

[EN] Quick Installation Guide

AREA HOME AUTOMATION MODULE
KN-MDZ

Compliments! You have purchased the KOOLNOVA Home Automation Zone Module (MDZ), a new automation concept. KOOLNOVA covers the basic automation needs of lighting/general loads, shutters and technical alarms using a single universal module, which brings together everything needed for an area of the building or house without having to acquire different modules for each functionality.

Thank you for your trust!

Keep the document for future reference.

www.aircontrolclima.it



Subscription to the communication bus

1. Registration procedure
Must be run in all zone modules (MDZ) of the installation in the desired order, with the only condition that the first to be executed is the last MDZ on the bus, which is physically located at the end of the wiring. Make a note of the order where you are registering and the location of each one (living room, kitchen, ...), this information will be needed later:

Press and hold SEL. until the Modbus activity icon turns off, indicating successful registration.

If registration fails (the activity icon ModBus is still on), we recommend carrying out the following procedure:

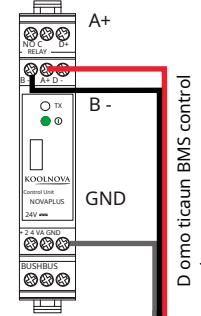
- Press SEL. again, holding the pressure for at least 1 second.

- Check the bus connection with MDZ.
- Check that the control unit has also been installed in addition to the MDZ.
- Check that the control unit is connected to the MDZ via the bus and power supply.
- Check the use of the correct ModBus sea connection in the control unit (of the two available).
- Check the ModBus wiring. Pay special attention to the A+/B- thread matching (check that has not been reversed in any MDZ or control unit).

I CONE ALL ARM ITE CN ICI	
	The fire
	The news
	Presence
	Contacts (window opening) doors

INDICATION STATUS OF ZONES DIALL ARME TE CN I CH E	
Worn out	Area forest or deactivated (Not used by the installer).
Switched on	Area currently in alarm.
The flashing fast	Area conavaria. (area open, unshort or with excess consumption).
Worn out, conbreve the amp eggio distanced	Stored in memory: an associated with at least detector was alarming me in a Certain zone results currently inflame me. none
Switched on, with the amp eggio quick	Just for intrusion zones (presence and contacts). Alert me to a fault (possible sabotage of the connection row).

