KDT Touch

Keyboard with touch technology for refrigeration applications.

User terminal for full display and programming of controllers for ducted and plug-in refrigerated cabinets.
The keypad is compatible with the controllers of RTX/RTD/RTN and IWP750/760 SMPS series.

USER INTERFACE

Reduced Set / Economy LED Permanently on: Energy Saving active Blinking: reduced setpoint active Rapid blinking: access to level2 parameters Off: otherwise		**Evaporator Fans LED** Permanently on: evaporator fans on Off: otherwise	
Compressor LED Permanently on: compressor on Blinking: delay, protection or start blocked Off: otherwise		**Defrost LED** Permanently on: Defrost Active Blinking: activated manually or from Digital Input (DI) Off: otherwise	
Alarms LED Permanently on: alarm present Blinking: alarm acknowledged Off: otherwise		**AUX LED** Permanently on: AUX output active Blinking: Deep Cooling cycle active Off: AUX output not active	AUX
°C LED Permanently on: °C setting (dro=0) Off: otherwise	°C	**°F LED** Permanently on: °F setting (dro=1) Off: otherwise	°F

NOTE: When switched on, the device performs a Lamp Test; the display and LEDs will flash for several seconds to check that they all function correctly.

KEYs

ESC ➔ ESC

Press and release
- Returns to the previous menu level
- Confirms parameter value

Press for at least 5 sec
- Activates the Reduced Set function (see H3**x** parameter of the power board)

SET ➔ SET (ENTER)

Press and release
- Displays any alarms (if active)
- Opens Machine Status menu

Press for at least 5 sec
- Opens Programming menu
- Confirms commands

➔ STAND-BY (ON/OFF)

Press for at least 5 sec
- Activates the Stand-by function (ON/OFF) (when outside the menus) (see H3**x** parameter of the power board)

➔ UP

Press and release
- Scrolls through menu items
- Increases values

Press for at least 5 sec
- Activates the Manual Defrost function (see H3**x** parameter of the power board)

➔ DOWN

Press and release
- Scrolls through menu items
- Decreases values

Press for at least 5 sec
- User configurable function (see H3**x** parameter of the power board)

➔ LIGHT

Press and release
- Switches ON/OFF the light

Press for at least 5 sec
- User configurable function (see H3**x** parameter of the power board)

***NOTE**: if H3**x**≠0, the device doesn't switch ON/OFF the light

+ ESC
- **IWP750/760 SMPS**: Press and hold simultaneously for at least 2 seconds to lock the keyboard. To disable the keyboard lock, repeat the aforementioned procedure.
- **RTX-RTD-RTN (/V)**: Enables the remote control of the display (keyboard shared on LINK²).

LEDs

Device off	Light relay ON from key

STAND-BY

When reset or not touched for at least 30 seconds, the keypad enters stand-by mode.

To exit stand-by mode, press and hold any button for at least 5 secs.
Exiting of this mode is confirmed by the buzzer and the LED for the button you have pressed, without the command actually being implemented.

The action corresponding to the button you have pressed only takes place if you press one of the buttons again.

MECHANICAL INSTALLATION

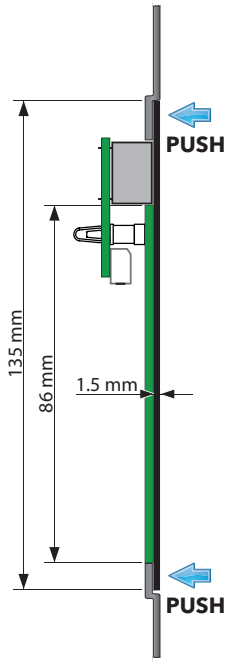
The device is designed for panel mounting.

Drill a 67x120 mm hole, insert the instrument and secure it using the appropriate double-sided adhesive present in the back of the front panel.

The front panel can be fitted against the metal sheet (protruding) or you can bend the sheet for flush mounting (see diagram).

Do not install the device in places subject to high humidity and/or dirt; it is intended for use in sites with ordinary or normal levels of pollution.

Keep the area around the device cooling slots adequately ventilated.



