Gönnheimer
Elektronic GmbH

EEx i-
Message display
TA 125

TÜV 00 ATEX 1551, TÜV 00 ATEX 1552

Properties

- Mounting inside hazardous area
- Ex- Protection: II 2 G, EEx ib IIC T6
  II 2 D, T 70°C IP65
- Robust field housing, protection class IP65
- Text data transmission from the save into the hazardous area
- Display with 15 mm character height, 4 rows with 40 characters
- Modular interface to connect several bus systems (RS232, RS485, Profibus DP, Interbus, Modbus)
- Connection of multiple text displays with different text contents to one bus
- XXL- Mode with one row and 65 mm figure height
- Twelve intrinsically safe digital inputs for connection of passive inputs devices; e.g. the KB125 keyboard with twelve keys
- Alarm output to control alarming devices, e.g. flash light, horn, etc.
- 32kbyte character memory (ca. 255 pages)
- Optional eight non intrinsically safe binary address inputs for the TI125 to select the page to be displayed

T
authentic character size

Description

The message display TA125 indicates messages, warnings or hints in the hazardous area Zone 1 and Zone 21. It's large (58 x 244 mm^2), reflective display with a figure height of 15 mm can easily be read up to a distance of five meters. The display is organised into 4 rows with 40 characters per row.

The TA125 receives the messages for instance from a PC or PLC located in safe area. The text interface TI125 operates as an intrinsically safe barrier and power supply. It can be equipped with several bus modules (RS232, RS485, RS422, Profibus DP, Interbus and Modbus).

The distance to the TA125 could be up to 300 meters with a data rate of 38,4 kbit/s.

Multiple text displays can be connected to one bus (up to 255). Each one with different text content.

Additionally the TA125 has an intrinsically safe passive alarm output. This features a connection of alarming devices.

The keyboard KB125 (12 keys) is an optional input device for the TA125. Using the KB125, the TA125 can work as a low cost text panel in hazardous area.

The TA125 stores up to 32 kByte of messages in an internal EEprom. The messages can be loaded using the bundled windows software "TEXT LINK" from your PC.

Two ways to display predefined texts are possible: Using the appropriate command from the control system or applying a defined bit pattern to binary address inputs of the TI125 (option).

Technical Details

TI 125

Terminals Mains Interface	230 VAC, 120 VAC, 24 VDC RS232, RS485, Profibus DP, Interbus , Modbus
Mounting	Safe area
EC- type certificate	TÜV 00 ATEX 1552
Ambient temperature	-20°C .. 60°C
Housing protection	IP40
Dimensions	105 x 105 x 66 mm^3
Housing material	Aluminium
Fixing	35mm rail acc. DIN EN 50022

TA125

Display	Text display 4 x 40 characters Viewing area: 68 x 244 mm²
Character height	15 mm
Ex- protection	2 II G, EEx ib IIC T6 2 II D, T 70°C IP65
EC- type certificate	TÜV 00 ATEX 1551
Mounting	Hazardous area
Connection to TI125	2 x 2 x 0,25 mm² or bigger diameter
Ex- limits* Digital output Digital inputs	 U_i = 30 V, I_i = 160mA, P_i = 0,85W U_0 = 6 V, I_0 = 1 mA,
Ambient temperature	-20°C .. 45°C T6 -20°C .. 65°C T4
Housing protection	IP65
Dimensions	120 x 360 x 80 mm³
Material	Aluminum, lacquered RAL 7035

*: See EC- type certificate for more information

Type code

Interface device	TI125	.x	.x	.x
Power supply:				
230 VAC		.0		
110 VAC		.3		
24 VDC		.6		
Interface modul:				
RS485 / RS232 / RS422			.0	
Modbus			.1	
Profibus DP			.2	
Option binary address inputs (to recall prestored messages, only with TI125.x.0.x)				
Without				.0
Present				.1

