Physical Specifications				
Dimensions	150.0 (L) x 135.0 (W) x 61.0 (H) mm			
	5.91 (L) x 5.31 (W) x 2.40 (H) inch			
Weight	750 g +/-2%			
	1.654 lb +/-2%			

#### Accessories M5L35 Screw x 4

Jumper terminals x 1



