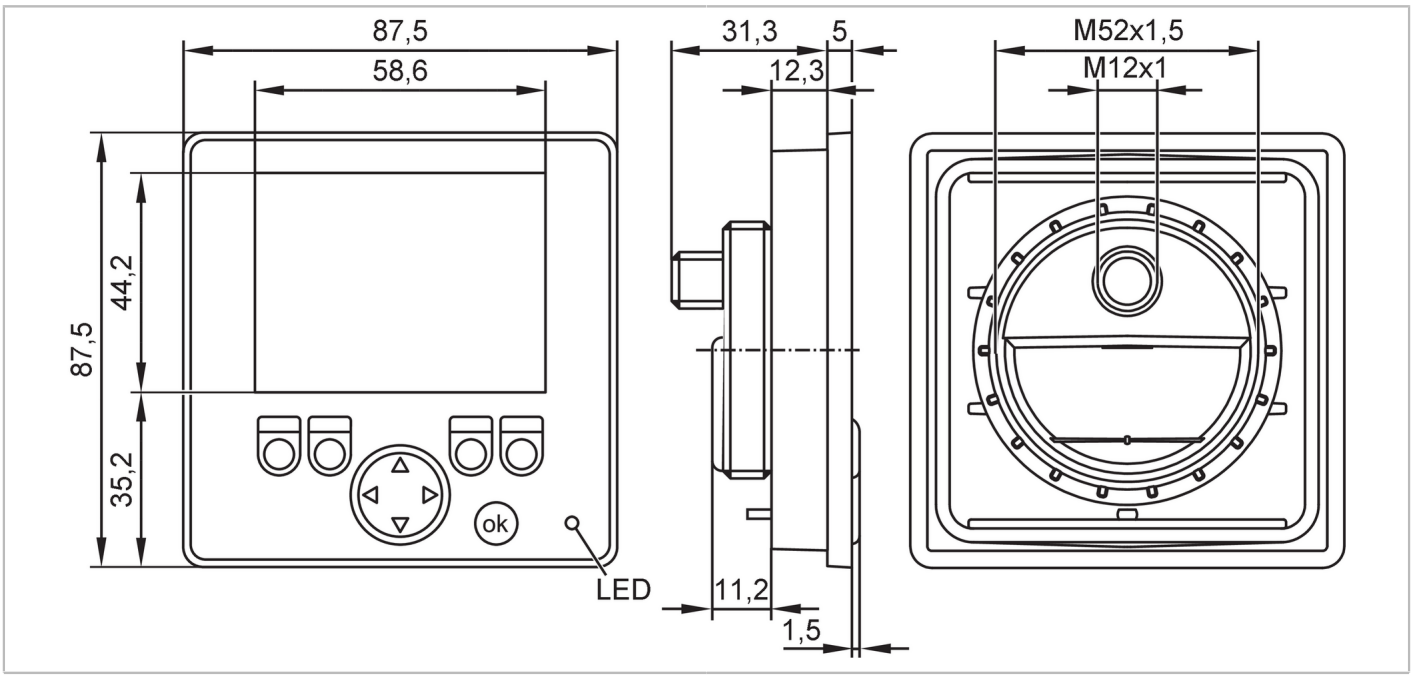
CR0451

Programmable graphic display for controlling mobile machines

R360/BasicDisplay



Product characteristics			
Communication interface		CAN	
Operating elements		5	freely programmable backlit function keys
		1	navigation key with pushbutton
Display type		colour display	
Electrical data			
Operating voltage	[V]	8...32 DC; (to SELV/PELV ; For information on undervoltage limits, please refer to the operating instructions.)	
Nominal voltage DC	[V]	12 / 24	
Current consumption	[mA]	70; (24 V DC; background illumination: 100 %)	
Power consumption	[W]	1.68	
Overvoltage protection		yes; (36 V: t ≤ 10 s)	
Software / programming			
Parameter setting options		CODESYS 2.3	
PLC function to IEC 61131-3		yes	
Interfaces			
Communication interface		CAN	
Number of CAN interfaces		1	
Transmission rate		20 kBit/s... 1 MBit/s	
Protocol		CANopen; SAE J1939; free protocol	
Profile		CiA DS 301 Version 4; CiA DS 401 Version 1.4	
Interface		CAN Interface 2.0 A/B ISO 11898	
Factory settings		Transmission rate: 250 kBits/s	
Operating conditions			
Ambient temperature	[°C]	-20...70	

