



CabinetController for mobile machines.



ecomat[®]
mobile

**24 inputs digital / analogue
18 outputs digital / PWM /
high current**

- ▲ Analogue and digital I/Os with diagnostic function for mobile applications.
- ▲ Usable as a controller for cockpit or operating panels.
- ▲ 2 CAN interfaces with CANopen and SAE J1939 protocol.
- ▲ Freely programmable with CoDeSys 2.3 to IEC 61131.
- ▲ e1 type approval of the German Federal Office for Motor Traffic.



CabinetController for mobile machines

Large mobile machines often have cabins for the operators. There are many signals in the area around the driver's workplace, e.g. from switches, joysticks and signal lamps. To ensure low-cost connection of these signals to the process controller, they are collected at a central point, pre-processed and transferred via CANopen.

The CabinetController has been developed just for this application. Its flat design enables integration in dashboards and operating panels.

The CabinetController is also ideally suited for use in small compact machines. Here the controller is often directly installed in a control cabinet.



fluid sensors
and diagnostic
systems

position
sensors
and object
recognition

bus,
identification
and control systems



Functions and advantages

• Mechanical structure

The control electronics integrated in a compact plastic housing provide all the necessary connections for the inputs and outputs, communication and programming. The connectors for mobile use are locked and they are reverse-polarity protected.

The RGB status LED and the three coding switches for setting the node number and the baud rate are located behind a transparent service lid.

• The electronics

The core of the controller designed according to the applicable standards for electronics for mobile applications is a modern 40 MHz processor. Monitoring and protection functions enable safe operation even under extreme operating conditions.

• Configuration of the inputs and outputs

By means of the application software, the inputs and outputs can be configured to adapt to the respective application.

Depending on the type of input, a configuration as digital, frequency or analogue input with diagnostic function is possible. In addition, the evaluation of positive and negative digital input signals is supported by some of the inputs. The analogue inputs enable current or voltage measurement and use as digital input.

The outputs can be operated as digital or PWM output. In addition, the control electronics provide high-current digital outputs with diagnostic capability and overload protection.

• Programmable to IEC 61131-3 with CoDeSys

Programming with the standardised IEC 61131-3 languages enables the user to create clear and easy application software. In addition, libraries are available for special functions of the controller.

• CANopen interface with CANopen protocol

The CabinetController is equipped with two CAN interfaces to ISO 11898. The data is exchanged with all connected bus participants via these interfaces.

The CANopen protocol enables a quick and flexible connection to the bus. For the connection by means of the J1939 protocol the data is read directly from the power trains and the motor.

Applications

- Refuse trucks
- Compact construction machines
- Municipal vehicles

Products

Description	Order no.
CabinetController	CR0303
Plug set	EC2090
Programming cable, 2 m	EC2091

Technical data

CabinetController	
Housing	plastic housing
Device connection	AMP Junior Timer 6, 10, 18 poles
Protection rating	IP 20
Operating voltage [V DC]	10...32
Power consumption [VA]	approx. 2.4
Temperature range [°C]	-40...85
Indications	RGB LED
Controller	C167CS, 40 Mhz
Number of inputs	digital plus 8 digital plus / minus 4 digital plus / frequency 4 analogue 8
Number of outputs	digital plus 4 A 4 digital plus / PWM 4 A 8 high current 10 A 6
Voltage output 5 / 10 V DC, 400 mA	1
Interfaces	2 x CAN (ISO 11898 V 2.0B) 1 x RS232
Supported CAN protocols	CANopen (CiA DS 301 V4) SAE J 1939
Program memory [Kbytes]	448
SRAM data memory [Kbytes]	80
Data memory Flash [Kbytes]	32
Non-volatile data memory [Kbytes]	3
Data storage Auto save [bytes]	256
Programming software	CoDeSys V2.3
Standards and tests (Extract)	CE, e1 (RL 06/28/EC), approval for railway applications EN 50155

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