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1 INTRODUCTION

REDOX TRANSMITTER 8206

Dear Customer,

Congratulations on your purchase of our digital redox potential transmitter type 8206

BEFORE INSTALLING OR USING THIS PRODUCT, PLEASE TAKE OUR ADVICE AND READ THE ENTIRE MANUAL THOROUGHLY.

This will enable you to fully profit from all of the advantages offered by this product.

1.1 Unpacking and Control

Please verify that the product is complete and free from any damage. The standard delivery must include:

-1 redox potential transmitter type 8206 either in compact version, or in panel version with mounting accessories (1 gasket, 4 spacer bolts, 1 protective plate, 4 screws, 4 lockwashers, 2 cable clips and 1 cut-away film) or in IP65 wall-mount version.

-1 Operating Instruction Manual
ref 425549S

Compare the type specifications on the label to the following list to ensure that you have received the proper unit. If there is any loss or damage, please contact your local Bürkert subsidiary.

1.2 About this Manual

This manual does not contain any warranty statement. Please refer to our general terms of sale and delivery.

Only properly-trained staff should install and/or repair this product. If difficulties should occur at the time of installation, please contact your nearest Bürkert sales office for assistance.

1.3 User's Responsibility for Safety

Bürkert manufactures a broad range of redox potential transmitters (compact, wall-mounted or panel versions). While each of these products is designed to operate in a wide variety of applications, it is the user's responsibility to select a transmitter model that is appropriate for the application, install it properly, and maintain all components. Special Attention must be paid to the chemical resistance of the transmitter against the fluids which are directly contacting the product.



This symbol appears in the manual to draw special **attention** to instructions that affect the safe installation, function and use of the product.

1.4 Electromagnetic compatibility

This transmitter conforms to the EMC-Directive of the Council of European Communities 89/336/EEC. In order to comply with this directive, follow the wiring instructions (§ 3).

2 SPECIFICATION

REDOX TRANSMITTER 8206

2.1 Compact redox transmitter type 8206 ordering list

2.1.1 Compact redox transmitter; 4-20 mA output; 12-30 VDC; without relay

| Transmitter without relay | | | Plug G 1/2" | Plug | PG 13,5 |
|---------------------------|--------|-----------|-------------|----------|----------|
| Compact | Gasket | Electrode | Ident N° US | Ident N° | Ident N° |
| 8206 | FPM | PLA | 418860F | 418836K | 418843S |
| 8206 | EPDM | PLA | 418867S | 418849G | 418851S |

2.1.2 Compact redox transmitter; 4-20 mA output; 12-30 VDC; with relays

| Transmitter with relays | | | 2xG 1/2" | 2xPG 13,5 |
|-------------------------|--------|-----------|-------------|-----------|
| Compact | Gasket | Electrode | Ident N° US | Ident N° |
| 8206 | FPM | PLA | 418861U | 418837L |
| 8206 | EPDM | PLA | 418873Y | 418857Y |

2.2 Specification redox transmitter type 8206 Separate

Redox transmitter type 8206 panel version

| Type | Output | Power Supply | Ident N°. |
|------|-------------------|--------------|-----------|
| 8206 | 4-20 mA | 12-30 VDC | 429088U |
| 8206 | 4-20 mA, 2 relais | 12-30 VDC | 430754G |

Redox transmitter type 8206 wall-mounted version

| Type | Output | Power Supply. | Ident N°. |
|------|-------------------|---------------|-----------|
| 8206 | 4-20 mA | 12-30 VDC | 430755H |
| 8206 | 4-20 mA, 2 relais | 12-30 VDC | 430756A |
| 8206 | 4-20 mA | 115/230 VAC | 430757B |
| 8206 | 4-20 mA, 2 relais | 115/230 VAC | 430758L |

Redox sensor for redox transmitter type 8206 separate versions.
See type 8200 instruction manual.

2.3 Design and Measuring Principle

Design

Redox transmitter type 8206 compact

The redox-transmitter compactly combines a redox-sensor and a transmitter type 8206 with display in a splash-proof plastic IP65 enclosure.

The sensor component consists of a replaceable combination redox-electrode, screwed into the sensor housing with screw-in threads PG 13.5.

The measured signal is connected to the remote transmitter via a coax cable.

The transmitter component converts the measured signal, displays the instantaneous value and computes the output signals.

The access to the output terminals are provided via a cable gland PG 13.5 or a 4-pole plug (transmitter without relay) or via 2 cable glands PG 13.5.

Redox transmitter type 8206 separate

The redox transmission system combines a redox sensor type 8200, and a separate redox transmitter type 8206 with display.

The 8206 separate transmitter is available in panel mounted version and in a wall-mounted plastic IP65 enclosure for connection to the redox sensor type 8200.

Redox sensor type 8200 separate

A redox sensor is necessary for use with the redox transmitter type 8206 separate.

The redox sensor type 8200 for redox transmitter type 8206 separate version can be easily installed into pipes using our specially designed fitting system (type S020,1500,1501).

Please refer to the redox sensor type 8200 instruction manual.

Measuring Principle

When a redox potential electrode is immersed in a solution an electron exchange occurs between the oxidised and the reduced state of the electrolyte. The generated cell voltage is the redox potential.

The transducer without relay functions in a 2-wire circuit and requires a power supply of 12...30 VDC (or 115/230 VAC as an option in Wall-mounted version). A 4...20 mA standard signal is available as output signal, proportional to the redox potential (cf § 4.3.2).

The transducer with two additional relays functions in a 3-wire circuit. Limit values are freely adjustable (cf § 4.3.3)