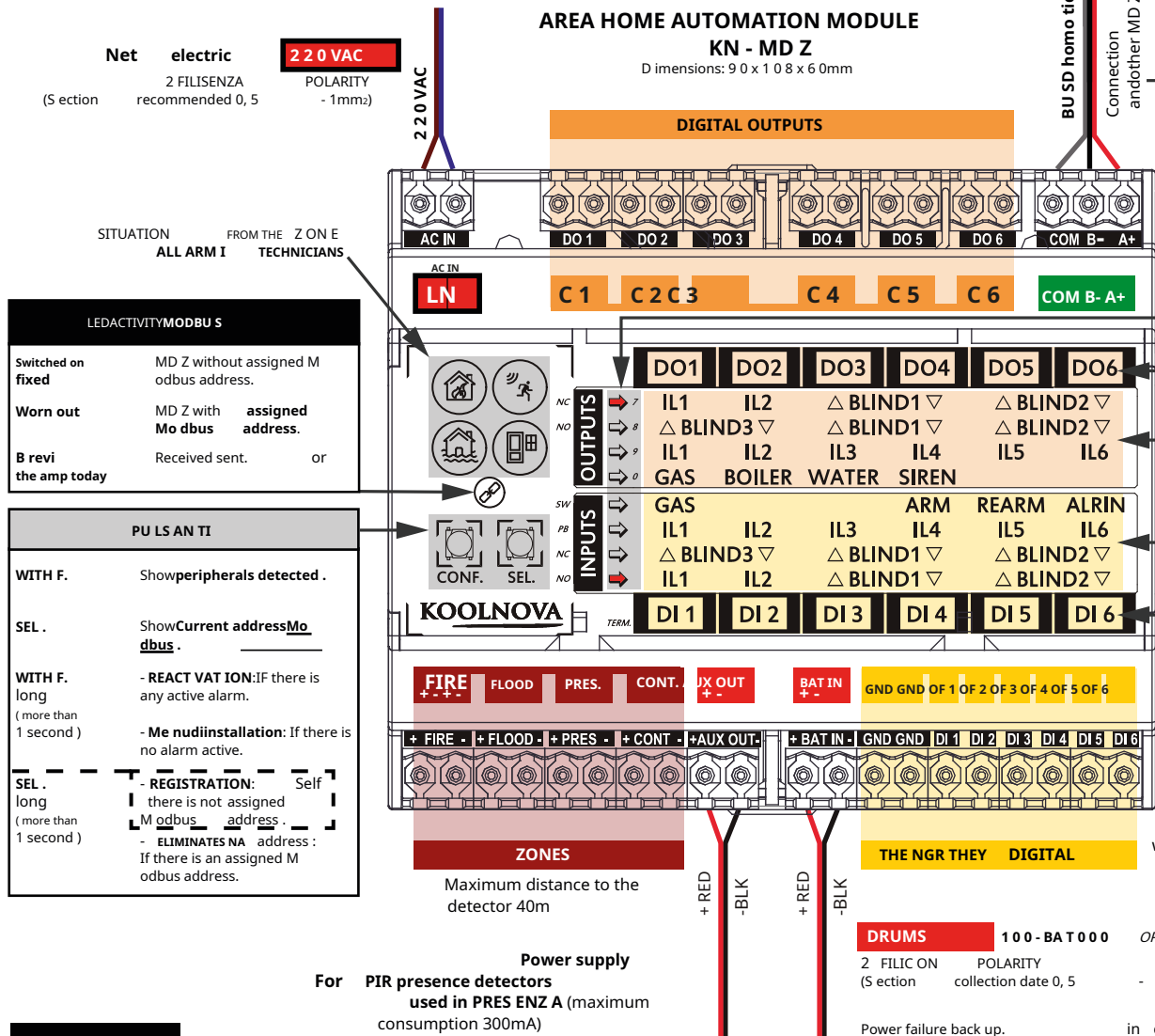
CONTROL UNIT



Connections to the control unit or BMS	
MODBUS RTU on RS-485	
Typology: Daisy Chain (chain)	
Guy I said: Cavo specific RS-485.	
Connection: 3 THREADS WITH POLARITY B-, COM, A+.	

For more information see:

Quick installation guide A51050 QUICK INST. GUIDE 3G HOME AUTOMATION CONTROL UNIT. NH-ES-3G-HOME AUTOMATION. POSSIBILITIES OF THE KOOLNOVA SYSTEM.



LED ACTIVITY MODBUS	
Switched on fixed	MDZ without assigned Modbus address.
Worn out	MDZ with assigned Modbus address.
Brevi the amp today	Received sent. or

PULSANTI	
WITH F.	Show peripherals detected.
SEL.	Show Current address Modbus.
WITH F. long (more than 1 second)	- REACT VATION: If there is any active alarm. - Me nudi installation: If there is no alarm active.
SEL. long (more than 1 second)	- REGISTRATION: Self there is not assigned Modbus address. - ELIMINATES NA address: If there is an assigned Modbus address.

Performance

6 digital inputs (DI) very low voltage (SELV): Configurable to control from the switch or button. NC / NO configurable.

6 digital outputs (DO) in the form of SPST 220v/7A dry contacts: General purpose charges and capacity loads up to a peak of 51A. NC / NO configurable.

4 FSL analogue zones (supervised wiring and consumption) *always available in any functional mode:*

Fire: up to 4 thermal velocity detectors (100-DETINC00). up to 8 flood detectors (100-DETIND00). up to 8 PIR detectors (100-DETINT00 / 100-DETINT01). up to 8 standard contacts.

Magnetic contacts:

5 functional modes:

- Lighting and shutters:** 2 light points and 2 shutters.
- Shutters only:** 3 shutters (curtains, roller shutters, motorized roller shutters or sliding shutters), 6 light points.
- Lighting only:** 3 light points.
- Technical alarm module:** Outputs for controlling gas, boiler, water solenoid valves, anti-intrusion siren and 2 free-use outputs.
- Generic E/S form:** 6 digital inputs and 6 outputs available for free use.

Entrance for:

- Fire Detection (FIRE)
- Flood Detection (FLOOD)
- Presence detection
- Door and window opening detection (CONTACTS)
- Gas detection (GAS)
- Intrusion arming button (ARM) External alarm input (ALRIN) General reset input (REARM) 2 free-use inputs

Self-deployed:

Technical alarms automatically propagate between the Zone Home Automation Modules, so that several MDZs configured as technical alarms behave as one: Alarms detected in any MDZ cause activation on the solenoid valves of the MDZs that are connected, even without the intervention of the Control Unit. In practice it means having a technical alarm module that can be expanded without limits and is always close to the sensors and solenoid valves, thus facilitating the connection.

