

Data Sheet

# Control panel Type **MMIGRS2**

Electronic controller suitable for all HVAC/R software application needs.



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.

**Features:**

- Full graphic LCD display, 128 x 64 dots resolution
- Easy connection to MCX CANbus network through telephone plug and CAN connector
- No need to be programmed: information about user interface is loaded from the MCX controller
- Powered by the MCX which it is connected to
- Dimensions 88 x 150 mm
- Panel and wall mounting
- IP64 protection rating on panel version

**Product specification**

**General features**

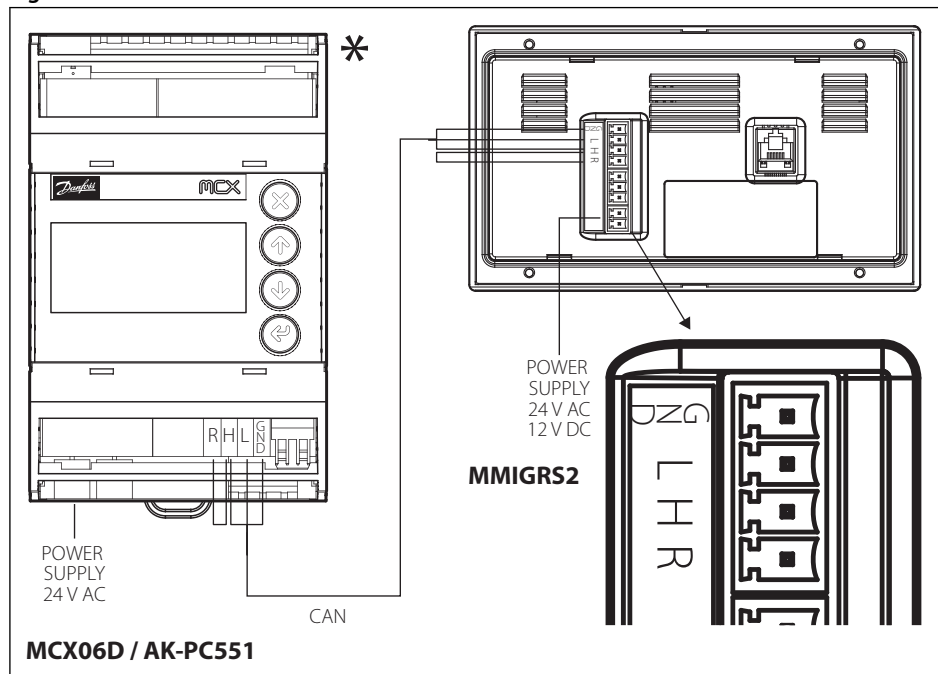
**Table 1: General features**

Features	Description
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
Plastic housing	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
Operating conditions	CE: -20T60 / UL: -20T60, 90% RH non-condensing
Storage conditions	-30T80, 90% RH non-condensing
Integration	In Class I and / or II appliances
Index of protection	IP64 ~ NEMA3R (panel version) IP40 (wall version)
Period of electric stress across insulating parts	Long
Resistance to heat and fire	Category D
Immunity against voltage surges	Category II
Software class and structure	Class A

