

Operator dialogue terminals

Magelis XBT N, XBT R Small Panels with keypad, Magelis XBT RT Small Panels with touch screen and keypad

Presentation



XBT R411

XBT N400

XBT RT511

Magelis XBT N and Magelis XBT R/RT terminals are used to display messages and variables. In addition, Magelis terminals XBT RT can display small graphic elements.

Various keys can be used to:

- Modify variables
- Control a device
- Navigate within the operator dialogue application

On XBT RT terminals, the touch screen can also be used to modify variables, control devices and navigate within the dialogue application.

Models equipped with a printer link are able to print alarm messages.

Operation



"Entry" customization



"Control" customization

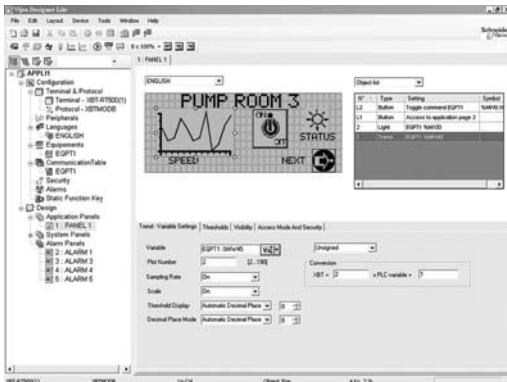
All Magelis terminals have the same user interface:

- A configurable touch screen, on XBT RT only ("touch-sensitive" mode)
- 2 service keys (◀, ▶) configurable for contextual link or control, on XBT N/R and XBT RT ("entry"/"control" modes)
- 2 service keys (ESC, ENTER), non-configurable
- These keys are complemented by:
 - On XBT N terminals: 4 customizable service keys which can be configured as function keys ("control" mode) or service keys ("entry" mode)
 - On XBT R terminals: 4 service keys, non-configurable, and 12 function or numeric entry keys (depending on context)
 - On XBT RT terminals in "control" or "entry" mode: 4 customizable and configurable function keys 4 service keys (non-configurable)

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Configuration



Vijeo Designer Lite

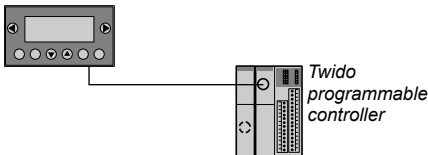
Magelis terminals can be configured using Vijeo Designer Lite software in a Windows environment.

Vijeo Designer Lite software uses the concept of pages: each page can be viewed in its entirety. A 2, 4 or 10-line window, depending on the terminal model to be configured, makes it possible to view the screen for this virtual terminal.

The symbol databases for TwidoSoft, PL7 and Concept applications can be imported into the Vijeo Designer Lite operator dialogue application.

Communication

XBT N terminal

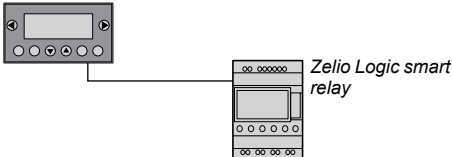


Connection example with Twido programmable controller

XBT N and XBT R/RT terminals communicate with PLCs via an integrated serial link in either point-to-point or multidrop mode, depending on the model.

The communication protocols used are those of Schneider Electric PLCs (Uni-TE, Modbus) and those of the main manufacturers on the market.

XBT N terminal



Connection example with Zelio Logic smart relay

XBT N401, XBT R411 and XBT RT 511 terminals communicate with Zelio Logic smart relays via a direct connection cable and using the Zelio protocol, which is included in Vijeo Designer Lite V1.3.

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Functions

On their front panel, XBT N/R/RT terminals have function keys and service keys (depending on how the keys have been configured for “control” and “entry” modes). XBT RT terminals feature a touch screen which can be configured in “touch-sensitive” operating mode.

