**Terminals
TERM10B
Industrial Terminal with LCD display
with resolution 240 x 128 dots**

SofCon®
AUTOMATIZAČNÍ TECHNIKA

6.6

- 5.5" LCD display, 240 x 128 dots
- Diaphragm keyboard, 54 keys
- 6 signalization LEDs with user-defined labels
- front panel protection IP65

- 8 digital inputs with galvanic separation
- 8 digital outputs with galvanic separation (optocouplers)

- Used as
  - Control system, including display and control panel
  - Display and control panel for SofCon control systems
  - Visualization panel for TECO, Allen-Bradley, SAIA, FESTO PLC systems

Basic Characteristics

TERM 10B is a programmable, general-use system which can be used as
– **autonomous control system** for the control of machinery and devices, including a display and control panel
– **separate display and control panel** for another SofCon control system.
– **visualization panel for PLC systems supplied by other companies**, such as TECO, Allen Bradley, SAIA, FESTO.

TERM10B is based on a KITV40 (KIT386EX) processor unit, complemented with a TERM10 board, used to connect the display and keyboard and including digital inputs and outputs.

A graphic 5.5" LCD display with a resolution of 240 x 128 dots, backlit by a discharge lamp, is used for display. The brightness can be adjusted at 4 levels. The contrast is temperature-compensated and adjustable at 16 levels.

The TERM10B keyboard is diaphragm. It contains alphanumeric and functional keys as well as 6 signaling fields with LEDs with user-defined labels. TERM10B is also fitted with acoustic signaling.

TERM10B also includes 8 galvanically separated digital outputs (optocouplers) and 8 galvanically separated digital inputs. These inputs and outputs can be used to connect a control system to the real environment.

TERM10B is controlled by a KITV40 (KIT386EX) industrial control unit. It is fitted with one (with KITV40) or two (with KIT386EX) RS232 serial communication lines. Both processor boards also include 3 8-bit digital port at the TTL level, which can be used to feed other signals from the process to the control system. However, these signals must be galvanically separated by additional modules.

TERM10B can either be used separately, or it can be extended with any SofCon IO-cards (technical papers 3.x), creating a control system with the required number of additional digital or analog inputs or outputs, or a control system completed with other types of communication channels. The top cover of the terminal is chosen according to the total number of extension cards. There are versions for up to approximately 1, 4 or 8 expansion cards. The actual number of expansion cards is given by their specific types.

Ordering Information

As standard, TERM10B is delivered with the KITV40 control unit in a case allowing the addition of 1 extension IO-card and with an RS232 communication channel.
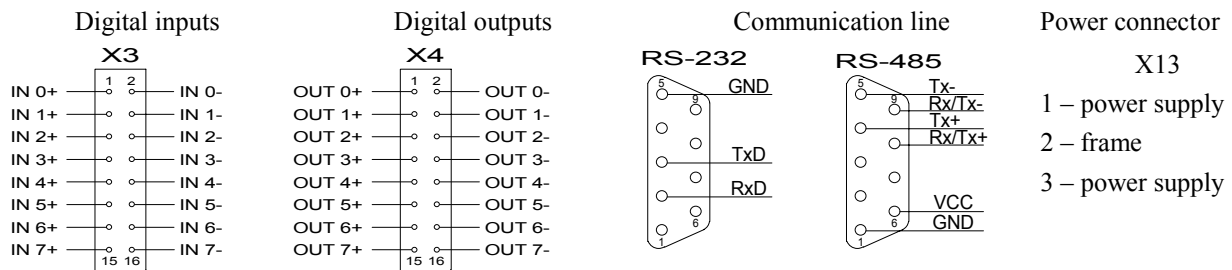
If the KIT386EX control unit is required, it must be specified in the order, along with any requirements for RS485 communication and the list of any required extension IO-cards.

Technical Data

Supply voltage	12 to 35 VDC / 15 to 26 VAC, Entrelec 3-pin connector
Supply current max.	0.55A/12 VDC and 0.25A/35 VDC
Display unit	LCD display 134 x 76 mm (5.5")
	graphic mode 240 x 128 dots
	alphanumeric mode 4x15, 4x16, 6x20, 8x20, 16x30, 16x40 characters
	backlit by a fluorescent discharge lamp
Keyboard	diaphragm, 54 keys
Communication interface	RS-232 or RS-485, Canon 9-pin connector (male)
Acoustic signalization	crystal acoustic transducer
Optic signalization	a field of 8 LEDs with user-defined labels
Inputs	digital, galvanically separated, PFL 16-pin, X3 connector
number	8
insulated strength GO	500 V
input L level	< 8 V
input H level	> 16 V
input H max level	30 V
input current for H level	10 mA/24V
Outputs	digital, galvanically separated, PFL 16-pin, X4 connector
number	8
insulated strength GO	500 V
switched voltage max.	30 VDC
switched current max.	0.2 A
type of output	transistor with open collector and protective diode
Control unit	KITV40 or KIT386EX
Expansion cards	from the KITV40 set
Protection (front panel)	IP65
Operating temperature	0 to 50 °C
Storage temperature	0 to 50 °C

