

GENERAL FEATURES

MMIGRS2 is MCX's family remote interface. It's fitted with a graphic display that allows a complete customization of the user interface. The connection with every unit of the MCX range is made through the CANbus network. All the information about the user interface is loaded inside the MCX controller; that's why there is no need of programming the MMIGRS2 interface. MMIGRS2 is powered externally or from the controller which it is connected to and automatically shows its user interface; but it can also show the interface of any other device connect to the same network.

Instruction sheet

Electronic controller
MMIGRS2



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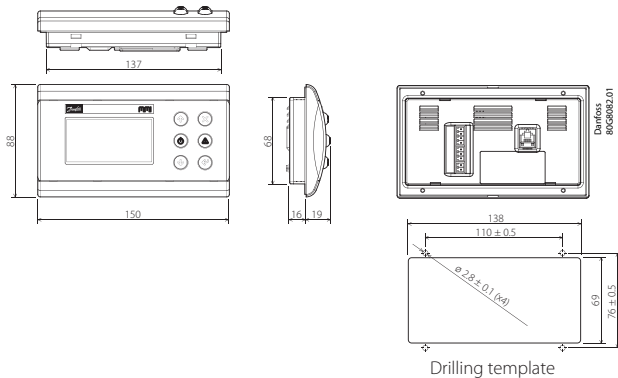


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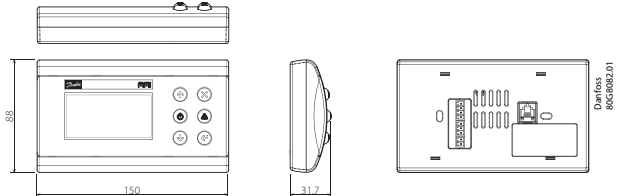
www.danfoss.com/mcx

DIMENSIONS

Panel mounting **Back view**

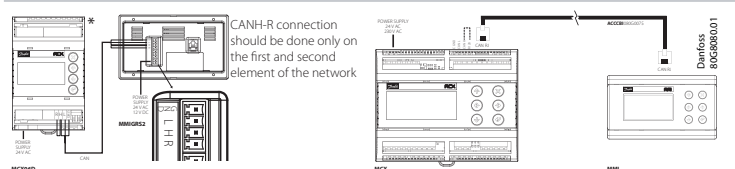


Wall mounting **Back view**



CONNECTION DIAGRAM

Remote MMIGRS connection **MCX connection - CAN-RJ connection**



* When MMI is not connected to MCX via telephone cable, the autodetection feature of the MCX CAN address will not work. Therefore check the following MMIGRS2 setting:

- 1) enter BIOS menu pressing and holding X + Enter keys for 5 seconds.
- 2) select "MCXselection" -> "Manual Mode" and set the CAN address of the MCX06 you wish to connect to.



TECHNICAL SPEC.

| | |
|--------------|--|
| Power supply | - from the MCX through the RJ12 telephone connector - 12/30 V DC SELV (separate power supply is recommended) - 24 V AC +10% / -15% SELV (separate power supply is recommended) - maximum power consumption: 1.5 W |
|--------------|--|

USER INTERFACE

| | |
|----------|--|
| Display | - graphical LCD blue transmissive - white LED backlight with adjustable brightness via software - display format 128x64 dots - active visible area 66.5x33.2 mm - contrast adjustable via software |
| Keyboard | - 6 white LED backlight keys individually managed via software - function key configurable configurable via the application software |
| Mounting | Based on the version: - panel mounting, see the drilling template in figure using the screws supplied in the packaging. - wall mounting on a standard 3 modules box |

OTHERS

| | |
|-------------------------------|--|
| CANbus | • |
| Modbus RS485 serial interface | • |
| Buzzer | • |
| RTC clock | • |
| Degree of protection | - IP64 ~ NEMA3R (panel version) - IP40 (wall version) |