TECHNICAL DATA

Mounting:	panel-mounting (via double-sided adhesive) can be set for a distance of up to 100 m, with 67x120 mm (+0.2/-0.1 mm) drilling template.
Power supply:	12V⎓ ±10% from power board (RTX/RTD/RTN and IWP750/760 SMPS series)
Container:	open board with Poly(methyl methacrylate) (PMMA) front panel
Dimensions:	front panel 87x135 mm, panel thickness 15/10 mm
Connectors:	JST for connection to power board
Temperature:	Operating: -5 … +55 °C - Storage: -20 … +60 °C
Humidity:	Operating / Storage: 10…90 % RH (non-condensing)
Display:	amber, red, blue or white display with 3 digits + sign
Icons	8 colour icons
LED:	2 status LEDs (associated with ON/OFF and Light keys)
Keys:	6 capacitive touch keys
Key feedback:	• buzzer. Emits a tone with a fixed duration of 100 ms; a different tone is used for each button • feedback LED which remains lit while the button is being pressed
Buzzer	YES

NOTE: For all technical and normative information not indicated in this section, refer to the "Technical Specifications" section of the documents relating to the power board to which the product is connected.

DIAGNOSTICS

If there is no communication between the keypad and the power board for 60 seconds or longer, the KDT keypad enters error mode **E7**.

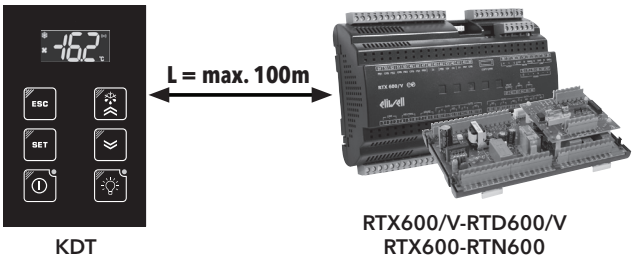
If this happens, the keypad will remain completely inactive with the exception of the display, on which the label **E7** will appear. The error mode is reset as soon as communication is restored.

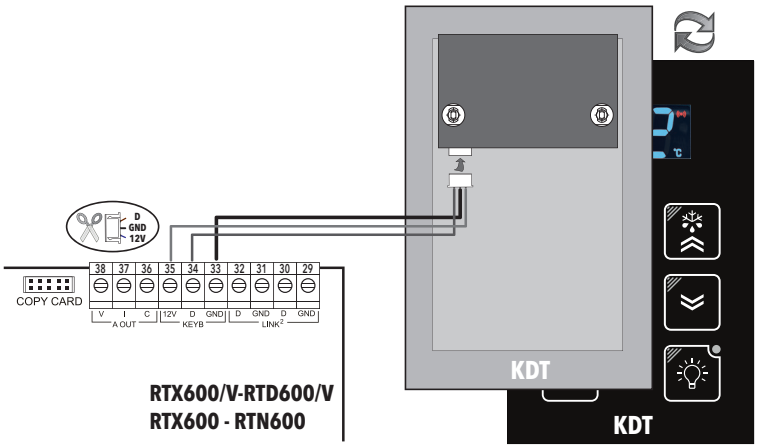
NOTE: If the keyboard is connected to one of the **RTX-RTN-RTD600 (/V)** family power board, the **E7** error could be a Pb7 error as well.

EXAMPLES OF CONNECTIONS

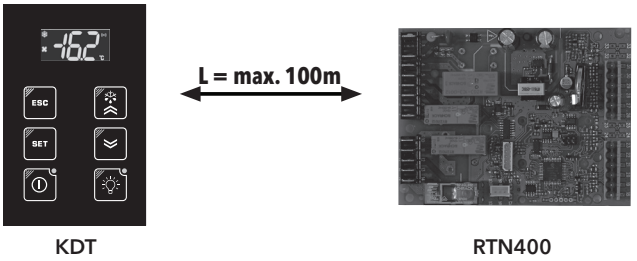
Each power board can be connected to a single KDT Touch keypad (user terminal) by means of the JST connector located on the keypad. For connection to power board it is necessary to cut one of the two connectors.

