

# EA321

## Permanent Magnet Generator Type AVR

Compatible with Newage Stamford MX321 regulator

### Features

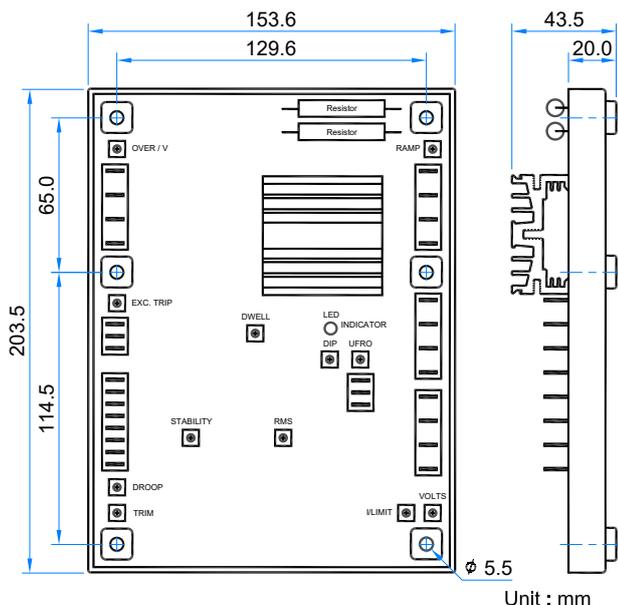
- Voltage regulation less than +/-0.5% RMS
- For use in parallel operation
- RAMP, DIP, DWELL, DROOP, RMS, U/F, Over Voltage & Over Excitation adjustment functions
- Over Exc. /Over Volt. & UFRO LED indicators
- Current limiting function



### Specifications

<b>Sensing Input</b>	Voltage	190 to 264 Vac	3 phase	<b>Analogue Voltage Input</b>	Input resistance	1K ohm
	Frequency	50/60 Hz	selectable		Max. input	+/-5 Vdc
<b>Power Input (PMG)</b>	Voltage	170 to 220 Vac	3 phase 3 wire	<b>Over Volt. Detector Input</b>	Sensitivity	1V for 5% generator volts
	Current	3A / Phase			Set point	300V. Time delay 1 second (fixed)
	Frequency	100 to 120 Hz	nominal		CB trip coil volt	10 to 30 Vdc / 0.5 Amp
<b>Excitation Output</b>	Voltage	Max. 120 Vdc @ power input 220 Vac		<b>Current Limit Input</b>	Burden	10 ohms
	Current	Continuous 4A Intermittent 7A for 60 seconds			Sensitivity range	0.5 to 1A
	Resistance	Min. 15 ohms			<b>Under Frequency Protection (Factory Presets)</b>	Set point
<b>External Volt. ADJ</b>	Max. +/-10% @ 5K ohms	1 watt potentiometer	Slope	100 to 300% down to 30 Hz		
<b>Voltage Regulation</b>	Less than +/-0.5% RMS (with 4% engine governing)		<b>Over Excitation Protection</b>	Set point	120Vdc. Time delay 8 to 15 seconds	
<b>Build Up Voltage</b>	5Vac residual volts at power input terminal		<b>Volt. Thermal Drift</b>	Less than 5% at temperature range	-40 to +70 °C	
<b>Soft Start Ramp Time</b>	0.4 to 4 seconds +/-10%		<b>Environment</b>	Operating Temperature	-40 to +70 °C	
<b>Static Power Dissipation</b>	Max. 18 watts			Storage Temperature	-40 to +85 °C	
<b>Quadrature Droop Input</b>	Burden	10 ohms	Max. input	0.33A	Relative Humidity	Max. 95%
	Max. sensitivity	0.22A for 5% droop (PF=0)			Vibration	3.3 Gs @ 100 to 2K Hz

### Dimensions



### AVR Control Functions

<b>VOLT</b>	Voltage adjustment
<b>STAB</b>	Stability adjustment
<b>UFRO</b>	Setting under frequency protection knee point
<b>DROOP</b>	To set the Droop to 5% at PF=0
<b>TRIM</b>	To optimize analogue input sensitivity
<b>EXC TRIP</b>	Over excitation trip level set
<b>DIP</b>	HZ related voltage DIP set
<b>DWELL</b>	HZ related recovery time set
<b>I / LIMIT</b>	Stator current limit set
<b>OVER / V</b>	Over voltage trip level set
<b>RAMP</b>	No load voltage ramp set time
<b>RMS</b>	Root mean square of generator

### Physical Specifications

<b>Dimensions</b>	203.5 (L) x 153.6 (W) x 43.5 (H) mm
<b>Weight</b>	530 g +/-2%

\*All manufacturer names and numbers are used for reference purpose only and do not imply that any part is the product of these manufacturer.



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