
	Document: Technical Description Version: 2 Status: replaces previous ver. Author: bs Date: 03-11-04 Approved: dh Date: 03-11-05 File: PC	EAM-110 GAC to CUMMINS QSK Interface Module GAC PIB4086-A (March 2001)	 Tel.: +41-62-916 50 30 Fax. +41-62-916 50 35 www.huegli-tech.com
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EAM-110 GAC to CUMMINS QSK INTERFACE MODULE

Introduction

The EAM-110 interface module is designed to provide analog signal conditioning between a GAC auto synchronizing / load sharing system and the Cummins QSK engine control. With a nominal 5.0V DC at the input, the output will provide a 5.0V DC output signal based on the Cummins QSK internal 5.0 Volt reference.

The power to operate the interface module comes from the same 24V DC battery system that operates the QSK engines system.

Wiring

See Wiring Diagrams.

Note: The common battery minus connections between the QSK system, EAM-110, and the GAC auto load sharing and sync system should be as direct as possible electrically (minimum voltage difference).

Note: The output of the EAM-110 Terminal 16 is connected to Cummins control input Terminal 11.

Note: An external trim pot may be connected to the EAM-110 for manual adjustment of speed. Use a 5K pot connected to Terminals A, B, and E as shown in the Wiring Diagram.

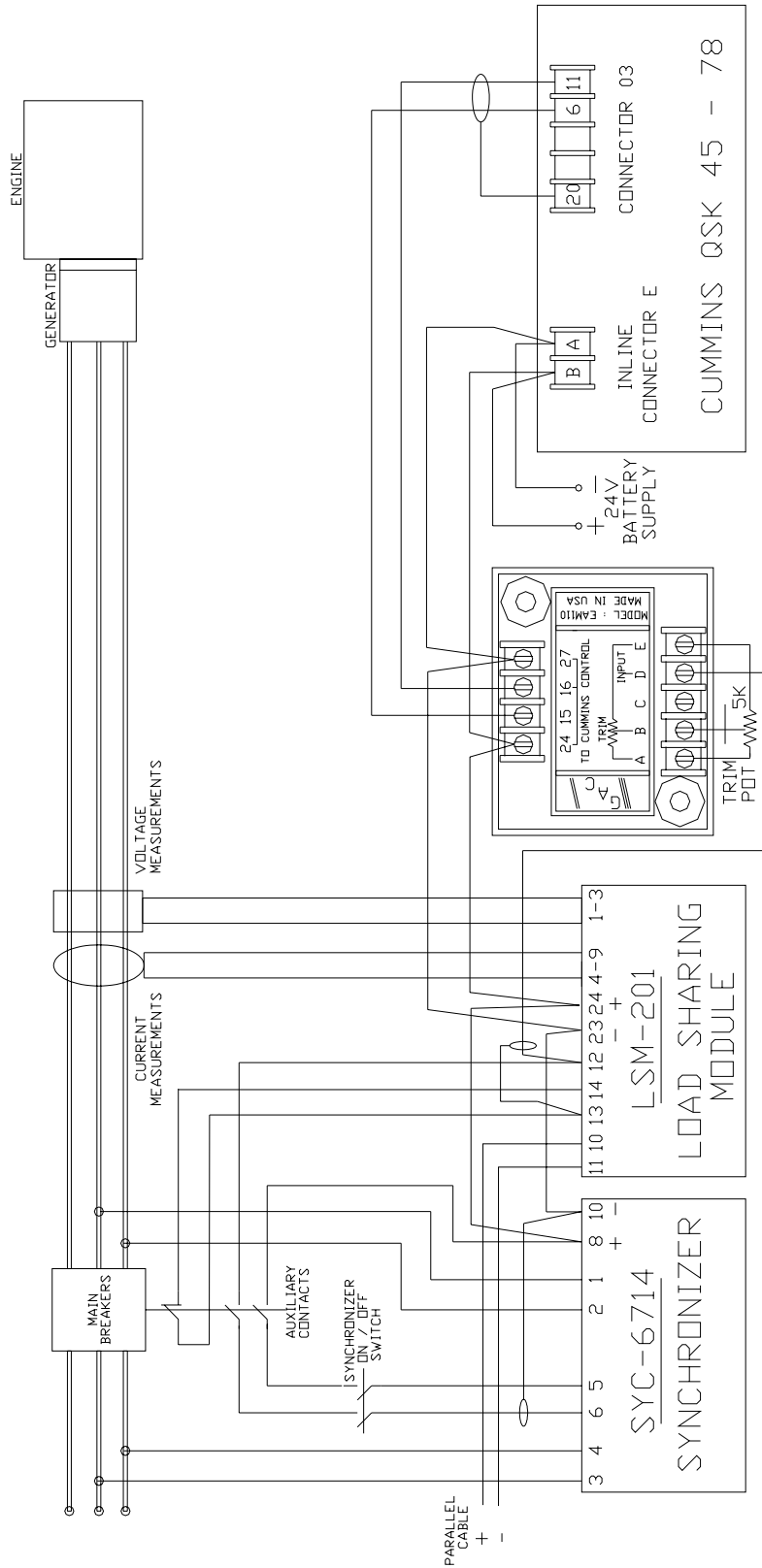
Important note

In order that the EAM-110 can communicate with the QSK Cummins ECU, it is necessary to enable the **Woodward Bias Input** on the Cummins ECU. This has to be done via the OEM Software of Cummins. If this software is not available, then please contact your local Cummins dealer and request to enable the Woodward Bias Input.

