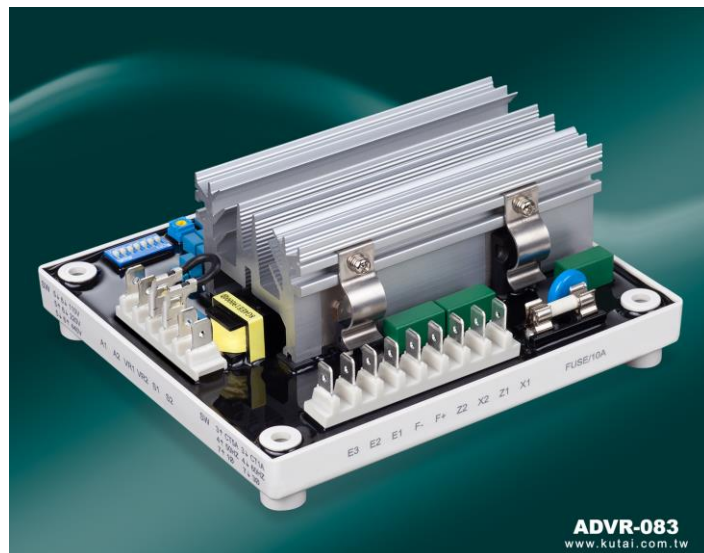


# ADVR-083

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

## Features

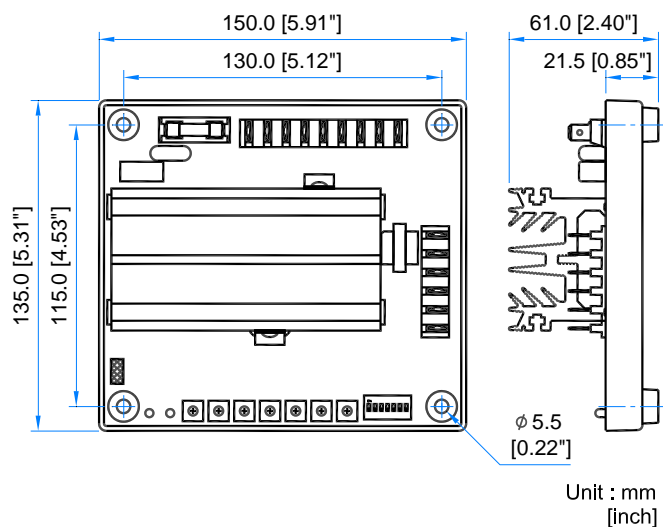
- Voltage Sensing Input and Power Input can be single-phase or 3-phase
- Digital voltage sensing circuit and Under Frequency Protection circuit improve thermal drift characteristics
- Over Excitation Protection // Under Frequency Protection // Soft Start voltage ramping
- Can be used with generators 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



## Specifications

<b>Sensing Input</b>	Voltage and Frequency DIP switch settings	<b>Analogue Voltage Input</b>	Input resistance greater than 2K ohms
<b>(Average Reading)</b>	Voltage 90 to 520 Vac 1 phase / 3 phase		Input range +/-5 Vdc or 0 to 10 Vdc
	Frequency 50/60 Hz	<b>Build Up Voltage</b>	Greater than 5Vac 25Hz residual volts input power
<b>Power Input</b>	Voltage 60 to 300 Vac 1 phase / 3 phase	<b>Soft Start Ramp Time</b>	4 seconds +/-10%
	Frequency 40 to 500 Hz	<b>Voltage Regulation</b>	Less than +/-0.5% (with 4% engine governing)
<b>Excitation Output</b>	110V 1 phase Continuous 63 Vdc 8A	<b>Typical System Response</b>	Less than 20 milliseconds
	Max. 90 Vdc 10A for 10 seconds	<b>EMI</b>	Built-in Harmonic suppression
	220V 1 phase Continuous 125 Vdc 8A	<b>Static Power Dissipation</b>	Max. 6 watts
	Max. 180 Vdc 10A for 10 seconds	<b>Under Frequency Protection (Factory Presets)</b>	
	220V 3 phase Continuous 150 Vdc 8A		50 Hz system knee point at 45 Hz
	Max. 215 Vdc 10A for 10 seconds		60 Hz system knee point at 55 Hz
<b>Resistance</b>	Min. 15 ohms Max. 100 ohms @ 220V	<b>Over Excitation Protection</b>	25 to 105% of input power (adjustable)
	Fuse Spec. Slow blow 5 x 20 mm 10A		The OE function can be turned off after 10 seconds delay
<b>External Volts Adjustment</b>	Max. +/-10% @ 1K ohm 1 watt potentiometer	<b>Voltage Thermal Drift</b>	Less than 3% from -40 to +70 °C
<b>Quadrature Droop Input</b>	CT N:5A or N:1A	<b>Under-Frequency Knee Point Thermal Drift</b>	
	Burden greater than 5 VA		Less than +/-0.1 Hz from -40 to +70 °C

## Dimensions



## Environment

<b>Operating Temperature</b>	-40 to +60 °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>Dimensions</b>	150.0 (L) x 135.0 (W) x 61.0 (H) mm
	5.91 (L) x 5.31 (W) x 2.40 (H) inch
<b>Weight</b>	750 g +/-2%
	1.654 lb +/-2%

## Accessories

<b>M5L35 Screw</b>	x 4
<b>Jumper terminals</b>	x 1



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