



The MVS.B6E is suitable for landscape/portrait, standalone or in-dash mounting. The adjustable backlight and the high resolution of the LCD display allows an optimal reading of texts and machine functions.

The Linux operating system allows to a stable and reliable use with a multi-platform application programming. The device provides several communication ports for serial line (RS232), CAN networks, ethernet and high speed USB port.



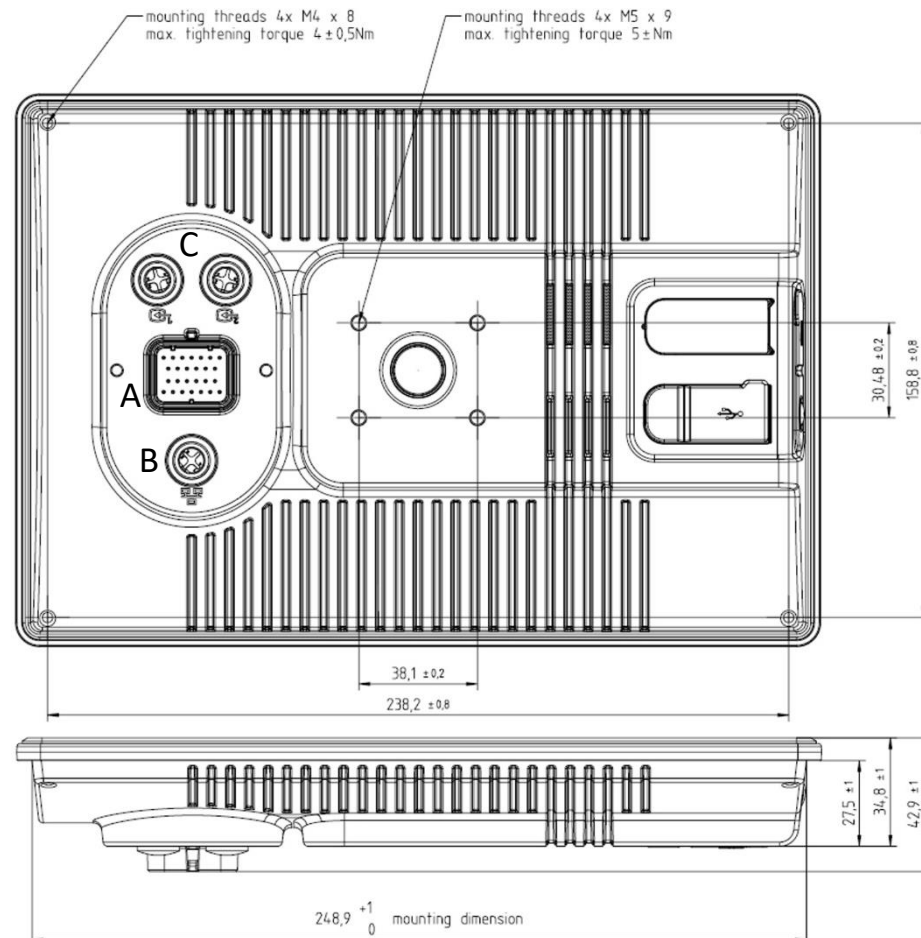
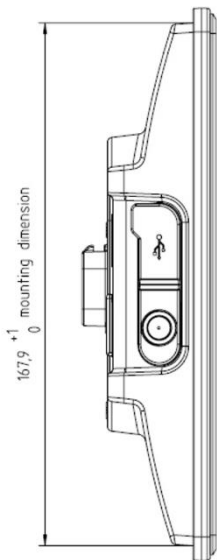
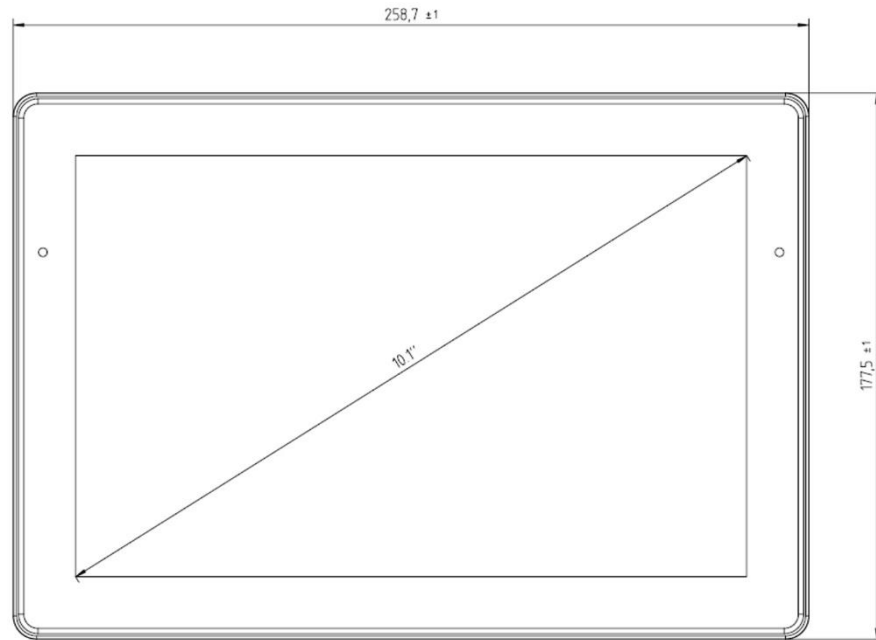
TECHNICAL FEATURES

