



## CED160 electronic control unit

- 12VDC applications
- One proportional function control (1 input / 2 outputs)
- Six digital outputs control (through six relays)
- Designed for PHC electronic systems

### Working conditions

#### General features

#### CED160

Supply voltage	from 9 to 16 V
Current consumption	50 mA (no-load current) 15A (max. supply)
Max. current output	7.5 A
Interface	CAN 2.0 A - B, 125-250 Kbit/sec
EMC compatibility	150 V/m - ISO13766, ISO14982
Environmental compatibility	IEC60068-2-6/27/29
Working temperature	from -40 to +85°C ( <i>from -40°F to 185°F</i> )
Protection degree	IP67 with mating connector attached
Weight	0.3 Kg ( <i>0.66 lb</i> )

#### Analog inputs

Number	3
Signal type	from 0.5 to 4.5 V

#### Digital inputs

Number	6
Signal type	0/VB

#### Proportional outputs

Number	1 couple
Type	HSD*
Signal	PWM
Frequency	from 50 to 300 Hz
Max. load	2 A

#### ON/OFF outputs

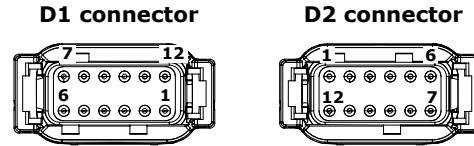
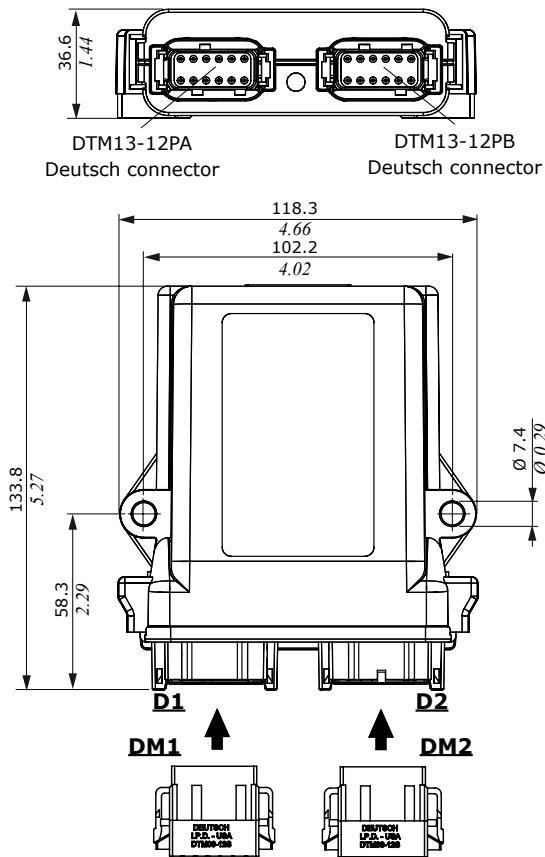
Number	6
Signal type	relay (HSD*)
Max. load	7.5 A

NOTE (\*): HSD - High Side Driver  
LSD - Low Side Driver

# Electronic control units

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### Dimensions and pin-out



Connector PIN-OUT		
Pin	Function	
	D1 connector	D2 connector
1	OUT_1	DI_5
2	VB-	DI_6
3	CAN_H	DI_1
4	CAN_L	GND_P
5	OUT_5	AI_3
6	OUT_6	AI_2
7	VK+	AI_1
8	VK+	OUT_B
9	OUT_2	DI_2
10	OUT_3	DI_3
11	OUT_4	DI_4
12	OUT_1	OUT_A

