



## MCX08M electronic controller

MCX08M is fitted with or without graphic LCD display. It is an electronic controller that holds all the typical functionalities of MCX controllers in the compact size of 8 DIN modules: programmability, connection to the CANbus local network, Modbus RS485 serial communication interface.

It is moreover available in the version with power supply 110-230Vac or 24Vac

Programmable	Protection degree	CAN bus	Graphic display	Multilanguage	MYK connection	Modbus RS485

## General features

MCX08M	
Features	Value
<b>ANALOG INPUTS</b>	
NTC, 0/1V, 0/5V	4
Universal (NTC, Pt1000, 0/1V, 0/5V, 0/10V, ON/OFF, 0/20mA, 4/20mA) selectable via software	4
Total number	8
<b>DIGITAL INPUTS</b>	
Voltage free contact	8
Total number	8
<b>ANALOG OUTPUTS</b>	
0/10Vdc optoinsulated	2
PWM, PPM selectable via software	2
Total number	4
<b>DIGITAL OUTPUTS</b>	
SPST relay 16A (normally open contacts)	2
SPST relay 8A (normally open contacts)	2
SPDT relay 8A (changeover contacts)	4
Total number	8
<b>OTHERS</b>	
Power supply 24V AC/20-60V DC	•
Power supply 110V/230V AC	•
Connection for programming key	•
Connection for remote display and keyboard	•
Buzzer	•
CANbus	•
RTC clock	•
Modbus RS485 serial interface	•
Dimensions (DIN modules)	8
Mounting	DIN bar

## Technical specifications

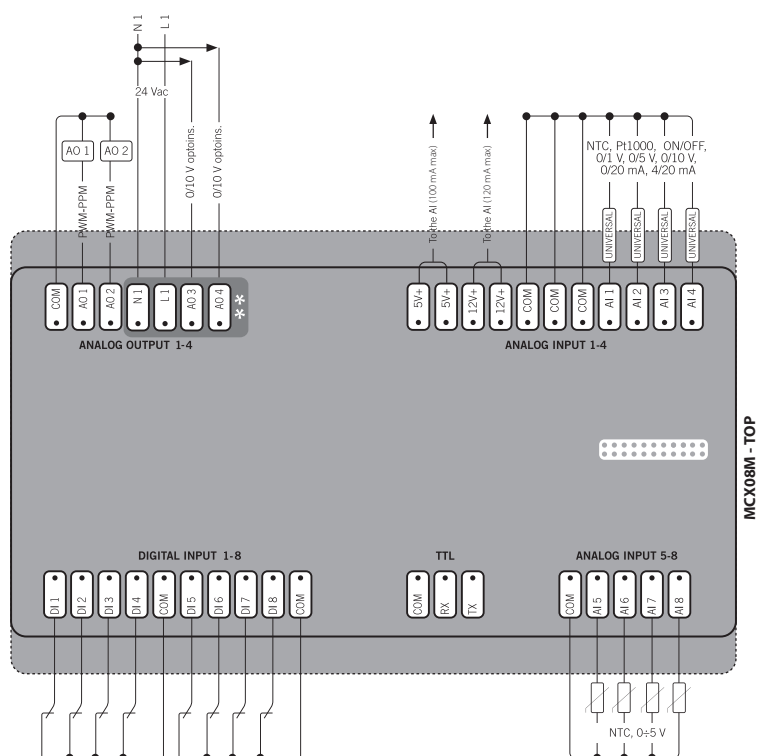
### POWER SUPPLY:

- 20/60Vdc and 24Vac  $\pm 15\%$  50/60Hz. Maximum power consumption: 6W, 9VA
- Insulation between power supply and the extra-low voltage: functional

