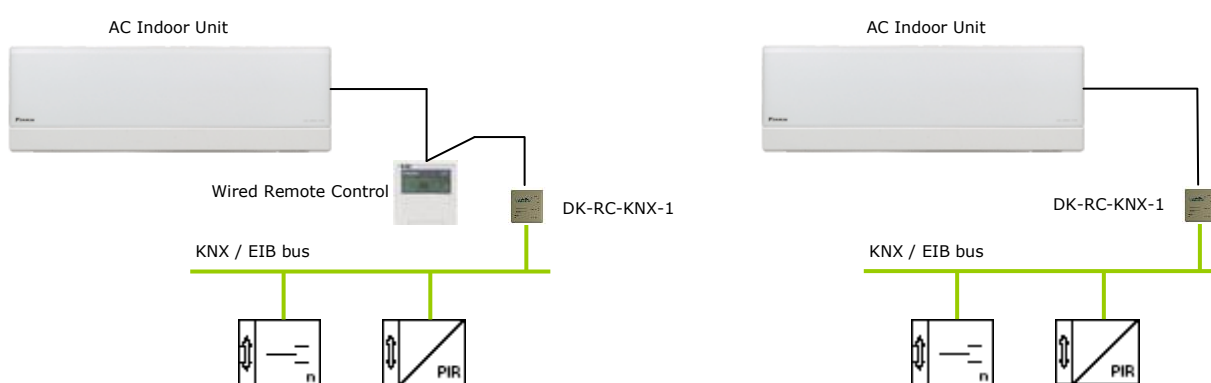




IntesisBox® DK-RC-KNX-1

Interface KNX for DAIKIN Air Conditioners (SKY & VRV)



IntesisBox® DK-RC-KNX-1 allows monitoring and control, fully bi-directionally, all the functioning parameters of DAIKIN Air Conditioners from KNX installations. Compatible with all SKY Air and VRV models commercialised by DAIKIN (see link to compatible models at the end of this document).

Small dimensions and easy installation. It can be connected with or without the wired Remote Controller of the AC indoor unit in one side, which can be hidden into an electrical installation cabinet, and in the other side it connects directly to the KNX TP-1 (EIB) bus. The maximum bus distance between the AC Indoor Unit, the Remote Controller and the Interface is 500 meters (see *Connections* section).

Great flexibility of integration into your KNX projects. Configuration is made directly from ETS, the database of the device comes with a complete set of communication objects allowing, from a simple and quick integration using the basic objects, to the most advanced integration with monitoring and control all the AC unit's parameters. Also available specific device's communication objects, as for example save and execute scenes.

Allows single or dual Temperature Setpoint (different for Cool Mode and for Heat Mode) from KNX (configurable by parameters), and also allows the use of a KNX temperature sensor for the air conditioning control.

IntesisBox® DK-RC-KNX-1 will allow you offering a full integration of the air conditioning in your KNX projects at a very affordable cost.

1. Communication objects

The ETS database of the device comes with multiple communication objects allowing great flexibility of integration.

- 1.1.1 DK RC Interface v1.1
 - 0: Control_ On/Off [DPT_1.001 - 1bit] - 0-Off;1-On
 - 1: Control_ Mode [DPT_20.105 - 1byte] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
 - 2: Control_ Mode Cool/Heat [DPT_1.100 - 1bit] - 0-Cool;1-Heat
 - 3: Control_ Mode Cool & On [DPT_5.001 - 1byte] - 0%-Off;0.1%-100%-On+Cool
 - 4: Control_ Mode Heat & On [DPT_5.001 - 1byte] - 0%-Off;0.1%-100%-On+Heat
 - 5: Control_ Mode Auto [DPT_1.002 - 1bit] - 1-Set AUTO operating mode
 - 6: Control_ Mode Heat [DPT_1.002 - 1bit] - 1-Set HEAT operating mode
 - 11: Control_ Fan Speed / 2 Speeds [DPT_5.010 - 1byte] - Speed values 1,2
 - 15: Control_ Fan Speed +/- [DPT_1.007 - 1bit] - 0-Decrease;1-Increase
 - 47: Status_ On/Off [DPT_1.001 - 1bit] - 0-Off;1-On
 - 48: Status_ Mode [DPT_20.105 - 1byte] - 0-Aut;1-Hea;3-Coo;9-Fan;14-Dry
 - 49: Status_ Mode Cool/Heat [DPT_1.100 - 1bit] - 0-Cool;1-Heat
 - 50: Status_ Mode Auto [DPT_1.002 - 1bit] - 1-AUTO is active
 - 73: Status_ Error Text Code [DPT_16.001 - 14byte] - 2 char DK Error / Empty-None
 - 74: Status_ Power Mode [DPT_1.001 - 1bit] - 0-Off;1-On
 - 75: Status_ Econo Mode [DPT_1.001 - 1bit] - 0-Off;1-On

2. Parameters

Multiple parameters can be configured to ensure the maximum flexibility for the integration, not only in functionality of the device but in visibility of objects in ETS for a more comfortable integrator's work.