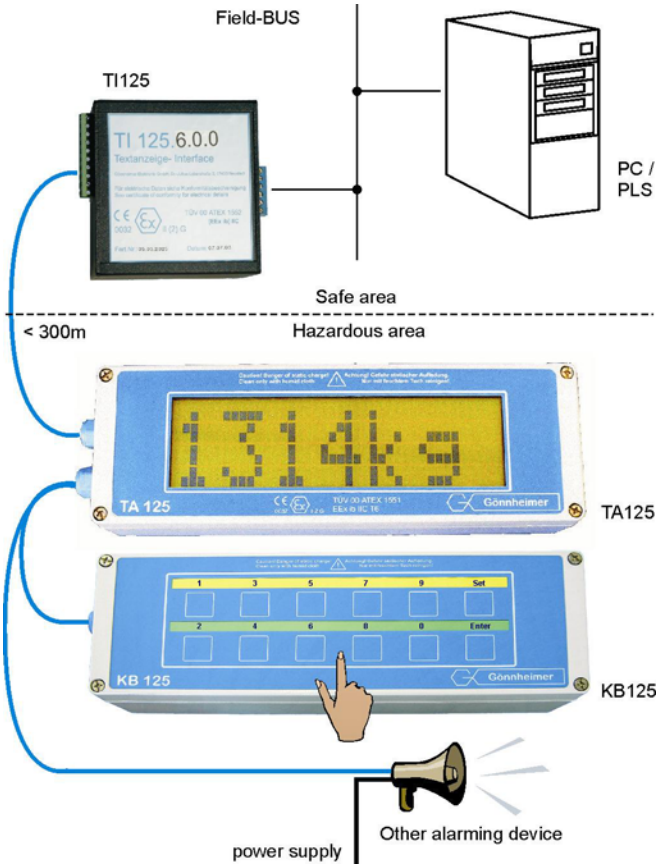
Other field bus types on request

Text display	
IP 65 housing	TA125.0

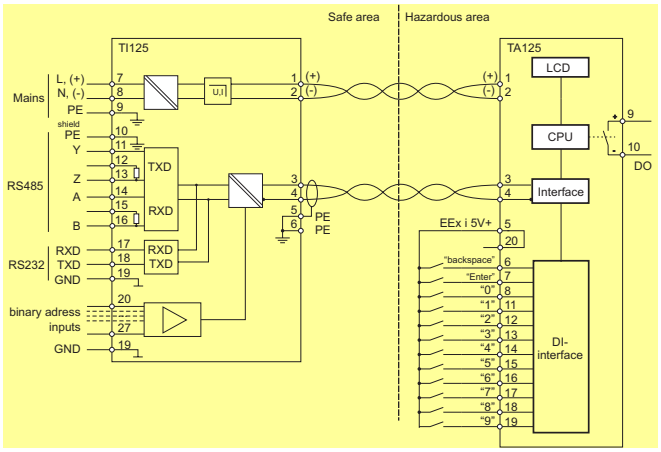
More housing types (e.g. stainless steel) on demand

Keyboard KB125	
IP 65 housing	KB125.0

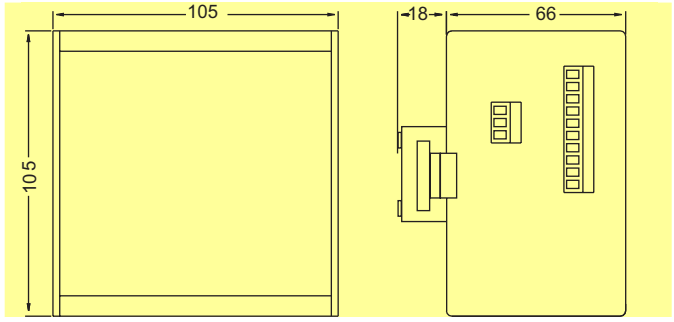
Application sample



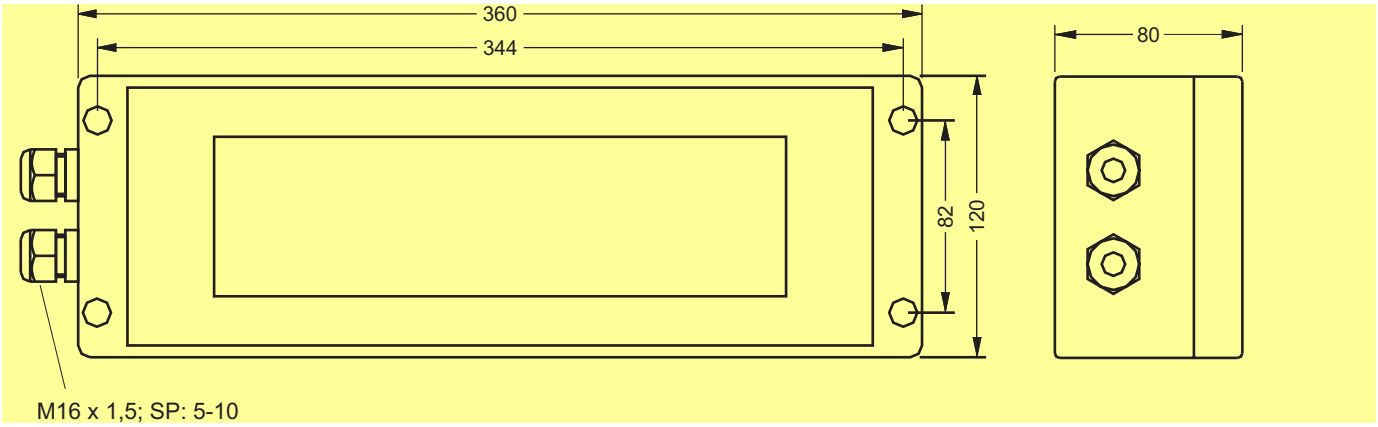
Block diagram



Dimensions



Dimensions TI125



Dimensions TA125

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