**GENERAL FEATURES**

**MCX06C**

**ANALOG INPUTS**

- AI1, AI2
- Universal (PX, PV100, OTY, OTYV, ON2, ON4, DC100, DC80, 0-10V, 4-20mA) selectable via software
- Total number: 2

**DIGITAL INPUTS**

- Voltage-free contact
- Total number: 6

**ANALOG OUTPUTS**

- AO1, AO2
- Universal (PX, PV100, OTY, OTYV, ON2, ON4, DC100, DC80, 0-10V, 4-20mA) selectable via software
- PWM, PPM serial interface
- Total number: 2

**DIGITAL OUTPUTS**

- SPST relay (typically open contacts)
- Total number: 6

**OTHERS**

- Insulated power supply: 20/60Vdc - 24Vac
- Connection for remote display and keyboard
- Connection for programming key
- RTC clock
- Modbus RS485 serial interface
- Dimensions (mm): 22/22
- Mounting: Panel

**TECHNICAL SPECIFICATIONS**

**POWER SUPPLY**

- 200VAC and 24Vac ±15% 50/60Hz
- Maximum power consumption: 6W

**I/O TYPE**

<table>
<thead>
<tr>
<th>I/O Type</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital</td>
<td>6</td>
</tr>
<tr>
<td>Analog</td>
<td>2</td>
</tr>
</tbody>
</table>

**INPUTS**

- Insulation between relays and the extra-low voltage parts: reinforced
- PWM, PPM selectable via software
- Analog inputs selectable via software between 0–10V, 4–20mA, 0–5V, 0–1V
- Current consumption: 5mA

**OUTPUTS**

- SPST relay (typically open contacts)

**GENERAL FEATURES AND WARNINGS**

**PLASTIC HOUSING FEATURES**

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

- EN60730 (Automatic electrical controls for household and similar use)
- EN60695-2-12, EN60695-11-12 and EN50082-1 noise tests at 40°C according to EC 60746-1-2
- EN60601-1:2006, EN50081-1, EN50082-1, EN50083-1:2007, EN50084-1 and EN50305:2000

**GENERAL WARNINGS**

- This product contains live electrical components therefore all the service and maintenance operations must be performed by qualified personnel
- The device can be used in a safe 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 to the local standards and legislations of the country
- Always operate on the electrical connection with the device disconnected from the main power supply before carrying out maintenance operations on the device, disconnect all the electrical connection with the device before performing any work on it
- Don't expose the device to continuous water sprays or to relative humidity greater than 90%
- Avoid exposure to corrosive or polluting gases, chemicals, strong magnetic and/or electrostatic fields, shocks, dust, strong vibrations or noise, or topical fluctuations in ambient temperature that in combination with high humidity can condensate, strong magnetic and/or electrostatic fields, shocks, dust and strong vibrations or noise
- Reduce the path of the probe and digital inputs cables as much as possible, and avoid spiral paths of the cables

**SOFTWARE CLASS AND STRUCTURE**

- Software class and structure: class A

**CATEGORY OF RESISTANCE TO HEAT AND FIRE**

- Category of resistance to heat and fire: D

**INDEX OF PROTECTION**

- Index of protection: IP64 ~ NEMA3R only on the front cover

**STORAGE CONDITIONS**

- Storage conditions: -30°C to +80°C, 90% RH non-condensing

**OPERATING CONDITIONS**

- CE: -20°C to +60°C
- UL: 0°C to +55°C

**BALL TEST**

- 125°C according to IEC 60730-1

**LEAKAGE CURRENT**

- ≥ 250V according to IEC 60112

**SELF EXTINGUISHING**

- V0 according to IEC 60695-11-10 and glowing/hot wire test at 960°C

**PRODUCED BY DANFOSS ELECTRONICS SPA**

- DANFOSS - MCX06C extraction driver: FN 20100120 - 55 20100133
- Produced by Danfoss Electronics spa Graphic Department, 10-2000
**CONNECTION DIAGRAM**

