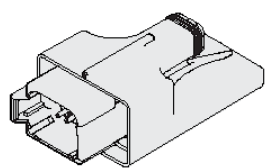




Overview



Description

A compact plug-in style, microprocessor based valve driver designed for use in hydraulic proportional valve applications. Configurable to drive either one or two coils using SAE J1939 CAN or CAN Open input or an independent signal. The ECDR-0201A proportionally controls one or two coils to a user-defined metering profile. It is configured with HF-Impulse software; an easy-to-use, web-accessible configuration tool available as a free download at www.hydraforce.com/electronics.

Operation

The controller accepts input from commonly available analog or SAE J1939 CAN/CAN Open operator interface devices (joystick, potentiometer, sensors, etc.) The input signal drives the output current.

Diagnostic Features

- Any supply voltage below 8.5 Vdc causes the controller to default to the valve-off mode.
- The driver output drops and holds at the inactive stand-by condition.
Any short or open circuit condition is automatically detected as an error.
- When the fault is corrected, the controller returns to standard operation.

Multiple Personalities

The EVDR controller is available in multiple configurations (personalities) to suit the needs of specialized applications. Choose the one that best fits your needs.

EVDR-0201A - General Purpose.

EDFR-0201A - Fan Control.

ECDR-0201A - Configurable.

Ratings

Electrical Parameters

Power requirements	9 to 32 Vdc	
Output current	0 to 2000 mA	- Note: Continuous

Processor and Memory

Processor	ARM 32-bit Cortex [®] -M3 CPU, 72 MHz
Flash memory	64 kB
RAM	20 kB

Properties

Mating connectors	Deutsch DT06-8SA - Note: Input DT04-2P - Note: Output
Output indicator	2 Red LEDs
Environmental rating	IP69K
Operating temperature	-40 to 85 °C (-40 to 185 °F)
Unit weight	0.079 kg (0.175 lb) - Note: without connectors



I/O

Number of inputs	1
Number of outputs	2
Temperature	ERT 120 (HydraForce temperature sensor)
CAN	SAE J1939 CAN Open

Control Inputs - Analog

Voltage	0 to 5 Vdc 0 to 10 Vdc
Current	0 to 20 mA 4 to 20 mA
Resistive	0 to 6000 Ohm
Temperature	ERT 120 (HydraForce temperature sensor)

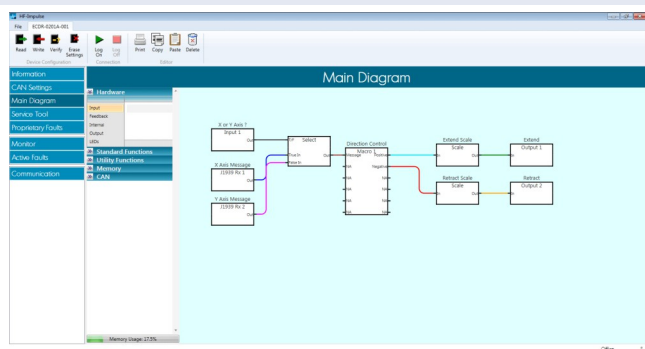
Control Inputs - Digital

Switch	Switch to battery Switch to open Switch to ground
PWM	0 to 100% - Note: 60 to 5000 Hz
Frequency	60 to 10 000 Hz