2 SPECIFICATION

REDOX TRANSMITTER 8206

2.4 Dimensions of the redox transmitter type 8206 compact

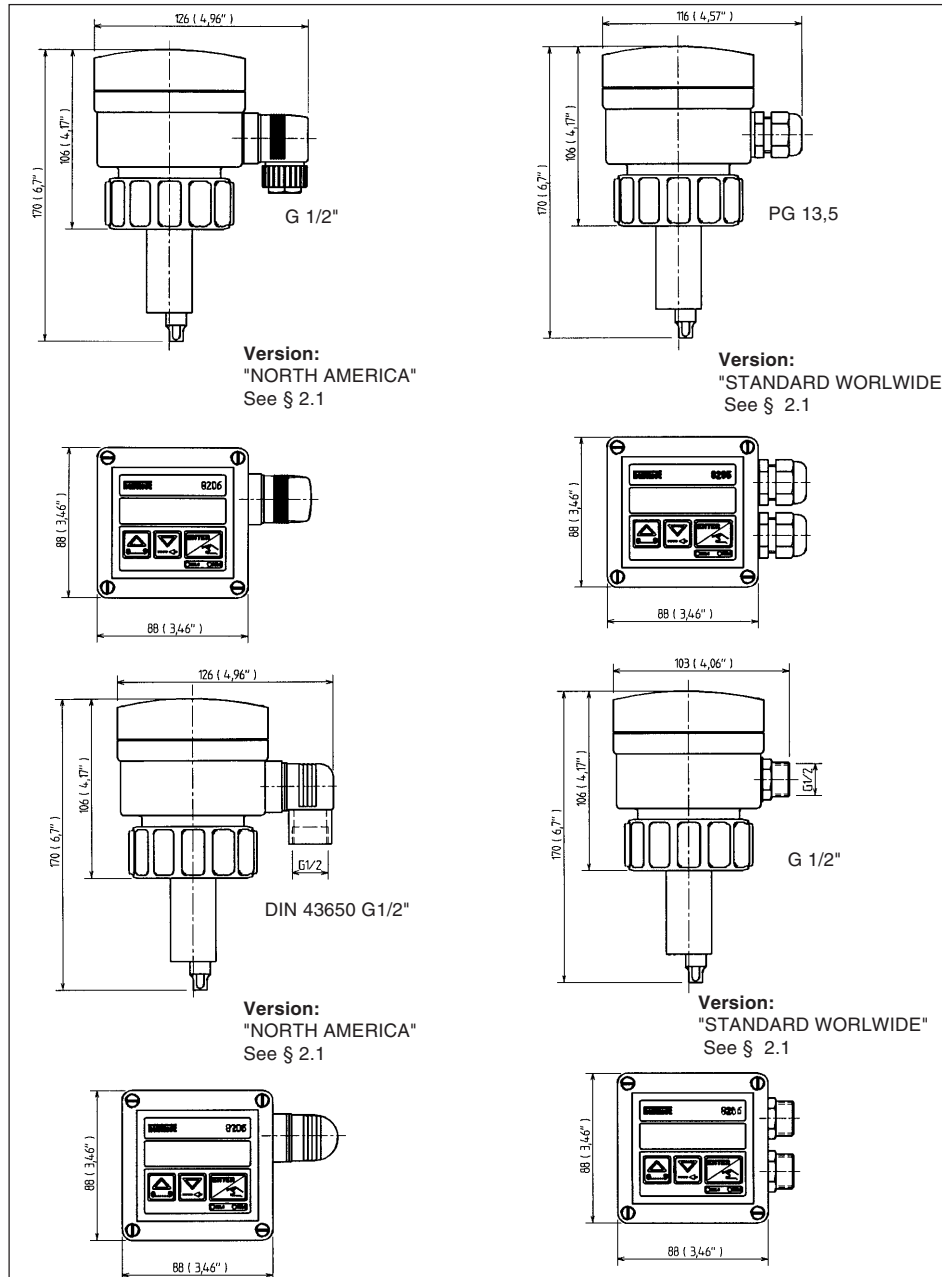


Fig. 2.3 Dimensions redox transmitter type 8206 compact housing

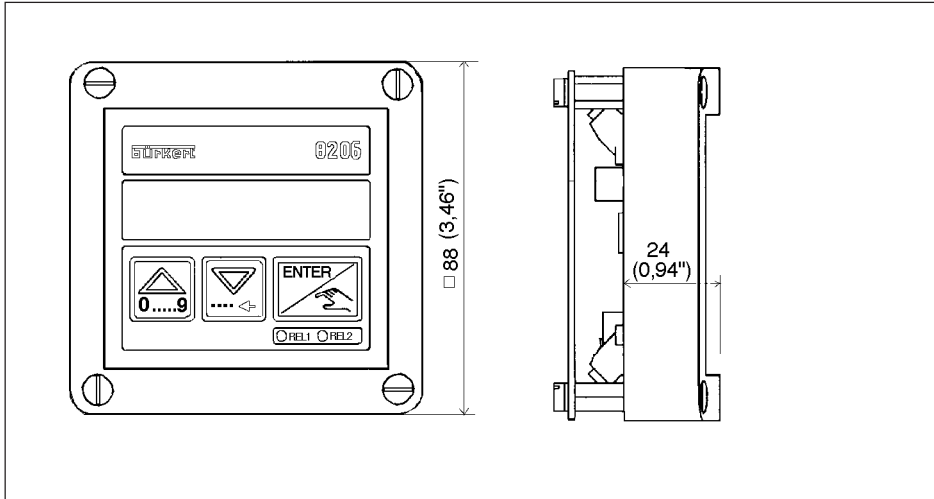


Fig. 2.4 Dimensions redox transmitter type 8206 panel version

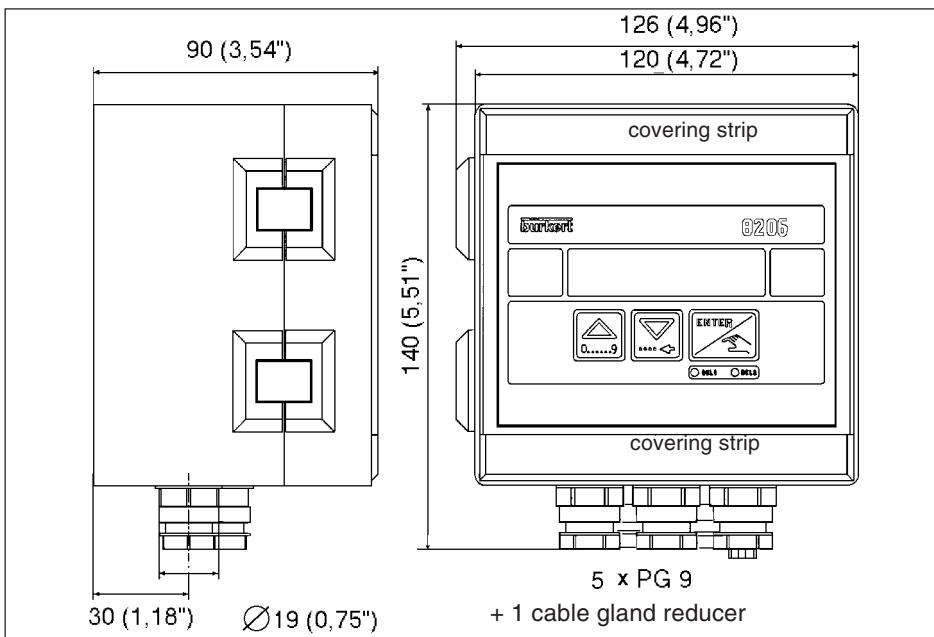


Fig. 2.5 Dimensions redox transmitter type 8206 wall-mounted version

2 SPECIFICATION

REDOX TRANSMITTER 8206

2.5 Technical Data

2.5.1 Redox transmitter type compact

| | |
|---|--|
| Ambient temperature | 0 to 60 °C (32 to 140 °F) |
| Storage temperature | 0 to 60 °C (32 to 140 °F) |
| Relative humidity | max. 80 % |
| Enclosure | IP 65 |
| Measuring range | -1575...+1575 mV |
| Smallest measuring range on output 4...20 mA | 50 mV |
| Measuring error | ±3 mV, depending on electrode calibration |
| Voltage supply | 12...30 VDC |
| Consumption | 20 mA (without relay); or 80 mA (with relays) |
| Output signal | 4...20 mA |
| Load | max. 700 Ω at 30 V max. 400 Ω at 24 V max. 100 Ω at 15 V |
| Display | 15 x 60 mm LCD 8 digits, alphanumeric, 15 segments, 9 mm high |
| Relay output (optional) | 2 relays, 3 A, 230 V, freely adjustable |
| Sensor housing | PVDF |
| O-rings | FPM/EPDM |
| Electronics housing | PC |
| Front plate | polyester |

Technical Data Electrode

| | |
|--------------------------------------|------------------------|
| Type | PLA |
| Housing | glass shaft |
| Fluid pressure (max) | 0-6 bar (0-87 psi) |
| Fluid temperature | 0-90 °C (32-194 °F) |
| Max. pressure at max. temperature | 4 bar (58 psi) |
| Diaphragm | zirkondioxide |
| Reference electrolyte | gel |

2 SPECIFICATION

REDOX TRANSMITTER 8206

2.5.2 Redox transmitter type 8206 separate

| | |
|---|---|
| Ambient temperature | 0 to 60 °C (32 to 140 °F) |
| Storage temperature | 0 to 60 °C (32 to 140 °F) |
| Relative humidity | max. 80 % |
| Measuring range | -1575...+1575 mV |
| Smallest measuring range on output 4...20 mA | 50 mV |
| Measuring error | ±3 mV, depending on electrode calibration |
| Display | 15 x 60 mm LCD 8 digits, alphanumeric, 15 segments, 9 mm high |
| Relay output (optional) | 2 relays, 3 A, 230 V, freely adjustable |
| Enclosure | Wall-mounted IP 65; ABS Panel IP230 (rear plate); IP65 (front plate); PC |
| Voltage supply | 12...30 VDC (115/230 VAC option wall-mounted version) |
| Consumption | 20 mA (without relay); or 80 mA (with relays) |
| Output signal | 4...20 mA |
| Load max: | 700 Ω at 30 V; 400 Ω at 24 V; 100 Ω at 10 V |

Technical Data Redox Electrode

(refer to redox sensor type 8200 Instruction manual)

3 INSTALLATION

REDOX TRANSMITTER 8206

3.1 Installation Guidelines

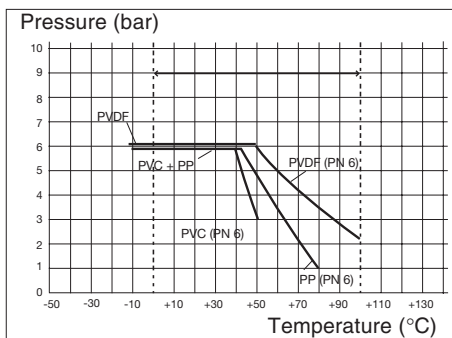


The transmitter must be calibrated with buffer solutions (see § 4.2) prior to installation.

