

Product information

Analysis Conductivity

Conductivity Meter LF9648



Characteristics

The Conductivity Meter LF9648 has been designed for the measurement of conductivity, as a degree of the purity or concentration of a liquid. In connection with 4-electrode-conductivity cells a high accuracy and insensitivity of contamination can be achieved. A further advantage is a broad range of application with only one cell. Only for measurement in ultra-pure water a special 2-electrode conductivity cell must be used.

Technical data

Power supply

Supply voltage : 230 V AC $\pm 10\%$; 115 V AC $\pm 10\%$;
24 V AC $\pm 10\%$ or 24 V DC $\pm 15\%$

Power consumption : max. 3.5 VA, 5 VA with analog output

Operating temp. : $-10\ldots+55\text{ }^{\circ}\text{C}$

CE-conformity : EN 61326-1:2013
EN 60664-1:2007

Inputs

MR conductivity : 0..2.000(0) $\mu\text{S}/\text{cm}$ up to
0..2000 / 200(0) mS/cm (at $25\text{ }^{\circ}\text{C}$)

-Cell constant : 0.080..9.999

-Accuracy : 0.5 % of the measuring value, ± 2 Digit

-Temperature comp. : non linear for ultra pure water and natural
water or linear programmable from
0.000..9.999 $\%/^{\circ}\text{C}$

MR temperature : $-50.0\ldots+200.0\text{ }^{\circ}\text{C}$; Sensor Pt100 or Pt1000

-Accuracy : $\pm 0.2\text{ }^{\circ}\text{C}$

Display : LED red, 14.2 mm

Indicating range : 2000(0) Digit with leading zero suppression

Parameter display : LED 2-digit red, 7 mm
(parameter - and output indicator)

Outputs

Relay : SPDT $< 250\text{ V AC}$ $< 250\text{ VA}$ $< 2\text{ A}$,
 $< 300\text{ V DC}$ $< 50\text{ W}$ $< 2\text{ A}$

Transistor : transistor, $< 35\text{ V AC/DC}$, max.100 mA,
short circuit protected

Analog output

Active : 0/4..20 mA burden $\leq 500\text{ }\Omega$;
0/2..10 V burden $> 500\text{ }\Omega$, isolated
automatic burden changing
(burden dependent)

Passive : 4..20 mA, ext.
burden = $\text{RA}[\Omega] \leq (\text{supply} - 5\text{ V}) \div 0.02\text{ A}$;
supply voltage 5..30 V DC,

Accuracy : 0.1 %; TK 0.01 $\%/^{\circ}\text{C}$

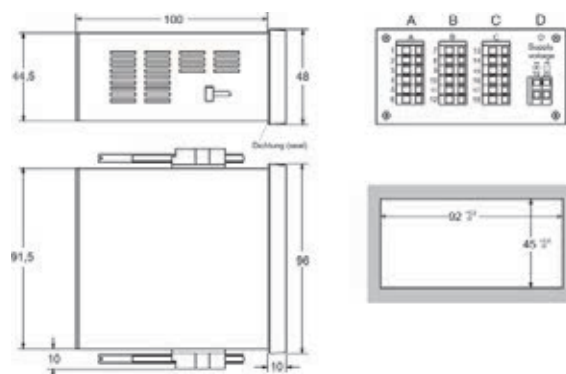
Case : panel mounting DIN 96x48 mm,
material PA6-GF; UL94V-0

Dimensions : front 96x48 mm, mounting depth 100 mm,

Weight : max. 390 g

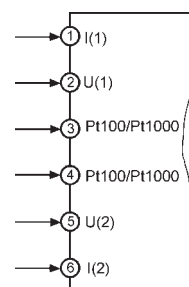
Connection : clamp terminals, 0.08..1.5 mm^2 ,
AWG28..AWG14

Dimensions



Connection diagram

Terminal strip A



Ordering code

LF9648 - 1. - 2. - 3. - 4. - 5. - 6. - 7.

