

**CB01R****HERMETIC I/O CAN BUS MODULE**

The CB01R is an ECU (Electronic Control Unit) which can handle up to 16 sources which can be software configured as inputs or outputs.

The small size and the easy installation, makes the controller suitable for low cost application and it can be implemented in a CAN-BUS network as SLAVE.

The polyurethane resin case makes the controllers belonging to this family suitable for use on machines that operate in harsh work environments.

**TECHNICAL FEATURES**

|                                                 |             |                                                                                                                                                                                                          |                                                |
|-------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| MASTER CODE                                     |             | CB01R                                                                                                                                                                                                    |                                                |
| POWER SUPPLY                                    |             | 9-36 VDC / CURRENT CONSUMPTION 20 mA AT 24 VDC (STAND BY MODE)                                                                                                                                           |                                                |
| DIGITAL INPUT<br>(ON/OFF)<br>OUTPUT<br>(ON/OFF) | TOTAL<br>16 | 16 OPTO ISOLATED INPUT (HIGH SIDE)<br><br>16 ON/OFF OUTPUT<br>(MAX TOTAL ABSORPTION 500mA, HIGH SIDE )                                                                                                   | INPUT & OUTPUT PIN CONFIGURABLE<br>BY SOFTWARE |
| CAN BUS                                         | 1 PORT      | 2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S<br>(CAN TERMINATION CONFIGURABLE BY SOFTWARE)                                                                                                  |                                                |
| CAN BUS PROTOCOLS                               |             | CAN OPEN (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE)<br>ON REQUEST: SAE J1939 - ISO 11783 (ISO BUS) - FMS                                                                     |                                                |
| CONNECTIONS PORT                                | 3 or 1      | N.2 8X1 PUR CABLE – CONNECTOR: (SEE THE TABLE A «CONNECTORS»)<br>N.1 4x0,75 PUR CABLE – CONNECTOR: (SEE THE TABLE A «CONNECTORS»)<br>OR N.1 25X0,50 NUMERATED PUR CABLE – (SEE THE TABLE B «CONNECTORS») |                                                |
| WORKING TEMPERATURE                             |             | -40°C +80°C                                                                                                                                                                                              |                                                |
| CASE                                            |             | ENCAPSULATED IN PUR RESIN - SELF-EXTINGUISHING UL94 (V0)                                                                                                                                                 |                                                |

**ELECTRONIC FEATURES**

|             |          |
|-------------|----------|
| SLAVE USAGE | EDS FILE |
| CYCLE TIME  | 100 ms   |



(25/06/2025) - 1



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#### ELECTRONIC FEATURES

**ELECTROMAGNETIC EMISSIONS** EN 61000-6-4// EN 55011 (RF RADIATE)

**ELECTROMAGNETIC IMMUNITY** EN 61000-6-2// EN 61000-4-2/3/4/6

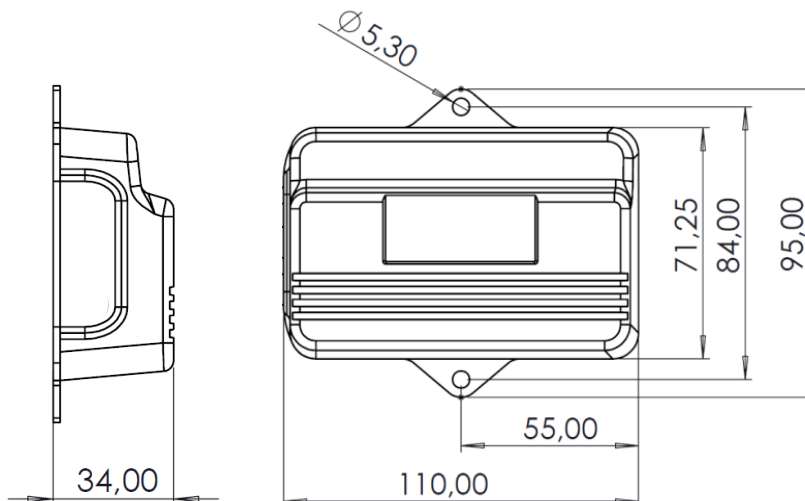
**IP** BOX IP68

**MTTFD** 62,88 YEARS  
CALCULATED ACCORDING TO THE IEC61709 (SIEMENS SN29500), WITH ENVIRONMENTAL FACTORS 3K7 (IEC60721)