“F” function keys

The function keys are defined for the whole application. The number of function keys depends on the model:

- F1, F2, F3, F4 on XBT N
- F1...F12 on XBT R
- F1...F10 or F1...F4 according to configuration on XBT RT

They can have the following functions:

- Accessing a page
- Impulse command
- “Toggle” command
- etc.

In addition, with the XBT R terminal, if the **MOD** key is pressed the 12 function keys become numeric entry keys **1...0**, **+/-** and **..**

“R” function keys for XBT RT (“entry” mode)

The R1, R2, R3 and R4 function keys on the XBT RT are defined for the pages displayed. They can be used for:

- Accessing a page
- Memorising memory bits
- Toggling memory bits (ON/OFF)
- Resetting memory bits to 1/0

An icon can be displayed on the screen, above the **Ri** keys. This icon is defined using the Vijeo Designer Lite software.

Matrix touch screen (5 x 11 cells) for XBT RT

The touch screen can be configured to be active on the XBT RT (“touch-sensitive” mode).

This is used for:

- Accessing a page
- Memorising/toggling memory bits
- Modifying a numeric field via a virtual numeric keypad

Service keys

Service keys **◀**, **ESC**, **DEL**, **▼**, **▲**, **MOD**, **ENTER** and **▶** are used to modify the parameters of the automation system.

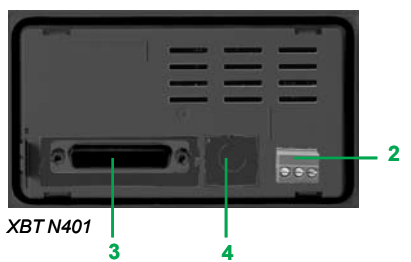
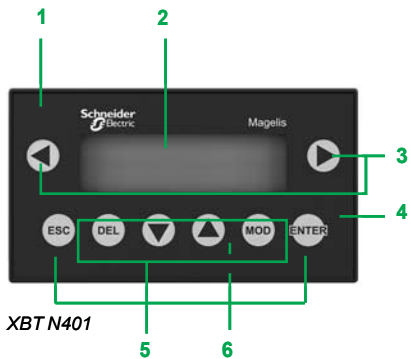
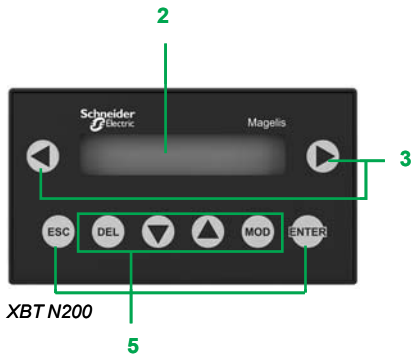
They perform the following actions:

- ESC** Cancel an entry, suspend or stop an action in progress, go back up a level in a menu
- DEL** Delete the character selected in entry mode
- MOD** Select the variable field in which to enter data. Enable entry in the next field, on each press, from left to right and top to bottom.
- ENTER** Confirm a selection or entry, acknowledge an alarm

The “arrow” keys are used to:

- ◀ ▶**
 - Change the page within a menu
 - Display the current alarms
 - Change a digit in a variable field in which data is being entered
 - Activate the function associated with a functional link
- ▼ ▲**
 - Move up and down within a page (XBT N40●)
 - Select the value of a digit
 - Select a value from a list of choices
 - Increment or decrement the value of a variable field

Description of XBT N terminals



XBT N terminals comprise:

On the front panel

- 1 A communication monitoring LED (model XBT N401)
- 2 A backlit ultra-bright LCD display: 122 x 32 pixels (matrix) or 2 lines of 20 characters (alphanumeric)
- 3 Two non-customizable command or contextual link keys
- 4 An "alarm" LED (model XBT N401)
- 5 Six service keys, 4 of which (framed) can be configured as function keys and customized using labels.
- 6 Two system LEDs in entry mode or 4 LEDs that can be controlled by the PLC in control mode (model XBT N401)

