# EAO3A

# Generator Automatic Voltage Regulator Operation Manual



Self Excited Automatic Voltage Regulator Designed For Gasoline Generators





# **SECTION 1: SUMMARY**

# **Sensing Input**

Voltage 18 – 20 Vac, 1 phase 2 wires

# **Power Input**

Voltage 60 – 90 Vac, 1 phase 2 wires

#### **Excitation Output**

Voltage 5 – 85 Vdc Current Continuous 3A

Intermittent 4A for 60 secs.

Resistance Min. 25 ohms

#### **Voltage Regulation**

Less than +/- 2% ( with 4% engine governing )

#### **Build Up Voltage**

5 Vac residual volts at power input terminal

#### **Voltage Adjust Range**

110 Vac +/- 15%

# **Voltage Thermal Drift**

Less than 5% at temperature range -40 to +70 °C

#### **Environment**

Operating Temperature -40 to +60 °C

Storage Temperature -40 to +85 °C

Relative Humidity Max. 95%

Vibration 1.5 Gs @ 5 – 30 Hz 5.0 Gs @ 30 – 500 Hz

# **Dimensions**

113.0 (L) x 41.0 (W) x 32.0 (H) mm

#### Weight

127 g +/- 2%

### **SECTION 2: OUTLINE / SIZE REFERENCE**

- Stop engine
- Install AVR to generator field (Show as Figure 1)

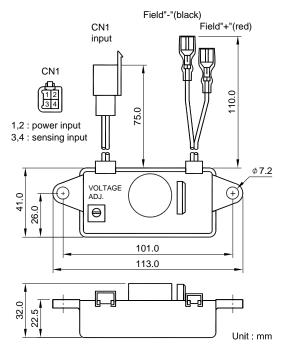


Figure 1

# **ATTENTION**

- 1. AVR can be mounted directly on the engine, genset, switchgear, control panel, or any position that will not affect operation. For dimension reference please see Figure 1.
- All voltage readings should be taken with an average-reading voltmeter. Megger or high-potential test equipment must not be used. Use of such equipment could damage the AVR.
- Improper setting of under-frequency protection could cause the output voltage of the unit to drop or become unstable under with changes in load. Avoid making any changes to the U/F setting unless necessary.

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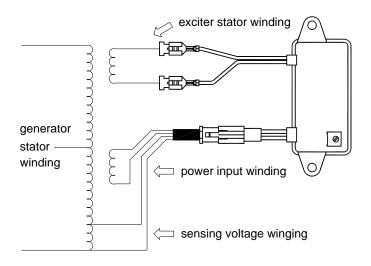


Figure 2

# **SECTION 3: APPLICATION MODE**

BRAND	PART NUMBER		
ELEPAQ	PH-1800, PH-2600		
HONDA	EP-1800, EP-2500		
KAWSAKI	GA-2300 ` GA-2900 ` GE-1400 ` GE-2200		
KUBOTA Low Boy	GL6500S		
MARUYAMA	ME-1800, ME-2600		
SUZUKI	SV-1400L, SV-1400LD, SV-2200L, SV-2200LD		
SAWAFUJI	SH-1800, SH-2600		
YAMAHA	EDL6500S		

# **SECTION 4: TRUBLESHOOTING**

SYMPTOM	POSSIBLE CAUSES	SOLUTIONS
Voltage does not build up	F+, F- not connected	Connect F+, F-
	CN1 not connected	Connect CN1
Out voltage high	Voltage over AC130V can not adjusted	Defective regulator

<sup>\*</sup> Appearance and specifications of products are subject to change for improvement without prior notice.