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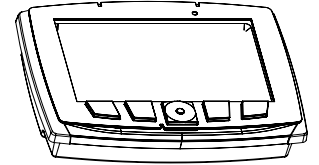
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Mobile electronics display CL-711

- Digital mobile electronics display CL-711
- 7" colour display
- Robust construction with plug-in connection for mobile applications
- Protection class IP67
- Multi-functional pin assignment, 10 I/Os
- CAN connection
- Freely programmable



DESCRIPTION

Microcontroller based control with display and operating buttons including multifunctional inputs/outputs. Delivered in a robust plastic housing, it is designed for the hard use in working devices and is perfectly suitable for the communication between the machine and the user.

FUNCTION

The control can be used and programmed as a stand alone unit, or as part of a distributed, decentralised system architecture. The functions on the display and the buttons are simply and individually generated with a programming tool. The additional inputs and outputs enable reading and controlling sensors and actuators of all kinds.

APPLICATION

This mobile electronics is used mainly in the mobile field because of the compact construction, protection class IP67 as well as the extensive operating temperature range and the selected plug connection. Customer-specific requirements can easily be implemented.

CONTENT

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TYPE CODE

CL-711-101-10-WAG-00	Master I/O Display
CL-711-101-20-WAG-00	Client I/O Display

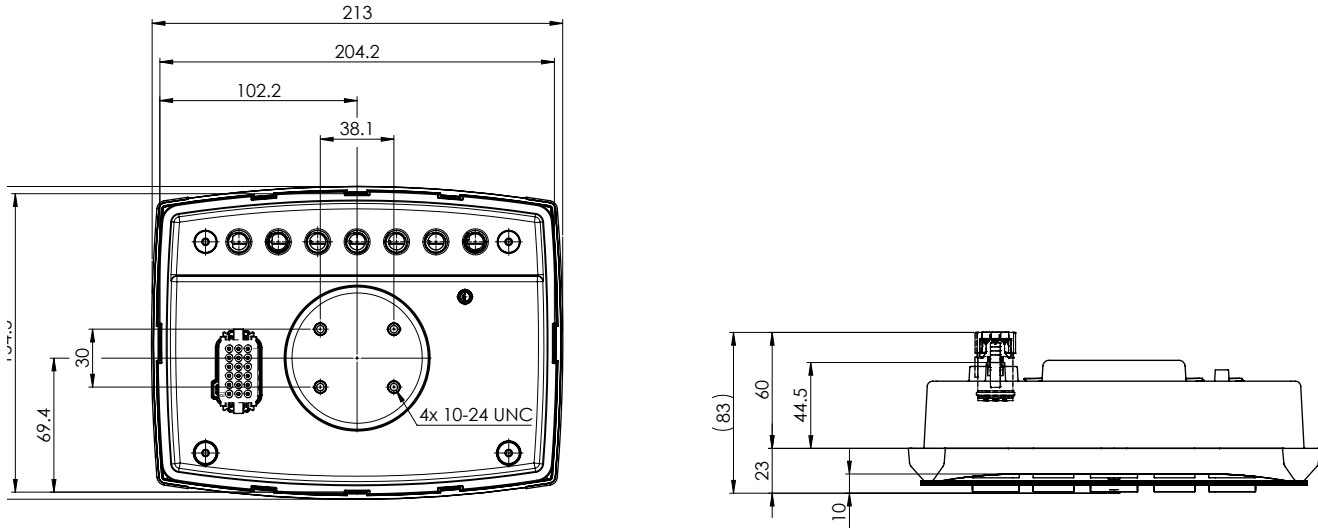
GENERAL SPECIFICATIONS

Execution	Plastic molded housing	Display	Diagonal 7" / 178 mm Readable also in direct sunlight TFT LCD 800 x 480 pixel Real time clock Low power sleep mode with wake-up function
Dimensions	213 x 162 x 67.5 mm (see Dimensions)		
Mounting	Front panel assembly with separate mounting bracket		
Weight	1000 g		
Device receptacle	Deutsch DT, 18-pole pin header	Video inputs	Device receptacle male, M12, 4-pole, B coded Mating connector Cable plug (female), M12, 4-pole, B coded
Mating connector	Deutsch DT16-18SA-K004		
USB connector			
Device receptacle	male, M12, 4-pole		
Mating connector	Cable plug (female), M12, 4-pole		
Working temperature	-40...+70°C	Note	The mating connector and mounting bracket are not part of the delivery

