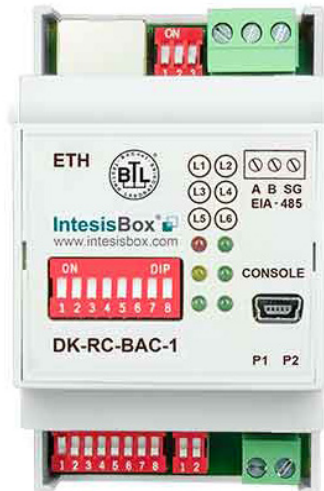




# NC-DK-RC-BAC-1

BACnet MS/TP & IP Interface for DAIKIN Air Conditioners



## Overview

The NC-DK-RC-BAC-1 interface allows a complete and natural integration of Daikin air conditioners into either BACnet IP or MS/TP networks. Compatible with SKY & VRV air conditioner lines commercialized by Daikin.

## Applications

- For operation with Daikin air conditioners

## Features & Benefits

- Allows using simultaneously the IR and wired remote controls and BACnet
- Total Control and Supervision. Real states of the AC unit's internal variables
- Direct connection to the AC indoor unit
- Direct connection to BACnet networks. NC-DK-AC-BAC-1 is a BACnet MS/TP or a BACnet IP server (depending on configuration)
- External power not required
- Quick and easy installation

# Product Specifications

## Environmental

Operating Temperature	0°C to 40°C (32°F to 104°F)
Relative Humidity	5 to 95%, non-condensing
Protection	IP20 (IEC60529) NEMA 1

## Enclosure

Dimensions (W x H x D)	3.66 x 2.09 x 2.28" (93 x 53 x 58 mm)
Weight	0.19 lb (85 g)
Material	Plastic Type PC (UL 94 V-0)
Colour	Light Grey RAL 7035
Mounting	DIN Rail Wall Mounting EN60715 TH35

## Ports

BACnet MS/TP	1 x EIA485 Plug-in screw terminal block (2 poles + GND)
Console	Mini USB port for console usage
LED Indicators	6 x Gateway/Communication status
Terminal Wiring	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 20 to 14 AWG (0.5 to 2.5 mm <sup>2</sup> ) 2 cores: 20 to 16 AWG (0.5 to 1.5 mm <sup>2</sup> ) 3 cores: not permitted
Isolation Voltage	4000 VDC (between AC unit and EIA-485) 1000 VDC (between AC unit and console)

## Regulatory Compliance

CE	EMC directive (2004/108/EC) Low-voltage directive (2006/95/EC) EN 61000-6-1 ; EN 61000-6-3; EN 60950-1; EN 50491-3
RoHS	2002/95/CE
FCC	Complies with part 15 of the FCC Rules <sup>1</sup>

## Compatibility

Compatible models	Refer to Intesis website <sup>2</sup>
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1. Operation is subject to the following two conditions:

- This device may not cause harmful interference
- This device must accept any interference received, including interference that may cause undesired operation.

2. A list of Daikin indoor unit model references compatible with NC-DK-RC-BAC-1 and their available features can be found at:

- [https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox\\_DK-RC-xxx-1\\_AC\\_Compatibility.pdf](https://www.intesisbox.com/intesis/support/compatibilities/IntesisBox_DK-RC-xxx-1_AC_Compatibility.pdf)

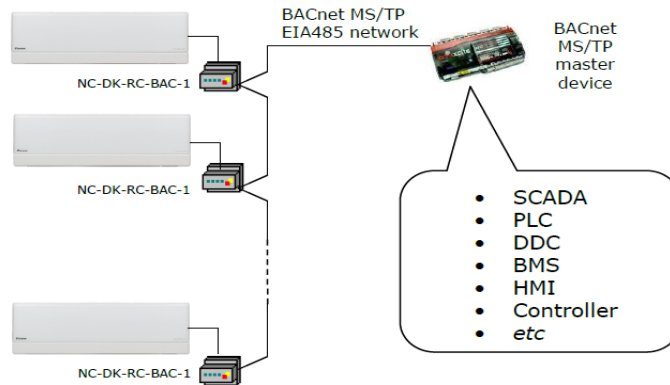
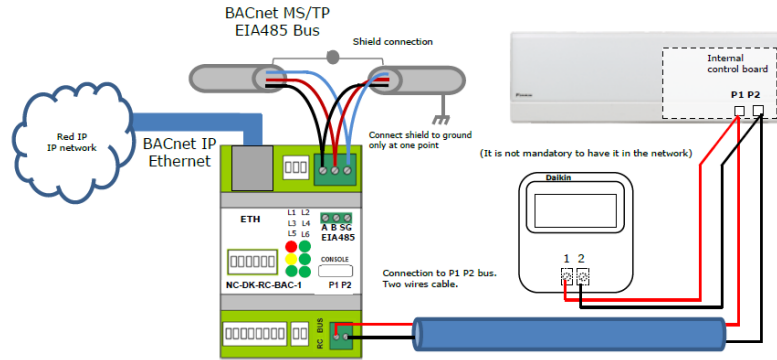
## BACnet Interface

Object-name	Description	Object-type
NC-DK-RC-BAC-1	Daikin AC Interface	Device
OnOff_status		BI
OnOff_command		BO
Mode_status		MI
Mode_command		MO
SetPoint_status		AI
SetPoint_command		AO
FanSpeed_status		MI
FanSpeed_command		MO
AirDirectionUD_status		MI
AirDirectionUD_command		MO
RoomTemperature_status		AI
RoomTemperature_command		AO
ErrorCode		AI
ErrorCodeM		MI
ErrorActive		BI
ErrorAddress		AO
OnTimeCounter		AV
FilterSign		BI
FilterReset		BO
Occupancy		MV
OccupiedCoolSetPoint		AV
OccupiedHeatSetPoint		AV
UnoccupiedCoolSetPoint		AV
UnoccupiedHeatSetPoint		AV
OccupancyContinuousCheck		BV
UnoccupiedDeadbandAction		BV
LockRemoteControl		BV
IndoorLiquidPipeTemp		AI
IndoorGasPipeTemp		AI
IndoorEEVOpening		AI
Thermostat ON		BI

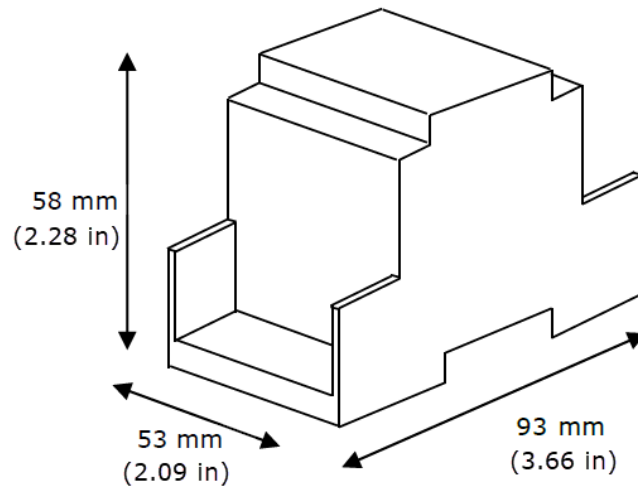
\* Configurable from BACnet side, the device configuration tool and the switch configuration. Check the user manual for more information.

# Connections

NC-DK-RC-BAC-1 connects directly to the indoor unit connector using the P1P2 connector and to the BACnet side using BACnet IP or BACnet MS/TP



# Dimensions



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