**Connection diagram – MCX or MCX06**

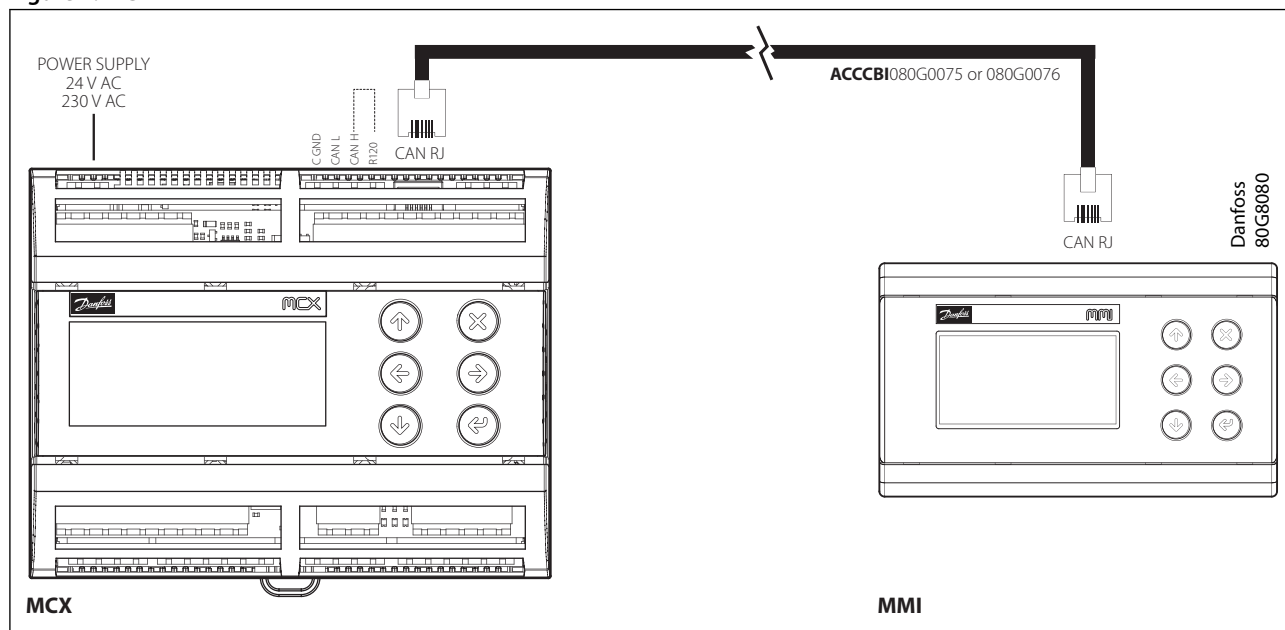
CANH-R connection should be done only on the first and last element of the network

**Figure 1: MCX06D / AK-PC 551**



## Control panel, type MMIGRS2

Figure 2: MCX - MMI



**NOTE:**

\*When MMI is not connected to Danfoss controller 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 MCX you wish to connect to.

### Connection

Table 2: Connection

Connectors	Type	Dimensions
Power supply connector	24 V AC - 2 way screw plug-in connector type	<ul style="list-style-type: none"> <li>pitch 3.5 mm</li> <li>section cable 0.08 – 1.5 mm<sup>2</sup></li> </ul>
CAN connector	4 way screw plug-in connector type	<ul style="list-style-type: none"> <li>pitch 3.5 mm</li> <li>section cable 0.08 – 1.5 mm<sup>2</sup></li> </ul>
CAN-RJ connector	6/6 way telephone RJ12 plug type	

