

EC-MMS-6252-H MACHINE MANAGEMENT SYSTEM CONTROLLER**DESCRIPTION**

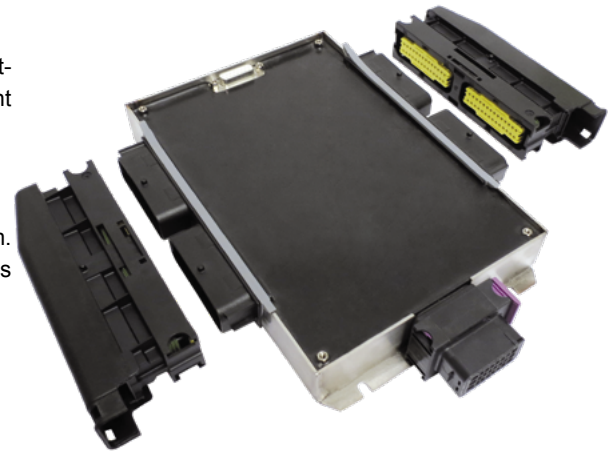
MMS (Machine Management System) controller with built-in advanced safety and fault-detection features for integrated control of a high number of functions in mobile equipment applications.

OPERATION

It is normally used as the main control unit in a complete machine management system. Two microprocessors and advanced diagnostics for safety applications. CANbus communication. Serial connection for software download.

FEATURES

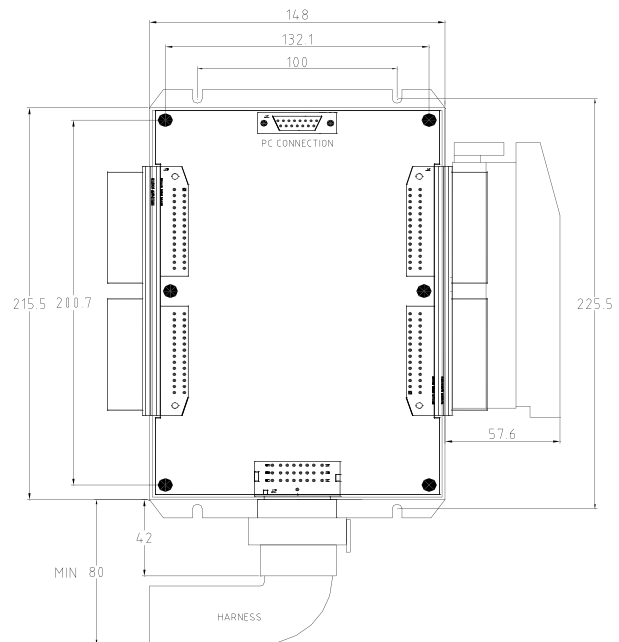
- Robust metal enclosure and complete potting.
- Power supply line is protected against reversed polarity and overvoltage.
- Inputs are protected against short circuits to GND and supply.
- Outputs are protected against short circuits, reversed polarity, over-current and over-temperature.
- Dual microprocessor for advanced diagnostics capability.
- Serial communication ports: CANbus, RS485, RS232.
- Optional add-on inclinometer.
- +5 V auxiliary power supply for external control devices.
- Performance level d capability according to ISO 13849, thanks to redundant microcontroller and embedded diagnostics.
- Electro Magnetic Compatibility (EMC): EN 61000-6-2 (Immunity), EN 61000-6-3 (Emissions).

**SPECIFICATIONS**

Operating voltage:	8.5÷32 VDC
Max current consumption:	400 mA (no load applied)
Operating temperature:	-25°C / +85°C
Degree of protection:	IP 67
Input impedance:	100 kΩ
Analog inputs (10 bits):	16 (0-5 V) 6 (0-20 mA)
Typical ctrl pot resistance:	1÷10 kΩ
High side power outputs:	8 (5 A max) 28 (3.5 A max)
High side signal outputs:	10 (0.7 A max)
Digital inputs:	40
Max current load on all outputs:	16 A
Inputs for current feedback:	4
Current output range (PWM):	100÷1600 mA
Analog voltage outputs:	6 (0-5 V)

APPLICATIONS

- 12 VDC and 24 VDC systems.
- Main ECU for aerial platforms, cranes, telehandlers, agric. machines.
- Field-adjustable applications.
- Two or more MMS boards can be interconnected by means of 2-wires RS485 serial lines or CANbus.

