Danfoss Electronics spa

MMILDS electronic controller

MMILDS is MCX's family remote interface. It's fitted with a LED display for displaying data from a MCX or from 2 probes that can be locally connected. The connection with any MCX controller is through the CAN bus network. The power supply can come from controller which it is connected

REFRIGERATION &
AIR CONDITIONING DIVISION

Protection degree CAN bus MYK connection

IP65 CAN

GENERAL FEATURES

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 MMILDS interface.
MMILDS is powered 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

	MMILDS
TECHNICAL SPECIFICATIONS	
Analog input	- AI1: 0/20mA, 4/20mA, 0/5V, 0/1V - AI2: NTC, default 10KΩ a 25°C
Power supply	- from the MCX through the RJ11 telephone connector - 12Vdc ± 20% external power supply - 12Vac ± 15% external transformers - maximum power consumption: 1.5W
USER INTERFACE	
Display	- LED 3-½ digit
Keyboard	- 3 key
Mounting	- panel mounting (see the drilling template in figure)
OTHERS	
CANbus	•
Modbus RS485 serial interface	
Buzzer	
RTC clock	
Degree of protection	- IP65

CONNECTIONS

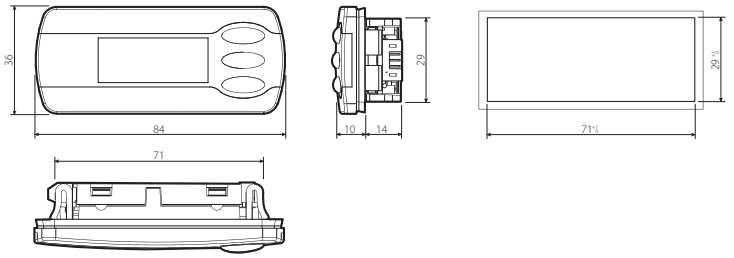
- CAN connector
  5 way JST PH type pitch 2mm
- Probe connector
  5 way screw plug-in connector pitch 3.5mm

PRODUCT PART NUMBER

CODE	DESCRIPTION
080G0232	MMILDS, 12V, LED, CAN, REMOTE DISPLAY, PANEL, S

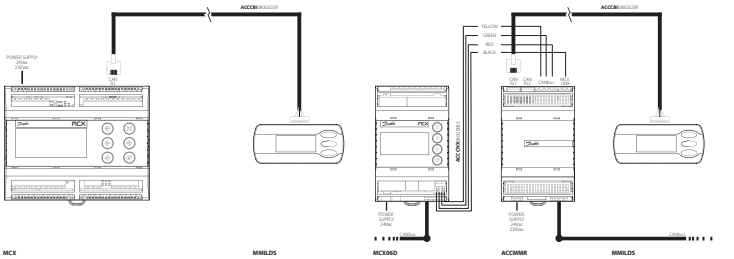
DIMENSIONS

Panel mounting



CONNECTION DIAGRAM

MCX connection **MCX06D connection**



GENERAL FEATURES AND WARNINGS

OTHER FEATURES
- Operating conditions CE: -20T60 / UL: 0T55, 90% RH non-condensing
- Storage conditions: -30T80, 90% RH non-condensing
- To be integrated in Class I and/or II appliances
- Index of protection: IP65
- Period of electric stress across insulating parts: long
- Suitable for using in a normal pollution environment
- Category of resistance to heat and fire: A
- Immunity against voltage surges: category I
- Software class and structure: class A

CE COMPLIANCE
This product is designed to comply with the following EU standards:
- Low voltage guideline: 73/23/EEC
- Electromagnetic compatibility EMC: 89/336/EEC and with the follwing norms:
- EN61000-6-1, EN61000-6-3 (immunity for residential, commercial and ligth-industrial environments)
- EN61000-6-2, EN61000-6-4 (immunity and emission standard for industrial environments)
- EN60730 (Automatic electrical controls for household and similar use)

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 b 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. Refer to the Fieldbus Installation Guide 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

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