ELECTRICAL SPECIFICATIONS

Protection Class	IP 67	Digital Outputs	
Supply Voltage	8...32 VDC	Number of outputs	up to 4
No-load current	440 mA at 13.8 V, 252 mA at 28 V	Protection	Short to GND Short to Battery Overcurrent
Analogue inputs		Pull-up/down	560 Ohm / 1.4 kOhm for diagnostics
Number of inputs	up to 5	DOUT Digital Outputs	
Input voltage range	0...5.51 V	Maximum current	3.0 A (individual) 8.0 A (grouped for pin 1-4) 2.5 A (grouped)
Input resistance	57 kOhm	PWM Pulse Width Modulation Outputs	
Resolution	12 bit	Maximum current	3.0 A (individual) 8.0 A (grouped for pin 1-4) 2.0 A (grouped)
Digital inputs		ECC Estimated Current Feedback, 0.2-4.1 A / 12 bit	
Number of inputs	up to 10	Accuracy ECC	+/- 50mA at 2A
STB Switch to Battery input		5 V Sensor Supply	
Input resistance	1.4 kOhm	Stabilised output voltage	5 V +/- 5 %
Switching threshold	positive >5.9 V, negative <3.2 V	Max. load	250 mA
STG Switch To Ground input		CAN	2 CAN interfaces 40 kbit/s to 500 kbit/s
Pull-up resistor	560 Ohm to internal 5 V	Software	
Switching threshold	positive >3.25 V, negative <1.75 V	Beside the programming tools, a software for diagnostics and troubleshooting for the commissioning of the system is available.	
FREQ Frequency input			
Switching threshold	positive >3.5 V, negative <1.0 V		
Pull-up resistor	4.7 kOhm to internal 5 V		
Resolution	<5 Hz		
Frequency range	max. 10 kHz (open drain, sinking sensor)		
RTD Resistance to digital			
Pull-up resistor	499 Ohm (Input#1) 2000 Ohm (Input#2)		
Accuracy	+/- 1 % and +/- 5 Ohm (Input#1) +/- 1 % and +/- 19.5 Ohm (Input#2)		

DIMENSIONS



Fixing: Threaded socket UNC 10-24, max. depth 11 mm

ACCESSORIES

Mating connector	DT16-18SA-K004
Crimp socket AWG 16-20, 0.5-1.5 mm ²	Deutsch 0462-201-16141 (max. 18 pcs)
or crimp socket AWG 14, max. 2 mm ²	Deutsch 0462-209-16141 (max. 18 pcs)
Sealing plug	Deutsch 114017 (max. 18 pcs)
or snapping sealing plug	Deutsch 0413-217-1605
USB connector	
Mating connector	Cable plug (female), M12, 4-pole
Video connector	
Mating connector	Cable plug (female), M12, 4-pole, B coded
Orchestra Software Suite	Project management software
Art. no. 740.1000	Ladder-Logic and C-Code
	Display GUI Programming incl. Conductor Software
Conductor Software	Standalone diagnostics and set-up tool
Art. no. 740.1001	
NXP (Freescale) CodeWarrior	C-Code Programming tool/Compiler
3rd party tool	

