

Accessories

# Control systems

RTD universal control

- » Modbus interface
- » Indoor unit control via 0~10 volt, dry contact or resistance contact
- » Key card connection
- » Duty/standby
- » Heating interlock
- » Alarm signal



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RTD



# Monitor and control up to 16 VRV<sup>®</sup> or Sky Air<sup>®</sup> indoor units via a third party control or BMS system

## Energy management gateways

### RTD-10

Advanced integration into BMS system of VRV, Sky Air, VAM and VKM through either:

- > Modbus
- > Voltage (0-10V)
- > Resistance

### RTD-NET




Modbus interface for monitoring and control of VRV, Sky Air, VAM and VKM

### RTD-HO

Intelligent hotel room controller

## Overview of functions

Key card + window contact
Set back function
Prohibit or restrict remote control functions (setpoint limitation, ...)
Modbus
0 - 10 V control
Resistance control
IT application
Heating interlock
Output signal (on/defrost, error)

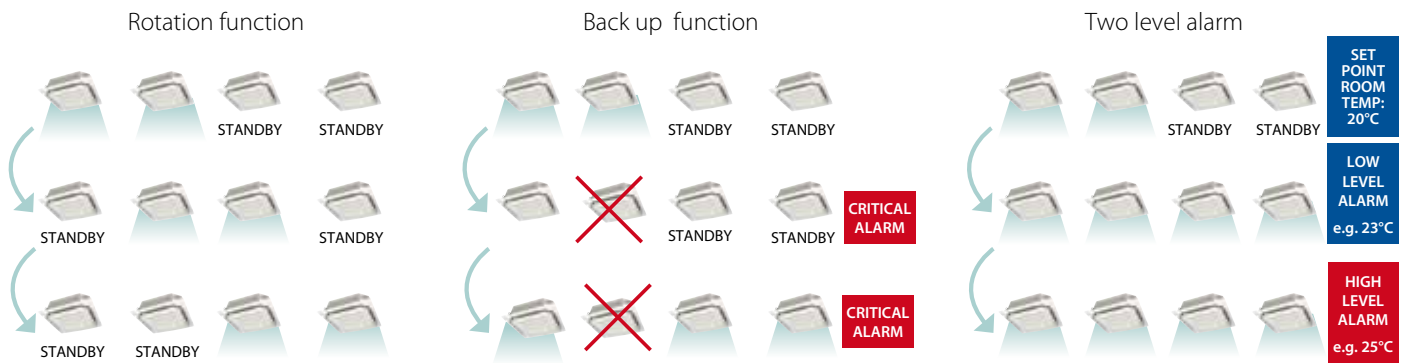
RTD-10	RTD-NET	RTD-HO
		
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# RTD-10

## Application: Duty/standby function for server rooms

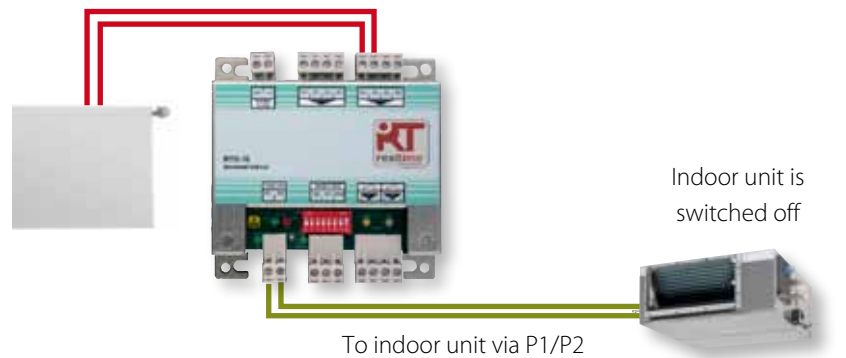
Suitable for IT and Telecom applications.

- > Rotation function:
  - > Up to 8 duty/standby groups
  - > 1 or 2 standby units
  - > Daily, Weekly or Multi-week duty rotation
  - > Optional thermistor space temperature alarm
- > Back up function
- > Two level alarm on high temperature or unit fault



