EC-MMS-0713-H MACHINE MANAGEMENT SYSTEM

DESCRIPTION

MMS (Machine Management System) controller with built-in advanced driving and fault-detection features to be used as a stand-alone unit or in connection with other CANbus units (e.g. joysticks, MLTs, radio, other MMS).

OPERATION

EC-MMS-0713 can be used as a stand-alone controller for applications with a single PWM or dual proportional manifolds where the functions are operated in meter-in configuration. Its CANbus interface allows it to be used as a part of complex CAN networks e.g. equipped with radio systems. EC-MMS-0713 is provided with display and push-buttons to configure the control characteristics (Imin/Imax, ramps, deadbands, dither) of its PWM output channels.

FEATURES

- Power supply line is protected against reversed polarity and overvoltage.
- Inputs are protected against short circuits to GND and supply.
- Outputs are protected against short circuits, over-current and over-temperature.
- CANbus (CAN 2.0B) interface
- Internal measurement of battery voltage.
- The current in the proportional solenoids is independent of change in the coil resistance and supply voltage variations.
- Especially designed for applications with manifolds in meter-in configuration (single or dual proportional).

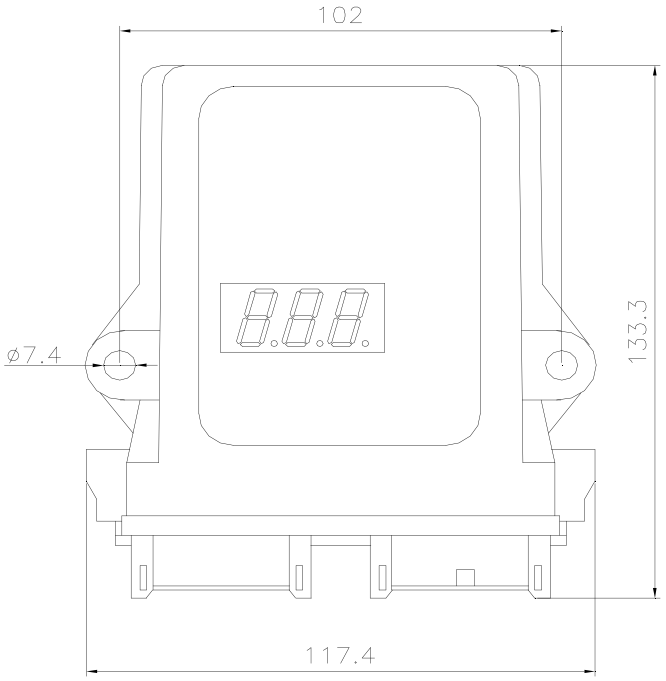
SPECIFICATIONS

Operating voltage:	8.5÷32 VDC
Max current consumption:	0.25 A (no load applied)
Operating temperature:	-25°C / +85°C
Degree of protection:	IP 65 (with housing)
Analogue inputs:	1, 10-bits resolution
Analogue input type:	0÷20 mA or 0÷5 V selectable by sw (HW option 0÷10 V)
Digital inputs:	6
Input impedance:	100kΩ (internal pull-down)
Max current load on all outputs:	10 A
High Side power outputs:	13 (3.5A max each) (HW option: 14-one digital input not available)
Current output range (PWM):	3 A
Available current feedbacks:	2 (on the high side) (HW option: 4)

APPLICATIONS

- 12 VDC and 24 VDC systems.
- For hand held terminal cable/radio applications.
- Field - adjustable applications.
- Machine management systems based on CANbus.

DIMENSIONS



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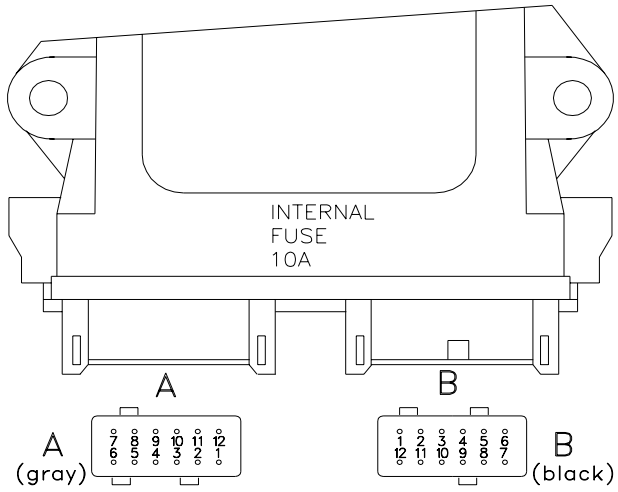
CIRCUIT BOARD PINOUT - WIRING DIAGRAM

Connector type: Deutsch - DTM12



A (GREY)

1 DI1 (DIGITAL INPUT)
2 EVP1 (HS OUTPUT WITH CURRENT FEEDBACK)
3 -V (POWER SUPPLY - GND)
4 EVP2 (HS OUTPUT WITH CURRENT FEEDBACK)
5 HS11 (HIGH SIDE OUTPUT)
6 +V (POWER SUPPLY - POSITIVE)
7 HS1 (HIGH SIDE OUTPUT)
8 HS2 (HIGH SIDE OUTPUT)
9 HS3 (HIGH SIDE OUTPUT)
10 HS4 (HIGH SIDE OUTPUT)
11 HS5 (HIGH SIDE OUTPUT)
12 HS6 (HIGH SIDE OUTPUT)

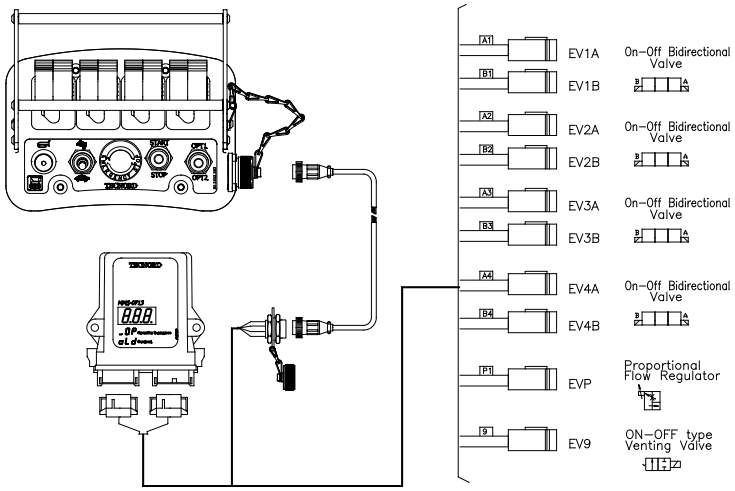
B (BLACK)

1 HS7 (HIGH SIDE OUTPUT)
2 HS8 (HIGH SIDE OUTPUT)
3 DI2 (DIGITAL INPUT)
4 DI3 (DIGITAL INPUT)
5 HS9 (HIGH SIDE OUTPUT)
6 HS10 (HIGH SIDE OUTPUT)
7 CAN HIGH
8 CAN LOW
9 AIN (ANALOGUE INPUT)
10 DI4 (DIGITAL INPUT)
11 DI5 (DIGITAL INPUT)
12 DI6 (DIGITAL INPUT)

ADJUSTMENTS

Adjustments through integrated display and pushbuttons

APPLICATION EXAMPLE



One MMS connected to a portable control unit through a CANbus line.
Radio connection available.

ORDERING INFORMATION

EC-MMS-0713-H

0713 = 7 inputs - 13 outputs

H = potted plastic Housing for panel mounting

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