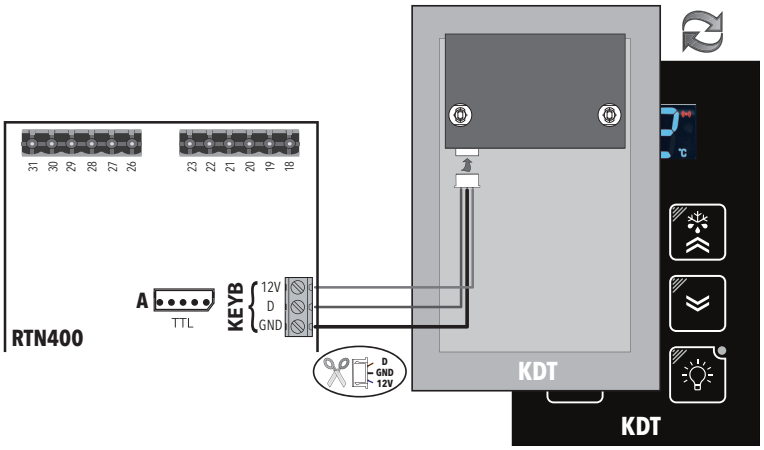
RTX/RTD/RTN 600 series + KDT Touch CONNECTION



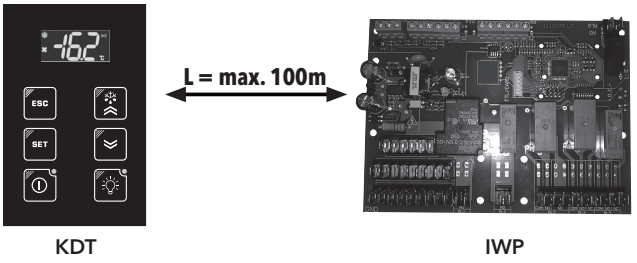


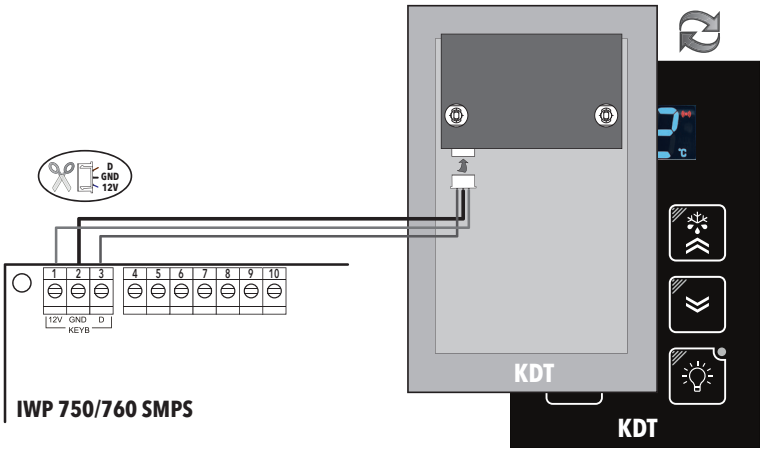
RTN400 + KDT Touch CONNECTION





IWP750/760 SMPS + KDT Touch CONNECTION





IMPORTANT: if the keyboard is connected to one of the **RTX-RTD-RTN 400** e **600 (/V)** family power board, the following parameters SHALL be configured: **H33 = 0** and **H35 = 6**.

ATTENZIONE: if the keyboard is connected to one of the **IWP750/760 SMPS** family power board, contact the Eliwell Technical Support to check the compatibility.

RESPONSIBILITY AND RESIDUAL RISKS

ELIWELL CONTROLS SRL declines all liability for damage due to:

- Installation/use other than expressly specified and, in particular, in conflict with the safety prescriptions set down in regulations and/or specified in this document.
- Use on panels that do not provide adequate protection against electric shocks, water or dust in the adopted mounting conditions.
- Use on panels allowing access to dangerous parts without having to use tools.
- Tampering with and/or modification of the product.
- Installation/use on panels that do not comply with statutory laws and regulations.

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The same applies to any person or company involved in preparing and editing this document. ELIWELL CONTROLS SRL reserves the right to make aesthetic or functional changes at any time without notice.

CONDITIONS OF USE

Permitted use
For safety reasons, the device must be installed and used according to the instructions provided. In particular, parts carrying dangerous voltages must not be accessible in normal conditions. The device must be adequately protected from water and dust with regard to the application, and must only be accessible using tools (with the exception of the front panel).
The device is suitable for use in household refrigeration appliances and/or similar equipment and has been tested for safety aspects in accordance with the harmonised European reference standards.

Improper use
Any use other than that expressly permitted is prohibited. The relays provided are of a functional type and can be subject to failure: any protection devices required by product standards, or suggested by common sense for obvious safety requirements, must be installed externally to the controller.

DISPOSAL

The appliance (or the product) must be disposed of separately in compliance with the local standards in force on waste disposal.

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