

EA42-7

Self Excited Automatic Voltage Regulator For Use In Generators With Separate Power Windings

Compatible with Basler* AEC42-7 regulator

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

Features

- Voltage Regulation $< \pm 1\%$
- Over Excitation Automatic Shut Down
- For Use In Parallel Operation
- EMI Suppression
- Under Frequency Protection
- Soft Start Voltage Ramping



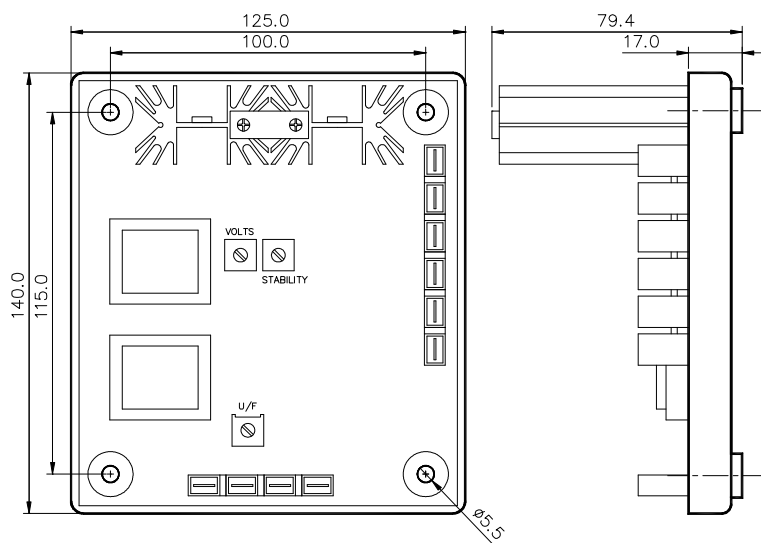
Specifications

Sensing Input	Voltage	220~252 VAC $\pm 10\%$ 1 phase 2 wire	Voltage Adjustable Range	180~277 VAC
	Frequency	50/60 Hz selectable	External Volts Adjustment	$\pm 10\%$ with 1 K Ω 1 watt trimmer
Power Input	Voltage	220~260 VAC $\pm 10\%$ 1 phase 2 wire	Unit Power Dissipation	Max. 20 watt
	Frequency	50/60 Hz	EMI Suppression	Internal electromagnetic interference filtering
Output	Voltage	Max. 42 VDC	Thermal Drift	0.05% per $^{\circ}\text{C}$ change in AVR ambient
	Current	Continuous 7A Intermittent 15A for 10 sec.	Under Frequency Protection (Factory Setting)	60 Hz system presets knee point at 55 Hz 50 Hz system presets knee point at 45 Hz
	Resistance	Min. 6 Ω Max. 105 Ω	Over Excitation Shutdown	Field volts shut down after time delay if exciter field volts exceeds 52 ± 2 VDC
Volts Regulation	$< \pm 1\%$ (with 4% engine governing)			
Voltage Build-up	Residual volts at AVR terminal > 5 VAC	Quadrature Droop	Max. Sensitivity 1 VAC 2%	
			Max. Input 5 VAC @ 5 Ω Burden	

Environment

Operation Temperature	-40~60 $^{\circ}\text{C}$	Relative Humidity	Maximum 95%
Storage Temperature	-40~85 $^{\circ}\text{C}$	Vibration	1.5G @ 5~30 Hz / 5.0G @ 30~500 Hz

Mechanical Specifications (Unit : mm)



AVR Control Function

VOLT	Voltage Adjustment
STAB	Stability Adjustment
U/F	To Set the U/F*1 Knee Point

*1 U/F : Under Frequency protection

Physical Specification

Dimensions	140.0 (L) x 125.0 (W) x 79.4 (H) mm
Weight	680 g $\pm 2\%$
Shock	Withstands up to 20G in each X, Y, Z axes