Before first electrode calibration, immerse it for at least 2 hours in a solution of KCl 3M (223,6 g/l) or in drinking water.

Pressure-Temperature-Diagram

Mind pressure-temperature dependence according to the respective fitting materials.



Installation Guidelines

Mount the compact redox transmitter (or redox sensor) in a vertical position (max. $\pm 75^\circ$) into a horizontal pipe (cf fig. 3.1).

The electrode must continuously be immersed into the measuring fluid in order to protect it from drying out.

The transmitter must be protected from constant heat radiation and other environmental influences, such as direct exposure to sunlight.

3.1.1 Compact redox transmitter type 8206 installation

The redox transmitter can be easily installed in pipes using our specially designed fitting system. Remove protective cap of the sensor and keep it for storage.

1. The fitting **4** must be installed into the pipe according to the installation specifications in section 3.1.
2. Insert plastic nut **3** into fitting, and let plastic ring **2** snap into guide bush **5**.
3. Carefully insert the redox transmitter **1** into the fitting. If installed properly, the transmitter cannot be rotated.
4. Tighten transmitter housing to fitting with plastic nut **3**.



CAUTION! Plastic nut must only be tightened by hand!

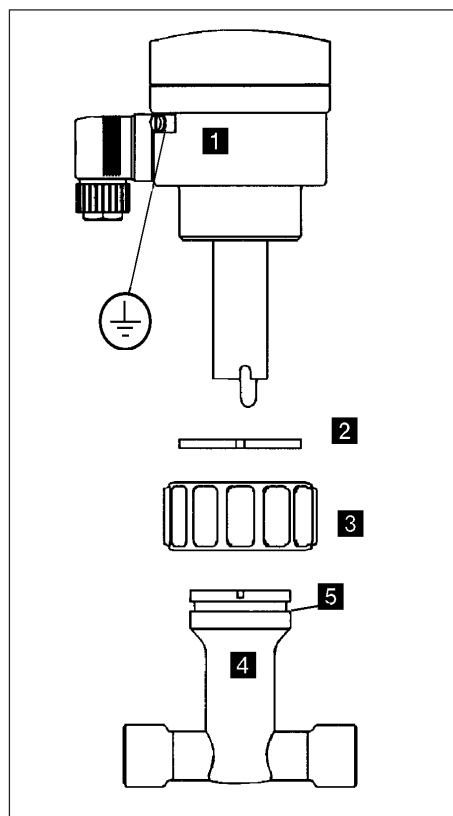


Fig. 3.1 Compact transmitter installation

3 INSTALLATION

REDOX TRANSMITTER 8206

3.1.2 Redox transmitter type 8206 panel installation

For the cut-away of the front panel, follow the instructions on the enclosed delivery film. Install the transmitter as follows:

1. Put gasket **2** on the cover **1** and place the complete unit in the panel cut-away.
2. Screw the spacer bolts **3** on the panel fixing screws **4**.
3. Insert the cable clips **10**, to hold the different cables (power supply, outputs, sensor) of the transmitter, into plate **7**.
4. If a PLC is connected to the transmitter, set the switch SW1 of the electronic card (if required)(cf § 3.2.3)
5. Fasten the plate **7** with screws **9** on bolts **3**, tightening the lockwashers **8**.

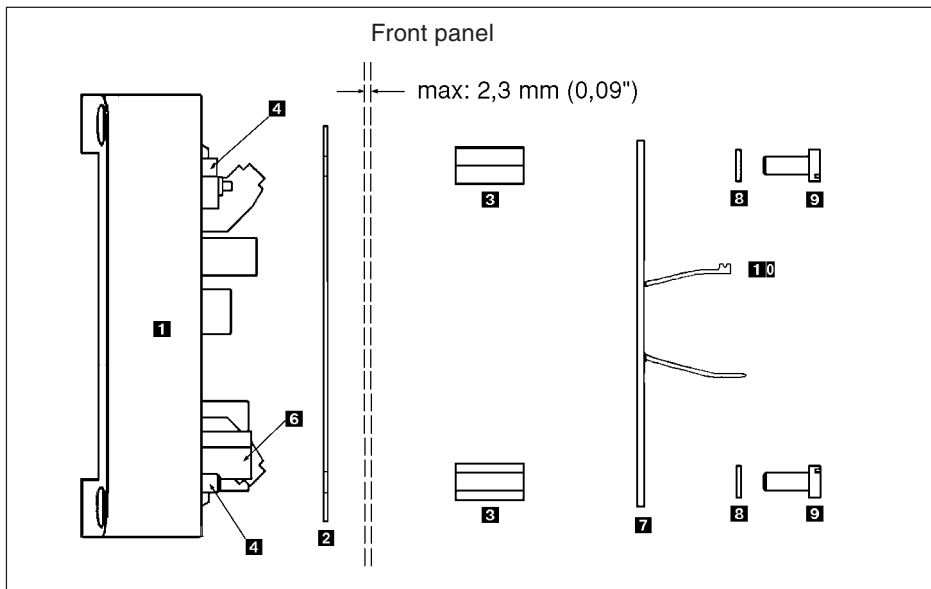


Fig. 3.2 Installation redox transmitter type 8206 panel version

3 INSTALLATION

REDOX TRANSMITTER 8206

3.1.3 Redox transmitter type 8206 Wall-mounted version installation

The redox transmitter in wall-mounted version has 4 fixing holes in the bottom enclosure. Remove the white blanking strips and the cover to access to fixing holes **1**.

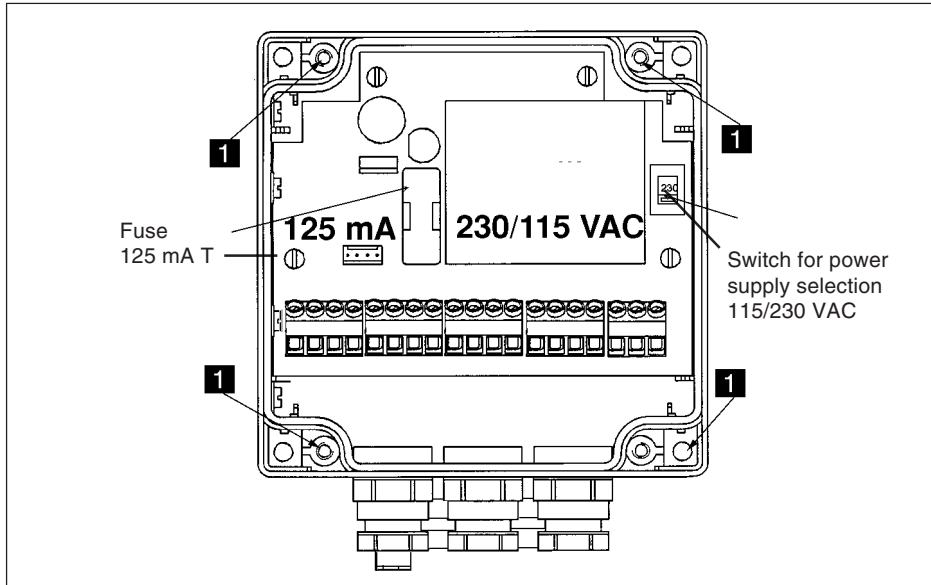


Fig. 3.3 Installation redox transmitter type 8206 wall-mounted version

3.2 Electrical connection

3.2.1 General electrical requirements

The connecting cable conducts the measuring signal and must not be installed in combination with high voltage or high frequency carrying lines. If a combined installation cannot be avoided, either keep a min. space of 30 cm (approx. 1 ft) or use shielded cables. When using shielded cables ensure continuous grounding of the shield.

