

INTERFACE ATW-KNX-01



DANGER

Follow carefully this safety and installation instructions. Improper work may lead to serious harmful for your health and also may damage seriously the interface and/or the AC indoor unit.

1 SAFETY INSTRUCTIONS

- This interface must be installed by accredited technical personnel (electrician, KNX installer, or authorized technical personnel) and following all the safety instructions given here and in accordance always with the country legislation for installation of electric equipment.
- This interface cannot be installed outdoors or exposed to direct solar radiation, water, high relative humidity or dust and must only be installed in a restricted access location.
- Before manipulating the AC indoor unit, be sure it is completely disconnected from the mains electricity supply.
- Disconnect always from the mains electricity supply any wires from the KNX bus, the AC indoor unit and the external power supply before manipulating and connecting them to the interface.
- A power supply with an NEC Class 2 or Limited Power Source (LPS) and SELV rated is to be used.
- Supply always a correct voltage to power the interface in between the admitted range (see details in the technical characteristics).
- Respect always the expected polarity of power and communication cables when connecting them to the interface.
- In case of installation of the interface inside the AC indoor unit, fix the interface and communication cables preferably to any appropriate point of the plastic cover of the unit, taking care of no blocking free movement of mobile parts, and as far as possible from tubes containing liquids and power cables.
- To prevent EMC disturbances, ensure that there is a safety separation (SELV) of the connected signal cables (including possible extensions) from the other voltage carrying devices and cables.
- This device was designed for installation in an enclosure. To avoid electrostatic discharge to the unit in environments with static levels above 4 kV precautions should be taken when the device is mounted outside an enclosure. When working in an enclosure (ex. making adjustments, setting switches etc.) typical anti-static precautions should be observed before touching the unit.



NOTE

- *The maximum length for the H-Link bus is 1000 m. Extending the connecting cable may cause it to malfunction. Keep the connecting cable as far away as possible from electrical wires and ground wire. Do not bundle them together.*

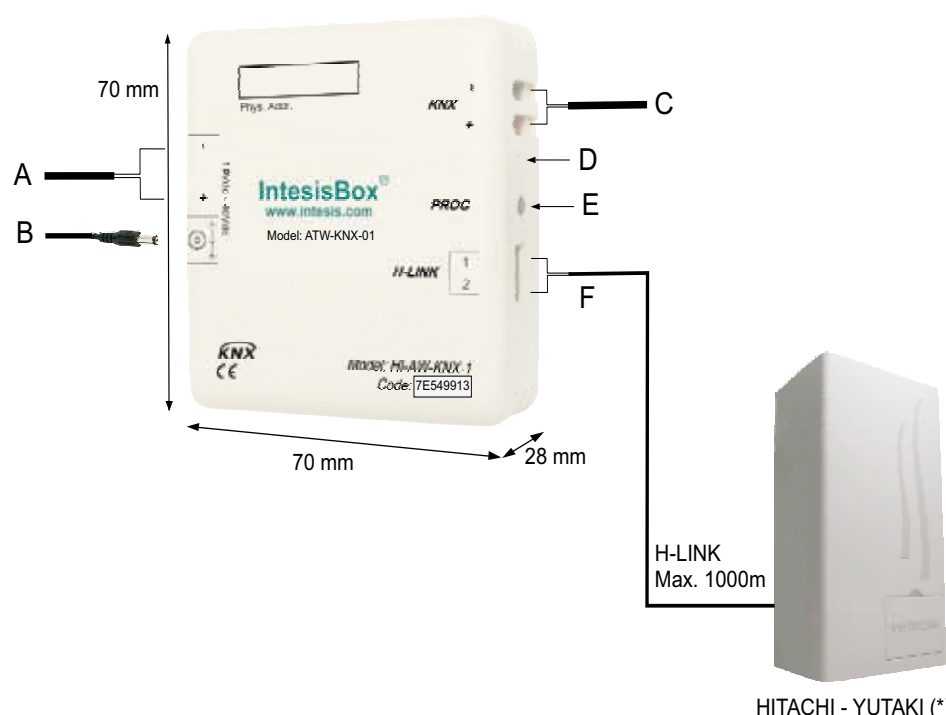
2 INSTALLATION INSTRUCTIONS

- Disconnect the Air Conditioner from the mains electricity supply.
- Disconnect power of any bus or communication cable before connecting it to the interface.
- Disconnect from the mains electricity supply the external power supply before connecting it to the interface.
- Connect the H-Link bus cable between the interface and the AC indoor unit following the instructions of the installation diagram.
- Connect the KNX bus to the connector KNX of the interface. Respect polarity.
- Close the AC indoor unit and reconnect it to the mains electricity supply.
- Connect a NEC Class 2 or Limited Power Source (LPS) and SELV rated power supply to the interface, respect the polarity if DC power. Apply always a voltage within the range admitted by the interface and of enough power (see technical features).
- Circuit-breaker must be used before the power supply. Rating 250V-6A.
- Reconnect power supply to the KNX bus.
- Follow the instructions on the user's manual for configuring and commissioning the interface.

3 CONFIGURATION INSTRUCTIONS

- Download the Operation Manual *TCGB0084* and project file *ATW-KNX-01_v0.2*. from: www.hitachiaircon.es:8080/HapeWeb

4 CONNECTIONS



A: External power supply connection (1).
2 wire terminal

B: DC Jack

C: KNX Port
KNX TP-1 (Bus EIB)

D: KNX Programming led.

E: KNX Programming button.

F: H-LINK port.

(1) Must use NEC Class 2 or Limited Power Source (LPS) and SELV rated power supply.
If using DC power supply:
Respect polarity applied of terminals (+) and (-). Be sure the voltage applied is within the range admitted (10 to 40 Vdc). The power supply can be connected to earth but only through the negative terminal, never through the positive terminal



NOTE

Connect only one external power supply. Use either the two-wire terminal connector (A) or the DC adaptor Jack connector (B).

(*) YUTAKI S example:
Terminal board 2: Terminals 1 and 2.

5 TECHNICAL FEATURES

Enclosure	ABS (UL 94 HB) de 2,5 mm thick
Dimensions	70 X 70 X 28 mm
Weight	70g
Color	Ivory White
Power Supply	29V DC, 6mA (KNX bus)
External Power Supply	10-40V DC, 100mA (Recommended: 12V DC, 100 mA) Must use a NEC Class 2 or Limited Power Source (LPS) and SELV rated power supply. Plug-in terminal block for power connection (2 poles).
Terminal wiring (for power supply and low-voltage signals)	Per terminal: solid wires or stranded wires (twisted or with ferrule) 1 core: 0.5mm ² ... 2.5mm ² 2 cores: 0.5mm ² ... 1.5mm ² 3 cores: not permitted
KNX port	1 x KNX TP1 (EIB) port opto-isolated. Plug-in terminal block (2 poles). TNV-1
H-Link port	Plug-in terminal block for H-Link bus connection (2 poles) with no polarity.
LED	1 x KNX programming.
Push buttons	1 x KNX programming.
Configuration	Configuration from ETS
Operational temperature	From 0°C up to 40°C
Storage temperature	From 0°C up to 40°C
Operational humidity	25-90% at 50°C, non condensing
Isolation voltage	External Power Supply – KNX: 2500V External Power Supply – H-Link: 1500V
RoHS conformity	Compliant with RoHS directive (2002/95/CE).
Certifications	CE conformity to EMC directive (2004/108/EC) and Low-voltage directive (2006/95/EC) EN 61000-6-2; EN 61000-6-3; EN 60950-1; EN 50491-3; EN 50090-2-2; EN 50428; EN 60669-1; EN 60669-2-1