# 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

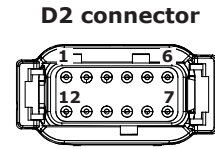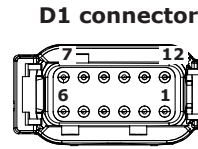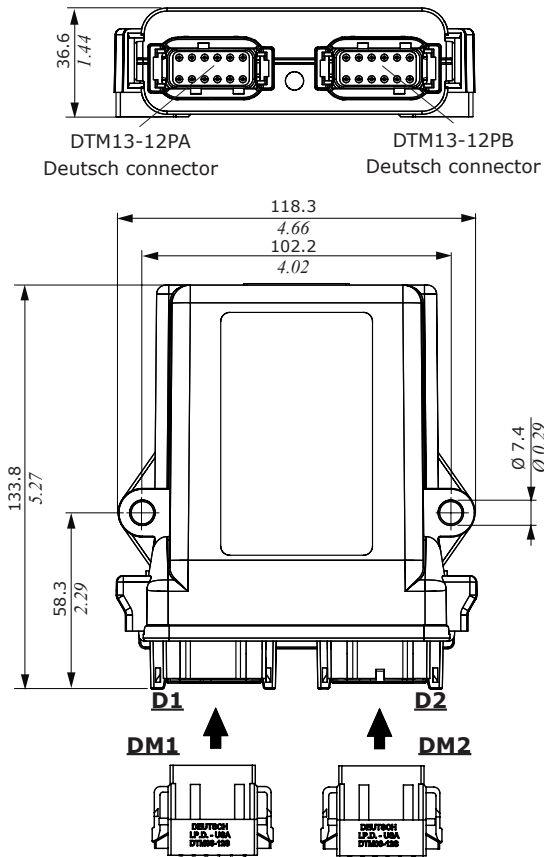| Working conditions | |
| --- | --- |
| **General features** | **CED160** |
| Supply voltage | from 9 to 16 V |
| Current consumption | 50 mA (no-load current) 15A (max. supply) |
| Max. current output | 7.5 A |
| Interface | CAN 2.0 A - B, 125-250 Kbit/sec |
| EMC compatibility | 150 V/m - ISO13766, ISO14982 |
| Environmental compatibility | IEC60068-2-6/27/29 |
| Working temperature | from -40 to +85°C (*from -40°F to 185°F*) |
| Protection degree | IP67 with mating connector attached |
| Weight | 0.3 Kg *(0.66 lb)* |
| **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

## CED160 electronic control unit

### Dimensions and pin-out

DTM13-12PA
Deutsch connector

DTM13-12PB
Deutsch connector

**D1 connector**

**D2 connector**

| 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.
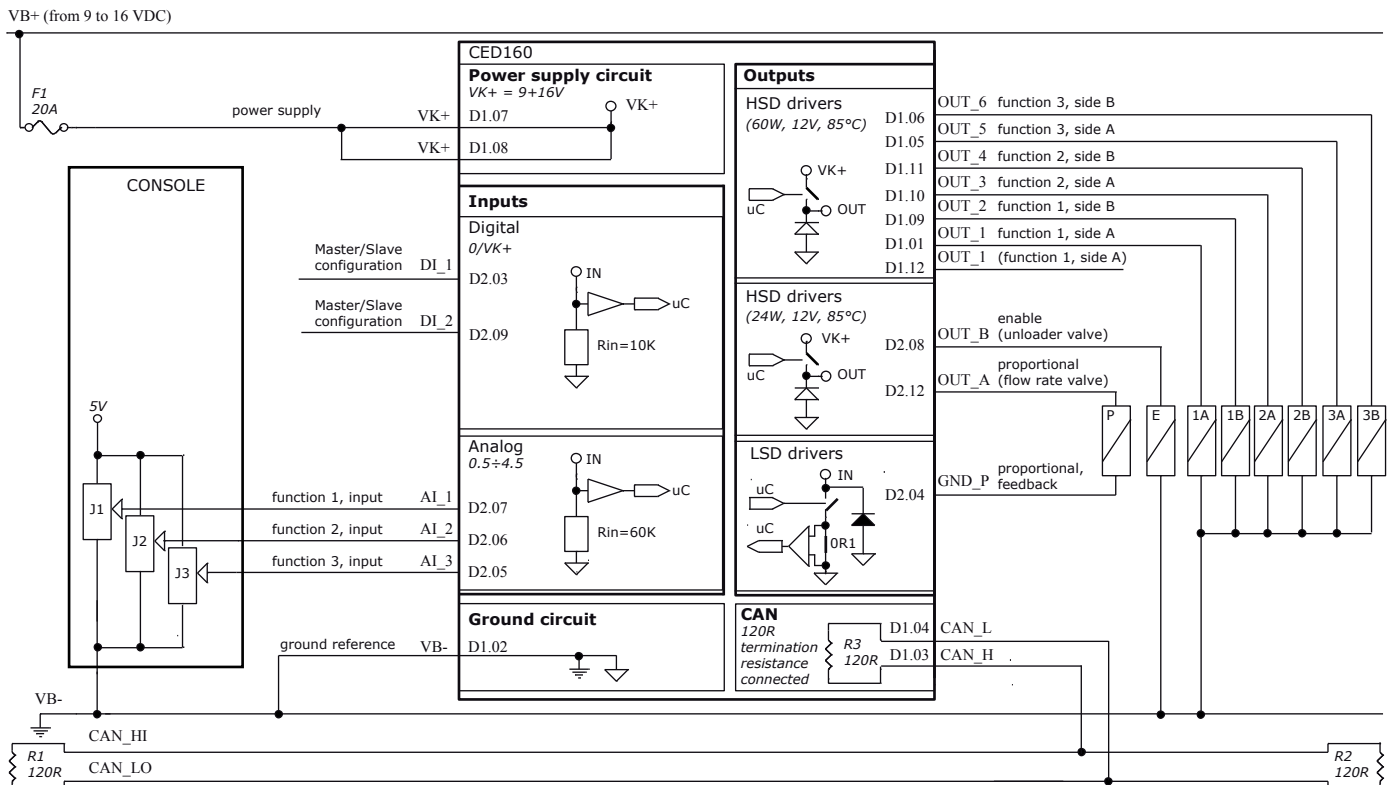


| CED configuration | | |
|---|---|---|
| **DI_1** | **DI_2** | **CED** |
| GND | GND | CEDA (Master) |
| VB+ | GND | CEDB (Slave1) |
| GND | VB+ | CEDC (Slave2) |
| VB+ | VB+ | CEDD (Slave3) |