# ECDR-0201A Dual/Single Valve Driver, Plug-In Style,



# 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.

### 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.

#### RATINGS

- Operating Temperature: -40 to 85 °C (-40 to 185 °F) Molded Enclosure Dimensions: 46.7 mm (W) x 87.8 mm (H) x 34.0 mm (D);
- 1.84 in. (W) x 3.46 in. (H) x 1.34 in. (D)

Mating Connectors: Deutsch DT06-8SA and DT04-2P

Power Requirements: 9 to 32 Vdc

#### **Control Inputs - Analog:**

Voltage: 0 to 5 or 0 to 10 Vdc

- Current: 0 to 20 or 4 to 20 mA
- Resistive: 0 to 6000 ohms

Temperature: ERT 120 (HydraForce temperature sensor)

#### Control Inputs - Digital:

Switch: Switch to battery, switch to open, switch to ground PWM: 0 to 100%, 60 to 5000 Hz

**Frequency:** 4 to 10 000 Hz

#### **Control Outputs:**

**Current:** 0 to 2000 mA **PWM:** 0-100% duty cycle; 40 to 400 Hz

### Output Indicator: Two LED

CAN Inputs/Outputs:

SAE J1939

CAN Open PDO Weight: 0.079 kg (0.175 lb) without connectors

## **CONFIGURATION EXAMPLE**





# Configurable

# ECDR-0201A

## **CONNECTIONS & WIRING**

Description	Interface	Pin	Mating Connector
Battery	Power + Power -	1 8	DT06-08SA
Voltage/Current/ Resistance/ Control Signal	Signal in Gnd	2 7	
CAN/J1939 Communication	CAN_HI CAN_LO	3 6	
External Solenoid	Sol B + Sol B -	4 5	
Integral Solenoid	Sol A + Sol A -	1 2	DT04-2P



### **DIMENSIONS & MOUNTING**



ECDR-0201A Valve Driver shown installed on coil

#### **TO ORDER**

Dual/Single Valve Driver Model ECDR-0201A — Part No. 4204740

ECDR-0201A Configuration Software - HF-Impulse - free download from www.hydraforce.com/electronics

Connector Kit - Part No. 4001955

Test Harness: Part No. 4000304

USB-CAN Programming Adapter: Kvaser Leaf Light (Part No. 4000371) www.kvaser.com

Temperature Sensor: ERT 120 (Part No. 4206200); Mating Connector Kit for ERT 120 Temperature Sensor: Deutsch Model DTM06-2S (HF Part No. 4001970)

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