CONNECTIONS

- Power supply connector 24 V AC - 2 way screw plug-in connector type pitch 3.5 mm: section cable 0.08-1.5 mm²
- CAN connector - 4 way screw plug-in connector type pitch 3.5 mm: section cable 0.08-1.5 mm²
- CAN-RJ - 6/6 way telephone RJ12 plug type

PRODUCT PART NUMBER

| CODE | DESCRIPTION |
|----------|---|
| 080G0294 | MMIGRS2, REMOTE DISPLAY, PANEL, Single Pack |
| 080G0295 | MMIGRS2, REMOTE DISPLAY, WALL, Single Pack |
| 080G0297 | MMIGRS2, REMOTE DISPLAY, PANEL, Industrial Pack (27 pieces) |

GENERAL FEATURES AND WARNINGS

PLASTIC HOUSING FEATURES

- Self extinguishing V0 according to IEC 60695-11-10 and glowing/hot wire test at 960 °C according to IEC 60695-2-12
- Ball test: 125 °C according to IEC 60730-1. Leakage current: ≥ 250 V according to IEC 60112

OTHER FEATURES

- Operating conditions CE: -20T60 / UL: -20T60, 90% RH non-condensing
- Storage conditions: -30T80, 90% RH non-condensing
- To be integrated in Class I and/or II appliances
- Index of protection: IP64 ~ NEMA3R only on the front cover (panel version); IP40 (wall version)
- Period of electric stress across insulating parts: long
- Suitable for use in environments with degree of pollution 2
- Category of resistance to heat and fire: D
- Immunity against voltage surges: category II
- Software class and structure: class A

CE MARK

This product is designed to comply with the following EU standards:

- Electromagnetic compatibility EMC directive 2014/30/EU:
 - EN 61000-6-4: 2007 +A1: 2011 (Emissions standard for industrial environments)
 - EN 61000-6-2: 2005 (Immunity for industrial environments)
- RoHS directive 2011/65/EU and 2015/863/EU:
 - EN50581: 2012

UL APPROVAL

- File UL: E31024

GENERAL WARNINGS

- Every use that is not described in this manual is considered incorrect and is not authorised by the manufacturer
- Verify that the installation and operating conditions of the device respect the ones specified in the manual, specially concerning the supply voltage and environmental conditions
- This device contains live electrical components therefore all the service and maintenance operations must be performed by qualified personnel
- The device can't be used as a safety device
- Liability for injury or damage caused by the incorrect use of the device lies solely with the user

INSTALLATION WARNINGS

- The installation must be executed according the local standards and legislations of the country
- Always operate on the electrical connections with the device disconnected from the main power supply
- Before carrying out any maintenance operations on the device, disconnect all the electrical connections
- Don't expose the device to continuous water sprays or to relative humidity greater than 90%. Avoid exposure to corrosive or pollutant gases, natural elements, environments where explosives or mixes of flammable gases are present, dust, strong vibrations or chock, large and rapid fluctuations in ambient temperature that in combination with high humidity can condensate, strong magnetic and/or radio interference (e.g. transmitting antennae)
- Use appropriate data communication cables.
 - See the "hardware network specification" user manual for the kind of cable to be used and setup recommendations
 - Reduce the path of the probe and digital inputs cables as much as possible, and avoid spiral paths enclosing power devices. Separate from inductive loads and power cables to avoid possible electromagnetic noises
 - Avoid touching or nearly touching the electronic components fitted on the board to avoid electrostatic discharges

DISPLAY SETTINGS ADJUSTMENT

- Setting of the LCD display like contrast and brightness might need to be adjusted due to external ambient factors. Press simultaneously and hold for 5 seconds the Enter and X key to access the BIOS menu and select the DISPLAY menu. Use UP and DOWN arrow keys to adjust the contrast or the brightness of the display at the desired level.



DISPOSAL INSTRUCTION

- Equipment containing electrical components may not be disposed together with domestic waste. It must be separately collected with electrical and electronic waste according to local and valid legislation.