CR0451

Programmable graphic display for controlling mobile machines

R360/BasicDisplay

Storage temperature	[°C]	-30...80	
Max. relative air humidity	[%]	90; (non condensing)	
Max. height above sea level	[m]	2000	
Protection		IP 65; (on the front; when mounted: IP 67)	
Pollution degree		2; (before installation and when the device is replaced)	
Tests / approvals			
EMC		UN/ECE-R10 noise emission and noise immunity:	100 V/m
		DIN EN 61000-6-2 ESD	
		DIN EN 61000-6-4 Burst	
		EN 61010-1	
		ISO 7637-2 pulse 1	severity level 4 / function state C (24 V)
		ISO 7637-2 pulse 2a	severity level 4 / function state A (24 V)
		ISO 7637-2 pulse 2b	severity level 4 / function state C (24 V)
		ISO 7637-2 pulse 3a	severity level 4 / function state A (24 V)
		ISO 7637-2 pulse 3b	severity level 4 / function state A (24 V)
		ISO 7637-2 pulse 4	severity level 4 / function state A (24 V)
		ISO 7637-2 pulse 5	severity level 3 / function state C (24 V)
		ISO 7637-2 pulse 4	severity level 4 / function state A (12 V)
Continuous shock resistance		ISO 16750-3	30 g 6 ms / 24000 shocks
Vibration resistance		ISO 16750-3 Test VII	random, mounting place car body
		EN 60068-2-6 sine	10...500 Hz / 10 cycles/axis, sine
Climatic tests		EN 60068-2-30 damp heat: cyclical	55 °C upper temperature limit / 6 cycles
		EN 60068-2-78 damp heat: constant	40 °C 93 % rH / test period 21 days
Salt spray test		EN 60068-2-52 Salt spray	test method 3 / motor vehicle
MTTF	[years]	232	
Railway applications		DIN EN 50155 Pkt 13.3	
		EN 50121-3-2	
		EN 55016	
Mechanical data			
Weight	[g]	156	
Housing		rectangular	
Type of mounting		panel / surface; (panel cut-out (panel): 81,5 x 81,5 mm; panel cut-out (surface): 53 x 53 mm)	
Dimensions	[mm]	87.5 x 87.5 x 37.8	
Materials		housing: plastics black; Display: PET; pushbuttons: silicone	
Information on service life		pushbuttons:	≥ 750.000 activations
		navigation key with pushbutton:	≥ 750.000 activations
		Display LED lifetime:	≥ 50.000 h (at 25 °C)
Displays / operating elements			
Display		status LED	1 LED, red/green
Operating elements		5	freely programmable backlit function keys
		1	navigation key with pushbutton
Display resolution		320 x 240	
Display type		colour display	
Display size		2.8"	
Aspect ratio		4:3	

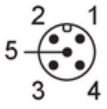
CR0451

Programmable graphic display for controlling mobile machines

R360/BasicDisplay

Display background illumination		LED
Colour depth		8 Bit
Brightness	[cd/m²]	< 300; (Display; adjustable: 0...100 %; In steps of: 1 %; Operating elements; $global)
Contrast ratio		500:1
Hardware		
Processor		Freescale PowerPC 5517E; 50 MHz
RAM		592 kByte RAM
Mass storage		1536 kByte Flash
Non-volatile memory		1 kByte
Remarks		
Remarks		for further information please see the operating instructions
Pack quantity		1 pcs.
Electrical connection - CAN		

Connector: 1 x M12; coding: A; Contacts: 5



1: n.c.
2: 8...32 V DC
3: GND
4: CAN_H
5: CAN_L