



**pH-4122
pH-4122.I.-Ex
pH/ORP-meter two channel
industrial**



pH-meter is a two-channel measuring device consisting of two primary transducers (PT) and a measuring instrument (MI).

MI of the instrument is of panel or wall mount design. Two-channel pH-meter of type pH-4122 is designed for automatic measuring of the hydrogen ions activity (pH) or redox potential (ORP) and temperature (T) of the analyzed liquid.

pH-meter provides a digital and graphical display of the measured values of pH and temperature, or OPR and temperature, their proportional conversion to standard analog output DC signals, data exchange with a computer via digital interface RS-485, signaling the measured parameters overranging the specified values, as well as archiving and graphical display of measurement results.

PT of the pH-meter pH-4122-Ex is in the "I" enclosure.

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

BASIC TECHNICAL SPECIFICATION AND PARAMETERS

Measuring channels quantity.....	1, 2
Parameters being measured in every channel.....	pH and temperature
pH measuring range.....	0..14
ORP measuring range.....	+/-1500mV
Analyzed liquid temperature range	look section Electrodes: Combined pH and ORP
MI design.....	panel or wall mounting
Type of MI indicator.....	LCD graphics
Electrode system (ES).....	combination pH electrode
Basic absolute error value limit:	
- measuring pH complete with ES.....	± 0,05 pH
- measuring ORP.....	± 5 mB
- measuring temperature.....	± 0,5°C
PT and MI connection line – three-wire.....	0.35mm2
Communication line length.....	max 600m
Output signals parameters:	
-two analog, programmable.....	(0..5), (0..20) or (4..20)mA
-one interface.....	RS-485, ModBus RTU data communications protocol
-four discrete.....	switching over dry contact, 240V, 3A
Setting Alarm range for pH and temperature.....	in the whole measuring range
Archive capacity (quantity of pH and temperature values pairs records).....	15872 points
Archiving time	from 4.4 hours to 55 days
Archiving interval.....	programmable from 1 sec to 5 min
Power supply	~(100..240)V, (50..60) Hz
Power consumption.....	max 15 VA
Explosion proof type (only for "I" housing of PT pH-4122-Ex).....	1ExdIIBT6 X
Climatic version -PT.....	T=(-40..+50)°C
Climatic version -MI.....	T=(+5..+50)°C
Dust and water protection - PT, MI wall mount design.....	IP65
Dust and water protection - MI panel design.....	IP54 (only on the front panel)
Resistance to mechanical influences - PT.....	V2

pH-meters > With active PT > pH-4122, pH-4122-Ex

Resistance to mechanical influences - MI.....	N2
PT enclosure material - type D, I.....	aluminum alloy
PT enclosure material - type S.....	steel SS316
MI enclosure material - panel mount.....	aluminum alloy
MI enclosure material - wall mount.....	ABS plastic
Weight of PT.....	max 2 kg