In normal operating conditions, the 4-20 mA output, and relays signals can be transmitted by a simple cable of 0.75 mm². In case of doubt, always use a shielded cable.

The power supply must be of good quality (filtered and regulated).



For EMC purposes, the earth must be connected to the earth of the transmitter or to the earth terminal (separate version).

3 INSTALLATION

REDOX TRANSMITTER 8206

3.2.2 Electrical wiring redox transmitter type 8206 compact or panel

3.2.2.1 Transmitter without relay

Electrical wiring either via cable plug according to DIN 43 650 or PG 13.5, (or G1/2" US Version) cable gland .

Wiring via cable plug

Standard DIN 43 650 plug connector with PG9-cable glands, pipe cross section max. 1.5 mm², IP65 rating.

1. To open the connector remove screws (fig. 3.4).
2. Remove the internal part **3** from the external part **4**.
3. Connect according to pin assignment in Fig. 3.5.
4. When re-assembling, the internal part **3** may be inserted into the external part **4** in 90°-step intervals as required.

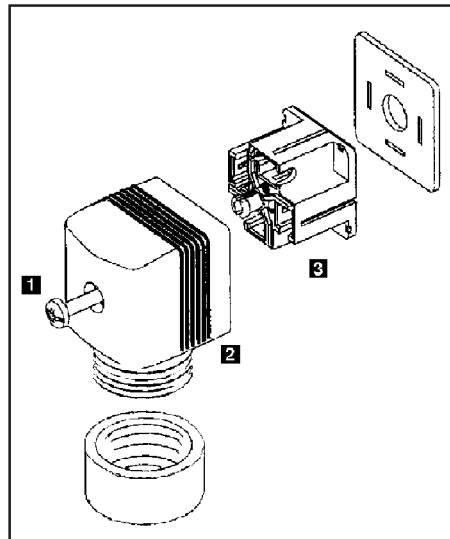


Fig. 3.4 Plug assembly
DIN 436520 Type 2508 form A

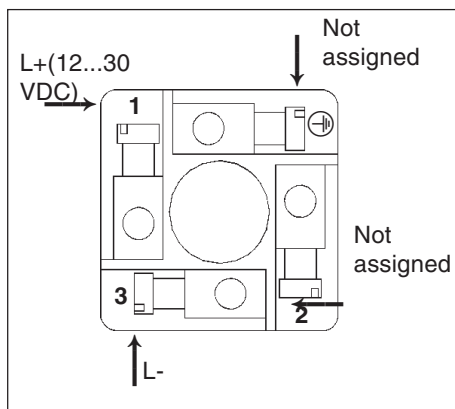


Fig.3.5 Pin assignment

Note: The 4-20mA output of the transmitter can easily be connected to a PLC (terminals 1-3), whatever the PLC type (sinking or sourcing) (cf. fig.3.7).

3 INSTALLATION

REDOX TRANSMITTER 8206

Wiring with PG 13,5

Remove the cover, pull the cable through the cable gland and wire according to following pin assignment (fig. 3.6).

- 1: Not assigned
- 2: L+ (12...30 VDC)
- 3: L-
- 4: Earth (earth lug)



For EMC purposes, the earth must be connected to the earth of the transmitter. It must be connected locally, and ideally together with the grounding of pipe or tank.

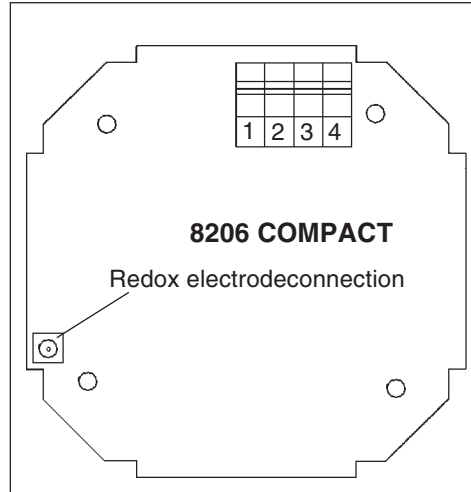


Fig. 3.6 Pin assignment of 8206 compact

Transmitter type 8206 panel

Install the transmitter (cf § 3.1.2) and connect according to pin assignment in Fig. 3.6.



For EMC purposes, the earth must be connected to the earth of the transmitter. It must be connected locally, and ideally together with the grounding of pipe or tank.

Note: The transmitter can easily be connected to a PLC, (terminals 2-3), whatever the PLC type (sinking or sourcing) (cf. fig.3.7).

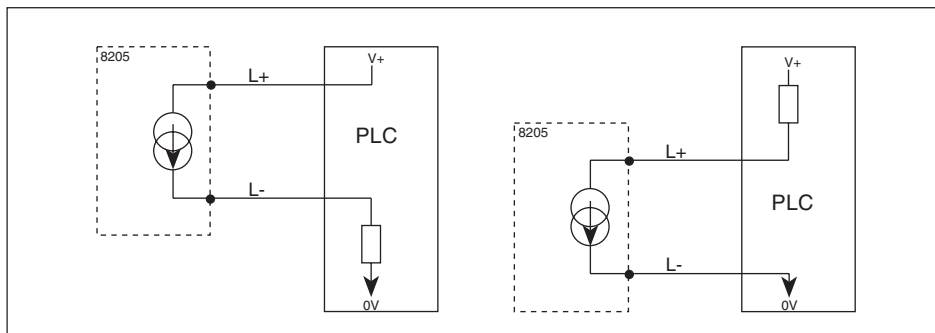


Fig. 3.7 Connection of 4-20 mA output to a PLC


3 INSTALLATION

REDOX TRANSMITTER 8206

3.2.2.2 Transmitter compact or wall-mounted with relays

The electrical connections are made via 2 cable glands.
Remove cover, pull cable through PG 13.5 and wire according to pin assignment (fig. 3.8).

- 1: Current output 4...20 mA
- 2: L+ (12...30 VDC)
- 3: L-
- 4: Earth (earth lug)
- 5: Relay 2
- 6: Relay 2
- 7: Relay 1
- 8: Relay 1

 If the 4-20 mA output is used, remove the strap 1-3 (cf Fig 3.8).

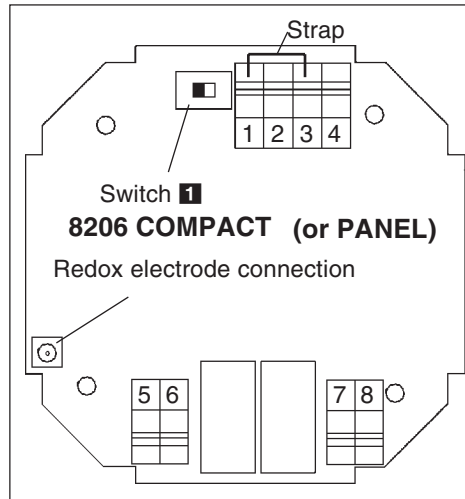



Fig. 3.8 Connection of 8206 with relays

 For EMC purposes, the earth must be connected to the earth of the transmitter. It must be connected locally, and ideally together with the grounding of pipe or tank.

Note: PLC-connection. Depending on the PLC-version, the switch **1** on the circuit board must be put to position A or B (see fig.3.8 and 3.9).

In this case remove the strap (see fig. 3.8).

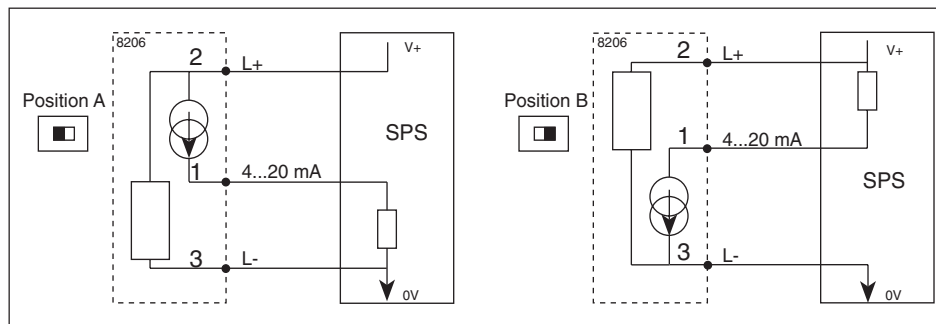


Fig. 3.9 Connection of the transmitter type 8206 to a PLC

3 INSTALLATION

REDOX TRANSMITTER 8206

3.2.3 Electrical wiring 8206 wall-mounted -12-30 VDC

Connect the redox sensor to the coaxial connector on the electronic board.

