



## MAIN MODULE

OMC 8000 is the main module of the PLC system.



- 3x DIGITAL INPUTS
- 6x UNIVERSAL ANALOGUE INPUTS
- 5x RELAYS
- ETHERNET, RS 485
- DIMENSIONS 72 X 90 MM
- POWER SUPPLY 80...230 V AC/DC OR 24 V AC/DC
- FULLY COMPATIBLE WITH EN 61131-3

### DESCRIPTION

For our PLC OMC 8000 range we chose module architecture. At the heart of the system there is the main module which can be accompanied by up to 31 expansion modules. These can be both nearby, or at a distance. The maximum distance is up to 40 m while the maximum data flow is still maintained. Communication is realised using the CAN interface. It needs to be remembered that the higher the number of expansion modules, the higher the demands on the communication line there will be.

The main module can be powered by 230 V or 24 V. It contains three digital inputs, which react to the power supply voltage. It also comes with six versatile inputs, all of which are electrically isolated (sharing a common ground terminal amongst them), from outputs and power supply. These can process the following signals:

- pulse up to 30 V
- pulse - contact, NPN open collector
- analogue, voltage up to 30 V
- analogue, current up to 20 mA
- analogue, Pt1 000, Ni 1000, Pt 100 (only two inputs)

Versatile inputs can also be used as two full quadrature inputs for the use with quadrature encoders where two input signals come with a 90° phase shift + zeroing pulse. One pair can be used as RS485 for communication with external devices such as numerical or text displays, simple operator panel etc.

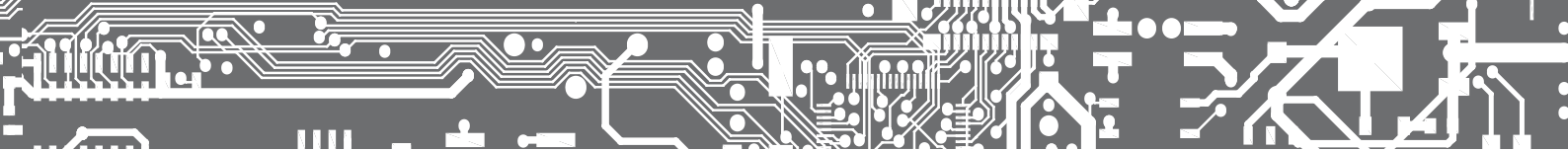
### ADVANTAGES OF OMC 8000

- module architecture with the possibility of connecting up to 31 modules
- colour TFT display provides information about the state of the entire system
- ETHERNET 100Base
- data recording onto a microSD card with a selectable time stamp for a later analysis (to monitor trends, states of I/O, alarms, etc ...)
- versatility of inputs (digital, analogue, frequency, data)
- two inputs for IRC encoders (1 MHz) or six inputs PNP/NPN/contact (100 kHz)
- five relay or DC outputs
- micro SD card
- online editing which enables debugging
- web server
- programming according to EN 61131-3