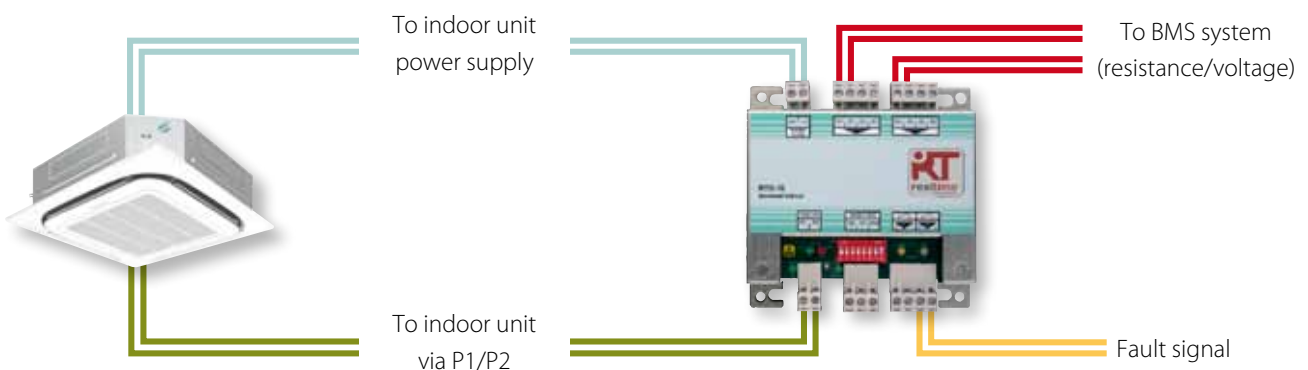
## Application: Heating interlock of air conditioning with central heating

- > Avoids having simultaneous cooling and heating occurring when a separate heating system is installed
- > The setting of the interlock function offers several possibilities on the indoor unit: to block certain functions, to switch it off or to change the mode to fan only



## Application: Integration in BMS system

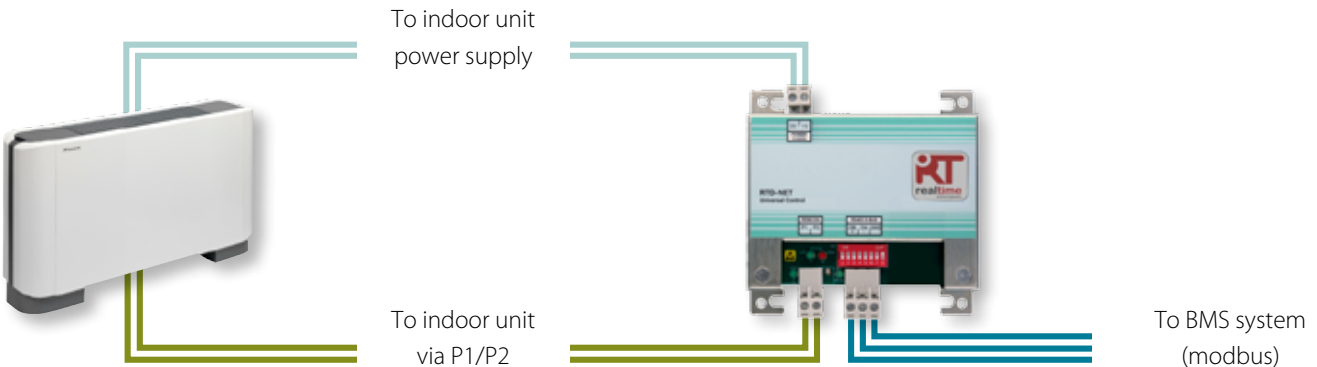
- > Integration in BMS system via resistance and/or voltage control