EXTERNAL WIRING

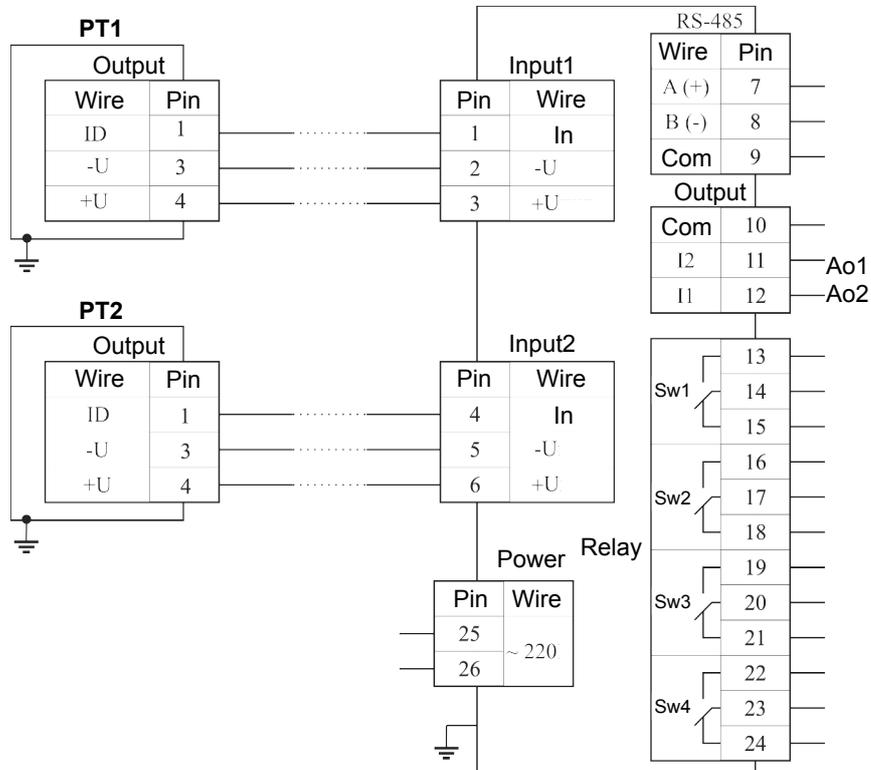


Figure 1. Connecting the primary transducer to the panel-mounting measuring instrument