⚠ Use the cable gland reducer for the redox cable.

⚠ If the 4-20 mA output is connected, remove the strap 10-12.

3.2.3.1 Transmitter 8206 wall-mounted 12-30 VDC - without relay-Strap

Open the cover to access to the terminals. Wire according to the figure 3.10

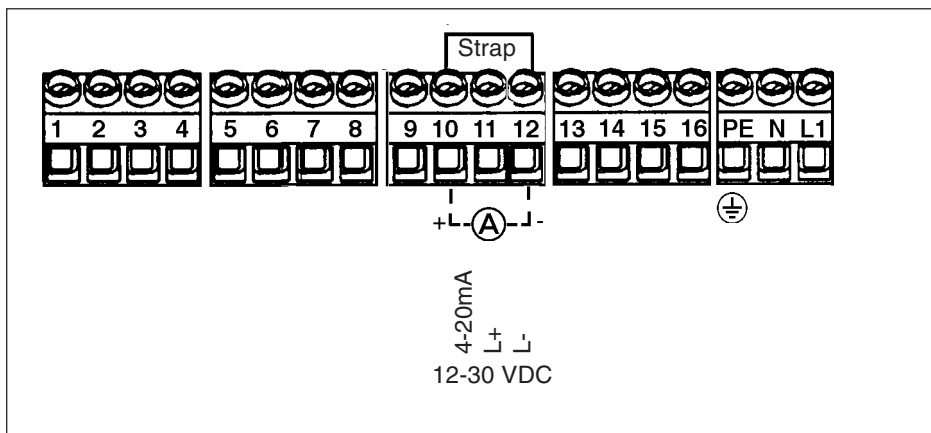


Fig. 3.10 Connection 8206 Wall mounted - 12..30 VDC without relay

3.2.3.2 Transmitter 8206 wall-mounted 12-30 VDC - with relays

Open the cover to access to the terminals. Wire according to the figure 3.11.

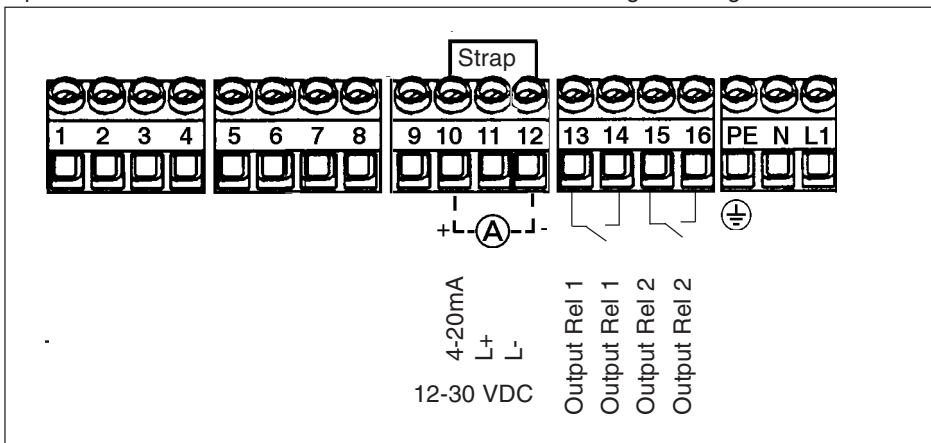


Fig. 3.11 Connection 8206 Wall mounted - 12..30 VDC with relays

3 INSTALLATION

REDOX TRANSMITTER 8206

3.2.4 Electrical wiring 8206 wall-mounted 115/230 VAC

Connect the redox sensor to the coaxial connector on the electronic board.

⚠ Use the cable gland reducer for the redox cable.

⚠ If the 4-20 mA output is connected, remove the strap 10-12.

3.2.4.1 Transmitter 8206 wall-mounted -115/230 VAC- without relay

Open the cover to access to the terminals. Wire according to the figure 3.12).

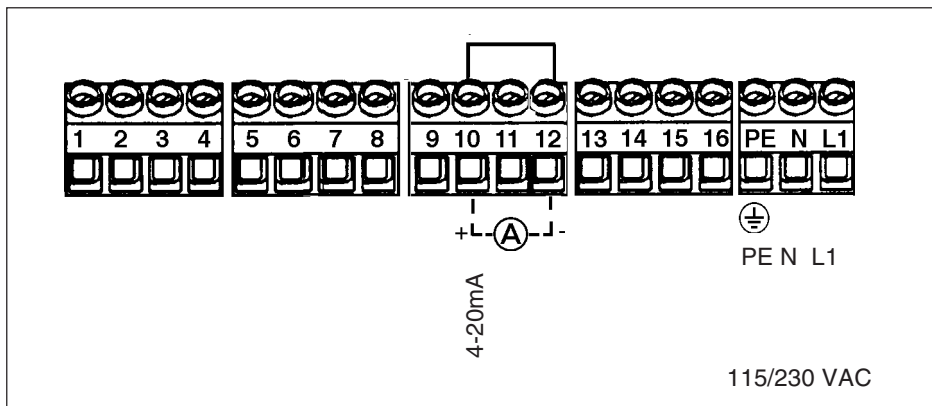


Fig. 3.12 Type 8206 Wall mounted - 115/230 VAC without relays

3.2.4.2 Transmitter 8206 wall-mounted -115/230 VAC- with relays

Open the cover to access to the terminals. Wire according to the figure 3.13.

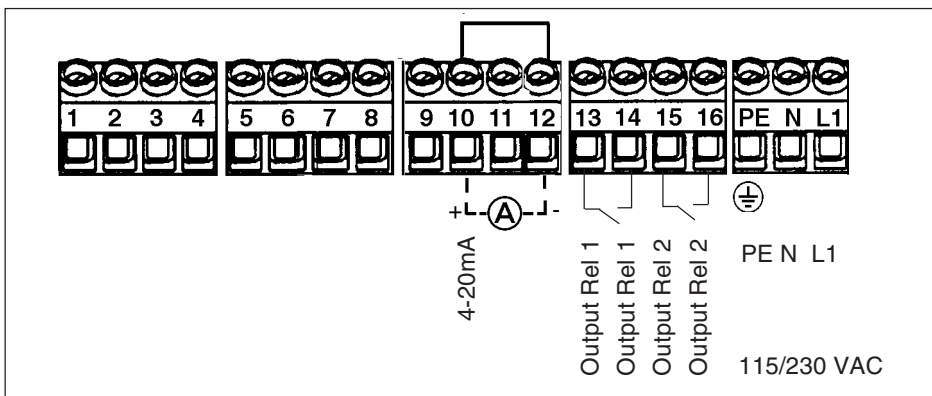


Fig. 3.13 Connection 8206 Wall mounted - 115/230 VAC with relays

⚠ Warning: Check the position of the power supply selection switch, before switching on the transmitter (fig. 3.3).

4 OPERATION

REDOX TRANSMITTER 8206

The operation of the redox transmitter is classified according to 3 levels.

Main Menu

Redox and output current are displayed in the normal function mode.

