

NEW

new
CED400X

Electronic Control Unit



**The ideal solution for most types
of mobile operating
machines**



New CED400X Electronic Control Unit



- CAN Bus version is available with CANopen and ISOBUS protocols**
- Extremely fast cycle time**
- Programmable functionality**

The **CED400X** Electronic Control Unit is designed to work together with hydraulic components in mobile and off-highway operating machines.

The CAN Bus version is available with CANopen and ISOBUS protocols.

The CED400X ECU can be used in all types of mobile operating machines (agriculture, forestry, building construction).

The device can be used as a general purpose controller, stand alone or as part of CAN Bus distributed control system, as a proportional valve driver and as a controller for pumps and motors.

Thanks to the extremely fast cycle time it makes easy to implement innovative electro-hydraulic functions (eg. electronic Load Sensing).

Working conditions

Features

Supply voltage VB	from 8 to 32 V
Current consumption	<100 mA
Current output max	6 A - 12 VDC
Interface	RS232, 9600, 8, n, 1
EMC compatibility	EN61000-4-2/4/5, ISO7637-0/1
Environmental compatibility	IEC60068-2-6/27/29
Working temperature	from -40 to +85°C
Protection degree	IP67 with mating connector attached
Weight	0,3 Kg

Analog inputs

Number	up to 4
Type of signal	0/VB or from 0 to 5 V

Digital inputs

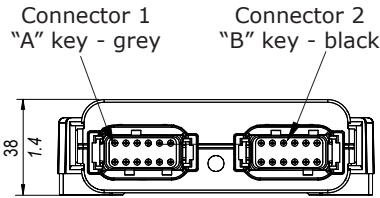
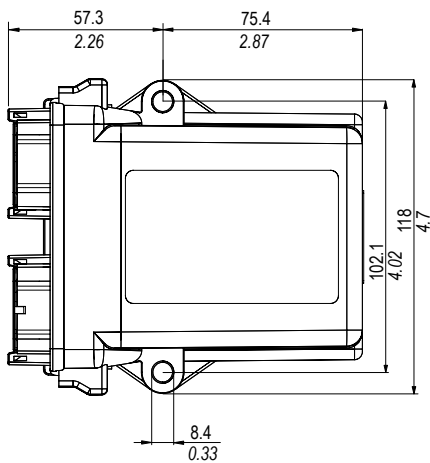
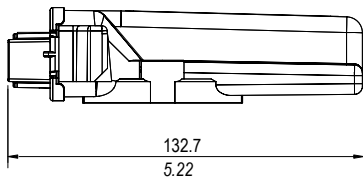
Number	up to 6
Type of signal	0/VB, from 0 to 50 KHz

Proportional outputs

Number	4 pairs
Type	8HSD* + 4LSD*
Signal	PWM on LSD*
Frequency	from 50 to 300 Hz, amplitude from 100 to 300 mA
Max. load	2 A