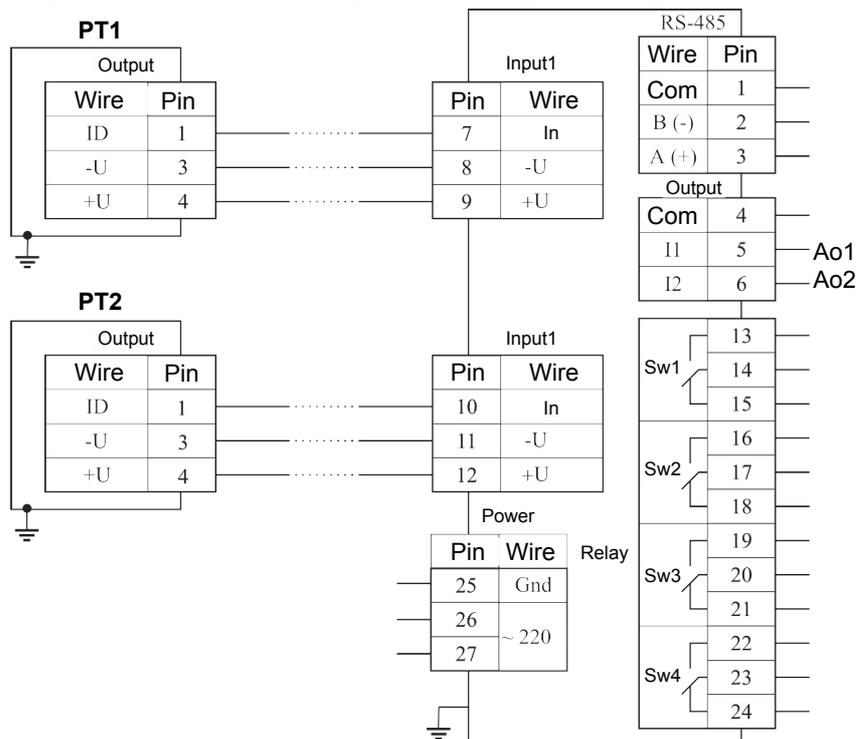


Figure 2. Connecting primary transducer to a wall-mounted measuring device

OVERALL AND MOUNTING DIMENSIONS

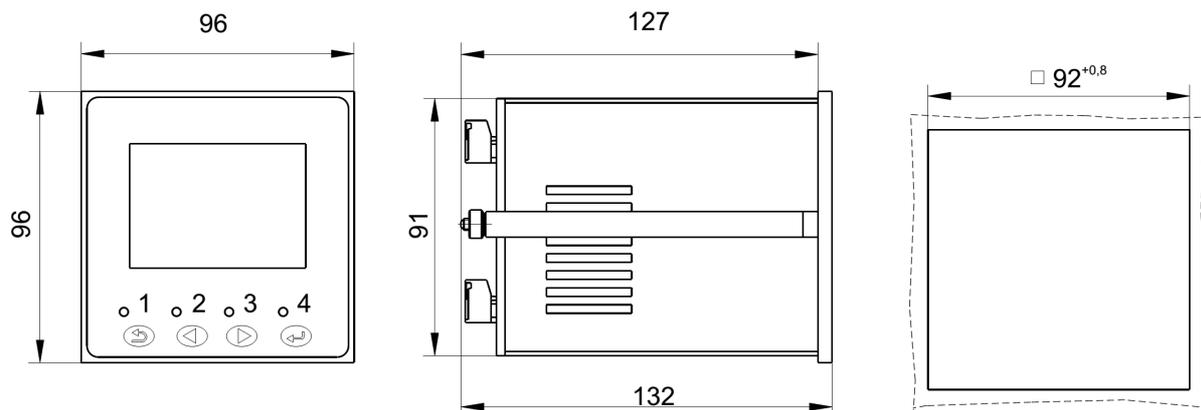


Figure 3. Panel-mounting measuring instrument , aluminum alloy, IP54 on the front panel

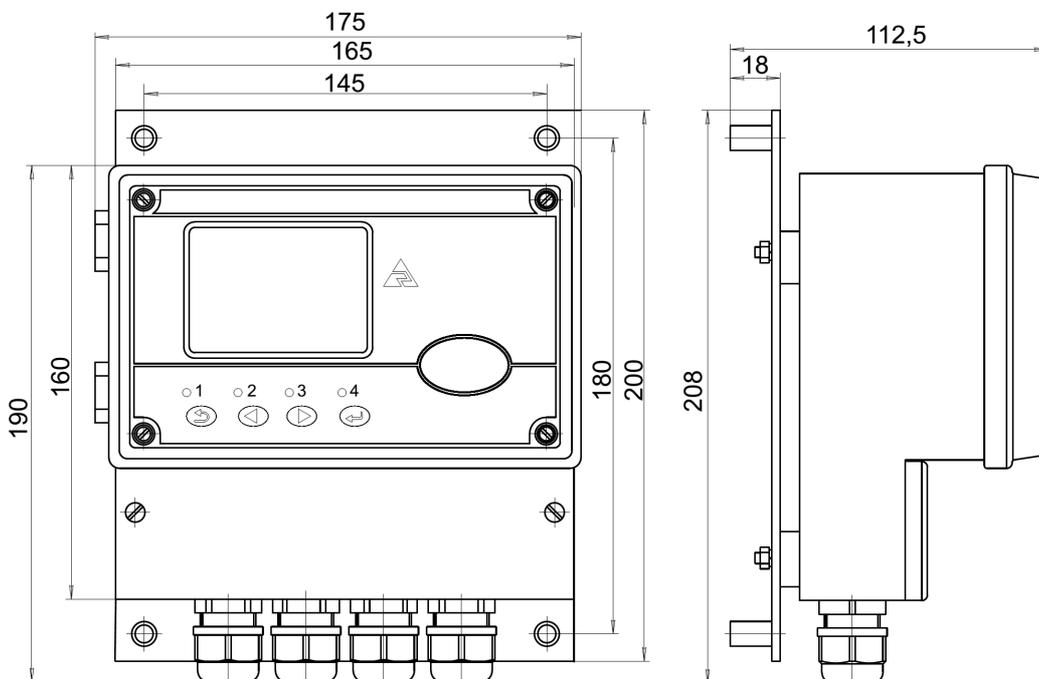


Figure 4. Wall-mounted measuring instrument, ABS plastic, IP65

The overall and mounting dimensions of the primary converters are given in the description of pH-4101

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.