# RTD-NET

## Application: Integration in BMS system via Modbus control

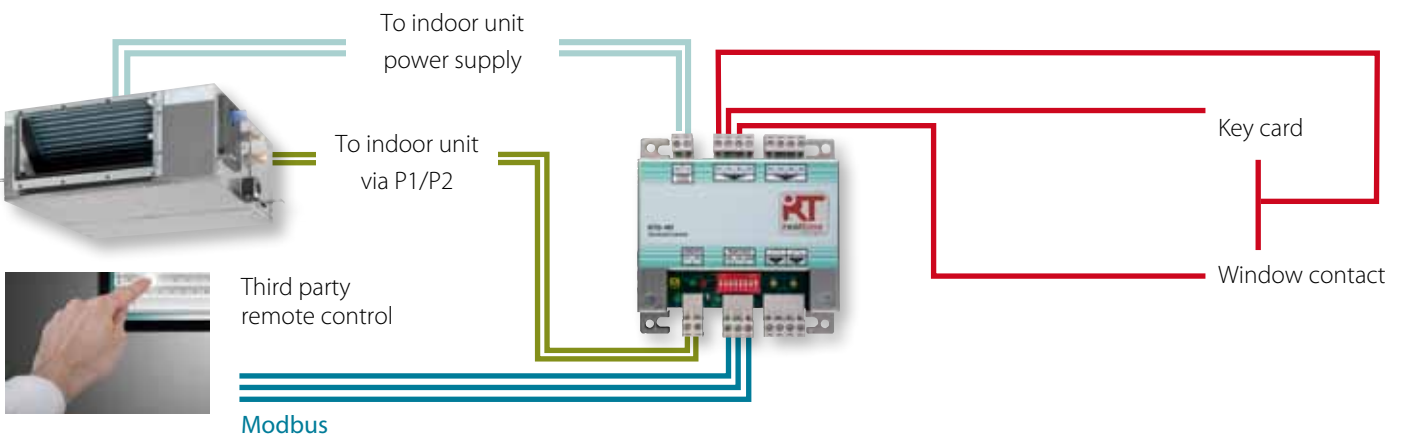
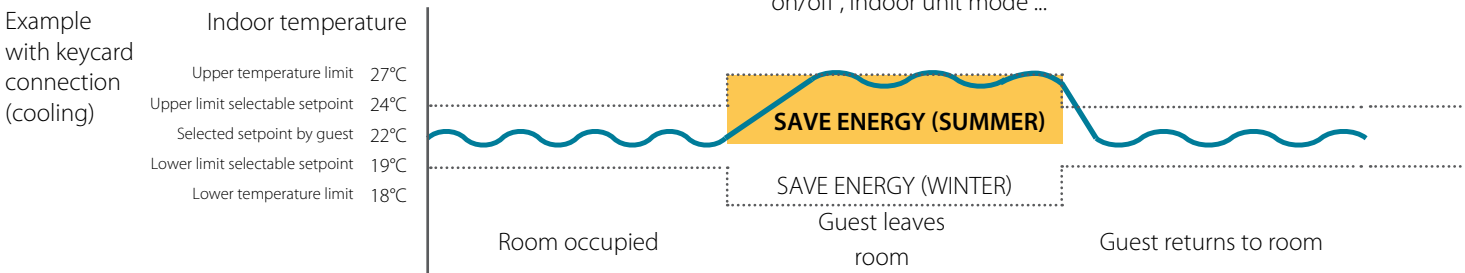
- > Integration in BMS system via Modbus



# RTD-HO

## Application: Hotel room

- > Interlock with key card
- > Interlock with window contact
- > Control via third party remote control
- > Limit selectable setpoint (e.g. between 19 and 24°C)
- > Prohibit several remote control settings like indoor unit on/off, indoor unit mode ...





# Specifications

			RTD-10	RTD-NET	RTD-HO
Dimensions	HeightxWidthxDepth	mm	100x100x22		
Weight		g	120		
Operation range		°C	0~50		
Power supply			15V-24V DC		
Voltage /resistance input			6	N/A	3
Voltage input			0~10VDC < 1mA	N/A	N/A
Resistance input			5V, 1mA	N/A	5V, 1mA
Dry contact input ports			2	N/A	N/A
Modbus connection			RS485		
P1/P2 connection			yes		
Relay			1A, 24VAC max	N/A	1A, 24VAC max
			1A, 30VDC max	N/A	1A, 30VDC max

# Overview functions

CONTROL FUNCTIONS	RTD-10	RTD-NET	RTD-HO
On/Off	M,V,R	M	M*
Set point	M,V,R	M	M*
Mode	M,V,R	M	M*
fan	M,V,R	M	M*
Louver	M,V,R	M	M*
HRV Damper control	M,V,R	M	
Prohibit/Restrict functions	M,V,R	M	M*

MONITORING FUNCTIONS	RTD-10	RTD-NET	RTD-HO
On/Off	M	M	M
Set point	M	M	M
Mode	M	M	M
fan	M	M	M
Louver	M	M	M
RC temperature	M	M	M
RC mode	M	M	M
nbr units	M	M	M
Fault	M	M	M
Fault code	M	M	M
Return air temperature (Average /Min/Max)	M	M	M
Filter alarm	M	M	M
Termo on	M	M	M
Defrost	M	M	M
Coil In/Out temperature	M	M	M

M: Modbus  
V: Voltage  
R: Resistance

\*: only when the room is occupied



RTD-10

Modbus, voltage and resistance communication



RTD-NET

Modbus communication



RTD-HO

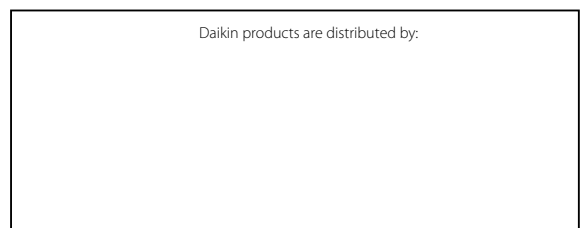
Hotel controller



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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