

EAM120

GAC to Woodward 2301A

Interface Module

1 INTRODUCTION

The EAM120 is an interface module which accepts a nominal 5 V DC input control signal and provides a nominal 0Vdc output with a range of +/- 5 V DC across a galvanic isolated barrier to prevent noise from interfering with measured signal.

The EAM120 is typically used with a GAC autosynchronizer and load sharing system to a Woodward 2301A control system that has internally isolated DC circuits. Other applications are also possible.

The power to operate the module comes from the input side (GAC) and is typically 12V DC or 24 V DC, system voltage.



2 SPECIFICATIONS

POWER	
Input Impedance (Terminals 5 and 6)	200 K Ω
Input DC Voltage (nominal) (Terminals 5 and 6)	5.0 V DC
Output Impedance (Terminals 3 and 4)	10 K Ω
Output Voltage Range (Terminals 3 and 4)	-5 to + 5 V DC
Nominal Output Voltage (Terminals 3 and 4)	0 +/- 0.15 V DC
Transfer Function	-1.0 Volts Out / Volt In
Supply Voltage Range (Terminals 1 and 2)	12 - 24 V DC
Supply Current (Terminals 1 and 2)	75 mA
Isolation Barrier Rating (Terminals 4 and 5)	1000 V DC
PHYSICAL	
Temperature Range	-40° - 185 ° F [-40° to +85°C]
Dimensions	1.02 x 3.0 x 3.5 in [25.91 x 101.60 x 118.62]
Mounting	Vertical mounting preferred
Relative Humidity	up to 97%

3 WIRING AND DIMENSIONS



An overspeed shutdown device, independent of the governor system, should be provided to prevent loss of engine control which may cause personal injury or equipment damage. A secondary shutoff device, such as a fuel solenoid, must be used.

The common battery minus (-) connection between the Woodward 2301A control, EAM120, and the GAC auto-sync and load sharing system should be as short and direct as possible electrically to minimize any voltage differences.