- TTL Serial Comm. (if expected)
- 24 Vac
- RS485 (Modbus) (if expected)
- Analog output

**UNIVERSAL POWER SUPPLY**

- DIGITAL OUTPUT
- CAN485
- CAN
- NTC
- Pt1000
- ON/OFF
- 0/1 V
- 0/5 V
- 0/10 V
- 0/20 mA
- 4/20 mA

**DIMENSIONS**

- LED display: type: LED display with two groups of digits and 18 icons
- Colour of digits: green
- Colour of allarm/warning icons: red
- Colour of other icons: yellow/amber
- Meaning of the icons and digits is settled by the application software
- Dimensions: 45x17mm

**USER INTERFACE**

- **LED DISPLAY**
  - Multi-line display with two groups of digits and 16 zones
  - Colour of digits: green
  - Colour of allarm/warning icons: red
  - Colour of other icons: yellow/amber
  - Meaning of the icons and digits is settled by the application software
  - Dimensions: 45x17mm

- **KEYBOARD**
  - Number of keys: 4
  - Keypad function is settled by the application software

**PRODUCT PART NUMBERS**

<table>
<thead>
<tr>
<th>CODE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>080G0065</td>
<td>MCX06C, 24V, LED, S</td>
</tr>
<tr>
<td>080G0066</td>
<td>MCX06C, 24V, LED, RS485, RTC, S</td>
</tr>
</tbody>
</table>

**CONNECTIONS**

- Input/output connector
  - 18-way Molex Microfit type (43025-1800) crimping contact type
  - Molex: (43030-0001) section cable AWG20-24 (0.52-0.20mm²)
  - Instrument for the Molex crimp code 69008-0982 (20-24 AWG)

- CAN connector
  - 4-way Molex Wire-to-board type (87369-0400) crimping contact type
  - Molex: (50212-8000) section cable AWG24-30 (0.20-0.05mm²)
  - Instrument for the Molex crimp code 63811-1200

- CAN/485 connector
  - 8-way Molex Wire-to-board type (87369-0800) crimping contact type
  - Molex: (50212-8000) section cable AWG24-30 (0.20-0.05mm²)
  - Instrument for the Molex crimp code 63811-1200

- Power supply connector
  - 2-way Molex KK type (09-50-8021) crimping contact type
  - Molex: (08-50-0105) section cable AWG18-24 (0.82-0.20mm²)
  - Molex: (08-50-0107) section cable AWG22-26 (0.32-0.13mm²)
  - Instrument for the Molex crimp code 69008-0953

- Digital output 1-6 connector
  - 12-way Molex Minifit Jr. type (39-01-2125) crimping contact type
  - Molex: (39-00-0077) section cable AWG16 (1.30mm²)
  - Molex: (39-00-0038) section cable AWG18-24 (0.82-0.20mm²)
  - Molex: (39-00-0046) section cable AWG22-28 (0.32-0.08mm²)
  - Instrument for the Molex crimp code 69008-0724

**MakIng MODERN LIVING POSSIBLE**

Danfoss Electronics spa

**REFERENCES**

- 485
- CAN
- PRG
- CANbus
- local network
- to the AI (80 mA max)
- NTC
- 0/5 V
- to the AI (50 mA max)
- 0/10 V
- PWM
- PPM
- 5 A
- 5 A
- 5 A
- 5 A
- 5 A
- 5 A
- Power supply board
- CANbus
- GND
- CAN
- GND
- MCX06C
- electronic controller

**DIMENSIONS**

- LED display
  - Dimensions: 45x17mm

**LED DISPLAY**

- Multi-line display with two groups of digits and 16 zones
- Colour of digits: green
- Colour of allarm/warning icons: red
- Colour of other icons: yellow/amber
- Meaning of the icons and digits is settled by the application software
- Dimensions: 45x17mm

**KEYBOARD**

- Number of keys: 4
- Keypad function is settled by the application software