The "HOLD" function and electrode calibration ("DRP CAL.") can be accessed . (§ 4.2)

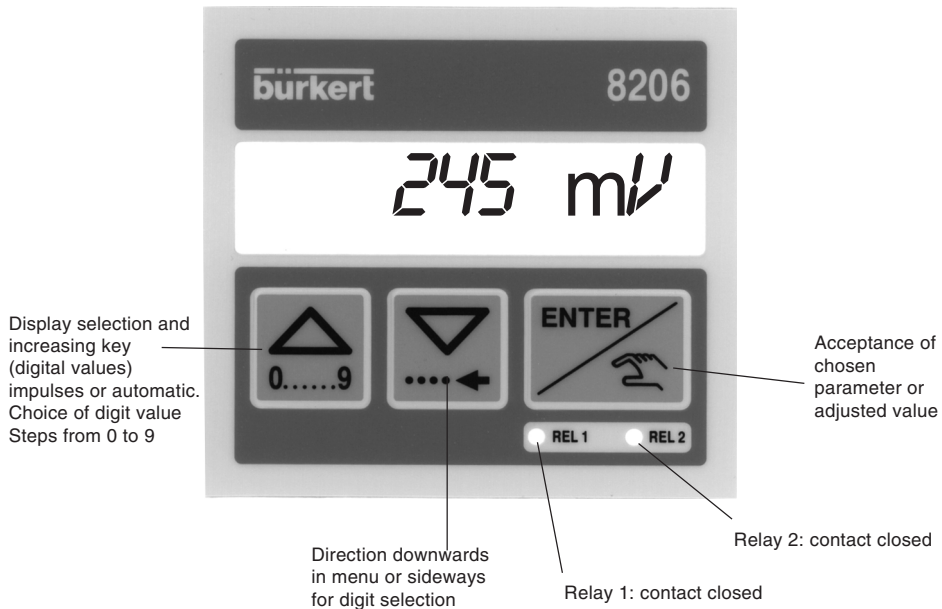
Calibration Menu

The calibration mode allows adjustments of all redox measurement parameters: language, 4...20 mA output, relay thresholds (option), and filter selection (§ 4.3).

Test Menu

The test menu allows the basic setting of the transmitter: Offset (4 mA), Span (20 mA). A redox value can be simulated via this menu, allowing the process to be tested in the "dry condition" (§ 4.4)

4.1 Transmitter Operating and Control Elements

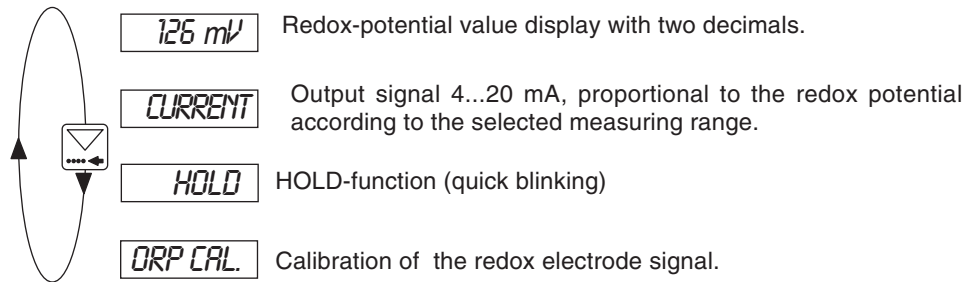


4 OPERATION

REDOX TRANSMITTER 8206

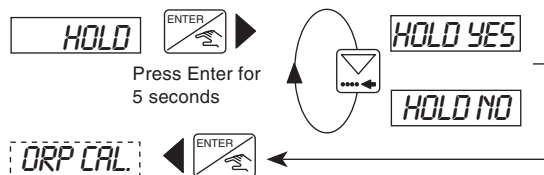
4.2 Operation Mode Display

The following process values are displayed in the display operation mode.



4.2.1 HOLD function

A continuous 4-20 mA output corresponding to the last value measured before this option was entered is generated. The relays are locked in their last state. This allows the electrode to be cleaned without interruption of the process. The display in the operation mode is flashing and there is no access to the parameter definition or the test menu, as long as the HOLD-function is activated. To deactivate HOLD function, enter again "HOLD" option and confirm "HOLD NO".



4 OPERATION

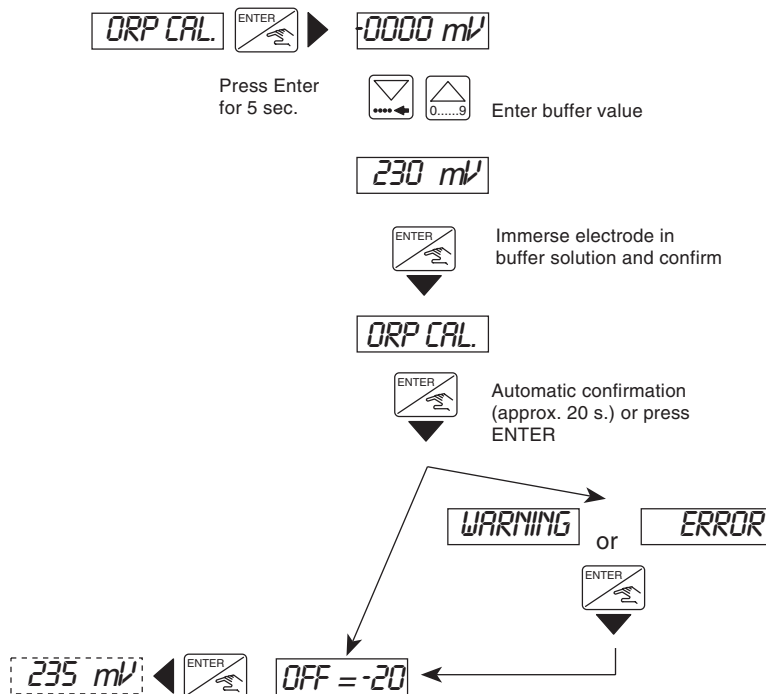
REDOX TRANSMITTER 8206

4.2.2 Calibration of redox electrode

In order to obtain reliable measurements, it is necessary to perform regular calibrations of the redox electrode.

A buffer solution is necessary to calibrate the reference value, we recommend the choice of a buffer value as close as possible to the required final redox potential value. Before each calibration, clean the electrode (see §5.2).

This maintenance procedure is very important to ensure a reliable control operation. The frequency of calibration depends upon the degree of contamination of the measuring fluid, in normal operations conditions, calibration should be repeated once a week.



The message "WARNING" at the end of calibration indicates a buffer solution error or advanced ageing of the electrode. In the latest case, a replacement of electrode must be anticipated. In normal conditions, the message "WARNING" appears then the electrode has reached the half of its lifetime.

The message "ERROR" at the end of calibration indicates a buffer solution error or that the electrode is out of tolerance. In this case, values of previous calibration are kept. The electrode must be changed, otherwise the measured values would be erroneous.

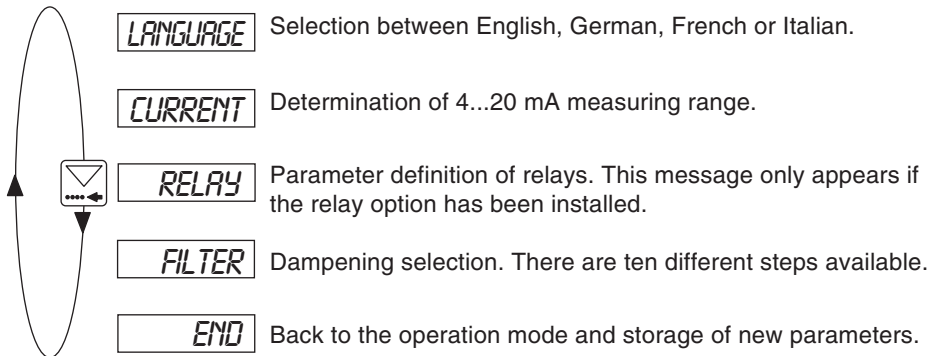
To escape electrode calibration, press  for 2s. Previous calibration values are kept. The sign can be changed as numbers.

