

Introduction:

ModBus is an RS485 industrial standard communication protocol used to control multi-purpose devices by reading & writing their slave registers.



A Modbus line consists of a 3 wires data bus: Common, Data+ & Data-.

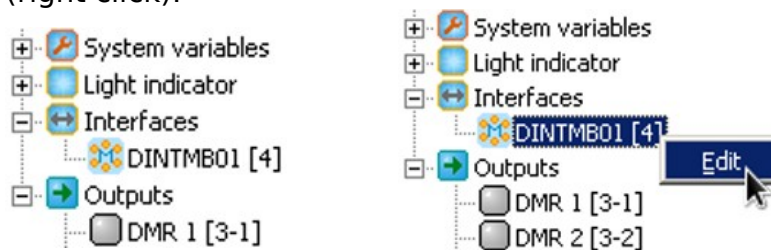
Maximum 64 ModBus slave devices can be connected to a ModBus master.

Each ModBus device has an individual address defined with dip-switches.

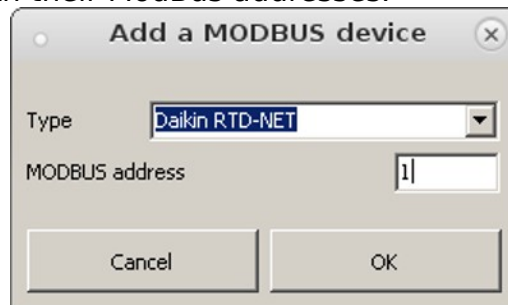
Domintell DINTMB01 module is a ModBus Master interface that manages only the devices listed below.

Operation:

- The configuration software detects a DINTMB01 module (network scan).
- The module appears then in section "Interfaces" on the right.
- Edit parameters (right click).



- Add manually devices with their ModBus addresses.

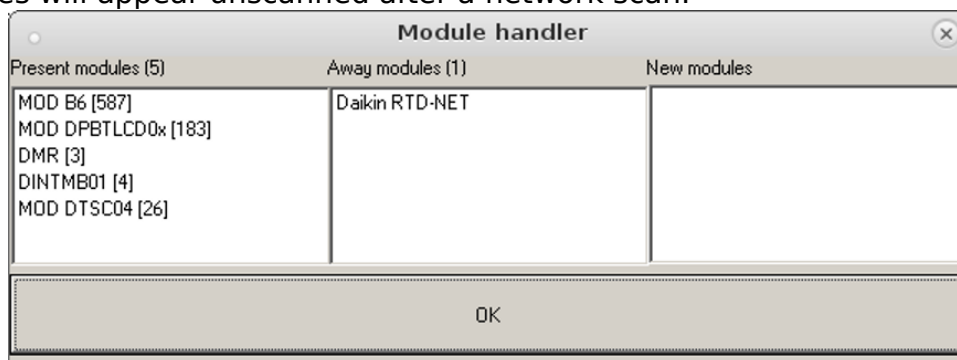


- ModBus Slave Devices appears like classic Domintell inputs/outputs.
- It is already possible to edit/rename these inputs/outputs.



- Links, groups, sfeers, clocks, followers, conditions, timers, OnChange, etc are available as usual with DINTMB01, depending the function of the slave device.
- Do not forget to save and transfer to the DGQG01 to terminate the configuration.

- While DINTMB01 module has not been initialized with the correct configuration, the slave devices will appear unscanned after a network scan.



Handled modules:

- DAIKIN RTD-NET (handled from v1.26.00)

Other modules can be proposed for integration with full technical datasheet & customer order. (Through hierarchic way)

Warnings:

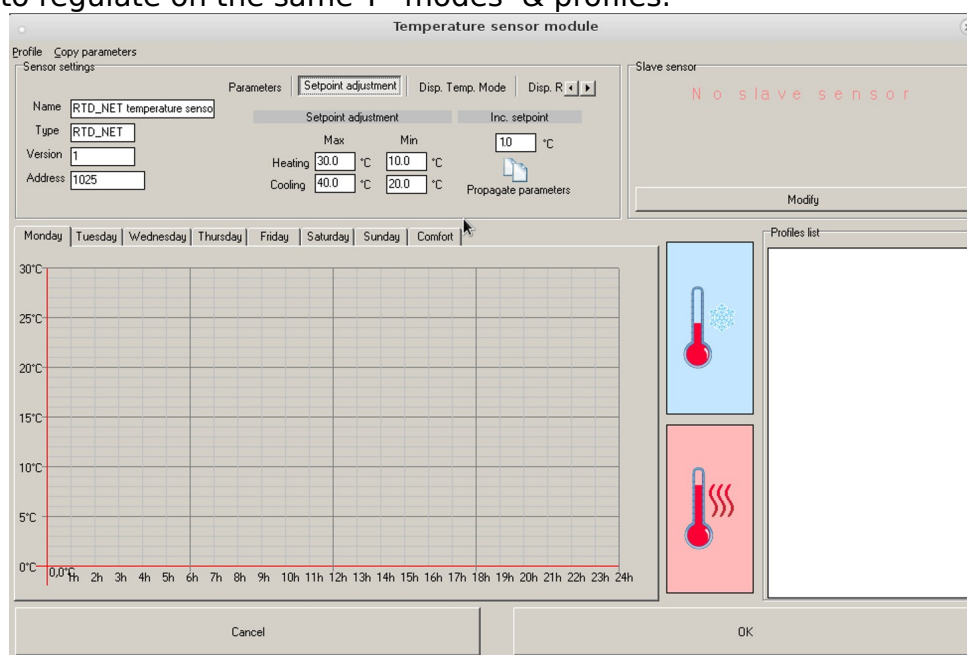
- DINTMB01 is available in version 1.26.00 and later
- Only one ModBus master can be connected to a ModBus bus at the same time.
- Multiple ModBus busses can be integrated to Domintell: one bus per DINTMB01.
- A ModBus address must be unique!