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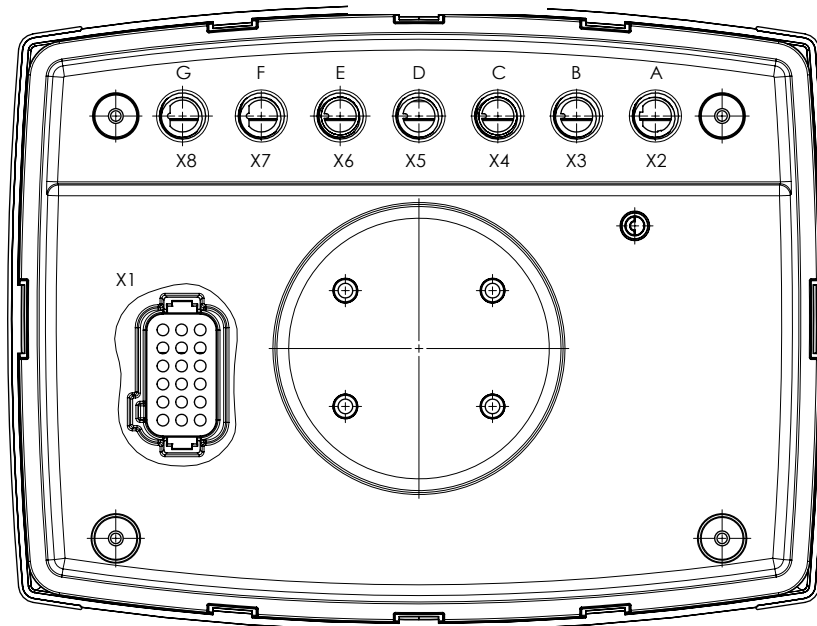
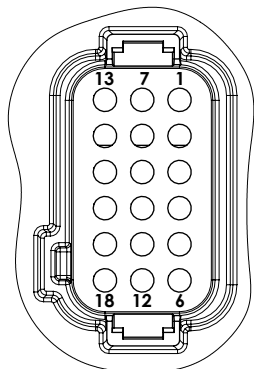
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X1, 18-pole, connector A-coded

Pin	Function
1	Output #1 DOUT(+) / PWM(+) / ECC/(+) / Input STB / STG
2	Output #2 DOUT(+) / PWM(+) / ECC/(+) / Input STB / STG
3	Output #3 DOUT(+) / PWM(+) / ECC/(+) / Input STB / STG
4	Output #4 DOUT(+) / PWM(+) / ECC/(+) / Input STB / STG
5	BAT(-) Module
6	Steady plus +Battery Module and Outputs
7	Input #9 Battery Voltage
8	CAN1-H
9	CAN1-L
10	Input #1 STB / STG / VTD(0-5.6V) / FREQ / PWM / Encoder(1A) / RTD(0-500Ohm)
11	Input #2 STB / STG / VTD(0-5.6V) / FREQ / PWM / Encoder(1B) / RTD(0-2kOhm)
12	Input #3 STB / STG / Wake-Up
13	Input #4 STB / STG / VTD(0-5.6V)
14	CAN2-L
15	CAN2-H
16	Input #5 STB / STG / VTD(0-5.6V) / FREQ / PWM / Encoder(2A)
17	Input #6 STB / STG / VTD(0-5.6V) / FREQ / PWM / Encoder(2B)
18	5VDC Sensor Supply Ground
19	5VDC Sensor Supply

DOUT = Digital output
 ECC = Estimated current feedback
 PWM = Pulse width modulation
 STB = Switch to battery input
 STG = Switch to ground input
 FREQ = Frequency input
 VTD = Voltage to digital (Analogeingang)
 RTD = Resistance to digital (Widerstandseingang)

X4 (C), USB Client, X6 (E) USB Host round 4-pole, M12 connector, A-coded for USB

Pin	Function
1	USB (Power)
2	USB (DP)
3	USB (DM)
4	USB (GND)

X7 (F), X8 (G) round 4-pole, M12 connector, B-coded for Video

Pin	Function
1	Ground
2	Ground
3	F: Video #1 / G: Video #3
4	F: Video #2 / G: Video #4