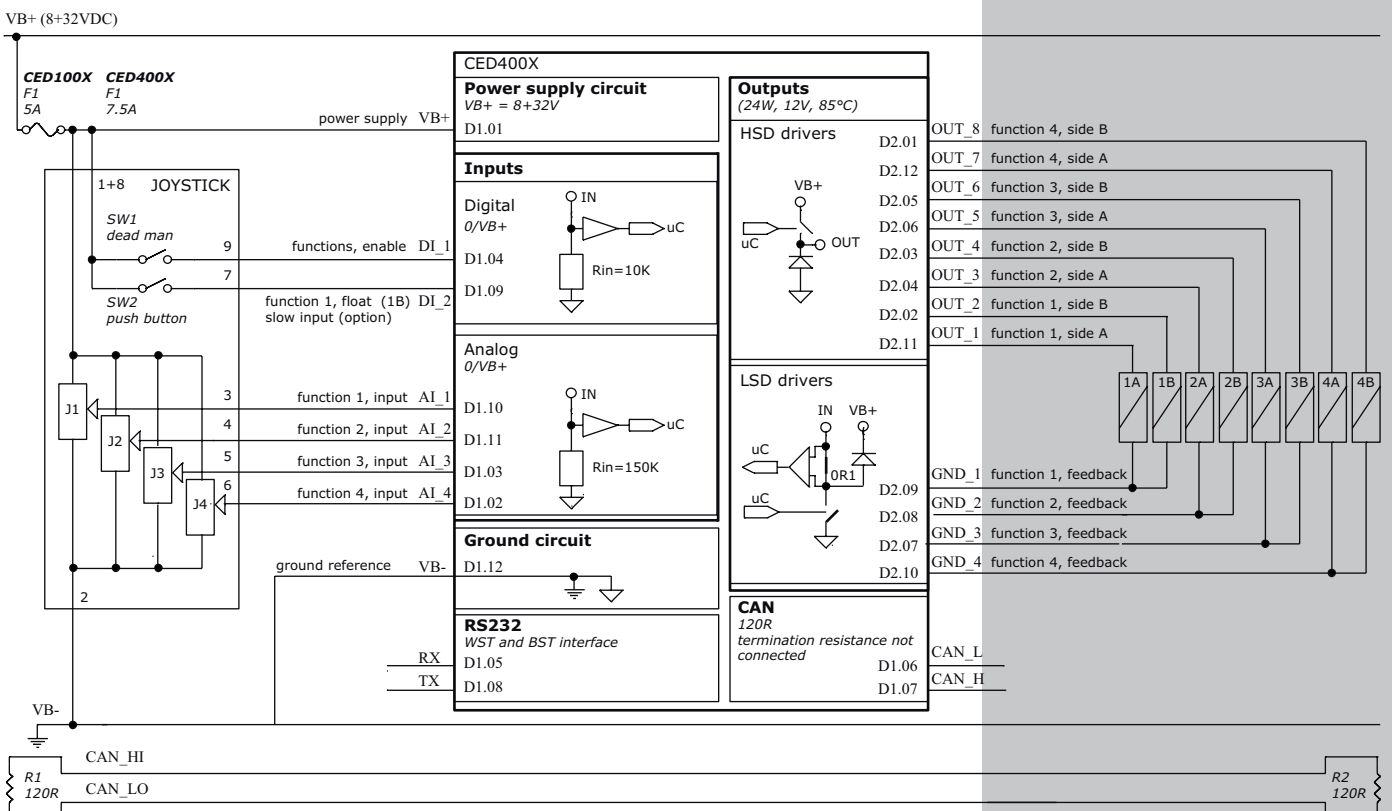
Notes(*): HSD - high side drive
LSD - low side drive

Dimensions



Connector 1		Connector 2	
Pin	Function	Pin	Function
1	VB+	1	OUT_8
2	AI_4	2	OUT_2
3	AI_3	3	OUT_4
4	DI_1	4	OUT_3
5	RX	5	OUT_6
6	CAN_L	6	OUT_5
7	CAN_H	7	GND_3
8	TX	8	GND_2
9	DI_2	9	GND_1
10	AI_1	10	GND_4
11	AI_2	11	OUT_1
12	VB-	12	OUT_7

System diagram



Features

- 24 pins: 2x12 poles Deutsch DTM
- 16 bit fixed point DSP running at 32 MHz
- 12 bit A/D converter
- 10 inputs
 - 4 analog:
 - 0 to 5 VDC or 0 to 32 (VB)
 - Option pull to center (2.5V or VB/2)
 - 6 digital or frequency:
 - Digital: pull up, pull down or pull to center
 - Frequency: up to 50kHz, pnp / npn
- 8 outputs
 - 8 HSD (high side drive) 2A, bidirectional pairs
- 3 ways watch-dog to cut off power outputs
 - external pin
 - main microprocessor watchdog
 - independent watchdog
- 1 CAN 2.0B port
- 1 RS-232 serial port
- 5 VDC power supply for external sensors
 - internally monitored and regulated
 - max current 200 mA
- Calibration software for PC
 - Joystick Input signal range
 - Output Currents (Min, Max, Dither Frequency)
 - Ramps and Float options

Application

The CED400X ECU can be used in all types of mobile operating machines (agriculture, forestry, building construction).

Accessories

PC communication cable (RS232 and CAN Bus)

WST Calibration Software for PC

Other configurations available on request.

Please contact Walvoil Sales Department.