Design	TERM10B-V40/1	TERM10B-V40/4	TERM10B-V40/8
dimensions (w x h x d) (mm)	291 x 212 x 105	291 x 212 x 155	291 x 212 x 215
max. no. of expansion cards	1	4	8

Top View

Connector connection

Digital inputs — X3; Digital outputs — X4; Communication line — RS-232, RS-485; Power connector — X13 (1 – power supply, 2 – frame, 3 – power supply)
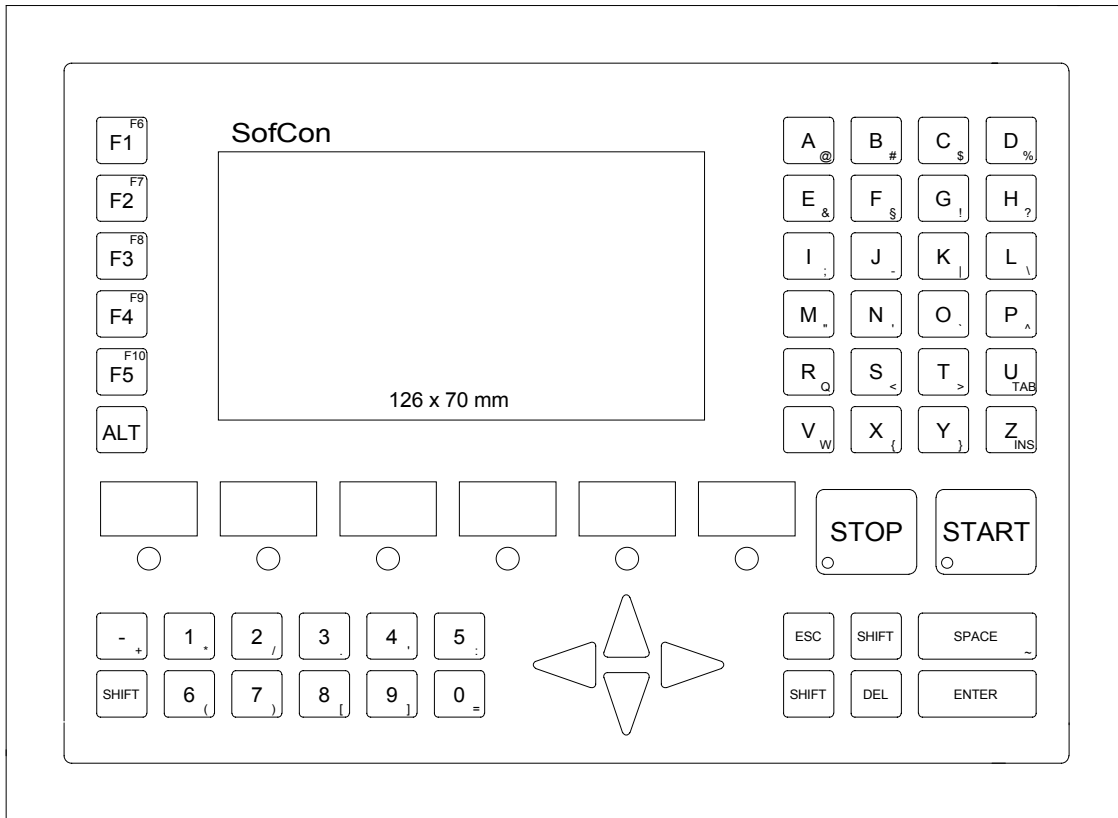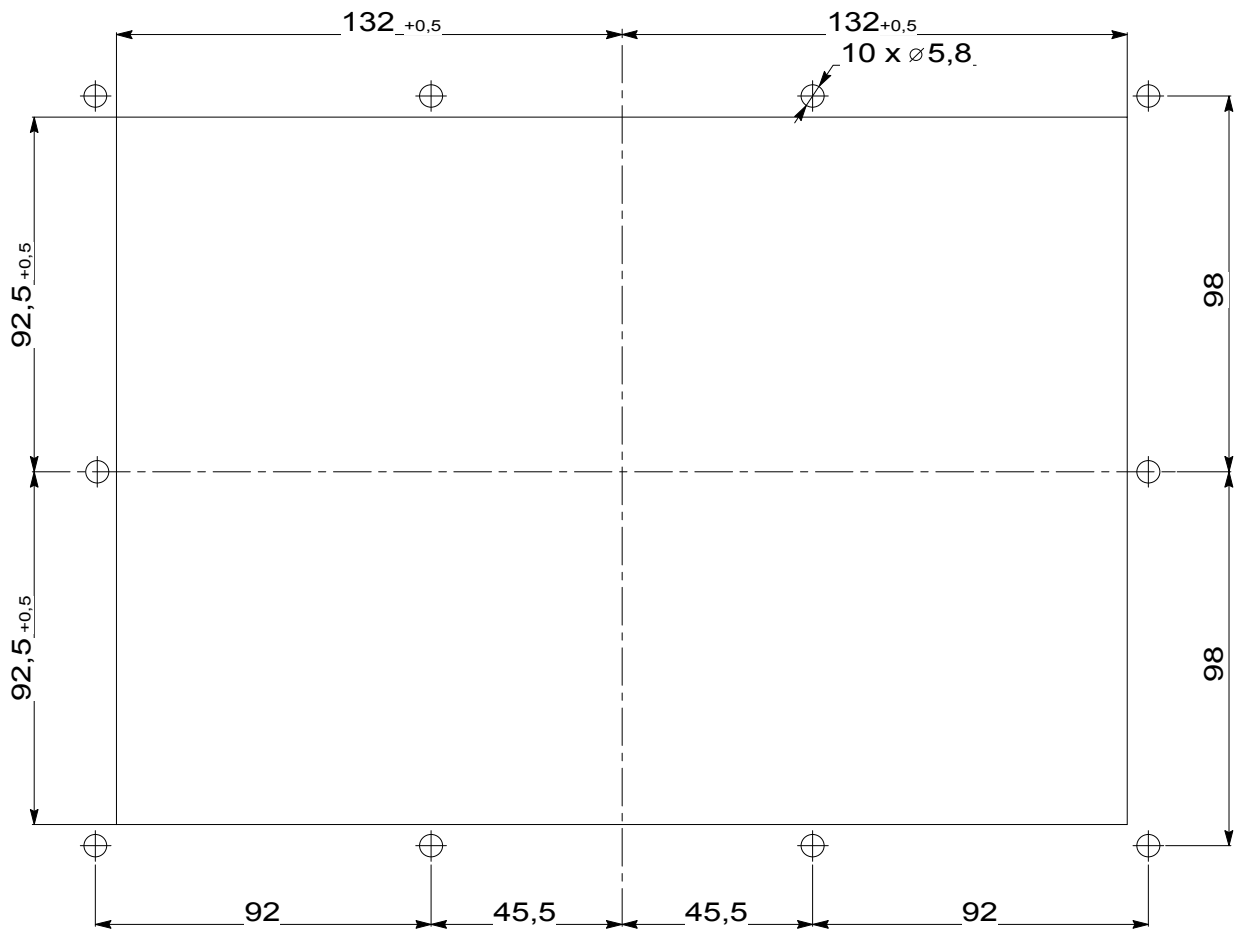
Connection of input and output circuits

