



- Temperature is shown on a three digit display
- Wide range of power voltage
- High accuracy of measurement
- Temperature correction can be set
- Modbus RTU or ARION communication over RS485 line
- Assembly into frame BTicino - Living - Light - Light tech - Axolute
- UNICA - TOP AL - TOP Grafit - Quadro - Plus - Colours - Basic
- MOELLER - Original - Intense - Pure
- LEGRAND - Valena - Cariva
- Merten - Antique
- GIRA

Description

The thermometers and controllers AMD Series and ARD Series are intended to sense and eventually correct the interior room temperature. The device measures, displays, and by means of push buttons ▲ and ▼ sets the temperature correction. The controller has a three digit LCD display. The measured temperature and correction value are evaluated by the processor which communicates with the supervisory system. The controllers, with their adjustable functions, can be used primarily in applications for individual room temperature control. With their low power consumption and high accuracy they are designed for use in systems for an extended number of controlled areas. The electronic system of the controller consists of two parts. The display part with controls is located at the printed circuit inside the cover and the main part with terminal boards is located in the box that is inserted in the installation box. Both parts are connected with a flat conductor and the connection can be dismantled. The temperature and humidity sensor are located in the metal housing on the front device cover.

The communication with superior system is led in the line RS485 by the protocol Modbus RTU and the device always operates in the "slave" mode. The common chemically non-aggressive environment suits working conditions under which the sensors require no maintenance or service.

Technical data

Supply voltage	12 to 30 VDC	Nap. úroveň výstupu OUT	Hi ≈ Ucc - 0,8V, Lo ≈ 0V
Current consumption	max. 20 mA	Communication	RS485, ModBus RTU
Resolution	0,1°C (-9,9 ÷ 40 °C) ; 1°C (-30 ÷ -10 °C)	Attenuation mode	Button switch without locking
Accuracy	± 0,5 °C	Indication of attenuation mode	green LED
Time needed for equalization	30 min.	Galvanic separation of PWM Output	no
Measuring range	-30 ÷ 40 °C	Galvanic separation of RS485	no
Ambient temperature	-30 ÷ 70 °C	Galvanic separation of terminal OKNO	no
Relative humidity	< 80 %	Protection type	IP40
Output OUT	active, max. 100mA	Terminals	screw terminal (wire max. 1mm ²)

Version types:

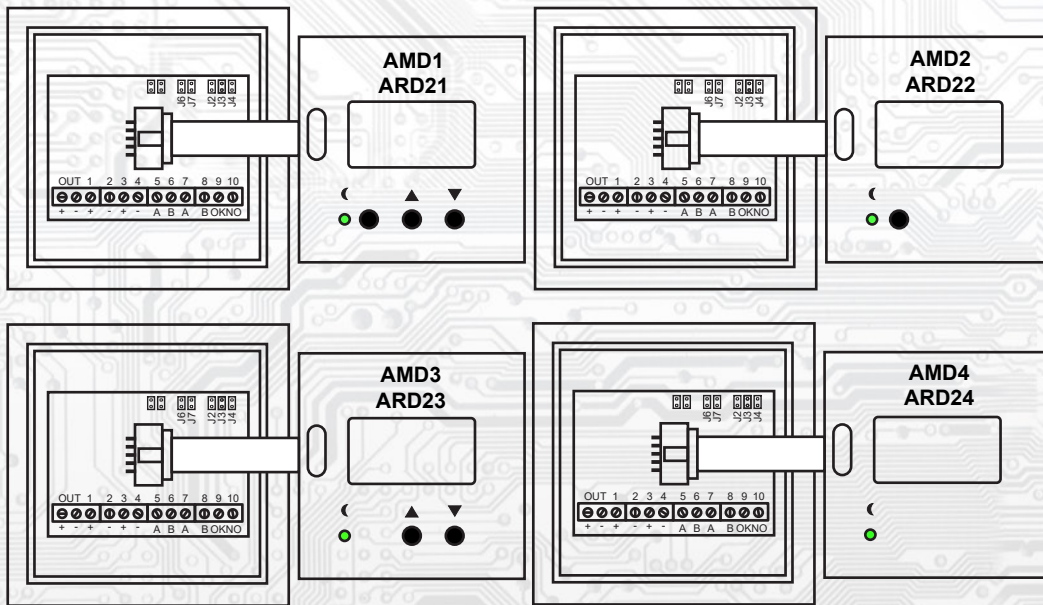
Type	ARD2x	AMDx
Communication	RS485 Protokol Arion	RS485 protokol ModBus RTU
Baud rate	2400 - 19200	1200 - 19200
Configuration	Sw:Regmet ARconfig	Sw: Regmet MBSset
Typ	AMD1 a AMD3	AMD21 a AMD23
Rozsah korekce teploty	± 5°C	10 ÷ 30 °C

x
Funkce:
1 – měření teploty, korekce teploty, tlačítko útlumu, indikační LED
2 – měření teploty, tlačítko útlumu, indikační LED
3 – měření teploty, korekce teploty, indikační LED
4 – měření teploty, indikační LED

Příklady provedení: **ARD21- Merten Antique** nebo **AMD1- Merten Antique**

Function description and controllers settings are on separate sheets:

Description of function and setting of AMD controllers - ModBus RTU protocol
Description of function and setting of ARD controllers - ARION protocol



- J2... definition of idle status (conductor A)
- J3... definition of idle status (conductor B)
- J4... termination resistor 120R
- J6... jumper "service"
- J7... jumper "service" (setting a fixed address 255 and setup communication speed of 19200 baud)

- Terminal:
- 1,3 - Power source positive terminal
 - 2,4 - Power source ground
 - OUT - Output of switching transistor
 - OKNO (WINDOW) --- input of window contact
 - 5,6,7,8 - A, B... RS485 communication line

Example of wiring the controllers in the system