Supplied separately



- A sheet of labels comprising:
 - 7 An "entry" label
 - 8 A "control" label (F1, F2, F3 and F4)
 - 9 4 customizable blank labels
- 2 spring clips for fixing the terminal on the panel

On the rear panel

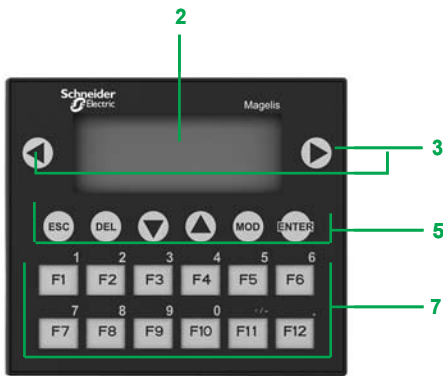
XBT N200/N400 terminals

- 1 An RJ45 connector for point-to-point serial link and connection for 5 V $\overline{\text{DC}}$ power supply (supplied by PLC)

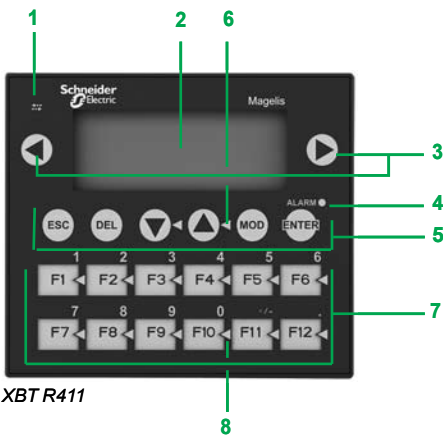
XBT N401/N410/NU400 terminals

- 2 A removable screw terminal block for the 24 V $\overline{\text{DC}}$ external power supply
- 3 A 25-way female SUB-D connector for multidrop serial link
- 4 An 8-way female mini-DIN connector for serial printer link (model XBT N401)

Description of XBT R terminals with keypad



XBT R400



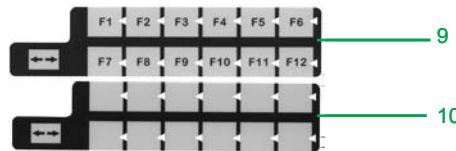
XBT R411

XBT R terminals comprise:

On the front panel

- 1 A communication monitoring LED (model XBT R411)
- 2 A backlit ultra-bright LCD display: 122 x 32 pixels (matrix)
- 3 Two non-customizable command or contextual link keys
- 4 An "alarm" LED (model XBT R411)
- 5 Six service keys
- 6 Two system LEDs (model XBT R411)
- 7 Twelve function or numeric entry keys (depending on context), customizable using labels
- 8 Twelve LEDs (for model XBT R411) which can be controlled by the PLC

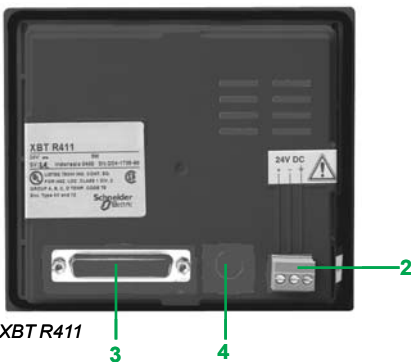
Supplied separately:



- A sheet of labels comprising:
 - 9 A "control" label (F1, F2, etc.) F12
 - 10 2 customizable blank labels
- 4 spring clips for fixing the terminal on the panel