TERM10B - keyboard and display

Holes for fixation TERM10B

Location of connectors on TERM10B – back view

MIN. 50

10 x M4

KOMUNIKAČNÍ LINKA
RS-232

IN0 IN1 IN2 IN3 IN4 IN5 IN6 IN7   OUT0 OUT1 OUT2 OUT3 OUT4 OUT5 OUT6 OUT7

SofCon
INDUSTRIAL
CONTROL
SYSTEM

X13
12-35VDC
15-26VAC

IN0........IN7
X3

OUT0........OUT7
X4

(16,5)

179

212

(16,5)

(16,5)

258

(16,5)

291

TERM10B - top view

6

14

38

105 (155, 215)

37

61 (111, 171)

RS-232

150
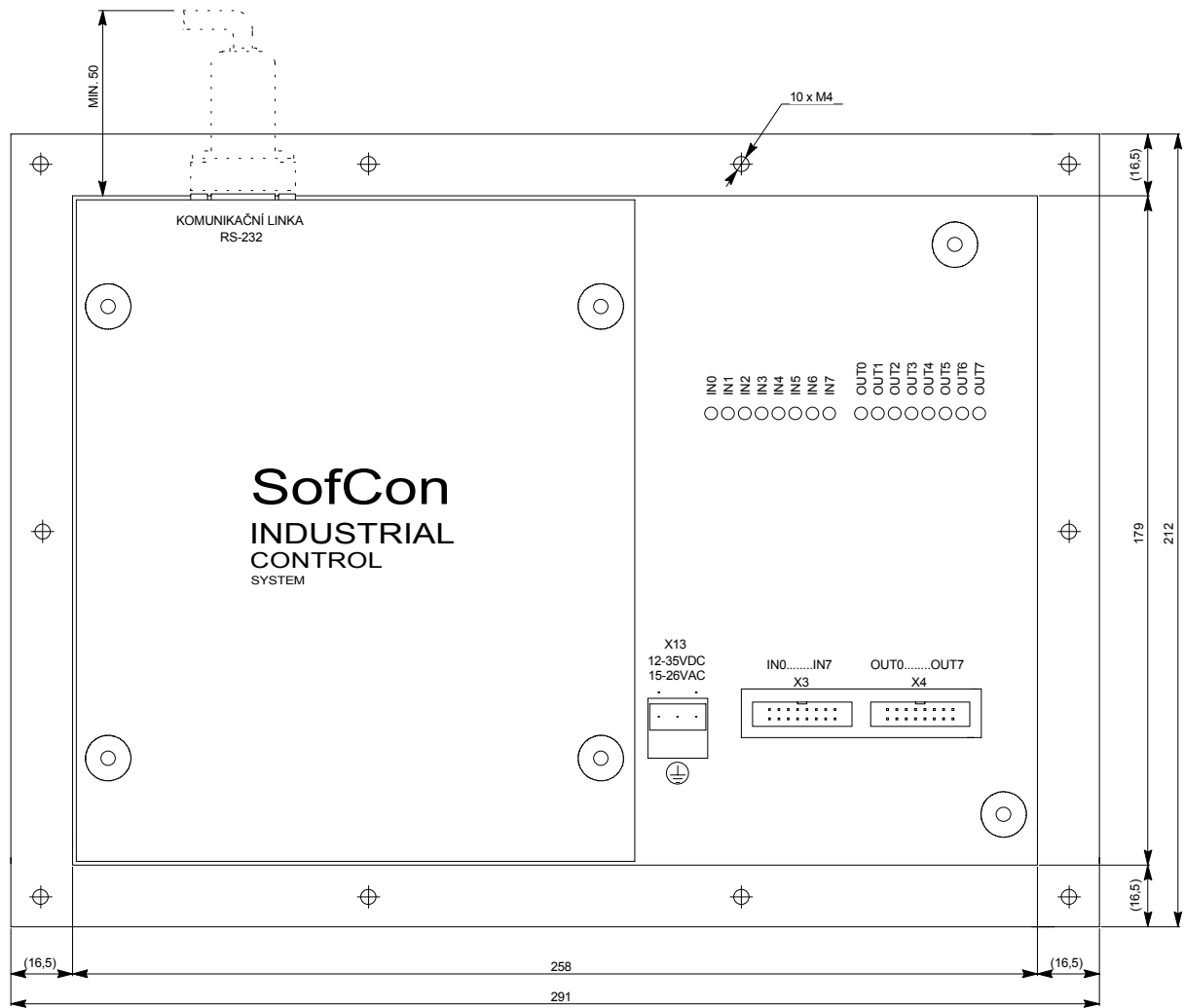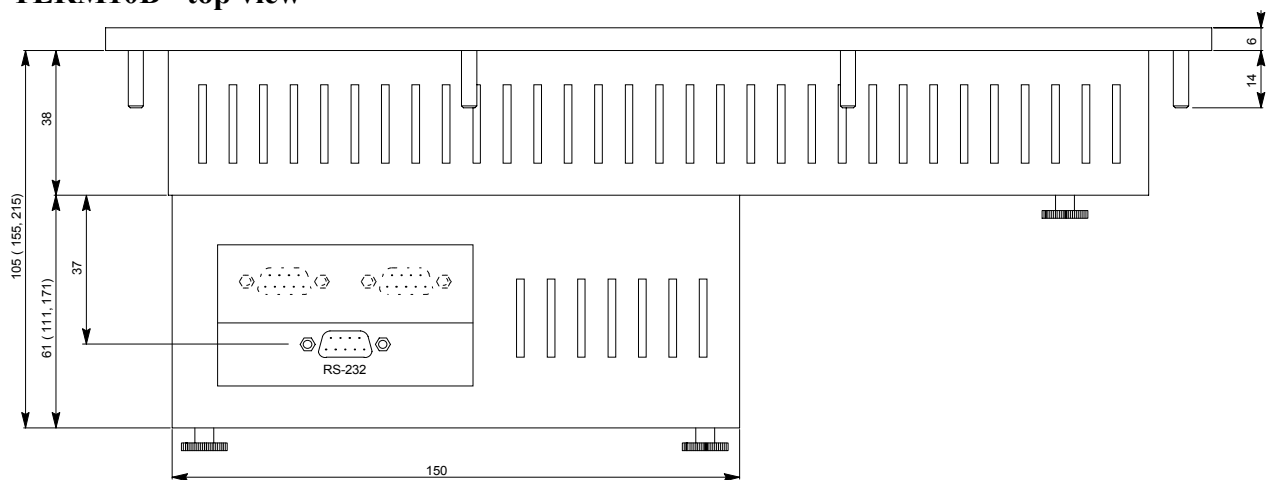
*) dimensions in brackets are valid only for version TERM10B-V40/4 or TERM10B-V40/8

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