1. Terminal strip A		
1	input for 2- or 4-electrode-cells, temperature compensation via Pt100	
3	as 1, but temperature compensation via Pt1000	
2. Terminal strip B		
00	not installed	
2R	2 relay outputs	
2T	2 electronic outputs	
3. Terminal strip C		
00	not installed	
2R	2 relay outputs	
2T	2 electronic outputs	
AO	analog output 0/4..20 mA, 0/2..10 V DC	
2A	2 analog outputs 4..20 mA passive	
4. Terminal strip D Supply voltage		
0	230 V AC	$\pm 10\%$ 50-60Hz
1	115 V AC	$\pm 10\%$ 50-60Hz
4	24 V AC	$\pm 10\%$ 50-60Hz
5	24 V DC	$\pm 15\%$
5. Options		
00	without option	
01	min- and max-peak hold	
14	measuring/monitoring acc. to USP<645>	
6. Unit appears on the unit field		
7. Additional text above the display (3x90 mm HxW)		

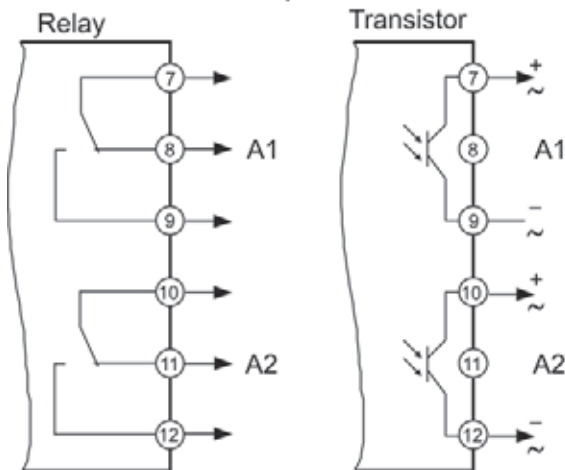
Connection diagram for terminal strip B-D see page 4

Connection Diagrams X9648, Terminals B-D

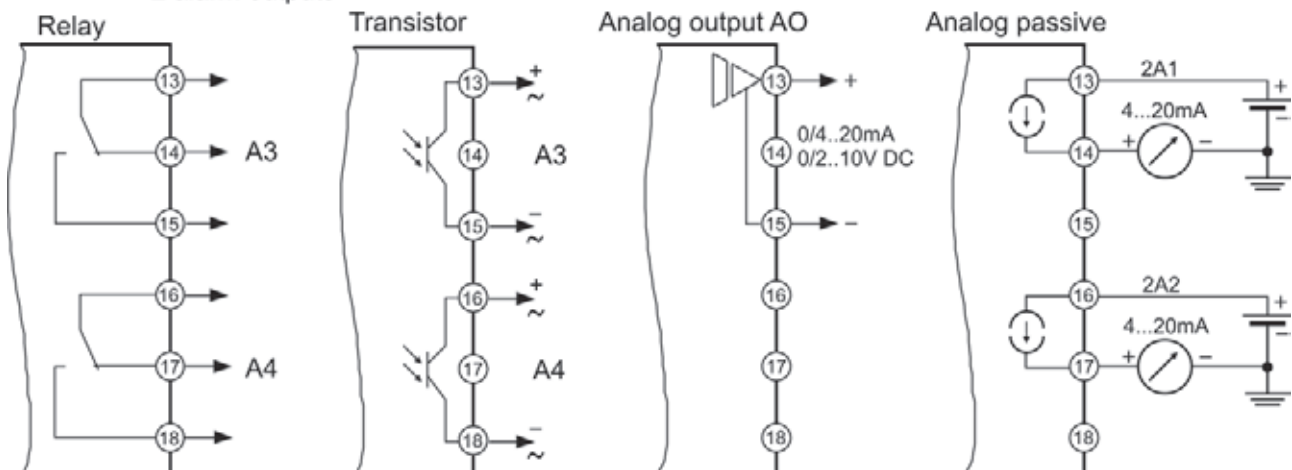
Terminal strips B, C, D

Terminal strip A belongs to each article.

Terminal strip B (varies with versions) 2 alarm outputs



Terminal strip C (varies with versions) 2 alarm outputs



Terminal strip D supply voltage (varies with version)