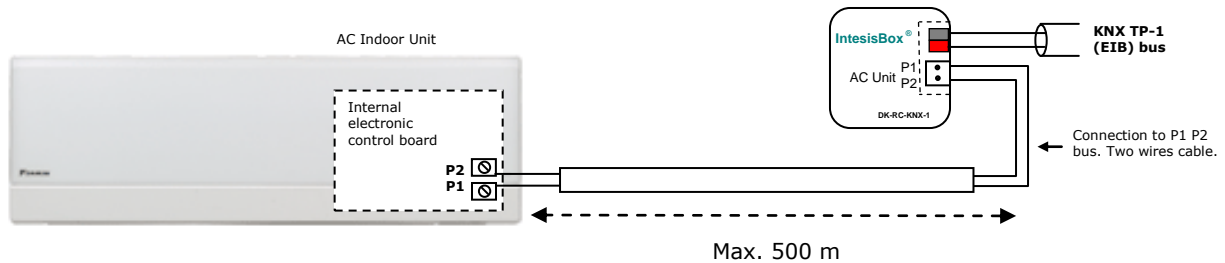
Device: 1.1.1 DK RC Interface

General		
Mode Configuration	When mode is AUTO Status_ objs report actual operating status (HEAT/COOL,..)	no
Special Modes Configuration	Enable use of Heat / Cool bit-type obj	yes
Fan Speed Configuration	Enable PID-Compat. Scaling Mode Objects	yes
Vane Up-Down Configuration	Enable use of +/- object for Mode	yes
Temperature Configuration	> DPT type for +/- Mode Object	0-Up / 1-Down [DPT_1.008]
Scene Configuration	Enable use of bit-type Mode objects (for control)	yes
Switch-Off Timeouts Configuration	Enable use of bit-type Mode objects (for status)	yes
	Enable use of Text object for Mode	yes
	ASCII strings shown in comm object "Status_ Mode Text"	<< 14-byte string values >>
	> String when mode is AUTO	AUTO

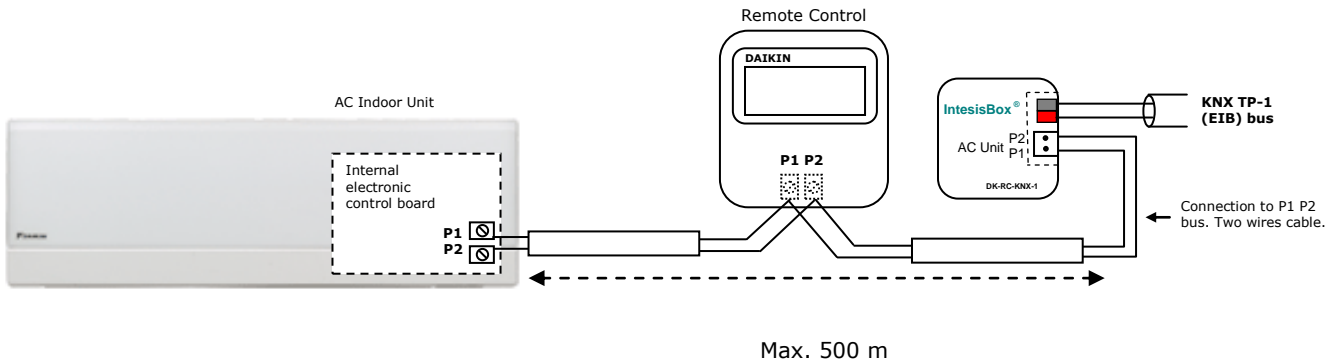
3. Connections

DK-RC-KNX-1 can be used with Daikin Remote Controllers or without them.

- DK-RC-KNX-1 without DAIKIN Remote Controller



- DK-RC-KNX-1 with DAIKIN Remote Controller



4. List of compatible Daikin AC indoor units.

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

http://www.intesis.com/pdf/IntesisBox_DK-RC-xxx-1_AC_Compatibility.pdf

5. Technical Specifications

Dimensions:	70 X 70 X 28 mm
Weight:	70 g
KNX current consumption:	5 mA
P1-P2 Bus current consumption:	45 mA
Operating Temperature:	-25 . . . 85°C
Stock Temperature:	-40 . . . 85°C
Isolation voltage:	2500 V