MASTER CODE	MVS.B6EB10
POWER SUPPLY	8 ÷ 36 VDC with protections SYSTEM SUPPLIED THROUGH TERMINAL 30 (BATTERY +) AND 31 (BATTERY -) see the pinout
LED	No. 1 LIGHT SENSOR No. 1 MULTI-COLOR LED
CAN BUS	No. 4 PORTS: 2.0 A/B COMPLIANT - (11, 29 BIT) - ISO 11898 UP TO 1MBIT/S (default 250 Kbit/s)
SERIAL	No. 1 PORTS: RS232 (Type: EIA232 (only Rx/D, Tx/D, GND) - Speed: max. 115.200baud
RTC	Buffered by gold cap for 2 weeks. Deviation max. 1 s/day
COMMUNICATIONS	No. 2 USB HOST 2.0 (Side + Back connector A High speed. Guaranteed 900mA @ 5V) No. 1 ETHERNET: (10/100 Mbit/s Base T - OPTIONAL: Automotive Interface)
TOUCH	CAPACITIVE TOUCH
PUSH BUTTON	SIDE PUSHBUTTON FOR POWER ON/OFF
DISPLAY	LCD TYPE: TFT Color Graphic LCD with LED backlight RESOLUTION: 1280 x 800 px (WQVGA), 15:9 SIZE: 10,1", 259 mm (W) x 175 mm (H) LUMINANCE: typ. 1000 cd/m ² CONTRAST RATIO: typ. 800:1
SPEAKER	YES – 90dB 10 cm distance
AUDIO OUTPUT	N.1 (L, R, GND) AC97 COMPATIBLE (MAX POWER ~50mW)
WORKING TEMPERATURE	-30°C +75°C - Storage temperature: -40°C +80°C
CASE	ALUMINIUM DIE CAST, POWDER COATED FRONT-GLASS
VIDEO INPUT	No. 2 PORTS: 1 VSS - CAMERA SUPPLY: 12 VDC – MAX CURRENT 300 mA CAMERA CONTROL OUTPUT (OPEN DRAIN) FOR SPECIAL FUNCTIONALITY (MIRROR, SHUTTER, HEATING ETC.)





SIZE (mm)





ELECTRONIC FEATURES

OS	Linux Kernel 5.43.53 or higher
APPLICATION PROGRAMMING	OPUS Projektor // COESYS 3.x // C/C++ // ISO-HORIZON
CPU	Freescale I.MX6®, 800 MHz
MEMORY	Mass storage: 4 GByte (minus space for OS & application) RAM: 1 GB

STANDARDS

EU Directive 2014/30/EU (EMC)	EN 13766-1 (part 1); EN ISO 14982; EN 50498; EN 61000-6-2; EN 61000-6-4;
E1 – Type approval	EU Directive ECE R 10.4
IP GRADE	IP 66 according to ISO 20653: Road Vehicles – Degrees of protection (IP-Code) – Protection of electrical equipment against foreign objects, water and access

FEATURES

POWER SUPPLY	<ul style="list-style-type: none"> • TERMINAL 15 (IGNITION) TO BE USED TO SWITCH ON/OFF. • SHORT CIRCUIT PROTECTION. • OVER-VOLTAGE PROTECTION UP TO 48 V FOR MAX. 5 MIN. • INVERSE POLARITY PROTECTION UP TO -48 V DC FOR MAX. 5 MIN.
SILENT WAKE-INPUT	INPUT WHICH CAN BE USED FOR SILENT-WAKE-ON OF THE OPUS TO REDUCE VISIBLE BOOT-TIME ACTIVE ON POSITIVE EDGE
MECHANICAL RESISTANCE TESTS	VIBRATION: NOISE, SINUSOIDAL AND ENDURANCE TEST MECHANICAL SHOCK / DROP PACKAGE DROP
CLIMATE TESTS	SALT SPRAY CHEMICAL RESISTANCE DAMP HEAT STEADY / CYCLIC TEMPERATURE CYCLING / SHOCK UV RESISTANCE