4 OPERATION

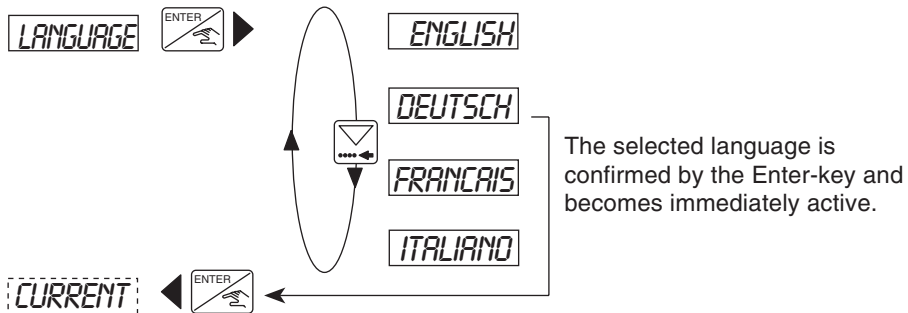
REDOX TRANSMITTER 8206

4.3 Calibration Mode: Press   simultaneously for 5 seconds

The following adjustments are set in the calibration mode display:



4.3.1 Language

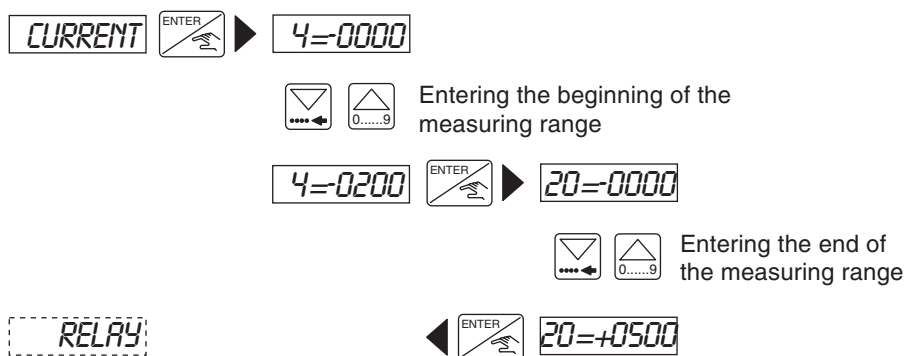


4 OPERATION


REDOX TRANSMITTER 8206

4.3.2 Output Current

Enter the measuring range corresponding to the 4...20 mA output. E.g. -200 to 500 mV corresponding to 4...20 mA. The beginning of the measuring range might be larger than the end of it, e.g. -200 to 500 mV corresponds to 20...4 mA (inverted output signal).




The sign can be changed like numbers.

 The minimum measuring range is 0,5 redox. If the beginning of the measuring range equals the end of it, there will be no display of the current value in the operation mode display (§4.2)

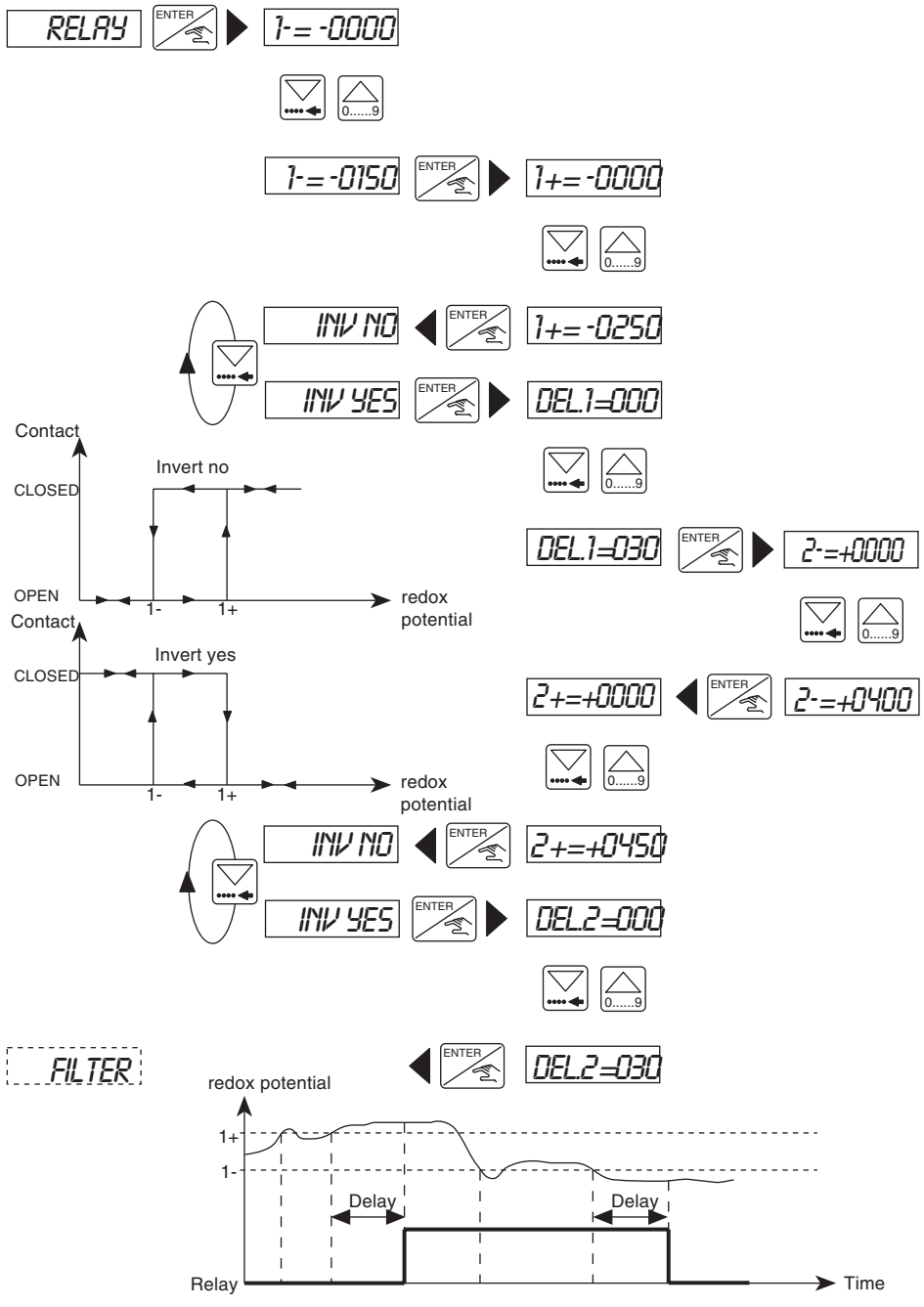
4.3.3 Relay

Definition of the relays functions. Two limit thresholds are set for each relay: 1- and 1+ or 2- and 2+. Inversion of the relays and delay are available. A delay (0 to 180 seconds) prevents the relays from being activated too fast, e.g. when time for homogenization is required (e.g. measurements in tanks with agitator). If the redox potential exceeds a limit value, the transmitter activates the relay at the end of the delay. Nothing happens, if the redox potential passes again under the threshold before the delay is elapsed. Units and decimal points as selected in the submenu "CURRENT" are active.

 **Caution!** The following condition must be maintained $1- \leq 1+$;
and $\Delta \text{ mV} > 2$.

4 CONFIGURATION

REDOX TRANSMITTER 8206

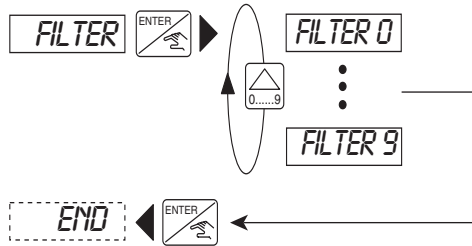


4 OPERATION

REDOX TRANSMITTER 8206

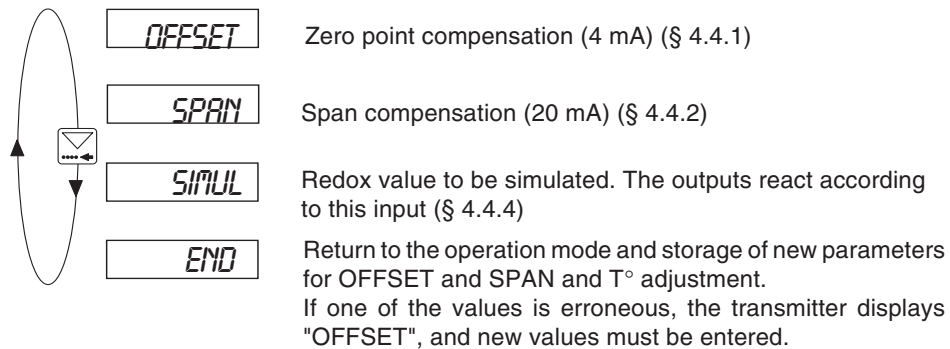
4.3.5 Filter Function

The damping is set in this sub-menu, which prevents display and output current fluctuations. There are 10 steps available. However, the first step ("FILTER 0") has no damping function.



