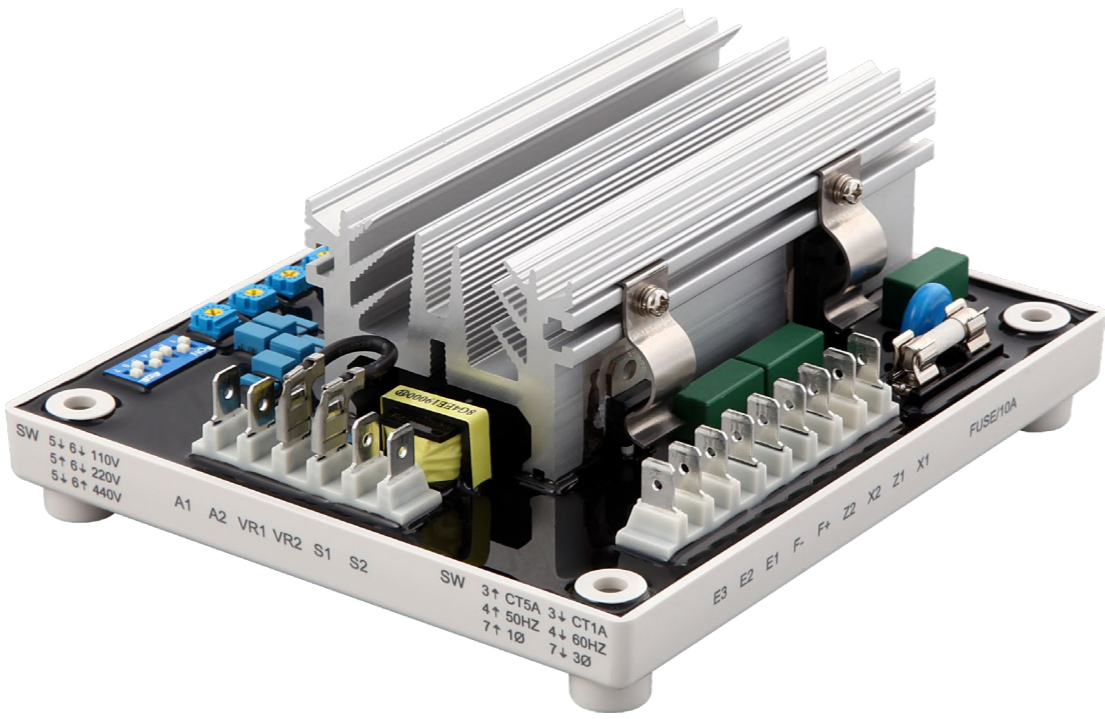


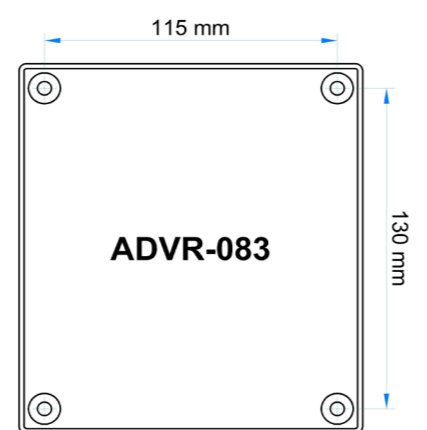
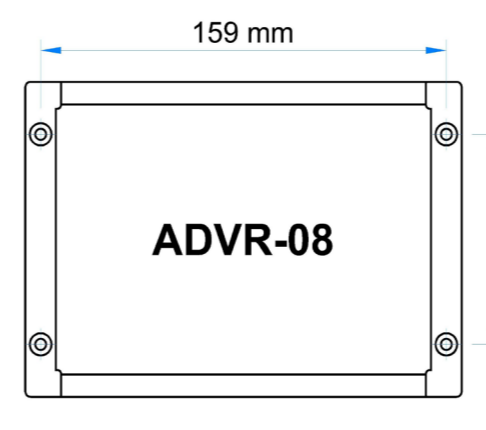
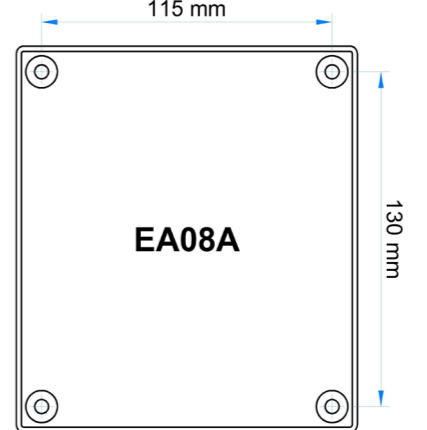