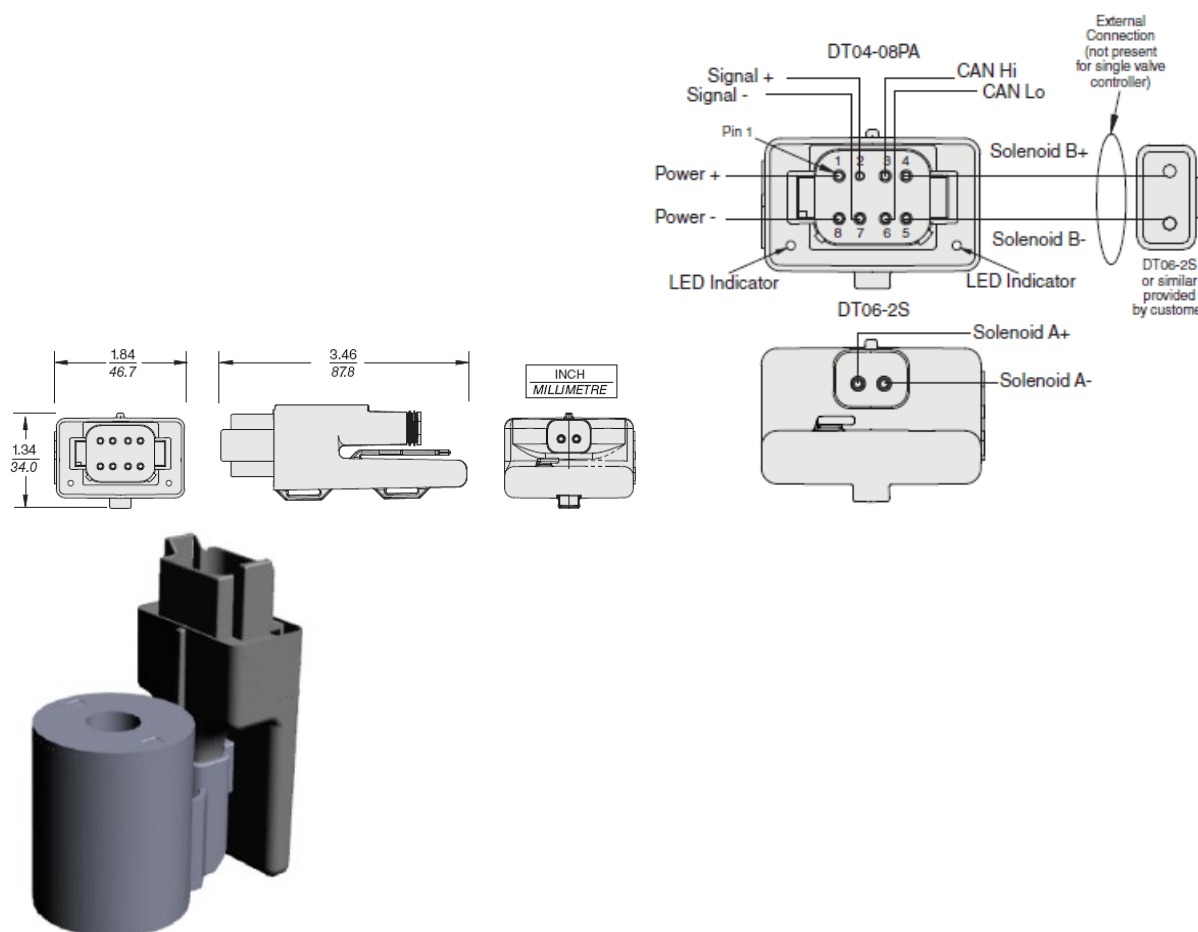
Outputs

Current control	0 to 2000 mA
PWM control	0 to 100% - Note: Duty cycle
PWM frequency range	40 to 400 Hz
CAN	SAE J1939 CAN Open

Configuration Example



Dimensions



To Order

Dual Valve Driver Model ECDR-0201A: Part No. 4204740

Configuration Software for ECDR-0101A & HF-Impulse: Free download from www.hydraforce.com/electronics.

Mating Connector Kit: Part No. 4001955

Test Harness: Part No. 4000304 (For testing and bench operation)

USB-CAN Programming Adapter: Kvaser Leaf Lite HS & Part No. 4000371, also available from www.kvaser.com

Temperature Sensor & ERT 120: Part No. 4206200

Mating Connector Kit for ERT 120 Temperature Sensor & Deutsch Model DTM06-2SP Part No. 4001970

For remote mounting, use connectors: DT04-2P (Part No. 4001958) and DT06-2S (Part No. 4001417)