XBT R400



XBT R411

On the rear panel

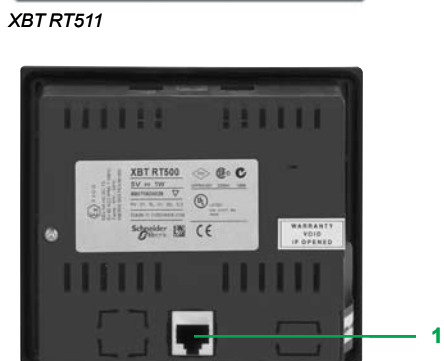
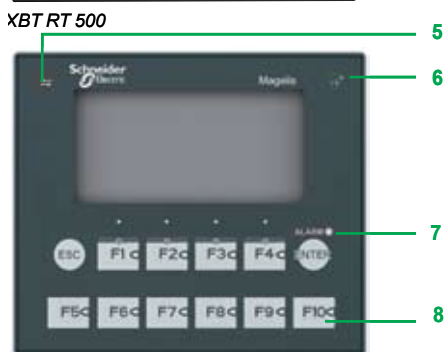
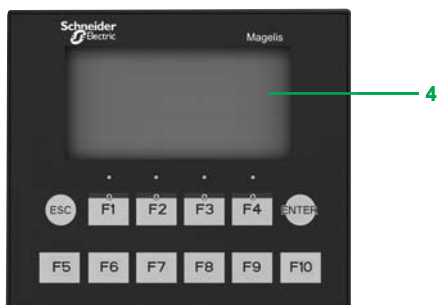
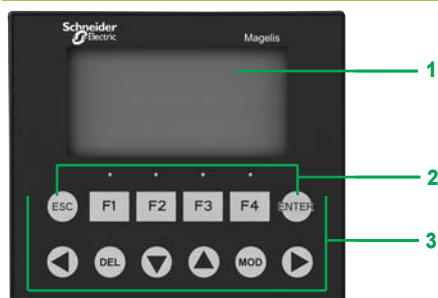
XBT R400 terminals

- 1 An RJ45 connector for point-to-point serial link and connection for 5 V $\overline{\text{DC}}$ power supply (supplied by PLC)

XBT R410/R411 terminals

- 2 A removable screw terminal block for the 24 V $\overline{\text{DC}}$ external power supply
- 3 A 25-way female SUB-D connector for multidrop serial link
- 4 An 8-way female mini-DIN connector for serial printer link (model XBT R411)

Description of XBT RT terminals with touch screen and keypad



XBT RT500



XBT RT500



XBT RT511

XBT RT terminals comprise:

On the front panel

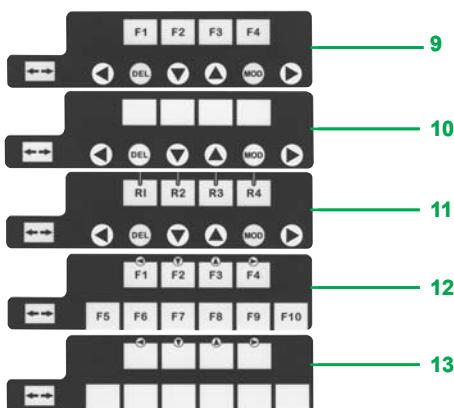
XBT RT terminals

- 1 An ultra-bright backlit LCD display: 198 x 80 pixels (matrix)
- 2 2 service keys
- 3 Function or service keys which can be configured and customized using labels
- 4 Matrix touch screen (11 x 5 cells)

XBT RT511 terminal

- 5 A communication monitoring LED
- 6 A "touch panel or keys being pressed" LED
- 7 An "alarm" LED
- 8 6 or 10 LEDs, depending on the configuration, which can be controlled by the PLC

Supplied separately:



- 2 sheets of labels comprising:
 - 9 A configurable "control" label (F1...F4)
 - 10 A customizable blank "control" label
 - 11 An "entry" label (R1...R4)
 - 12 A "touch-sensitive" label (F1...F10)
 - 13 Two customizable blank "touch-sensitive" labels

On the rear panel

XBT RT500 terminal

- 1 An RJ45 connector for point-to-point serial link and connection for 5 V $\overline{\text{DC}}$ power supply (supplied by PLC)

XBT RT511 terminal

- 2 A removable screw terminal block for the 24 V $\overline{\text{DC}}$ external power supply
- 3 An RJ45 connector for multidrop serial link
- 4 An 8-way female mini-DIN connector for serial printer link