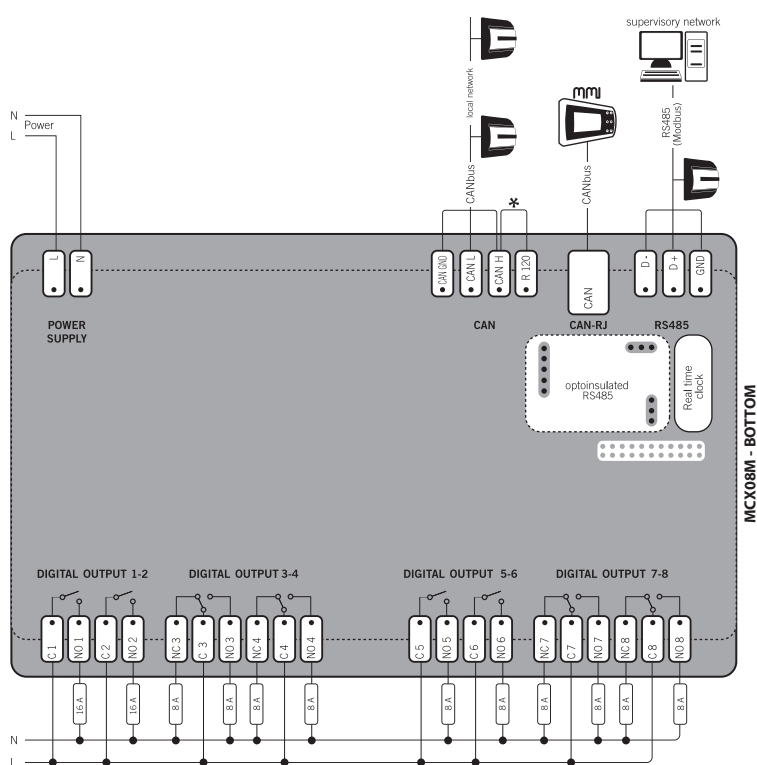
MCX08M			
I/O	Type	Number	Specifications
Digital outputs	Relay	8	Insulation between relay: functional Insulation between relays and the extra-low voltage parts: reinforced Total current load limit: 32A <b>C1-NO1, C2-NO2</b> High inrush current (80A - 20ms) normally open contact relays 16A: - characteristics of each relay: 10A 250Vac for resistive loads - 100.000 cycles 3.5A 230Vac for inductive loads - 230.000 cycles with $\cos(\phi) = 0.5$ UL: 240Vac - 10A resistive - 8FLA - 40LRA - 640VA pilot duty 30.000 cycles <b>C5-NO5, C6-NO6</b> Normally open contact relays 8A: - characteristics of each relay: 6A 250Vac for resistive loads - 100.000 cycles 4A 250Vac for inductive loads - 100.000 cycles with $\cos(\phi) = 0.6$ UL: 240Vac - 6A resistive - 4.9FLA - 29.4LRA - 470VA pilot duty 30.000 cycles <b>C3-NO3-NC3, C4-NO4-NC4, C7-NO7-NC7, C8-NO8-NC8</b> Changeover contacts relay 8A: 6A 250Vac for resistive loads - 100.000 cycles 4A 250Vac for inductive loads - 100.000 cycles with $\cos(\phi) = 0.6$ UL: 240Vac - 6A resistive - 4.9FLA - 29.4LRA - 470VA pilot duty 30.000 cycles
	Voltage free contact	8	<b>DI1 to DI8</b> Current consumption: 5mA
Analog outputs	0/10Vdc optoinsulated	2	<b>AO3, AO4</b> Analog outputs optoinsulated 0/10Vdc 10mA Max for each output External power supply 24Vac/Vdc
	PWM, PPM	2	<b>AO1, AO2</b> Analog outputs selectable via software between: - pulsing output, synchronous with the line, at modulation of impulse position (PPM) or modulation of impulse width (PWM) - pulsing output, at modulation of impulse position (PPM) with range 20Hz to 1KHz 6.8V open circuit voltage (1k $\Omega$ minimum load)
Analog inputs	NTC, 0/1V, 0/5V	4	<b>AI5 to AI8</b> Analog inputs selectable via software between: - NTC temperature probes, default: 10k $\Omega$ at 25°C - pressure transducers with 0/5V output
	Universal	4	<b>AI1 to AI4</b> Universal analog inputs selectable via software between: - ON/OFF (current: 20mA) - 0/1V, 0/5V, 0/10V - 0/20mA, 4/20mA - NTC (10k $\Omega$ at 25°C) - Pt1000 12V+ power supply 12Vdc, 120mA max for 4/20mA transmitter (total on all outputs) 5V+ power supply 5Vdc, 100mA max for 0/5V transmitter (total on all outputs)

## Connection diagram

### TOP BOARD



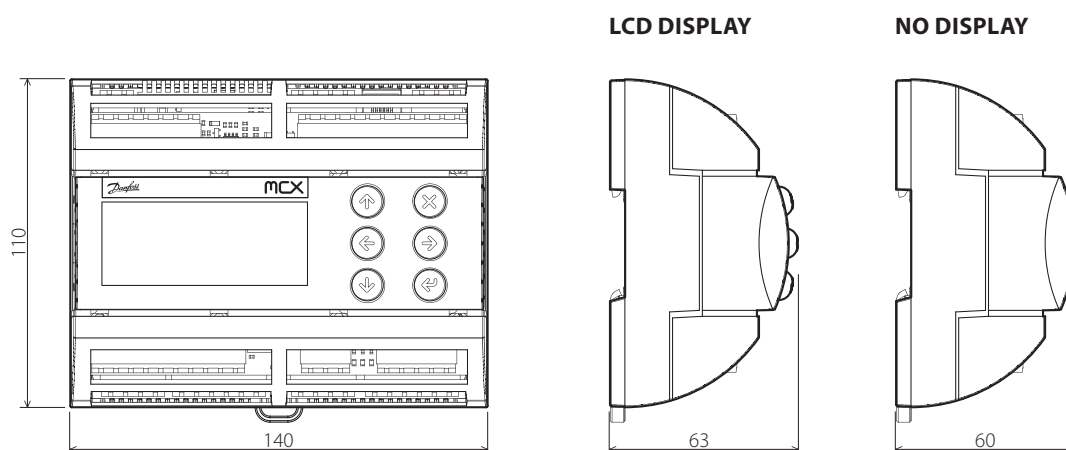
### BOTTOM BOARD



\*NOTE: connection has to be made on the first and last local network units, make the connection as close as possible to the connector

\*\*NOTE: optoisolated analog outputs voltages are referenced to contact N1

## Dimensions



## User interface

### LCD DISPLAY

- display mode: STN blue transmissive
- backlight: white LED backlight adjustable via software
- display format: 128x64dots
- active visible area : 58x29mm
- contrast: adjustable via software

### KEYBOARD

- number of keys: 6
- keys function is settled by the application software

## Product part numbers

MCX08M	
CODE ***	DESCRIPTION
080G0084	MCX08M, 24V, LCD, RTC, S
080G0085	MCX08M, 230V, LCD, RTC, S
080G0028	MCX08M, 24V, LCD, RS485, RTC, S
080G0029	MCX08M, 230V, LCD, RS485, RTC, S
080G0086	MCX08M, 24V, RTC, S
080G0087	MCX08M, 230V, RTC, S
080G0034	MCX08M, 24V, RS485, RTC, S
080G0035	MCX08M, 230V, RS485, RTC, S

\*\*\*NOTA: single pack codes (S) include standard kit connectors.  
Is also available industrial pack codes (I) that don't include standard kit connectors







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