

TECHNICAL DATASHEET #TDAX130751
CAN to 2 Analog/Digital Signals and 1 Relay Output Converter
CANopen®
P/N: AX130751

Features:

- 2 Analog/Digital signal outputs configurable as: 0-5V; 0-10V; 4-20 mA; Frequency or PWM Signal.
- 1 Relay output
- 1 isolated CANopen® port (SAE J1939 model available)
- Operational 9...36 Vdc (12 Vdc or 24 Vdc)
- Integrated Deutsch IPD 12-pin connector
- Compact, fully sealed enclosure, IP67
- Meets the surge requirements of SAE J1445
- Designed for EMC compliance



Applications:

- Throttle controls for marine engine applications
- Servo applications

Ordering Part Numbers:

CAN to A/D and Relay Outputs Converter, CANopen® - P/N: **AX130751**
 EDS File

Accessories:

Mating Plug KIT: **PL-DTM06-12SA**

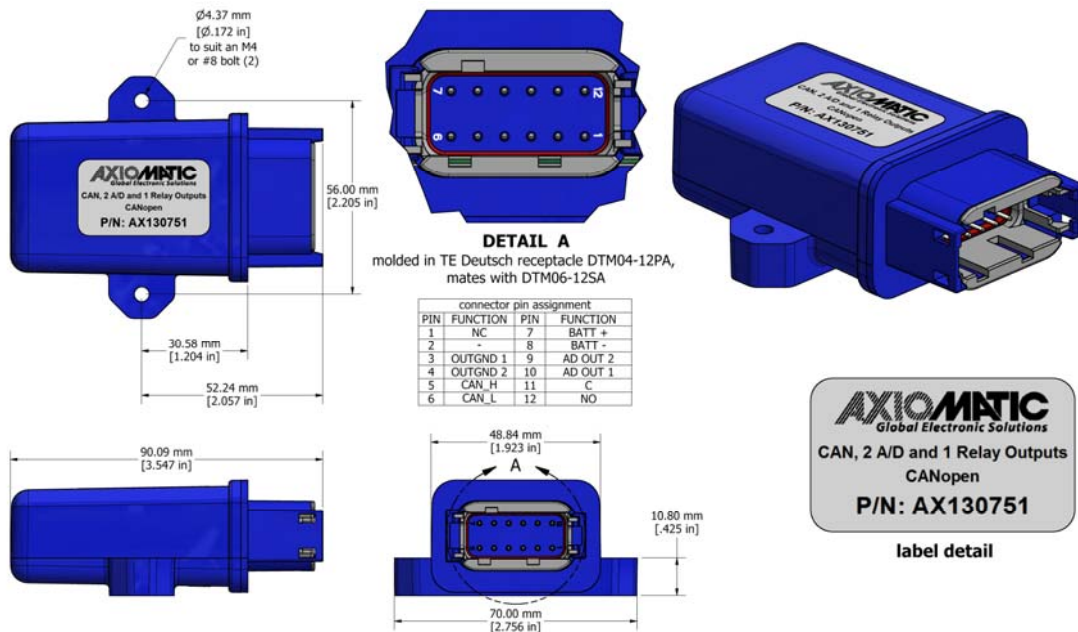


Figure 1.0 – Dimensional Drawing

Technical Specifications: *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.*

Power

Power Supply Input - Nominal	12 V or 24 Vdc nominal; 9...36 Vdc The minimum allowable supply voltage for the power pin is 7 Vdc.
Surge Protection	Meets the surge requirements of SAE J1445
Reverse Polarity Protection	Provided

Outputs

Analog/Digital Output	<p>2 signal outputs configurable as: 0-5V, 0-10V, 4-20 mA or PWM/Frequency</p> <p>Analog Voltage or Current Outputs: Voltage Output: 0-5 Vdc, 0-10 Vdc Maximum load is 30 mA. Current Output: 0-20 mA or 4-20 mA Maximum load resistance is < 500 Ohms. Compliance Voltage is 14V.</p> <p>PWM or Frequency Outputs 0.1 Hz to 20 kHz 0-100% D.C. 5 V or 12 V Amplitude Push pull output Maximum load is 50 mA. Over-current protection (50 mA)</p>
Output Accuracy	<p>Voltage: 0.2% Current: 0.2% PWM Signal: 0.1% Frequency Signal: 0.1%</p>
Relay Output	<p>Sets 1 Form C relay output Resistive load: <ul style="list-style-type: none"> 5A (NO)/5 A (NC) at 220VDC/250VAC Dielectric strength: <ul style="list-style-type: none"> 3,000 VAC, 50/60 Hz for 1 min between coil and contacts 2,500 Vrms between open contacts There is no special overcurrent/overvoltage protection on the relay outputs. The user is advised to provide a fast acting 6A fuse or an adequate external protection if necessary. </p>

Control Software

Software Platform	Pre-programmed with standard logic. Refer to the user manual.
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General Specifications

Memory	STM32F405RGT7; 32-bit, 1024 Kbytes Flash Program Memory
CAN Port	1 CANopen®
Isolation	300 Vrms isolation for CAN port
Quiescent Current Draw	Typical 63mA @12Vdc; 33mA @ 24Vdc
Response Time	<10 mSec. Typical
Operating Conditions	-40 to 85°C (-40 to 185°F)
Weight	0.15 lb. (0.068 kg) (preliminary)
Protection Rating	IP67
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
Enclosure and Dimensions	Molded Enclosure, integral connector Nylon 6/6, 30% glass Ultrasonically welded 3.54 x 2.75 x 1.31 inches (90.09 x 70.00 x 33.35 mm) L x W x H including integral connector Refer to Figure 1.0, dimensional drawing.
Electrical Connections	Integral TE Deutsch 12 pin receptacle (P/N: DTM04-12PA)

CAN and I/O Connector	
Pin #	Description
1	Relay Output (NC)
2	Not Used
3	Output 1 GND
4	Output 2 GND
5	CAN_H
6	CAN_L
7	BATT +
8	BATT-
9	A/D Output 2
10	A/D Output 1
11	Relay Output (C)
12	Relay Output (NO)

Mating Plug Kit	PL-DTM06-12SA Mating Plug Kit comprised of 1 DTM06-12SA, 1 WM-12S, 10 0462-201-20141, 2 0413-204-2005 Sealing Plug
User Interface	EDS File, Standard CANopen tools (not supplied)
Refashing	Axiomatic Electronic Assistant AX070502

Notes:

CANopen® is a registered community trademark of CAN in Automation e.V.

Form: TDAX130751-05/27/20