



pH-4121, pH-4121.E-Ex industrial pH-meter



The pH meter of pH-4121 type is designed for automatic measuring of the hydrogen ions activity (pH) and temperature (T) of the analyzed liquid complete with flow or submersible holders for a combination electrode.

pH-meter provides measuring and conversion values to standard analog output DC signals, data exchange with a computer via digital interface, alarming the measured parameters overranging the specified values.

pH-4121 consists of primary transducer

(PT) and measuring instrument (MI).

The instrument calibration according to the buffer solutions is performed in the primary transducer.

4121.E-Ex pH-meters (PT in the "T" enclosure) have an explosion protection type provided with a marking «IEx d IIB T6 X».

Scope of application: heat power industry, chemical, petrochemical, food processing, brewing and other industries.

pH-meter with an "E" index complies with raise requirements on electromagnetic interference resistance.

BASIC TECHNICAL SPECIFICATION AND PARAMETERS

PRIMARY TRANSDUCER

pH measuring range.....	0..14
Basic absolute error value limit:	
measuring pH complete with a combination electrode.....	± 0,05 pH
Operating temperature measuring range.....	look section Electrodes: Combined pH and ORP
Basic accuracy of measuring temperature.....	±0.5°C
Thermal compensation modes.....	automatic, manual
Climatic version.....	T=(-40..+50)°C
Dust and water protection.....	IP65
Resistance to mechanical influences.....	V2
Enclosure material:	
- D, I type (for pH-4121.E-Ex).....	aluminum alloy
- S type.....	steel SS316
Weight.....	max 2 kg

MEASURING INSTRUMENT

Indicator.....	LED four-digit seven segment
Indicator color.....	green or red
Parameters to be displayed.....	pH, temperature
Output signals parameters:	
- analog, programmable.....	(0..5) or (4..20)mA
- or interface (for pH-4121).....	RS-485, ModBus RTU data communications protocol
- two discrete.....	switching over dry contact, 240V, 3A
Communication line between PT and MI is three-wire, a wire cross-section is.....	at least 0.35mm ²
Communication line length.....	max 600m
Power supply voltage.....	~220V, 50Hz
Power consumption.....	max 7VA
MI climatic version.....	T=(+5..+50)°C
Resistance to mechanical influences.....	N2

EXTERNAL WIRING

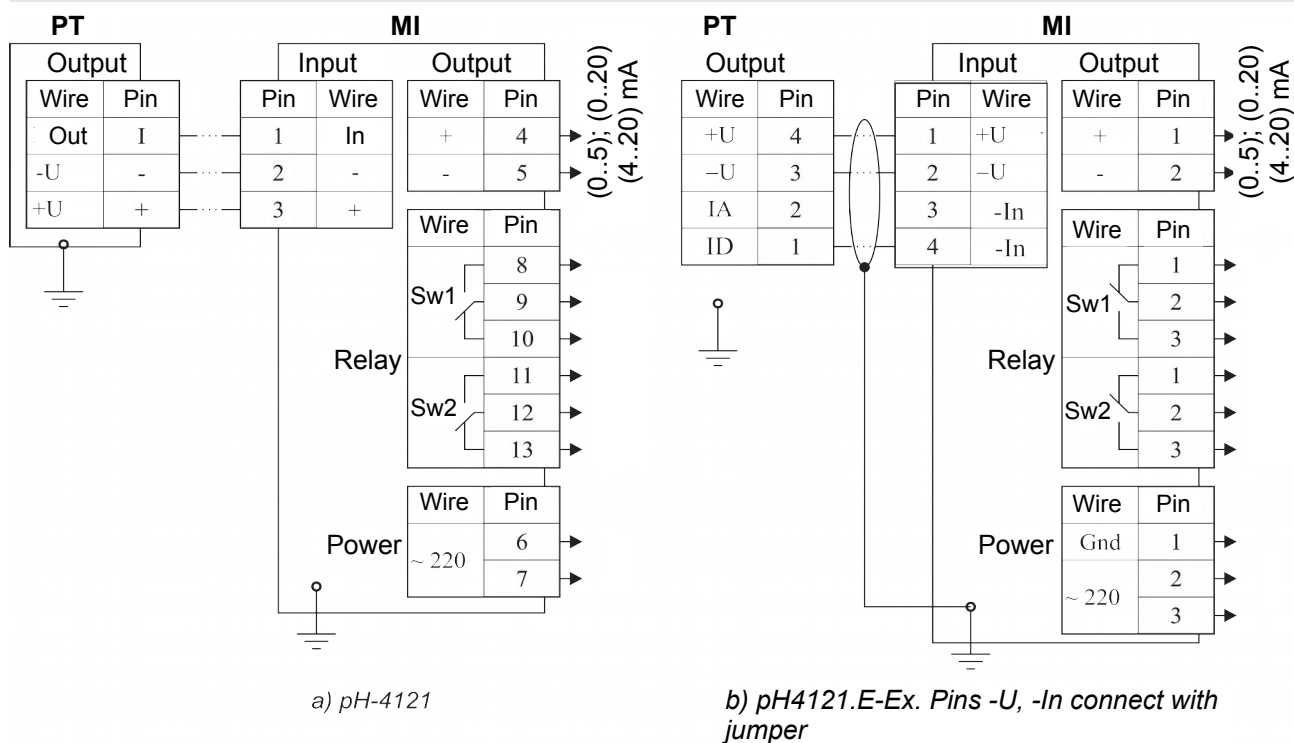


Figure 1. Connecting the primary transducer to the measuring device

OVERALL AND MOUNTING DIMENSIONS

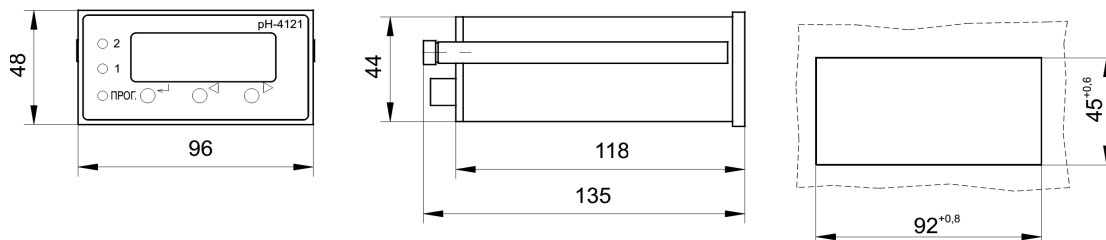


Figure 2. Measuring instrument pH-4121

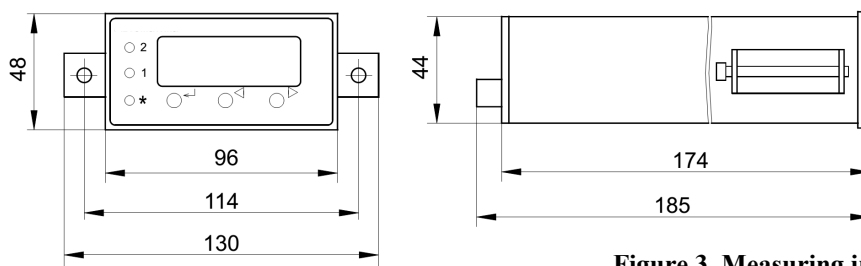


Figure 3. Measuring instrument pH-4121.E-Ex

ORDER REFERENCE CODE

To place an order, use the order reference in the description of pH-4101 and the questionnaire.

ACCESSORIES

- combination electrode (see section "Combination pH and ORP electrodes»);
- holders for pH-electrodes installation (see section "Holders for sensors");
- pH-metric cable.