Mating connectors	
Name	Type
DM1	DTM06-12SA Deutsch
DM2	DTM06-12SB Deutsch

#### CED160 control unit code

**Code** 183360008

**Description** CED160/PHC160F-12V/v4.00

**Notes** Supply voltage 12V, 1 prop. function (2 outputs - 2A), 3 ON-OFF functions (6 outputs - 5A)

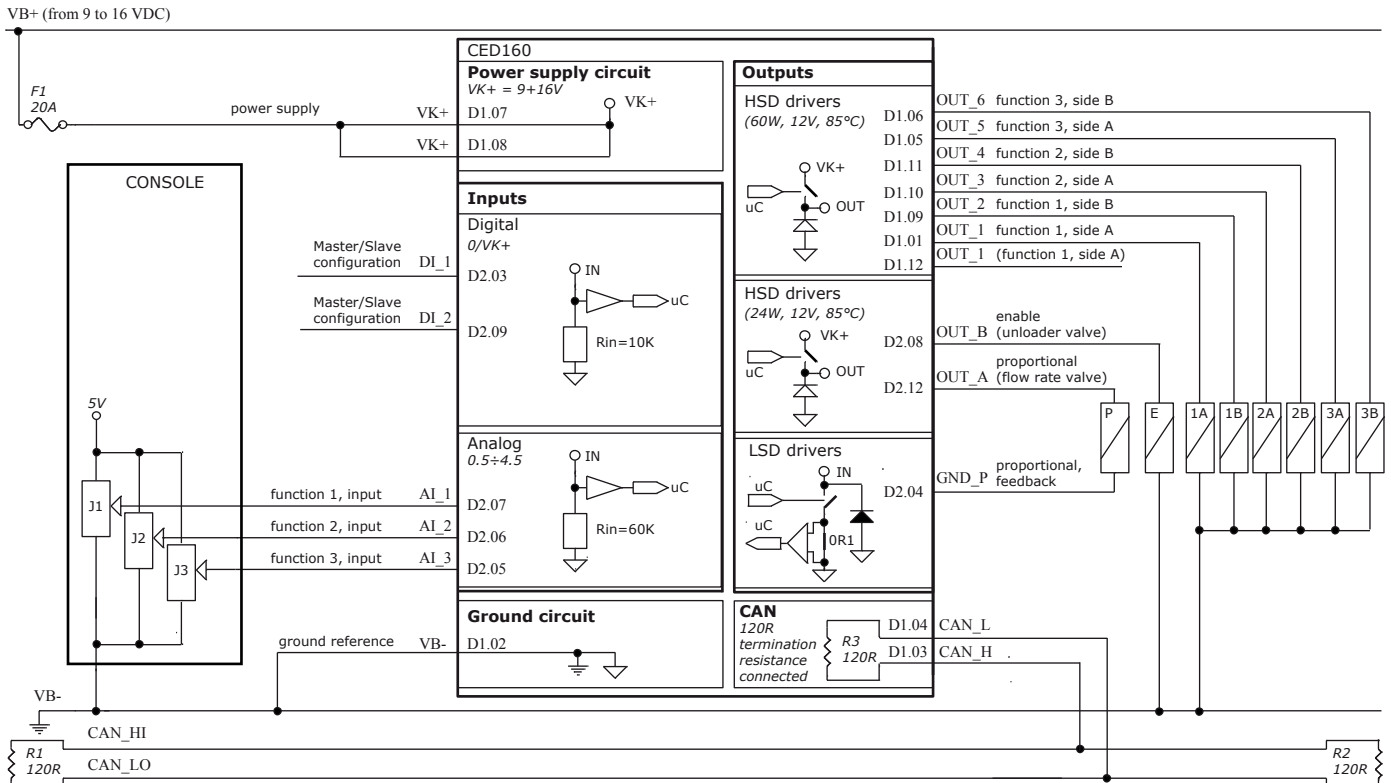
### System diagram

#### Specific circuit configuration

The CED160 control unit is available in dedicated configuration for the SDE series with direct acting solenoid control.

It is possible to configure the system with a maximum of 1 Master controller (1 proportional, 1 unloader and 6 on/off coils) and 3 Slave controllers (6 on/off coils for every controller).

For information, please contact our Sales Department.



#### CED configuration

DI_1	DI_2	CED
GND	GND	CEDA (Master)
VB+	GND	CEDB (Slave1)
GND	VB+	CEDC (Slave2)
VB+	VB+	CEDD (Slave3)