DIMENSIONS

Stainless steel enclosure completely potted.

WARNING: the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.



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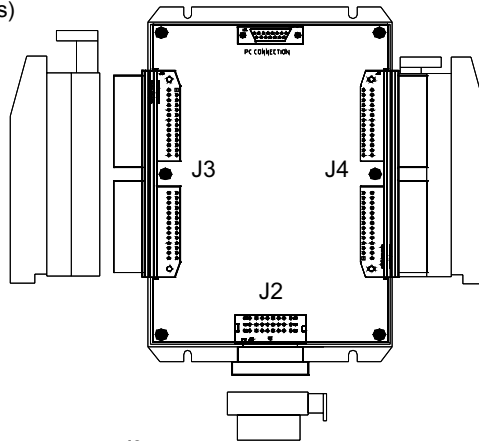
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EC-MMS-6252-H MACHINE MANAGEMENT SYSTEM CONTROLLER

CIRCUIT BOARD PINOUT - WIRING DIAGRAM

Main Connectors type: SICMA2/DCS1 (56 poles)
Auxiliary connector type: SICMA2 (24 poles)
PC connector type: DB15 female

- J3**
- 1 CAN BUS
 - 4 ANALOG INPUTS (0+20 MA)
 - 8 ANALOG INPUTS (0+5 V)
 - 24 ANALOG INPUTS
 - 10 DIGITAL OUTPUTS (0.7 A)
 - 1 RS485
 - 2 +5 V AUX
 - 2 +VBATT
 - 2 GND



- J4**
- 2 CAN BUS
 - 2 ANALOG INPUTS (0+20 MA)
 - 2 ANALOG INPUTS (0+5 V)
 - 16 DIGITAL INPUTS
 - 18 DIGITAL OUTPUTS (3.5 A)
 - 8 DIGITAL OUTPUTS (5 A)
 - 4 CURRENT FEEDBACKS
 - 2 GND

- J2**
- 6 ANALOG INPUTS (0+5 V)
 - 10 DIGITAL OUTPUTS (3.5 A)
 - 6 ANALOG OUTPUTS (0+5 V)
 - 2 GND

For wiring schematics consult factory.

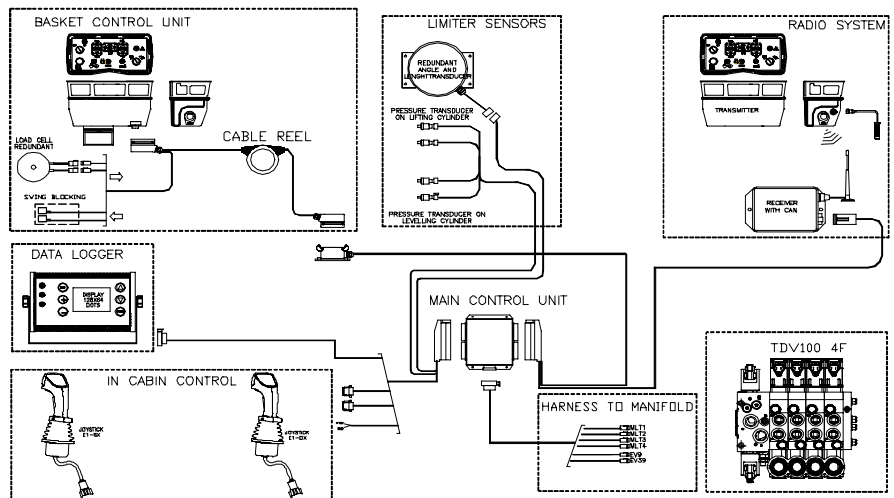
ADJUSTMENTS

MMS controllers have a customized firmware to fulfill machine functions. A customized calibration tool is available to set main working parameters.

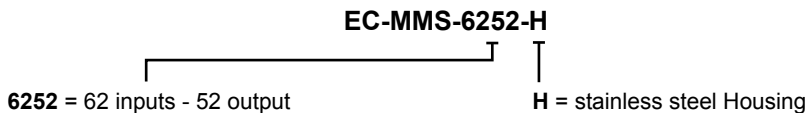


Ask for: PC calibration tool (see page EC44)

APPLICATION EXAMPLE



ORDERING INFORMATION



Two configuration available:
Standard (2 main connectors)
Full (all connectors)

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