



EXC06D electronic controller

The EXC06D expansion control presents a configuration of 12 inputs and 9 outputs to offer the maximum flexibility to expand the MCX system.

Further features are the possibility to connect it to the local CANbus and Modbus RS485 serial communication interface



General features

EXC06D	
Features	Value
ANALOG INPUTS	
NTC, 0/1V, 0/5V	2
Universal (NTC, Pt1000, 0/1V, 0/5V, 0/10V, ON/OFF, 0/20mA, 4/20mA) selectable via software	2
Total number	4
DIGITAL INPUTS	
Voltage-free contact	8
Total number	8
ANALOG OUTPUTS	
0/10Vdc, PWM, PPM selectable via software	2
PWM, PPM selectable via software	1
Total number	3
DIGITAL OUTPUTS	
SPST relay 5A (normally open contacts)	5
SPST relay 8A (changeover contacts)	1
Total number	6
OTHERS	
Insulated power supply 20/60Vdc - 24Vac	•
Connection for programming key	•
Connection for remote display and keyboard	
Buzzer	
CANbus	•
RTC clock	
Modbus RS485 serial interface	•
Dimensions (DIN modules)	4
Mounting	DIN bar

Technical specifications

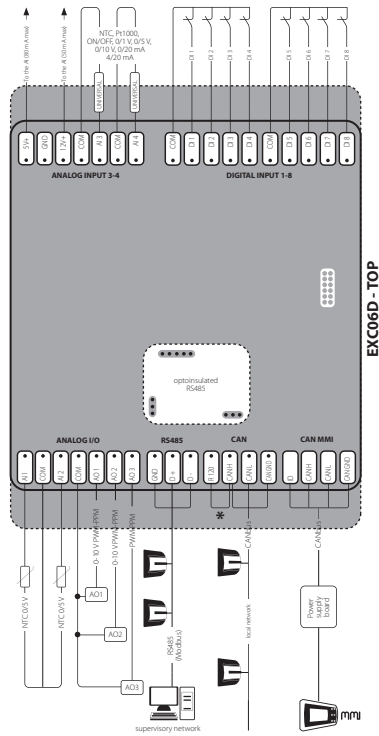
POWER SUPPLY:

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

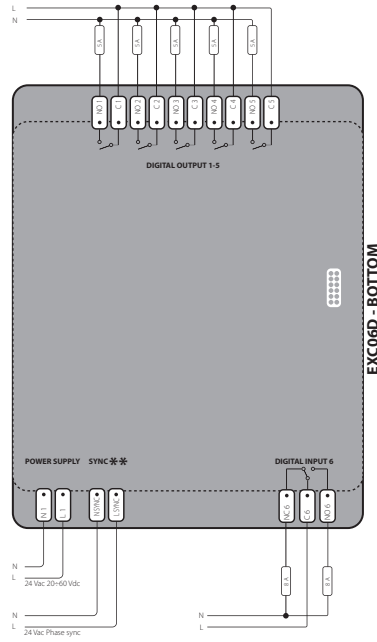
EXC06D			
I/O	Type	Number	Specifications
Digital outputs	Relay	6	Insulation between relays 1 to 5: functional Insulation between relay 6 and the other relays: reinforced Insulation between relays and the extra-low voltage parts: reinforced Total current load limit: 33A C1-NO1, C2-NO2, C3-NO3, C4-NO4, C5-NO5 Normally open contact relays 5A: - characteristics of each relay: 5A 30Vdc / 250Vac for resistive loads - 100.000 cycles 0,7A 250Vac for inductive load - 100.000 cycles with $\cos(\phi) = 0,5$ UL: 250Vac - 3A resistive - 1.5FLA - 9.0LRA - 144VA pilot duty 30.000 cycles NC6-C6-NO6 Changeover contacts relay 8A: - characteristics of each relay: 8A 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
Digital inputs	Voltage free contact	8	DI1, DI2, DI3, DI4, DI5, DI6, DI7, DI8 Current consumption: 5mA
Analog outputs	0/10V, PWM, PPM	2	AO1, AO2 Analog outputs selectable via software between: - pulsing output, synchronous with the line, at modulation of impulse position (PPM) or modulation of impulse width (PWM): 6.8V open circuit voltage (1k Ω minimum load) - pulsing output, at modulation of impulse position (PPM) with range 100Hz to 500Hz: 6.8V open circuit voltage (1k Ω minimum load) - 0/10Vdc non optoinsulated output, referred to the ground: 10mA maximum loads
	PWM, PPM	1	AO3 Analog outputs selectable via software between: - pulsing output, synchronous with the line, at modulation of impulse position (PPM) or modulation of impulse width (PWM): 6.8V open circuit voltage (1k Ω minimum load) - pulsing output, at modulation of impulse position (PPM) with range 100Hz to 500Hz: 6.8V open circuit voltage (1k Ω minimum load)
Analog inputs	NTC, 0/1V, 0/5 V	2	AI1, AI2 Analog inputs selectable via software between: - NTC temperature probes, default: 10k Ω at 25°C - pressure transducers with 0/5V output
	Universal	2	AI3, AI4 Universal analog inputs selectable via software between: - ON/OFF (current: 20mA) - 0/1V, 0/5V, 0/10V - 0/20mA, 4/20mA - NTC (10k Ω at 25°C) - Pt1000 12V+ power supply 12Vdc, 50mA max for 4/20mA transmitter (total on all outputs) 5V+ power supply 5Vdc, 80mA max for 0/5V transmitter (total on all outputs)

Connection diagram

TOP BOARD



BOTTOM BOARD

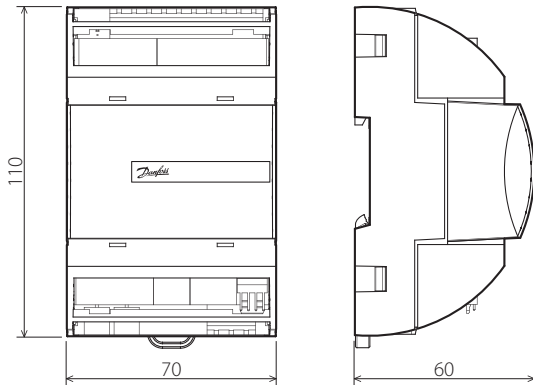


*NOTE: connection has to be made on the first and last local network units, make the connection as close as possible to the connector

**NOTE: when AO is used as synchronised output, the sync input must be in phase with the load on AO

Dimensions

NO DISPLAY



Product part numbers

EXC06D	
CODE ***	DESCRIPTION
080G0069	EXC06D, 24V, S

***NOTE: 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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