

#### TECHNICAL DATASHEET #TDAX031500 Magnetic Pick-up / CAN Converter SAE J1939

P/N: AX031500

# Converts a Magnetic speed sensor signal into SAE J1939 CAN Messages for communication with control systems

#### Features:

- 1 Magnetic Pick-up type input for interface with a sensor
- 1 CAN port (SAE J1939)
- Operational 8...60 Vdc (12 Vdc or 24 Vdc)
- Integrated Deutsch IPD 6-pin connector
- Compact, fully sealed enclosure, IP67
- Meets the surge requirements of DIN EN 13309
- CE marking
- Configure with Axiomatic Electronic Assistant®

### **Applications:**

- Power Generator Set control systems
- Machine engine control systems



# **Ordering Part Numbers:**

Magnetic Pick-up / CAN Converter, SAE J1939 - P/N: **AX031500** Configuration Tool: Electronic Assistant® P/N: **AX070502** 

Accessories:

Mating Plug KIT: AX070119

Specifications are indicative and subject to change. Actual performance will vary depending on the application and operating conditions. Users should satisfy themselves that the product is suitable for use in the intended application. All our products carry a limited warranty against defects in material and workmanship. Please refer to our Warranty, Application Approvals/Limitations and Return Materials Process as described on www.axiomatic.com/service.html.

# **Technical Specifications:** Typical at nominal input voltage and 25 degrees C unless otherwise specified **Power**

Power Supply Input - Nominal	12 V or 24 Vdc nominal; 860 Vdc The minimum allowable supply voltage for the power pin is 7 Vdc.
Surge Protection	Meets the surge requirements of DIN EN13309
Reverse Polarity Protection	Provided

### Input

	1 Magnetic Pick-up type input
Input	Frequency Range: 0.5 Hz to 20 kHz
	Amplitude: 100 mVAC to 100VAC (RMS)

## **General Specifications**

General Specifications	STM32F103CBT7, 32-bit, 128 Kbytes Flash Program Memory
Memory	
CAN Port	1 CAN (SAE J1939, 250 kbps) Other baud rates are available on request.
Control Logic	The Converter comes pre-programmed with standard logic. Configurable CAN messages via Electronic Assistant®
Sampling Time	The input is tied to a 16-bit timer.
Quiescent Current Draw	9.1 mA @ 24Vdc; 16 mA @ 12Vdc Typical
	71
Operating Conditions	-40 to 85°C (-40 to 185°F)
Weight	0.10 lb. (0.045 kg)
Protection Rating	IP67
EMC Compliance	CE marking
Vibration	MIL-STD-202G, Test 204D and 214A (Sine and Random)
	10 g peak (Sine); 7.86 Grms peak (Random)
Shock	MIL-STD-202G, Test 213B, 50 g
Packaging and Dimensions	Plastic Enclosure, Nylon 6-6 with 30% glass fill
	Integral Deutsch IPD connector
	Refer to Figure 1.0 dimensional drawing.
Electrical Connections	6 pin Deutsch IPD connector P/N: DT04-6P
	A mating plug kit is available as Axiomatic P/N: <b>AX070119</b> .
	CAN and I/O Connector
	Pin # Description
	1 BATT+
	2 Input +
	3 CAN H
	4 CAN_L
	5 Input GND
	6 BATT-
User Interface and S/W Reflashing	Axiomatic Electronic Assistant® AX070502

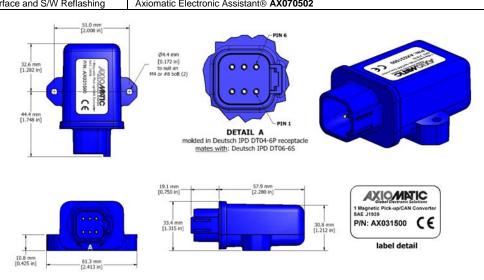


Figure 1.0 – Dimensional Drawing

Notes: Electronic Assistant® is a registered US trademark of Axiomatic Technologies Corporation.

Form: TDAX031500-06/07/16

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