

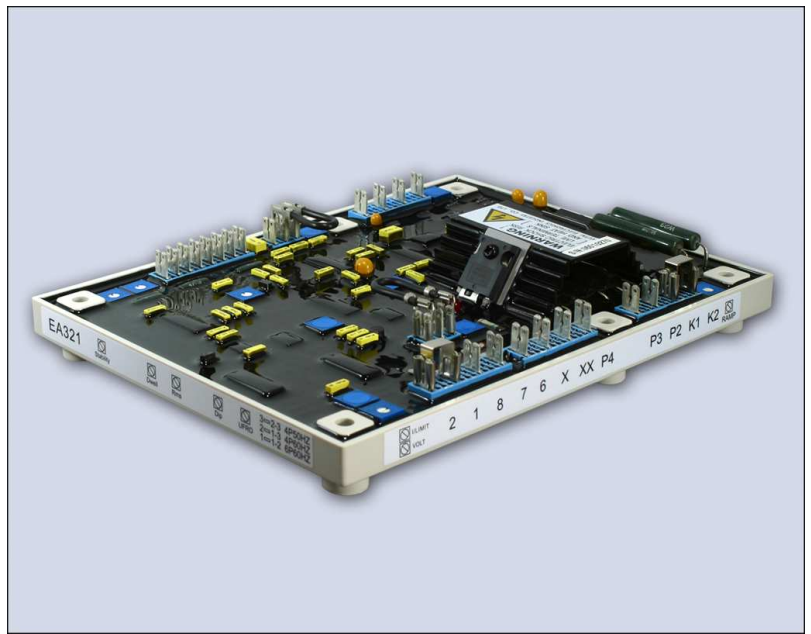
EA321

Permanent Magnet Generator Type AVR Compatible with Newage* Model MX321

Features

- < $\pm 0.5\%$ RMS Regulation
- 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

*Use for reference purpose only, not a genuine Newage product



Specifications

Sensing Input	Voltage	190 ~ 264 VAC, 2 or 3 phase	Unit Power Dissipation	Max. 18 watt
	Frequency	50 / 60 Hz selectable	External Volts Adjustment	$\pm 10\%$ with 1K Ω 1 watt trimmer
Power Input (PMG)	Voltage	170 ~ 220 VAC, 3 phase 3 wire	Over Excitation Protection	Set point 75 VDC, Time delay 8 ~ 15 sec.
	Current	3A / phase	Under Frequency Protection (UFRO)	Set point 95% Hz (Factory set)
	Frequency	100 ~ 120 Hz nominal		Slope 100 ~ 300 % down to 30 Hz
Output	Voltage	Max. 120 VDC		Max. Dwell 20% volts/sec. recovery
	Current	Continuous 3.7A Intermittent 6A for 10 sec.	Analogue Input	Max. Input ± 5 VDC
	Resistance	Min. 15 Ω	*Adjustable parameters	Sensitivity 1V for 5% generator volts*
Voltage Regulation	< $\pm 0.5\%$ RMS (with 4% engine governing)		Droop Input	Input Resistance 1K Ω
Voltage Build-up	Residual volts at AVR terminal > 5 VAC			Burden 10 Ω
Soft Start Ramp Time	0.4 ~ 4 sec. adjustment			Max. sensitivity 0.22A for 5% droop (PF=0)
Thermal Drift	0.05% per $^{\circ}\text{C}$ change in AVR ambient			Max. input 0.33A
Current Limit Input	Burden: 10 Ω , Sensitivity range: 0.5 ~ 1A		Over Voltage Detector Input	Set point 300 V, Time delay 1sec.(fixed)
				CB Trip Coil Volts 10 ~ 30 VDC / 0.5Amp

Environment

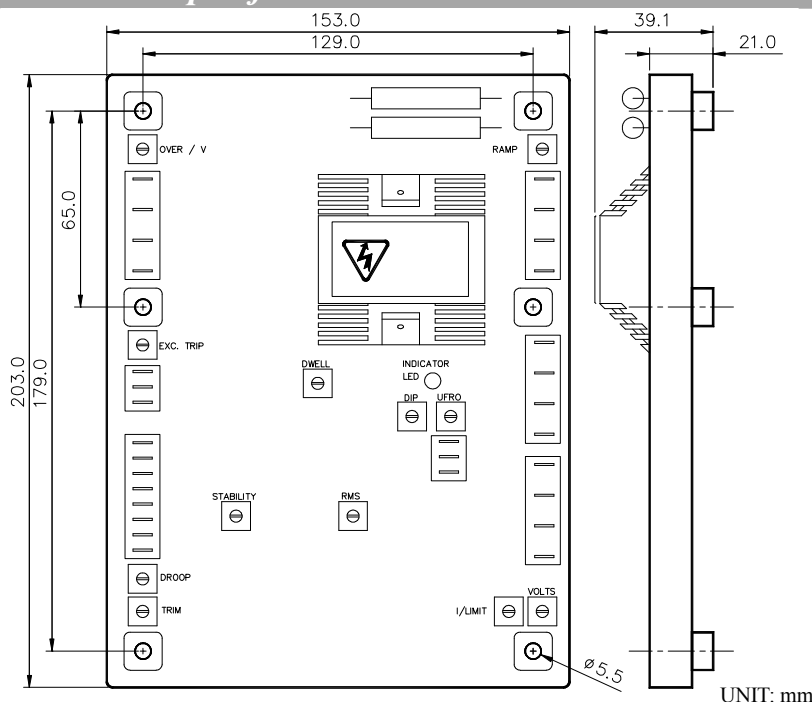
Vibration 3.3G @ 100 ~ 2 K Hz

Relative Humidity < 95%

Operating Temperature -40 ~ 70 $^{\circ}\text{C}$

Storage Temperature -40 ~ 85 $^{\circ}\text{C}$

Mechanical Specifications



AVR Controls	Function
VOLT	Output Voltage Adjustment
STAB	Stability Adjustment
UFRO	UFRO Knee Point Set
DROOP	To Set the Droop to 5% at PF=0
TRIM	To Optimize Analogue Input Sensitivity
EXC	Over Excitation Trip Level Set
DIP	Hz Related Voltage DIP Set
DWELL	Hz Related Recovery Time Set
I LIMIT	Stator Current Limit Set
OVER V	Over Voltage Trip Level Set
RAMP	No Load Voltage Ramp Set Time
RMS	Root Mean Square of Generator

Physical Specifications

Dimension 203.0 (L) x 153.0 (W) x 39.1 (H) mm

Weight 530 g \pm 2%

Please link to <http://www.kutai.com.tw> for detailed manual