DAIKIN RTD-NET: (handled from v1.26.00)

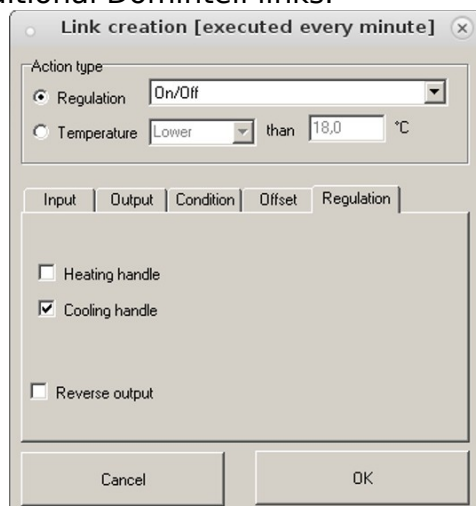
The RTD-NET is a Modbus interface for monitoring and control of Daikin VRV and Skyair ranges of air-conditioners and VAM and VKM ventilation units, connected on Daikin P1/P2 Bus.

This interface is integrated like a classic Domintell T° sensor that executes automatically it's regulation following usual Domintell T° management.

On such a configuration, up to 16 HVAC Units can be connected to regulate on the same T° modes & profiles.



It is also possible to add additional Domintell links.



Link creation [executed every minute]

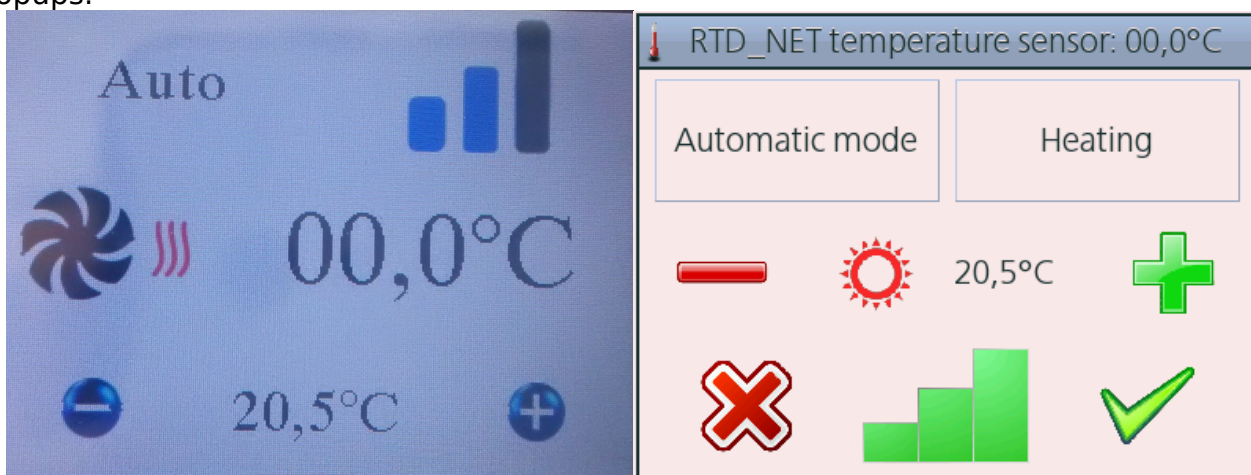
Action type:
☒ Regulation On/Off
☐ Temperature Lower than 18,0 °C

Input Output Condition Offset Regulation

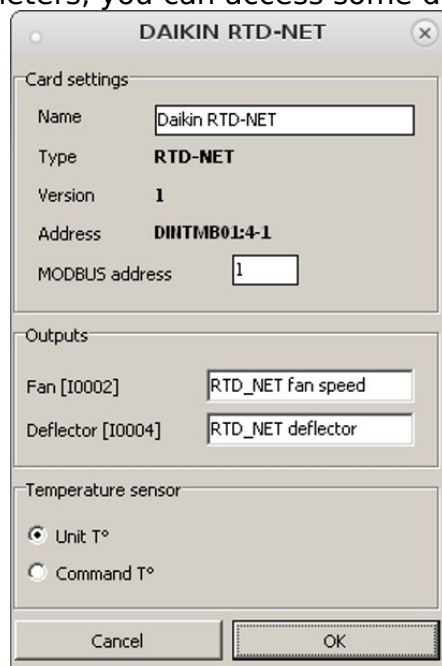
☐ Heating handle
☒ Cooling handle
☐ Reverse output

Cancel OK

Daikin Units Fan speed is handled with the T° sensor into DPBnLCD0x and DTSC0x popups:



When editing modules parameters, you can access some data:



DAIKIN RTD-NET

Card settings

Name: Daikin RTD-NET
 Type: RTD-NET
 Version: 1
 Address: DINTMB01:4-1
 MODBUS address: 1

Outputs

Fan [I0002]: RTD_NET fan speed
 Deflector [I0004]: RTD_NET deflector

Temperature sensor

☒ Unit T°
☐ Command T°

Cancel OK

- Modify the ModBus Address
- Modify Units Fan & Deflector Labels (Reserved for future use)
- Select the T° sensor that will be used to display & manage the system:
The HVAC Unit T° sensor (#1 if many units) or the Remote Controller T° sensor.

"ModBus Address" and the "Temperature sensor" parameters This parameter should be the same than inserted in the Daikin system.

You should check this point with the HVAC Technician.

Limitation:

- Daikin error codes are not decoded/interpreted.

We are at your service for all information request.