

DADCM

DIN rail mounted analogue to digital converter



DADCM are DIN rail mounted analog to digital (Modbus RTU) converter modules supplied via Power over Modbus. The DADCM/08 product version has four analog / modulating and four analogue inputs while the DADCM/44 version has four analog / modulating inputs and four temperature inputs. The type of input is selected via Modbus RTU communication. The input values are transferred to Modbus RTU.

Key features

- 24 VDC / 1 W supply voltage, Power over Modbus (PoM)
- Easy to connect via two terminal blocks or two Modbus RTU RJ45 connectors on the PCB
- DIN rail mounted
- Enclosure: plastic ABS, UL94-V0, grey RAL 7035

Area of use

- BMS and controlled ventilation systems
- Clean air and non-aggressive, non-combustible gases
- For indoor use only

Article codes

Article code	Number of analog / modulating inputs	Number of analog inputs	Number of temperature inputs	Modbus RTU
DADCM/08	4	4	0	yes
DADCM/44	4	0	4	

Technical specifications

Supply voltage	24 VDC / 1 W, Power over Modbus (PoM)		
Maximum power consumption	0,96 A		
Average power consumption in normal operation	0,72 A		
I_{max}	40 mA		
Consumption	35 mA		
DADCM/08	4 analog / modulating inputs	0–10 VDC / 0–20 mA / PWM (frequency: 1–5 kHz, amplitude: 2–10 VDC)	
	4 analog inputs	0–10 VDC / 0–20 mA	
	Input impedance	150 kΩ	
DADCM/44	4 analog / digital inputs	0–10 VDC / 0–20 mA / PWM (frequency: 1–5 kHz, amplitude: 2–10 VDC)	
	4 temperature inputs	PT500 or PT1000	
	Input impedance	150 kΩ	
Protection standard	IP30		
Ambient conditions	Temperature	-5–65 °C	
	Relative humidity	5–85 % rH, non-condensing	



Wiring and connections

DADCM/08	Ai1–Ai4	Analogue / modulating inputs
	AGND	Ground for analogue / modulating inputs
	Ai5–Ai8	Analogue inputs
	AGND	Ground for analogue inputs
DADCM/44	Modbus RTU communication, signal A	Analogue / modulating inputs
	Modbus RTU communication, signal /B	Ground for analogue / modulating inputs
	Modbus RTU communication, signal /B	Temperature inputs (PT500 or PT1000)
Connections	Ground, supply voltage	1,5 mm2
	Ground, supply voltage	3,5 mm

RJ45

24 VDC	Supply voltage, 24 VDC
GND	Ground
A	Modbus RTU communication, signal A
/B	Modbus RTU communication, signal /B



Standards

- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC: EN 61000-6-2: 2005/AC:2005, EN 61000-6-3:2007/A1:2011/AC:2012, EN 61326-2-3:2013
- WEEE 2012/19/EC
- RoHs Directive 2011/65/EC
- DIN rail EN 60715:2001 compatible: EN 60730-1:2011

