

### **Message memory**

The XBT-K terminal is equipped with a memory for 180 messages.

Storing these messages in the XBT-K alleviates the application memory requirement for the programmable controller, and considerably reduces the flow of information along the serial link.

These messages are protected by a lithium battery (5 year back-up for normal conditions of use).

The messages can be : - display of settings  
- display of changing variables  
- display of faults

The messages include one or several attributes, defined during storing, to simplify later use by the application program :

Storing these messages is achieved using :

- 1) a visual display terminal
- 2) a T407 programming terminal,
- 3) a personal computer (PC,PS/2).

The display of a message is always controlled by:

- an ASCII message via an asynchronous link.

(The use of TSX7 adjustment protocol considerably simplifies the application program for the user.)

- via a parallel interface.

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### 3.1 Environmental characteristics

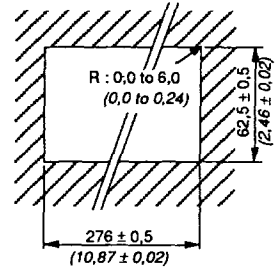
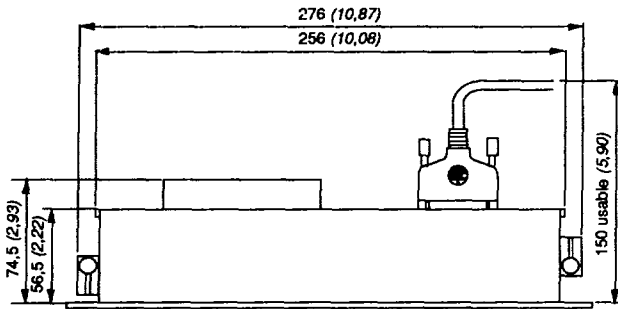
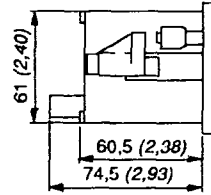
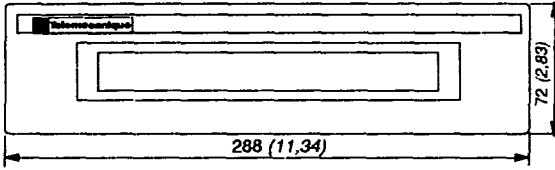
<b>Standards</b>	According to IEC 801-2/801-4; UL 508; CSA 122-2
<b>Degree of protection</b>	According to IEC 529 and NFC 20 010 : IP 653 (front facia with flange)
<b>Ambient temperature</b>	Operation : 0° C to +50° C Storage : -40° C to +70° C
<b>Humidity</b>	0 to 95% without condensation
<b>Shock</b>	According to IEC 68-2-27 degree 3 (1/2 sinusoidal pulse along the 3 axes. 50g for 11 ms).
<b>Vibration</b>	According to IEC 68-2-6 : Amplitude : 2 mm from 2 to 25 Hz ; 0.15 mm from 25 to 57 Hz. Acceleration : 1g from 57 to 150 Hz

### 3.2 Mechanical characteristics

<b>Mounting</b>	- Method : Flush mounting with a seal, fixed by a collar and two clamping screws . Thickness of supporting panel : (min = 1.5 mm, max = 6.0 mm) - Sense : Any
<b>Casing</b>	Black processed zinc alloy 5.5 mm thick (rear cover in bichromated steel).
<b>Connections</b>	Supply connection and parallel link connection via screw terminal connector, 17 terminals (5.08 mm spacing). Clamping capacity : 1.5 mm <sup>2</sup>  Serial link : 25 pins female SUB. D connector type HE 50 NFC 93 425
<b>Weight</b>	1.7 kg (without fixing collar) 1.9 kg (with fixing collar)