#### OMC 8000 - x1

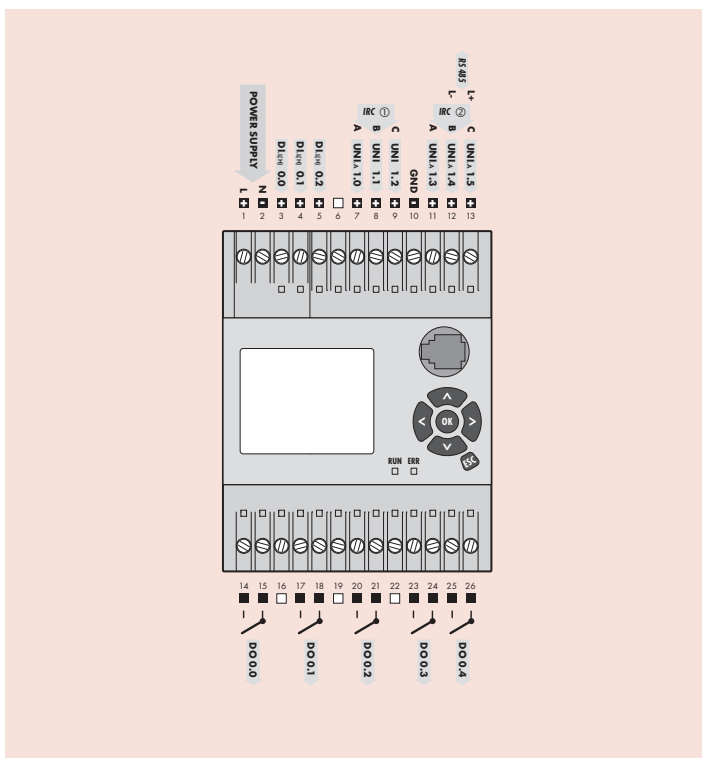
#### OMC 8000 - x2

OUTPUTS	OMC 8000 - x1	OMC 8000 - x2
Number	5	5
Type	transistor (DC)	relays
Function	ON/OFF, PWM (10 kHz)	ON/OFF
Max switchable current	300 mA	10 A
Max switchable voltage	30 V	250 VAC/24 VDC
Max switchable power	9 W	2500 VA/240W
Response time	< 0,15 ms	8 ms
LED signalisation of output state	yes	yes



	OMC 8000 - x1	OMC 8000 - x2
<b>INPUTS - ANALOGUE</b>		
Number of inputs	6	6
Type	analogue – universal/digital	analogue – universal/digital
Measuring range	0...3/10/30 V 0/4...20 mA Pt 100 [2x] Pt 1000/Ni 1000 PNP/NPN/contact [100 kHz] IRC [1 MHz], [2x]	0...3/10/30 V 0/4...20 mA Pt 100 [2x] Pt 1000/Ni 1000 PNP/NPN/contact [100 kHz] IRC [1 MHz], [2x]
Resolution	12 bits	12 bits
Overload capacity	10x	10x
Accuracy	0,2 % of range	0,2 % of range
Rate	500 meas./s	500 meas./s
LED signalisation of output state	yes	yes
<b>INPUTS - DIGITAL</b>		
Number of inputs	3	3
Measuring range (for Power supply 24 V AC/DC)	12...30 V AC/DC	12...30 V AC/DC
Measuring range (for Power supply 80...250 V AC/DC)	80...250 V AC/DC	80...250 V AC/DC
Max. current	2,5 mA	2,5 mA
Response time	20 ms	20 ms
LED signalisation of input state	yes	yes
<b>FUNCTION</b>		
Computing power	0,1 µs, 12 µs [WORD], 18 µs [floating decimal point]	
Projection	colour TFT display	
Communication	ETHERNET 100Base, RS 485	
Internal communication via bus	CANBUS at 1 Mbit/s over 40 m	
RTC	electrical circuit for time control and data recording	
microSDcard	max 32 GB	
<b>SPECIFICATIONS</b>		
Module width	72 mm	72 mm
Maximum consumption	5 VA	5 VA
Power supply	24 V AC/DC 80...250 V AC/DC	24 V AC/DC 80...250 V AC/DC
Working temperature	-20°...60°C	
Cover	IP 40	
Dielectric strength	4 kVAC for the duration of 1 minute between the data Bus and output 2,5 kVAC for the duration of 1 minute between data Bus and input	
Insulation resistance	for pollution degree II, measuring cat. III, 300 V [Z], 150 [DI]	
Electric safety	EN 61010-1, A2	
EMC	EN 61326-1	
Programming	EN 61131-3	

## CONNECTION



## ORDER CODE

### OMC 8000

<b>Power supply</b>	24 V AC/DC, isolated	<b>0</b>
	80...250 V AC/DC, isolated	<b>1</b>
<b>OUTPUTS</b>	5x open collector	<b>1</b>
	5x relays	<b>2</b>