
 <p>GOVERNORS AMERICA CORP.</p> <p>Engine Governing Systems</p>	<p>Document: Technical Description</p> <p>Version: 1</p> <p>Status: actual</p> <p>Author: bs Date: 04-09-20</p> <p>Approved: dh Date: 04-09-20</p> <p>File: PC</p>	<p align="center">EAM113</p> <p align="center">GAC to PERKINS 2800 Series</p> <p align="center">Interface Module</p> <p align="center">GAC PIB4071 (March 2001)</p>	 <p>HUGLI</p> <p>HUEGLI TECH LTD SWITZERLAND</p> <p>Tel.: +41-62-916 50 30 Fax. +41-62-916 50 35 www.huegli-tech.com</p>
	<p align="center">EAM 113</p> <p align="center">GAC to PERKINS 2800 Series Interface Module</p>		

EAM 113

GAC to PERKINS 2800 Series Interface Module

Introduction

The EAM113 interface module is designed to be used between the PERKINS 2800 series engine control and an external control such as a variable speed input or a Load sharing and Synchronizing system. The output of the EAM113 is a current sinking PWM signal that controls the PERKINS engine control.

The EAM113 has two inputs, a 4-20 mA input as well as a 5.0V DC input. The 4-20 mA input serves to provide a wide range of PWM for maximum changes at the PERKINS control. The 5.0vdc input is a limited range PWM output around 50% duty cycle for trimming of the speed for such usages as GAC load sharing and synchronizing.

A single potentiometer adjustment allows the range of the input signal's effect on the PERKINS control to be limited from maximum to minimum PWM duty cycle. The PWM frequency is fixed at 500 Hz. Supply voltage for the interface is the same 24V DC battery that supplies the PERKINS system.

Wiring

See Wiring Diagram.

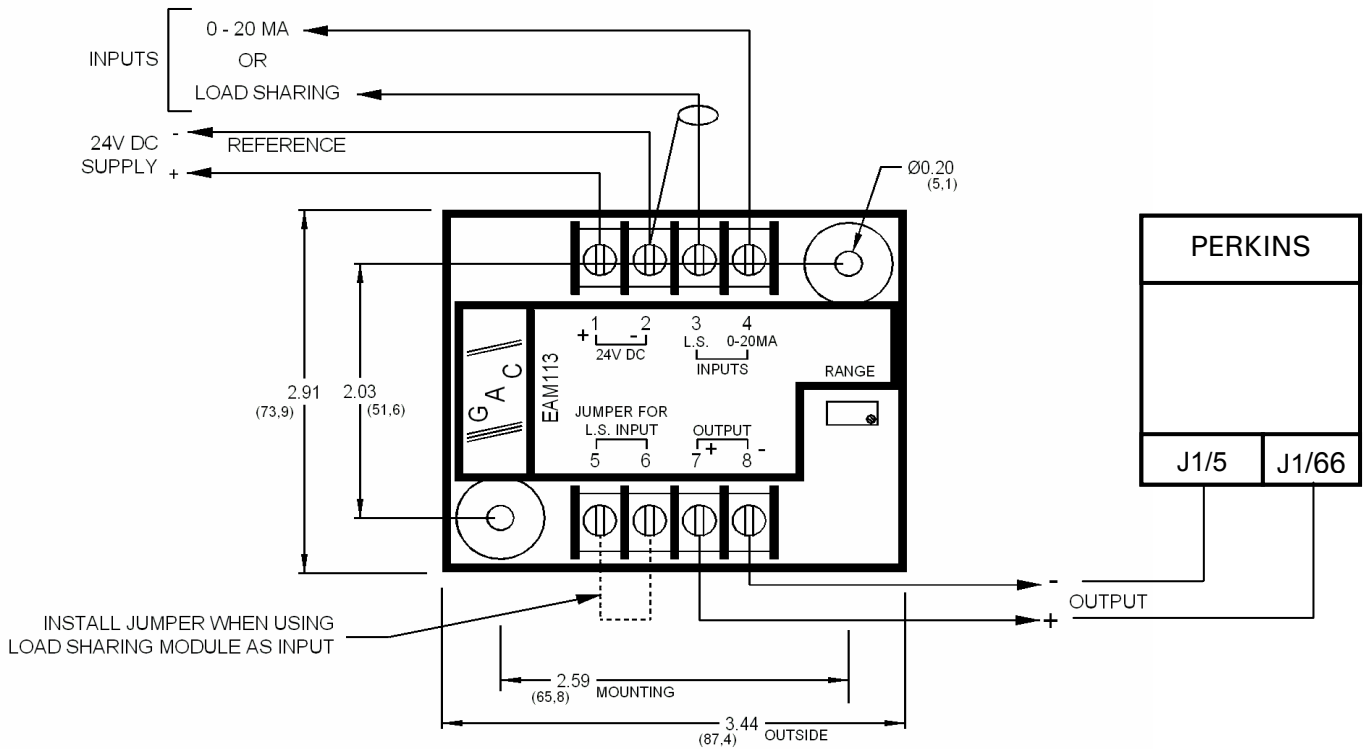
For 4-20 mA input, supply the current signal to Terminal 4. Terminals 3, 5, and 6 are to remain open.

For a 5.0V DC input (load sharing/ sync signal), connect to Terminal 3. Terminals 5 and 6 must be jumpered together. Terminal 4 must remain open.

SPECIFICATION

Input impedance (Terminals 4 & 2)	100 ohms
Maximum voltage (Terminals 4 & 2)	5V DC
Input impedance (Terminals 3 & 2)	500K ohms
Output Impedance (Terminals 7 & 8)	< 100 ohms (current protected)
Nominal PWM range (Terminals 7 & 8)	0 - 100%
Transfer function (4-20 mA)	20 mA in= adjustable,0-100% cycle
(5.0V DC)	5.0V in= 50% duty cycle, adjustable
DC supply (Terminals 1 & 2)	18-24V DC
DC current supply (Terminals 1 & 2)	20 mA
Temperature range	-40° to +85°C

Wiring Diagram WD



Machine Wiring Schematic, All Options

This Wiring Supplied By OEM

Customer Interface Connector

ECM

Notes:
 Outputs may be used to drive lamps or relays.
 Crank Terminate should be a relay used to disconnect the starter motor in OEM panel start circuit.
 Diagnostic lamp lights when active system fault registered
 For full details of inputs/ outputs, refer to Installation Manual

