



Systems for mobile machines

ecomatController starter kit: the easy way to start programming



Controllers



Including ecomatController
CR711S

Pre-wired simulator box with
switches and potentiometers to
simulate binary and analogue
signals

Includes all necessary connection
and interface cables

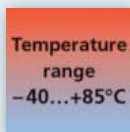
Programming software and
documentation for CODESYS



Ethernet



IP 65
IP 67



Temperature
range
-40...+85°C



SIL 2
PLd



E1

The quick way to start programming mobile machines

The new generation of ecomatControllers is the modern controller platform for vehicles and machine tools of the future.

This pre-wired starter kit includes the compact ecomatController CR711S with all necessary cables to supply the controller and to wire the interfaces for data exchange via CAN and Ethernet as well as the inputs and outputs. A simulator box offers switches, potentiometers and signal displays to simulate switching states and analogue input signals.

The integrated CODESYS software package (version 3.5) makes it easy to get familiar with the controller and to create an application program.



Powerful electronics

The heart of the starter kit is the ecomatController CR711S that is designed according to all applicable standards for mobile electronics and equipped with a state-of-the-art multi-core 32 bit processor with a clock frequency of 300 MHz. It offers all functions to create application programs and get familiar with the integrated hardware functions. RGB status LEDs indicate the most important system messages.

If required, the internal controllers that can be programmed separately (1 x standard, 1 x safety) will give you your first experiences with the programming of safety controllers for applications up to EN 13849 PL d and EN 62061 SIL cl2.

Interfaces with extended functionality

Via the integrated M12 sockets, two CAN interfaces are available in addition to an RS232 and the Ethernet interface with integrated switch. All CAN interfaces support the essential bus protocols CANopen, CANopen Safety and J1939.

Configurable inputs and outputs

Each simulator box has 6 pre-wired inputs and outputs. They can be configured as digital, frequency or analogue inputs with diagnostic function or as inputs for resistance measurement.

The outputs can be configured as diagnostic digital or PWM outputs. All inputs and outputs can also be configured as fail-safe channels, if required.

Special sensors and actuators can be connected in addition via wirable flat-pin connectors.

Programmable according to IEC 61131-3 with CODESYS

Programming is done by means of the standardised IEC 61131-3 languages. Program examples and libraries are available to get familiar with the software.

Products

Description	Order no.
Starter kit (set)	
ecomatController starter kit	EC2121
Accessories (to be ordered separately)	
Plug-in power supply with interchangeable adapter, 230 V/24 V (suitable socket not included)	E80121

More information

Items supplied

- ecomatController CR711S
- I/O simulator box incl. connection cable, pre-wired with:
 - 1 x 81-pole AMP connector, lock function and reverse-polarity protection
 - 1 x 2-pole connector (voltage supply)
 - 2 x 5-pole socket, M12 (CAN bus 1 and 2)
 - 1x 8-pole flat-pin connector (2x I, 2x O)
 - 1x Ethernet cable, 2 m, RJ45 / M12
 - USB memory stick with software and documentation

I/O simulator box

- 6 signalling LEDs, red {to simulate the outputs
- 6 potentiometers, 10 kΩ linear to simulate an analogue input
- 6 miniature toggle switches to simulate the digital inputs (on/off toggle/push up)

Supply voltage

- 24 V DC, < 550 mA (without external load)

System requirements

- Windows 7 (Service Pack 1 or higher) / 10 (32/64 bits), suitable PC hardware for the corresponding Windows platform