Specifications

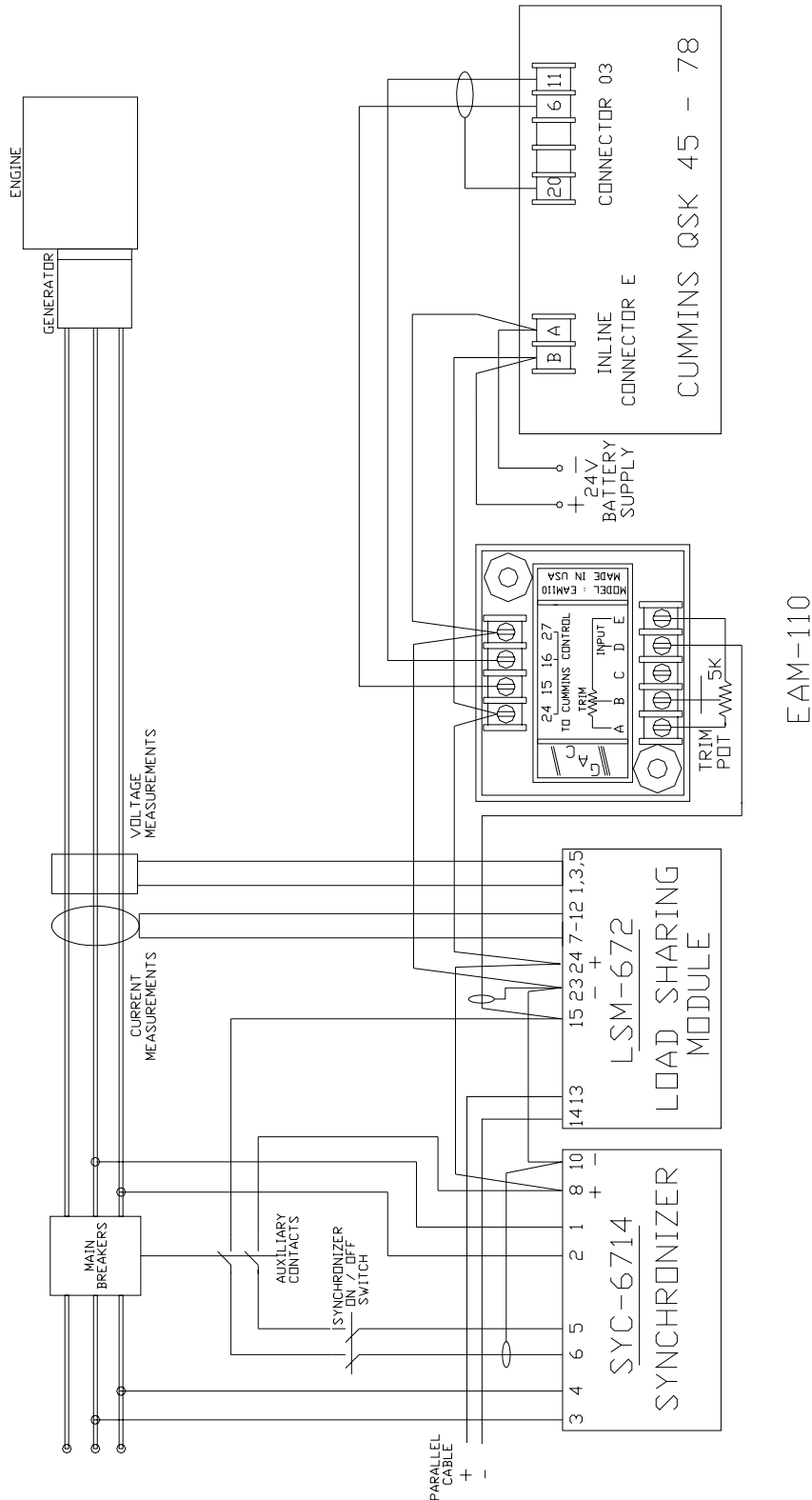
Input impedance (Terminal D)	30 kOhm
Output impedance (Terminals 16 & 27)	3 kOhm
Nominal output voltage (Terminals 16 & 27)	5.0V DC
Output voltage range (Terminals 16 & 27)	0-2.6V DC
Output transfer function	-0.5 volts/ volt
Temperature range	-40° to +85°C
DC supply range (Terminals 16 & 27)	15 to 32V DC
DC supply current (Terminals 16 & 27)	20 mA

Wiring Diagram (with LSM201) WD170A



EAM-110

Wiring Diagram (with LSM672) WD185



EAM-110