KOOLNOVA SYSTEM
MODULE DOMOTIC THE AREA CONTROL UNIT
KN-MDZ

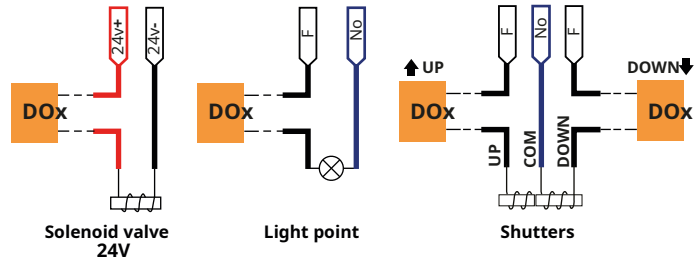
Connection

All terminals are connectable and grouped by color functionality.

220 VAC
Connect your 220V AC power supply here to power the MDZ.
To control the shutters it is recommended to power each MDZ from the same circuit as the electrical panel of the shutter motors under its control.

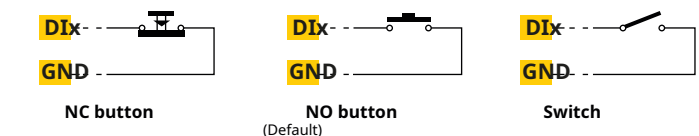
DIGITAL OUTPUTS

Connect each DOx output in series with the voltage to be controlled: light points, shutter motors, etc. Always respect the electrical characteristics:



THE DIGITAL INPUTS

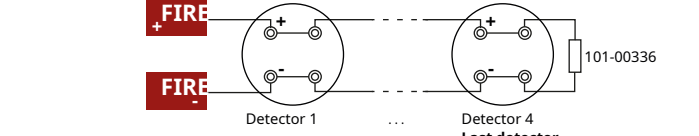
Connect the corresponding actuation mechanism in each of the DIx: buttons, switches and both NC and NO contact mechanisms. Connect each DI to the corresponding mechanism and the GND terminal wire.



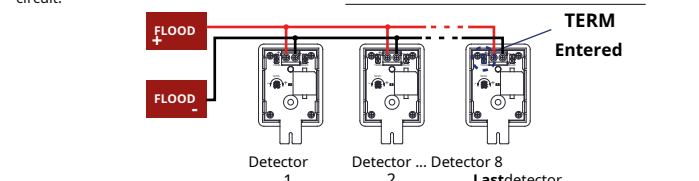
ZONE DIALL ARME TE CN I CH E

Connect the various detectors here respecting the polarity. Do not use GND as common, each zone has its connection to the negative pole. All zones are FSL (Full Supervised Loop) edit is essential to fit the 101-00336 terminals shown (supplied with each MDZ).

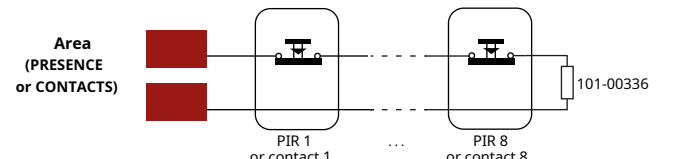
FIRE Thermal detector fire detectors (100-DETINC00). AND possible to connect up to 4 detectors at the FIRE input, adding a 101-00336 terminator after the last detector in the circuit:



FLOOD Flood detectors (100-DETIND00). At the FLOOD entrance can be connected up to 8 flood detectors. Flood detectors include a "TERM" jumpers to activate the end of circuit terminal. Don't forget to place the jumper only on the last detector in the circuit:



PRESENCE Intrusion detection zone, designed for connection of PIR presence detectors (100-DETINT00 / 100-DETINT01). You can connect up to 8 detectors with NC contact, powered by the AUX OUT output. You need to connect a 101-00336 terminator after the last detector in the circuit:



CONTACTS Intrusion detection zone, intended for connection of magnetic contacts. You can connect up to 8 magnetic contacts. You need to connect a 101-00336 terminator after the last detector in the circuit:

IMPORTANT: If using a PRESENCE and/or CONTACTS detector not supplied by KOOLNOVA, you need to add a resistor of 634ohm 1% in parallel with each NC contact of each PIR and each magnetic contact.

AUX OUT Power socket for PIR intrusion detectors (100-DETINT00 / 100-DETINT01) connected to the PRESENCE zone. The total consumption must be kept below 300mA.