

CDB2020 Module

CANBUS MODULE WITH 20 DIGITAL OPTOCOUPLED INPUTS AND 20 OPTOCOUPLED DIGITAL POWER OUTPUTS

CDB2020 is an open frame CanBus module with CanOpen protocol mountable on a standard DIN rail, which provides 20 digital optocoupled inputs, and 20 optocoupled digital power outputs.

Inputs can be buttons, limit switches, proximity sensors, photocells, etc.

Output channels can directly drive contactors coils, and hydraulic or pneumatic valves solenoids.

It is possible to drive all 20 outputs together, with a maximum current of 2A each.

5 groups of spring-cage connectors are provided:

1. 2 connectors for module 24 V power supply
2. 2 connectors for channels 24 V power supply (isolated from the module)
3. 60 connectors for input channels with 3 connections for each input:
 - left 24 V
 - middle input
 - right 0 V
4. 50 connectors distributed on 2 plans, grouped in 2 independent subgroups of 10 connectors. Each subgroup has 5 couples of connectors: 4 for channels output and 1 (centered) for the power source. Each subgroup is galvanically independent from the others.
5. 6 connectors for CanBus line (CANH, CANL e GND_CAN input, CANH, CANL e GND_CAN output)

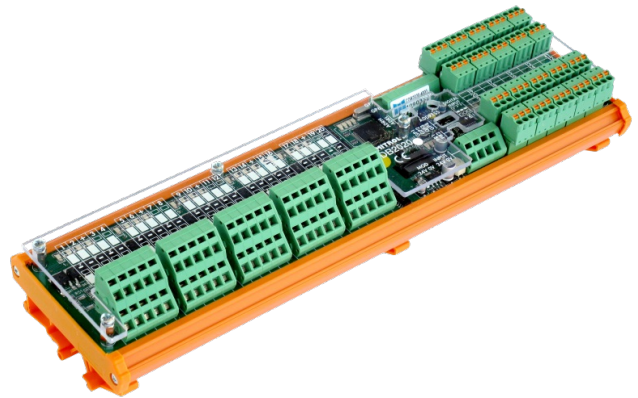
2-wires input devices, like limit switches, can be directly connected between the middle and the left point, without any extra connector.

3-wires input devices, like photoelectric cells and proximity sensors, can be connected directly to the 3 points respecting their own meaning, without any extra connector.

Input channels power supply is protected by an electronic fuse against accidental shortcircuits.

Being available 2 connectors for every output device, these can be directly connected, without any extra connector.

The module provides an internal reading of outputs for diagnostic purposes.



Technical specifications

Dimensions (H x W x D)	88x305x65 mm
Mounting	Standard DIN rail
Power supply	24 V (18 - 36 V)
Module power consumption	100 mA
Digital input channels	20
Digital output channels	20
Optocoupling	Standard on digital channels
Digital channels power supply	24 V (18 - 36 V)
Digital input channel current	5 mA
Digital ON level	$V_{inp} > 13 \text{ V}$
Digital OFF level	$V_{inp} < 5 \text{ V}$
Digital output channels power supply	24 V (18 - 36 V)
Nominal digital output channel current	2 A
Maximum total output current for digital channels	40 A (together)
Protection	Short-circuit Overload (over 2.5 A)
CanBus Baud Rate	125 kbps / 250 kbps / 500 kbps / 1 Mbps
Marking	CE
Operating temperature	0 - 55 °C
Storage temperature	-20 - 85 °C
Storage humidity	Max 85% non-condensing
CanOpen Standards	DS301 - DS401