## Dimensions

Figure 3: Panel mounting

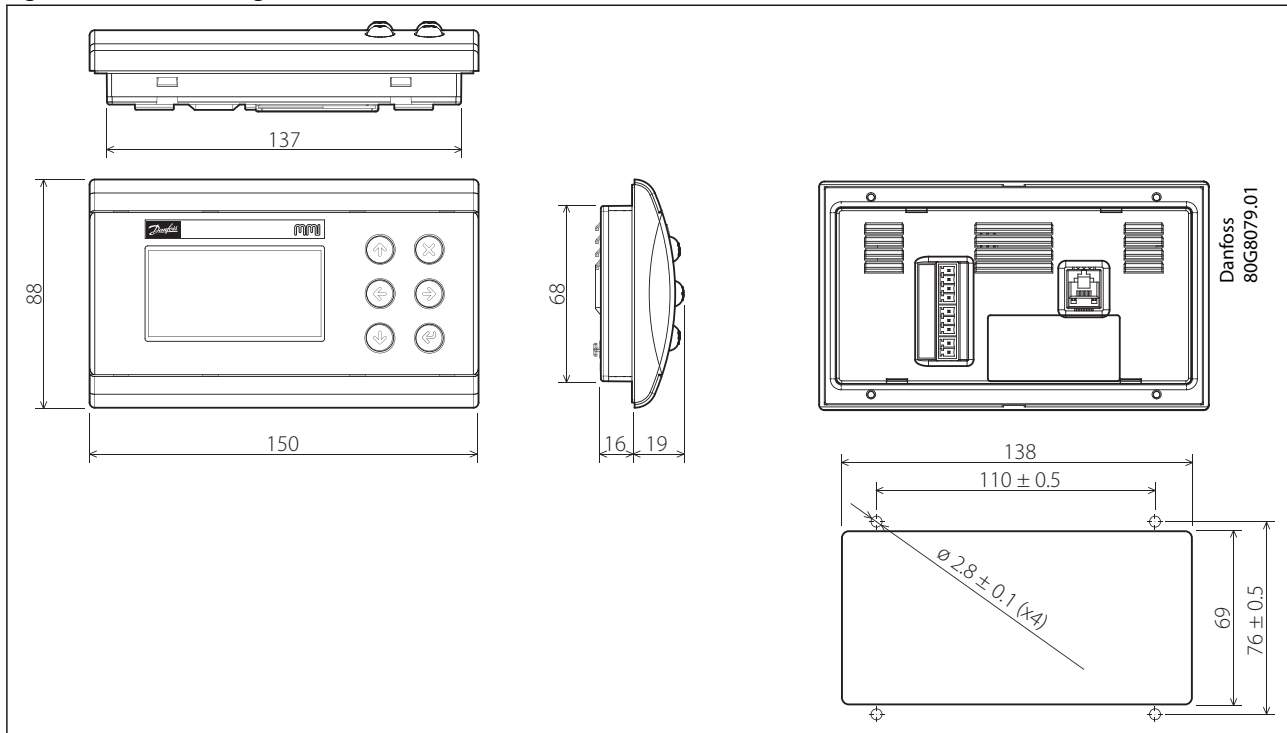
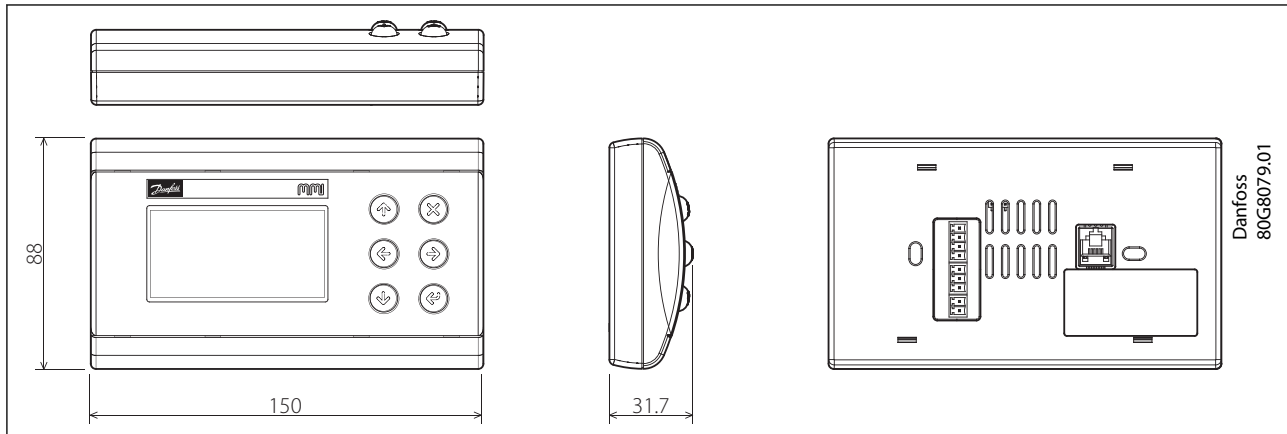


Figure 4: Wall mounting



## User interface

Table 3: User interface

Type	Features	Description
LCD display	Display	Graphical LCD blue transmissive
	Backlight	White LED backlight adjustable via software
	Contrast	Adjustable via software
	Format	128 x 64 dots
	Active visible area	66.5 x 33.2 mm
Keyboard	Number of keys	6, white LED backlight keys individually managed via software
	Keys function	Set by the application software
Mounting	Panel mounting	See the drilling template in figure, using the screws supplied in the packaging
	Wall mounting	Standard 3 modules box

## Ordering

### Product part numbers

**Table 4: Product part numbers**

Description	Code No.
MMIGRS2, Remote Display, Panel, S	080G0294
MMIGRS2, Remote Display, Wall, S	080G0295
MMIGRS2, Remote Display, Panel, I (27 pieces)	080G0297

**NOTE:**

Both single pack codes (S) and industrial pack codes (I) include standard kit connector.

### Accessories part numbers

**Table 5: Accessories part numbers**

Description	Code No.
ACCCBI, Telephone Cable User Interface Connector, 1.5 m Cable	080G0075
ACCCBI, Telephone Cable User Interface Connector, 3 m Cable	080G0076

## Certificates, declarations, and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

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**Table 6: Certificates, declarations, and approvals**

File name	Document type	Document topic	Approval authority
080R2089.02	EU Declaration of conformity	<b>EMC directive 2014/30/EU:</b> EN61000-6-3: 2007 +A1: 2011 EN61000-6-2: 2005 <b>RoHS directive 2011/65/EU and 2015/863/EU:</b> EN 50581: 2012	Danfoss
UL E31024	Electrical - Safety Certificate	-	UL

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