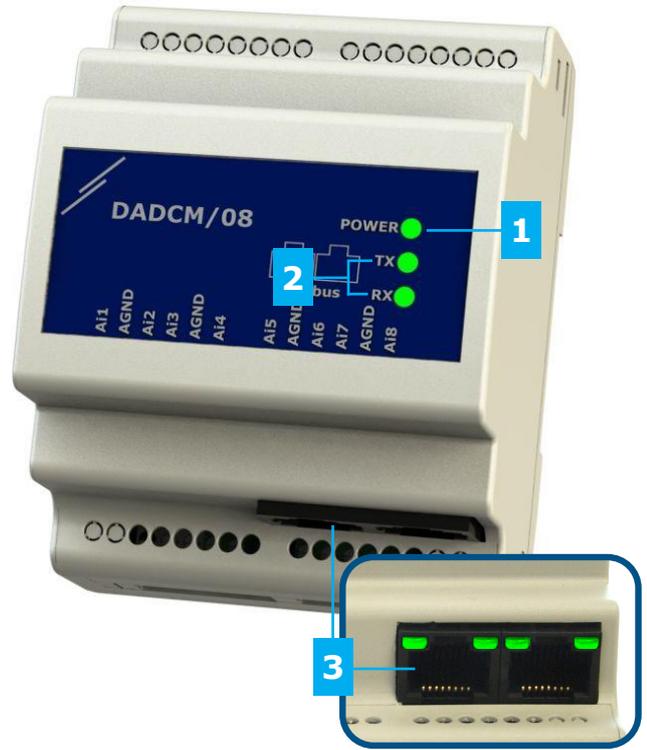


DADCM

DIN rail mounted analogue to digital converter

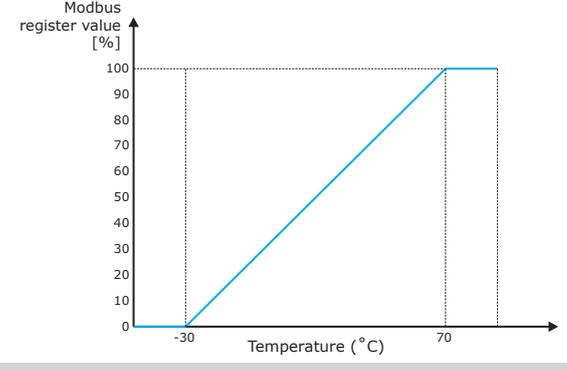
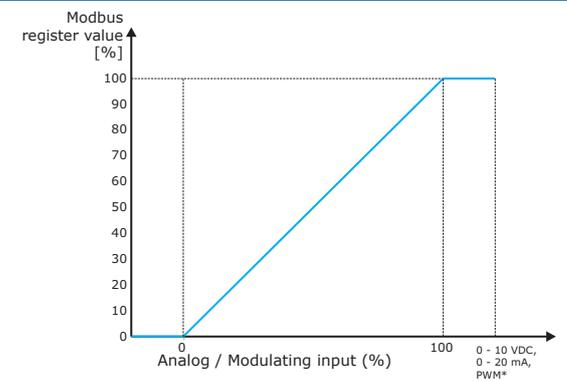


Settings and indications



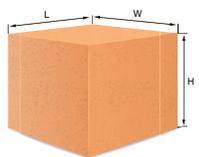
1 - Power ON LED indication	On	The unit is supplied
2 - TX and RX LEDs	Blinking	Active Modbus communication (TX - transmitting; RX - receiving)
3 - RJ45 connectors		Plug the communication and power cable into the socket. Blinking LEDs indicate active Modbus RTU communication

Operational diagrams



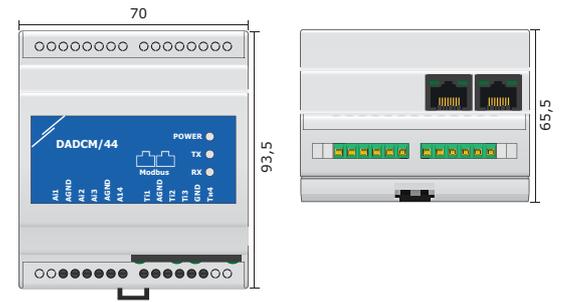
— Modbus output value (%)
* Available in Ai1—Ai4 only

Packaging

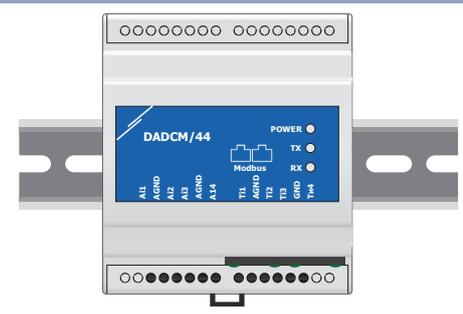


Article	Packaging	Length [mm]	Width [mm]	Height [mm]	Net weight	Gross weight
DADCM	Unit (1 pc.)	109	77	80	0,120 kg	0,156 kg
	Box (66 pcs.)	590	380	280	7,95 kg	11,20 kg

Fixing and dimensions



DIN-rail mounting



DADCM

DIN rail mounted analogue to digital converter



Application example