CONNECTION

(A) MAIN: Tyco-AMP 1437288-6

(B) ETHERNET: M12 CONNECTOR, FEMALE, 4-POLE, D-CODED ACC. TO EN 61076-2-101

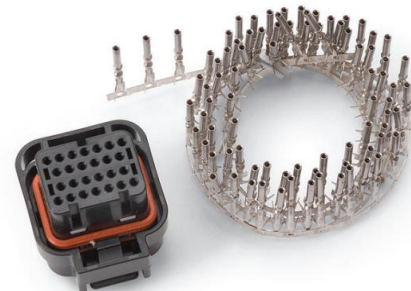
(C) VIDEO INPUT: M12 CONNECTOR, FEMALE, 5-POLE, B-CODED, ACC. TO EN 61076-2-101

MAIN (A) MATING CONNECTOR

Tyco-AMP 3-1437290-7

MATING CRIMP CONTACT (CUSTOMER):
Tyco-AMP 3-1447221-4

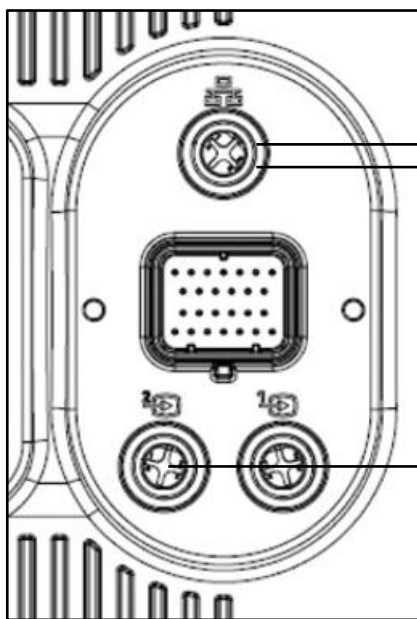
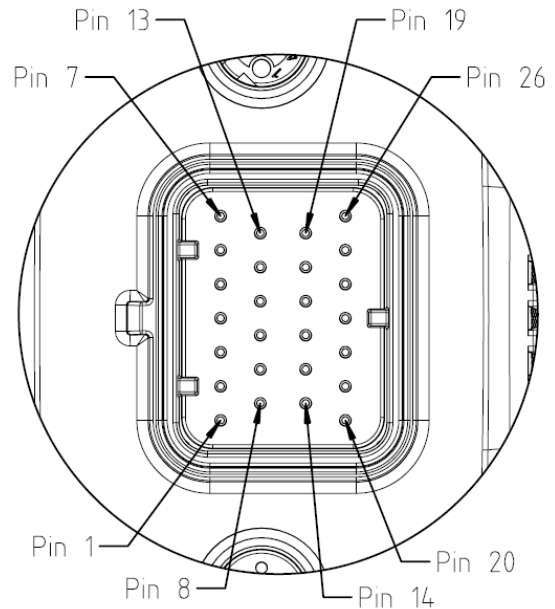
DUMMY PLUG (CUSTOMER):
Tyco AMP 4-1437284-3





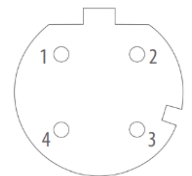
(A) MAIN CONNECTOR PINOUT

PIN	ASSIGNMENT	DESCRIPTION
1	VCC	SUPPLY VOLTAGE + ; TERMINAL 30
2	IGNITION INPUT	IGNITION INPUT; TERMINAL 15
3	GND	SUPPLY VOLTAGE - ; TERMINAL 31
4	WAKE	WAKE INPUT «DOORSWITCH»
5	AUDIO OUT LEFT	Audio line out, Stereo
6	AUDIO OUT RIGHT	Audio line out, Stereo
7	AUDIO OUT GND	Audio line out, GROUND
8	CAN 1 H	CAN 1 HIGH
9	CAN 1 L	CAN 1 LOW
10	CAN 2 H	CAN 2 HIGH
11	CAN 2 L	CAN 2 LOW
12	CAN 3 H	CAN 3 HIGH
13	CAN 3 L	CAN 3 LOW
14	CAN 4 H	CAN 4 HIGH
15	CAN 4 L	CAN 4 LOW
16	RS232 RxD	RS232 receive data
17	RS232 TxD	RS232 transmit data
18	RS232 GND	RS232 ground
23	ENA	Service enable



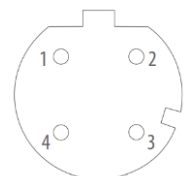
(B) ETHERNET CONNECTOR PINOUT

ETHERNET	
PIN	ASSIGNMENT
1	TD+
2	RD+
3	TD-
4	RD-



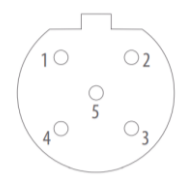
(B) ETHERNET CONNECTOR PINOUT

ETHERNET AUTOMOTIVE	
PIN	ASSIGNMENT
1	D+
2	-
3	D-
4	-



(C) VIDEO INPUT CONNECTOR PINOUT

PIN	ASSIGNMENT
1	VID SIG +
2	SWITCH
3	POWER 12V
4	POWER GND
5	VID SIG GND





ALMEC
MECHATRONICS

NOTE