**PERFORMANCE AND SAFETY INTEGRITY LEVEL** PLc – SIL1  
(SINGLE-CHANNEL INTERNAL SCHEME)

IN ACCORDANCE WITH THE EN509498 THE DEVICE MEETS THE TECHNICAL SPECIFIC REQUIREMENTS OF 2004-104 DIRECTIVE (AUTOMOTIVE).  
THE DEVICE IS EMC 2004/108 COMPLIANT.

#### SIZE (mm)





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FPM 4 POLES CONNECTOR

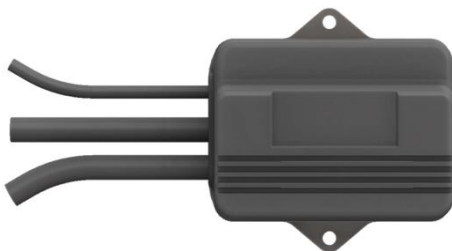
P

FPM 8 POLES CONNECTOR

Y

MPF 8 POLES CONNECTOR

X



CODE

SERIAL NUMBER

## A - CONNECTORS

RIF DESCRIPTION

A FASTON CONNECTOR  
SERIES 6,3



B METRIPACK



P

### POWER CABLE

CABLE PUR 4x0,75  
→ STANDARD CABLE  
LENGTH=25mm

X & Y

### I/O CABLE

CABLE PUR 8x1  
→ STANDARD CABLE  
LENGTH=21mm

| PIN | DESCRIPTION  | COLOR | PIN | DESCRIPTION | COLOR |
|-----|--------------|-------|-----|-------------|-------|
| 1   | POWER SUPPLY | BN    | 1   | IN/OUT 1    | BK    |
| 2   | GND          | BU    | 2   | IN/OUT 2    | GY    |
| 3   | CAN LINE L   | BK    | 3   | IN/OUT 3    | YE    |
| 4   | CAN LINE H   | WH    | 4   | IN/OUT 4    | OG    |
|     |              |       | 5   | IN/OUT 5    | VT    |
|     |              |       | 6   | IN/OUT 6    | TQ    |
|     |              |       | 7   | IN/OUT 7    | BN    |
|     |              |       | 8   | IN/OUT 8    | WH    |

MPF 20 POLES CONNECTOR



### ATTENTION!

TO USE CONNECTORS DIFFERENT FROM THE PROPOSED ONES, PLEASE CONTACT US;  
THE CONNECTOR COUPLED WITH THE ONE INCLUDED IN THE MODULE, HAS TO BE PURCHASED ASIDE.

## B - CONNECTORS

RIF DESCRIPTION

D MOLEX MINIFIT  
CONNECTOR 20 PINS  
CODE: 39-01-2060



Z FREE WIRES WITHOUT CONNECTOR

POWER CABLE – I/O CABLE : 25x0,50 NUMERATED PUR CABLE  
→ STANDARD CABLE LENGTH=25mm

| PIN | DESCRIPTION | PIN | DESCRIPTION  |
|-----|-------------|-----|--------------|
| 1   | IN/OUT 1    | 11  | IN/OUT 3     |
| 2   | IN/OUT 2    | 12  | IN/OUT 4     |
| 3   | IN/OUT 3    | 13  | IN/OUT 5     |
| 4   | IN/OUT 4    | 14  | IN/OUT 6     |
| 5   | IN/OUT 5    | 15  | IN/OUT 7     |
| 6   | IN/OUT 6    | 16  | IN/OUT 8     |
| 7   | IN/OUT 7    | 17  | POWER SUPPLY |
| 8   | IN/OUT 8    | 18  | GND          |
| 9   | IN/OUT 1    | 19  | CAN LINE L   |
| 10  | IN/OUT 2    | 20  | CAN LINE H   |



NOTE