Systems for mobile machines



Looking for a bigger size? ecomat*mobile* BasicDisplay XL





Visualisation for mobile machines – easy and cost-optimised

- Easy installation thanks to a coordinated mechanical concept
- Indication of system messages and visualisation of machine functions
- High-performance CAN interface for various communication tasks
- Programmable to IEC 61131-3 with CODESYS
- E1 type approval of the Kraftfahrtbundesamt (German Federal Motor Transport Authority)



ecomatmobile Basic

In many small and compact mobile applications, the requirements on control tasks are increasing. The costoptimised and modular mini controller ecomat*mobile* solves these tasks.

The BasicDisplay XL complements the existing components BasicRelay, BasicController and BasicDisplay.

Thanks to its electrical and mechanical features it can optimally be integrated in the existing ecomat*mobile* Basic family.

Free programming and the easy set-up of the visualisation screens with CODESYS to IEC 61131-3 ensure independent operation in different applications.





Functions and advantages

The high-resolution colour display replaces conventional analogue displays and, in part, the rudimentary operating elements of machines.

High-resolution display

Protected by a continuous membrane, the modern display, which can even be read in sunlight, provides a resolution of 480 x 272 pixels with an aspect ratio of 16:9. Graphics can be shown with a colour depth of up to 256 colours.

Mechanical design

The BasicDisplay XL has a sealed plastic housing with protection rating IP 67. The integrated M12 connector provides all important connections for supply and communication. The display can be mounted directly on the operator panel using a centralised fixing nut or it can be snapped into the mounting support.

Powerful electronics

The integrated 32-bit processor and the electronics tailored to the applications are optimally adapted to the application area. A status LED indicates the current operating status of the display.

Thanks to the integrated watchdog, stand-alone operation of the BasicDisplay XL is possible.

Programming according to IEC 61131-3

The CODESYS software enables clear and easy creation of the application software for the user. Function libraries are available for the special functions of the BasicDisplay XL. The graphic elements are created and animated via the integrated visualisation.

Communication interfaces

The BasicDisplay XL is fitted with a CAN interface to ISO 11898. These interfaces are for example used to exchange data between the connected controller, the decentralised input/output modules or the engine controller.

To perform these tasks the interface supports the CANopen and the J1939 protocol. With the master functionality of the CANopen protocol, networks can be built via decentralised input/output modules.

Applications:

Mobile construction equipment and building material machines, compact municipal vehicles, machines and equipment for market gardening and landscape gardening.

The products

Description	Order no.
BasicDisplay XL, 4.3", 480 x 272 pixels	CR0452
Mounting plate for panel mounting BasicDisplay XL	EC0404
Mounting support for surface mounting (RAMmount)	EC0406
Connection cable BasicDisplay XL, 5 m – BasicController with CAN terminating resistors	EC0454
Connection cables BasicDisplay XL, 5 m – 2 BasicControllers, 50 cm with CAN terminating resistors	EC0455
Programming software CODESYS, German version	CP9006
Programming software CODESYS, English version	CP9008
CAN programming interface CANfox	EC2112
Adapter set CAN/RS232 for CANfox	EC2113

Technical data

BasicDisplay XL CR0452			
lousing Plastic with M52 screw connection		Plastic with M52 screw connection	
Device connection	e connection M12 connector		
Protection	Front Back	IP 67 IP 65	
Operating voltage	[V DC]	832	
Current consumption	[mA]	≤ 100	
Temperature range	Operation [°C] Storage [°C]	-2065 -3080	
4.3" TFT LCD display		480 x 272 256 colours	
Processor PowerPC 50 MHz			
Indication		LED (red/green)	
Data memory SRAM	[kB]	592	
Program / data memory	Flash [kB]	1536	
Data memory (retain)	[kB]	1	
Function keys with softkey function, backlit		6	
Navigation key with cursor function, backlit		1	
Interfaces		1 x CAN	
Supported CAN protocols		CANopen (DS 301 V4.1) SAE J 1939	
Programming software		CODESYS V2.3	
Standards and tests (extract)		CE, E1 (UN-ECE R10)	
4.3" TFT LCD display Processor Indication Data memory SRAM [kB] Program / data memory Flash [kB] Data memory (retain) [kB] Data memory (retain) [kB] Function keys with softkey function, backlit Navigation key with cursor function, backlit Interfaces Supported CAN protocols Programming software Standards and tests		480 x 272 256 colours PowerPC 50 MHz LED (red/green) 592 1536 1 1 6 1 1 6 1 1 CANopen (DS 301 V4.1) SAE J 1939 CODESYS V2.3 CE,	