### Comparison Table

AVR model		ADVR-083	ADVR-08 (Discontinued)	EA08A (Discontinued)
Appearance				
Features		<ul style="list-style-type: none"> <li>- Inverse-time over excitation &amp; Soft start voltage ramping</li> <li>- Can be used with generators operating parallel</li> <li>- Digital circuit for voltage sensing and under frequency protection</li> <li>- Effectively minimize the output voltage variations and under frequency knee point drifted affected by temperature changes</li> </ul>	<ul style="list-style-type: none"> <li>- Inverse-time over excitation &amp; Soft start voltage ramping</li> <li>- Multiple power input source SHUNT, AUX, HARMONIC, PMG</li> <li>- Can be used with generators operating parallel</li> </ul>	<ul style="list-style-type: none"> <li>- Under Frequency Protection</li> <li>- Two-stage for STAB adjusting range</li> </ul>
Sensing Input	Voltage	110V, 220V, 440V, 1 phase / 3 phase set by DIP switch	110V, 220V, 380V	110V, 220V, 380V
	Frequency	50/60 Hz (DIP switch setting)	50 / 60 Hz (DIP switch setting)	50 / 60 Hz (DIP switch setting)
Power Input		60 – 300 Vac 1 phase / 3 phase · 40 – 500 Hz	40 – 300 Vac 1 phase / 3 phase, 50 – 500 Hz	40 - 250 Vac, 40 - 500 Hz
Excitation Output	Voltage	Max. 90 Vdc @ 110 Vac 1 Phase Input; Max. 180 Vdc @ 220 Vac 1 Phase Input; Max. 215 Vdc @ 220 Vac 3 Phase Input	Max. 63 Vdc @ 110 Vac Input; Max. 125 Vdc @ 220 Vac Input	Max. 150 Vdc @ 220 Vac Input
	Current	8A (Continuous); 10A for 10 seconds (intermittent)	8A (Continuous); 12A for 10 seconds (intermittent)	8A (Continuous); 12A for 10 seconds (intermittent)
	Resistance	Power Input 110 Vac @ Min. 15Ω, Max. 100Ω	Power Input 110 Vac @ ≥ 8 Ω, 220 Vac @ ≥ 16 Ω	Power Input 110 Vac @ Min. 10 Ω, Max. 100 Ω
Fuse Specification		Slow blow 5 x 20mm S505-10A	Slow blow 5 x 20mm S505-10A	Slow blow 5 x 20mm UDA-8A / 250V
Voltage Regulation		Less than +/- 0.5% (with 4% engine governing )	Less than +/- 0.5% (with 4% engine governing )	Less than +/- 1% (with 4% engine governing )
Build Up Voltage		5 Vac 25 Hz residual volts at power input terminal	6 Vac 25 Hz residual volts at power input terminal	5 Vac residual volts at power input terminal
External Voltage Adjustment		Max. +/- 10% @ 1 KΩ 1 watt potentiometer	Max. +/- 4% @ 500 Ω 1 watt; Max. +/- 8% @ 1 KΩ 1 watt potentiometer	Max. +/- 10% @ 1 KΩ 1 watt potentiometer
Soft Start Ramp Time		4 secs +/- 10%	4 secs +/- 10%	N/A
Typical System Response		Less than 20 milliseconds	Less than 20 milliseconds	Less than 20 milliseconds
Static Power Dissipation		Max. 6 watts	Max. 6 watts	N/A
EMI		Built-in harmonic suppression	Built-in harmonic suppression	Built-in harmonic suppression
Quadrature Droop Input		CT N:5A or N:1A greater than 5VA, sensitivity +/- 7% @ PF +/- 0.5 (Droop Adjustable)	CT N:5A or N:1A greater than 5VA, sensitivity +/- 5% @ P.F +/- 0.7	CT N:5A or N:1A greater than 5VA, sensitivity +/- 4% @ P.F +/- 0.8
Analogue Voltage Input		Input resistance greater than 2 KΩ, Max. input +/- 5 Vdc or 0 - 10 Vdc. Sensitivity 1 Vdc for 5% Generator	Input resistance greater than 2 KΩ, Max. input +/- 5 Vdc, sensitivity +/- 25% Generator Volts (Adjustable)	1 Vdc for 10% Generator Volts
Voltage Thermal Drift		Less than 3% from -40 to +70 °C	Less than 3% from -40 to +70 °C	Less than 3% from -40 to +70 °C
Over Excitation Protection		25 – 105% of Input Power (adjust with EXC pot.).O/E acts after 10 sec. delay. The OE function can be turned OFF by adjusting EXC. clockwise to max.	Set point 170 Vdc +/- 5 % @ power input 220V	N/A
Under Frequency Protection		50 Hz system knee point at 45Hz, 60 Hz systems knee point at 55Hz	50 Hz system knee point at 45Hz, 60 Hz systems knee point at 55Hz	Adjustable range 42 – 62 Hz (Factory Setting)
Under Frequency Knee Point Thermal Drift		Less than +/- 0.1 Hz from -40 to +70 °C	Less than +/- 0.1 Hz from -40 to +70 °C	N/A
Environment	Operating Temperature	-40 to +70°C	-40 to +70°C	-40 to +60 °C
	Storage Temperature	-40 to +85°C	-40 to +85°C	-40 to +85 °C
	Relative Humidity	Max. 95%	Max. 95%	Max. 95%
	Vibration	5.5Gs @ 60 Hz	3 Gs @ 100 – 2K Hz	1.5 Gs @ 5 – 30 Hz · 5.0 Gs @ 30 – 500 Hz
Terminal		Fast On Terminal	Fast On Terminal	Fast On Terminal
Adjustments	VOLT	Voltage Adjustment	Voltage Adjustment	Voltage Adjustment
	STAB	Stability Adjustment	Stability Adjustment	Stability Adjustment
	U/F	Under Frequency Adjustment	Under Frequency Adjustment	Under Frequency Adjustment
	DIP	To set the frequency related voltage dip	To set the frequency related voltage dip	To set the frequency related voltage dip
	TRIM	Analogue Voltage Input Adjustment	Analogue Voltage Input Adjustment	Analogue Voltage Input Adjustment
	DROOP	DROOP Adjustment	DROOP Adjustment	DROOP Adjustment
LED Indicators	O/E LED	Over Excitation LED	Over Excitation LED	N/A
	U/F LED	Under Frequency LED	Under Frequency LED	Under Frequency LED
Dimensions		150.0 (L) x 135.0 (W) x 61.0 (H) mm	171.0 (L) x 120.0 (W) x 50.0 (H) mm	150.0 (L) x 135.0 (W) x 56.0 (H) mm
Fixing Orifice Specifcaiton				
Weight		750 g +/- 2%	820 g +/- 2%	720 g +/- 2%