

CANopen[®] Valvedriver CDVD-10

CDVD-10 valve driver is a new approach to integrate existing hydraulic valves with CANopen[®]-network. This unit gives a very cost efficient CANopen[®] interface individually for each coil. Thanks to it's design it can be mounted to most valves on the market.



- DIN connector for coil
- RPDO timeout monitoring with automatic shutdown on error
- Supply voltage 7...36 VDC
- Continuous coil current monitoring in all operating modes
- Closed loop current control
- Dither
- Dead band compensation
- $\pm 4\text{kV}$ contact discharge and
- $\pm 8\text{kV}$ HMB air discharge for power supply and CAN
- Supply Current max. 175mA typ. 75mA
- Output current max. 2 A (possibility to get up to 4 A in on/off mode)
- Operating temperature $-40^{\circ}\text{C}...+85^{\circ}\text{C}$
- Environmental protection IP65+
- CAN baud rate 125k/250k/500k/800k/1M
- CAN voltage tolerance up to $\pm 36\text{VDC}$

Operational modes

The CDVD-10 valve driver has got three different operational modes:

- On-off
- Positive direction closed-loop PWM
- Negative direction closed-loop PWM

Current monitoring is active in all operating modes.

CANopen[®] interface

The physical CAN interface in the CDVD-10 valve driver is according to ISO11898-2 High-speed CAN physical layer. Cost-optimised CANopen[®] interface is according to the following standards:

- CiA[®] DSP 301 version 4.1.1
- CiA[®] DR 303-1 version 1.4
- CiA[®] WD 401 version 2.1.9

Connectors

CDVD-10 valve driver has got open end cables, alternatively Bosch Compact style connectors for power supply and CAN.

Valve coil connector is DIN 43650-A/ISO 4400.

Some features of CDVD-10 valve driver

Power from the CAN-bus

Compact dimensions 77 x 37 x 28 mm

Meets CiA301, CiA 303-1 and CiA 401

RPDO timeout monitoring

Automatic output shutdown on RPDO timeout

Automatic thermal shutdown of the output