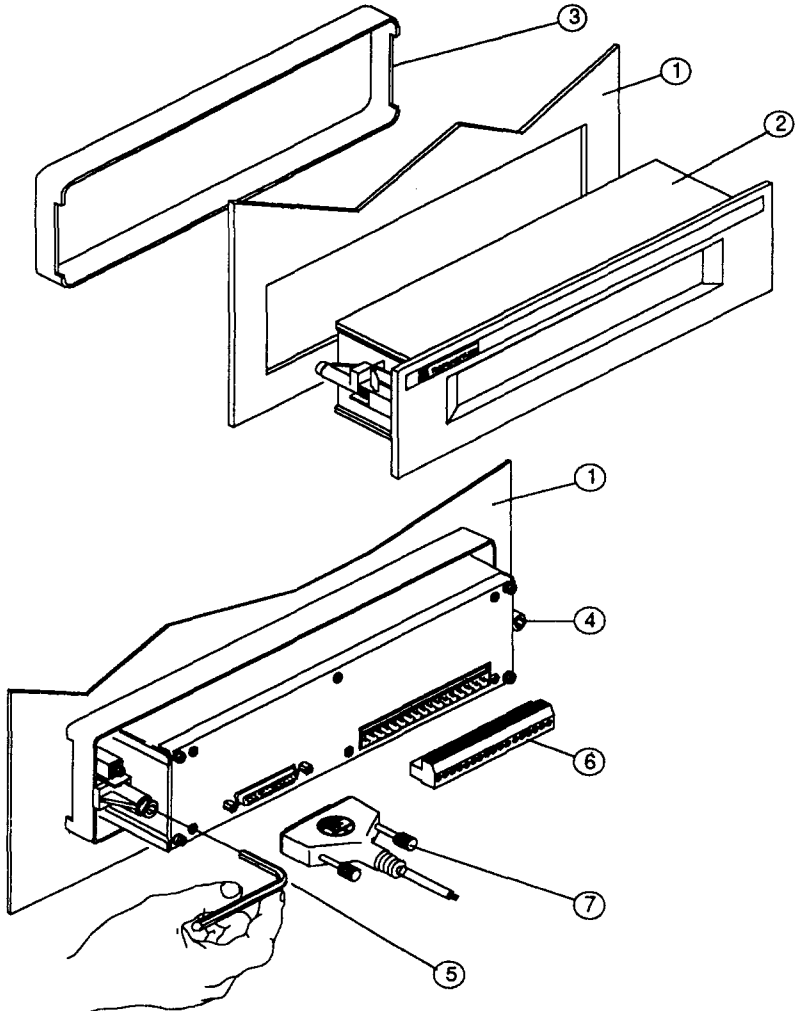
## Mechanical characteristics

Dimensions: In mm; (in Inches)



Panel cut-out  
thickness 1.5 min ; 6.0 max  
(0,06 min; 0,24 max)

## 3.3 Mounting



- ① Pre-cut support panel
- ② XBT-K casing
- ③ Fixing collar
- ④ Clamping screw
- ⑤ Clamping key
- ⑥ Removable terminal connector
- ⑦ Cable and 25 pins SUB. D male connector for serial transmission

**3.4 Electrical characteristics**

**3.4.1. Supply**

Nominal voltage	24 V DC
Ripple, max.	25 %
Voltage limits (including ripple)	18... 30 V DC
Max. consumption	10 W

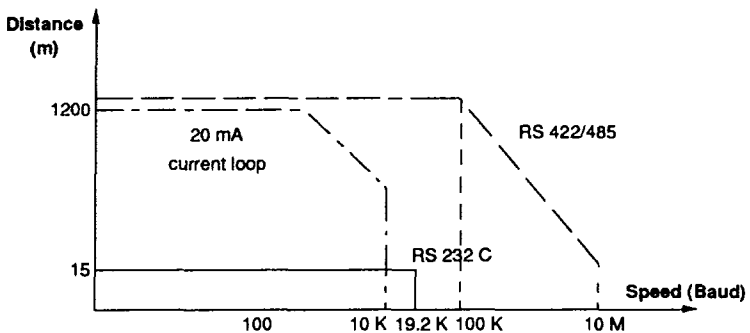
**3.4.2 Display**

Capacity : 20 digits display line  
 Type : 14 segment (with decimal point) fluorescent  
 Size : height = 10 mm, width = 6.4 mm  
 Colour : green

**3.4.3 Serial link**

Choice of transmission type depends on the distance and required speed.

Choice of physical link



**MAXIMUM TRANSMISSION SPEED  
 IS 19200 BAUDS FOR RS 232 AND RS 422  
 AND 9600 BAUDS FOR 20MA CURRENT LOOP**

**ONLY ONE TYPE OF TRANSMISSION SHOULD BE USED AT A TIME**

### 3 Technical characteristics

#### Electrical characteristics

**OPTO ISOLATED RS 232 C** ELECTRICAL CHARACTERISTICS : CONFORM TO THE RS 232 C STANDARD

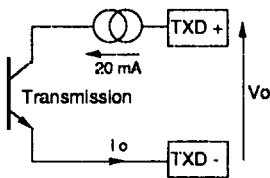
**OPTO ISOLATED 20 mA CURRENT LOOP** ELECTRICAL CHARACTERISTICS DEFINED AS FOLLOWS.

Passive

An external supply provides the current.

Busy

A current circulates whilst at rest.



Transmission

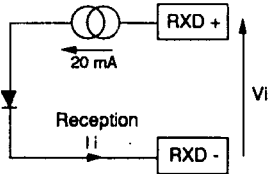
PROTECTED  
(with current limit)

Current  $I_o$

20 mA  $\pm$  20 %

Voltage drop  $V_o$

4 V Max



Reception

PROTECTED  
(with current limit)

Current  $I_i$

20 mA  $\pm$  20 %

Voltage drop  $V_i$

4 V Max

**OPTO ISOLATED RS 422 / 485**

ELECTRICAL CHARACTERISTICS : CONFORM TO RS 422 AND RS 485 STANDARDS