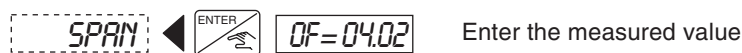
4.4 Test Menu: Press simultaneously for 5 seconds

The following compensations and controls are carried out in the Test menu:



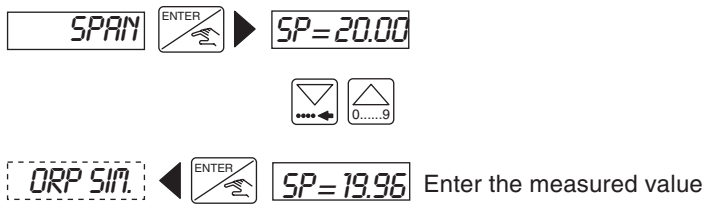
4.4.1 Offset-Compensation

In order to check and modify the basic setting of 4 mA, connect an ammeter in the output circuit. Press ENTER when "OFFSET" is displayed, the transmitter generates 4 mA. If the measured value is different from 4 mA, enter the measured value as the new offset.



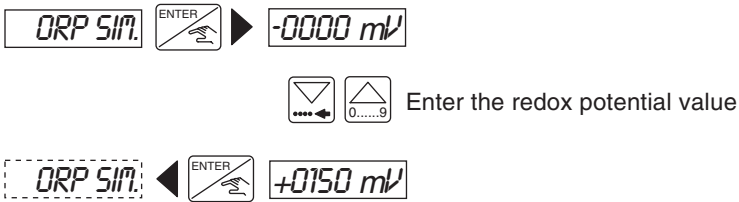
4.4.2 Span-Compensation

Check and modify the basic setting of 20 mA. The procedure is identical to the Offset-compensation. The transmitter generates 20 mA, if the ENTER key is pressed when "OFFSET" is displayed. Correct the span value by entering the measured value if necessary.



4.4.3 Redox potential-Simulation

A redox potential value can be simulated in this menu, allowing the user to test his system without the presence of any liquid being required. The simulated value influences the current output and the relays.



The simulation remains active until the user enters another sub-menu of the test menu.

5 MAINTENANCE

REDOX TRANSMITTER 8206

5.1 Replacement of the redox electrode (compact version)

Redox-electrodes have a limited service life, depending upon many parameters, such as the chemical composition of the handled fluid, temperature, pressure, etc.

The electrode must be replaced if it shows visible damage (broken glass, fractures, etc.) or if the message "ERROR" is displayed at the end of calibration.

For replacement, proceed as follows:



1. Disconnect supply voltage and make sure that there is no pressure on pipe or tank.

2. Remove the transmitter from the pipe or submersion assembly.

3. Unscrew the cover and open it slightly.

4. Pull out connectors **1** and **2**.

5. Pull sensor assembly **3** out of the enclosure.

6. Unscrew the electrode out of assembly **3** with SW17 wrench.

7. Screw new electrode into assembly and tighten with SW17 wrench.

Reassemble in reverse order.

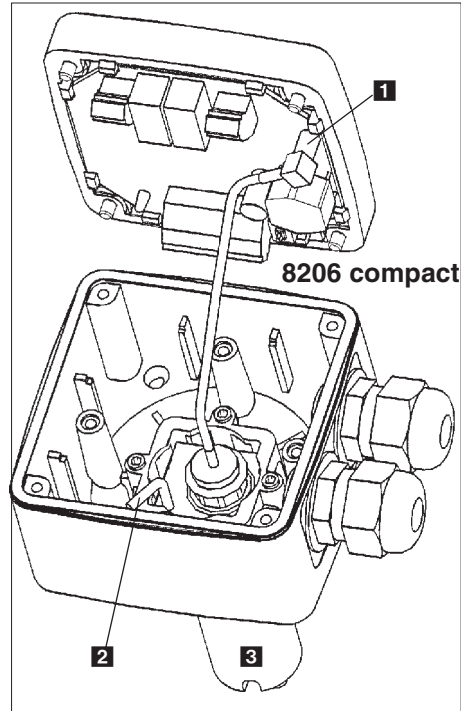


Fig. 5.1 Replacement of redox electrode

5.2 Storage and cleaning of the electrode

When not in operation, the electrode should be stored in a 3 molar potassium chloride solution (223,6 g/l), providing a regenerative effect. If there is no such solution available, normal tap water will also do for short measuring interruptions of max. 2 - 3 days.

The electrode must not be stored in distilled or deionized water, which may be used for rinsing purposes only!

Measuring inaccuracies may occur, if the platine band electrode is covered by solid matter deposits or organic substances. Since the contamination depends on the application, there is no general detergent available. The following detergents however can be recommended for most application cases.

-Greasy or oily deposits must be removed with a tenside-containing agent.

-Chalky deposits and metal hydroxide layers require diluted hydrochloric acid (10 %).

-Sulphide-containing deposits (purification systems) are removed with a detergent mixture of diluted hydrochloric acid (10 %) and saturated pepsin.



Observe safety regulations, when handling acid-containing solutions. Always rinse electrode with deionized water and leave for approx. 10 minutes in a 3 molar potassium chloride solution or in tap water.

5 MAINTENANCE

REDOX TRANSMITTER 8206

5.3 Error messages

"**ERROR**" on the display (except during the electrode calibration) points on that calibration data are lost. By pressing ENTER, the user can access the main menu, but the transmitter works with the factory settings (see §5.4). The transmitter needs re-calibration. If this message recurs, please return the transmitter to your supplier.

Electrode voltage: $>+1575$ mV or <-1575 mV. "---- mV" is displayed. For the outputs (current and relays) $+1575$ mV, respectively -1575 mV, are fixed.

5.4 Factory-setting of redox transmitter type 8206 at delivery

| | | | | |
|------------------------|---------|----------|----------|--|
| Language: | English | Relay 2: | | |
| Current Output: | | 2-: | -1575 | |
| 4 mA: | 0000 | 2+: | -1575 | |
| 20 mA: | 0000 | DEL2: | 000 | |
| Relay 1: | | INV: | Yes | |
| 1-: | -1575 | Filter: | Filter 2 | |
| 1+: | -1575 | | | |
| DEL1: | 000 | | | |
| INV: | Yes | | | |

User-setting of redox transmitter type 8206

| | | | | |
|------------------------|--|----------|--------|--|
| Language: | | Relay 2: | | |
| Current Output: | | 2-: | | |
| 4 mA: | | 2+: | | |
| 20 mA: | | DEL2: | | |
| Relay 1: | | INV: | | |
| 1-: | | Filter: | Filter | |
| 1+: | | | | |
| DEL1: | | | | |
| INV: | | | | |

5 MAINTENANCE

REDOX TRANSMITTER 8206

5.5 Spare Parts List ORP Transmitter type 8206

5.5.1 Spare Parts List Transmitter type 8206 compact

| Position | Specification | Order-No. |
|----------|--|-----------|
| 1 | Complete sensor housing with plug connector, ring and union nut | 418760J |
| 2 | Complete sensor housing with ring, union nut and one flat seal | 418761F |
| 3 | Complete sensor housing with ring, union nut and two flat seals | 418826R |
| 4 | Cable plug Worldwide version | 610647R |
| 5 | Cable plug North America version | 619825Z |
| 6 | PG 13.5 Worldwide version | 418339Q |
| 7 | PG 13.5 North America version (G 1/2 ") | 418340M |
| 8 | Cover with screws, front panel and printed circuit board Transmitter without relay | 418876T |
| 9 | Cover with screws, front panel and printed circuit board Transmitter with relay | 418877U |
| 10 | Ring | 619205L |
| 11 | Union nut | 619204K |
| 12 | Redox potential electrode 0...90 °C, 0...6 bar | 634507S |
| 13 | Electrode housing | 631633U |
| 14 | FPM seal kit | 425554P |
| | EPDM seal kit | 425555Q |
| | Operating instructions in 3 languages (D, GB, F) | 425549S |
| | Buffer solution, 465 mV, 500 ml | 418555Z |

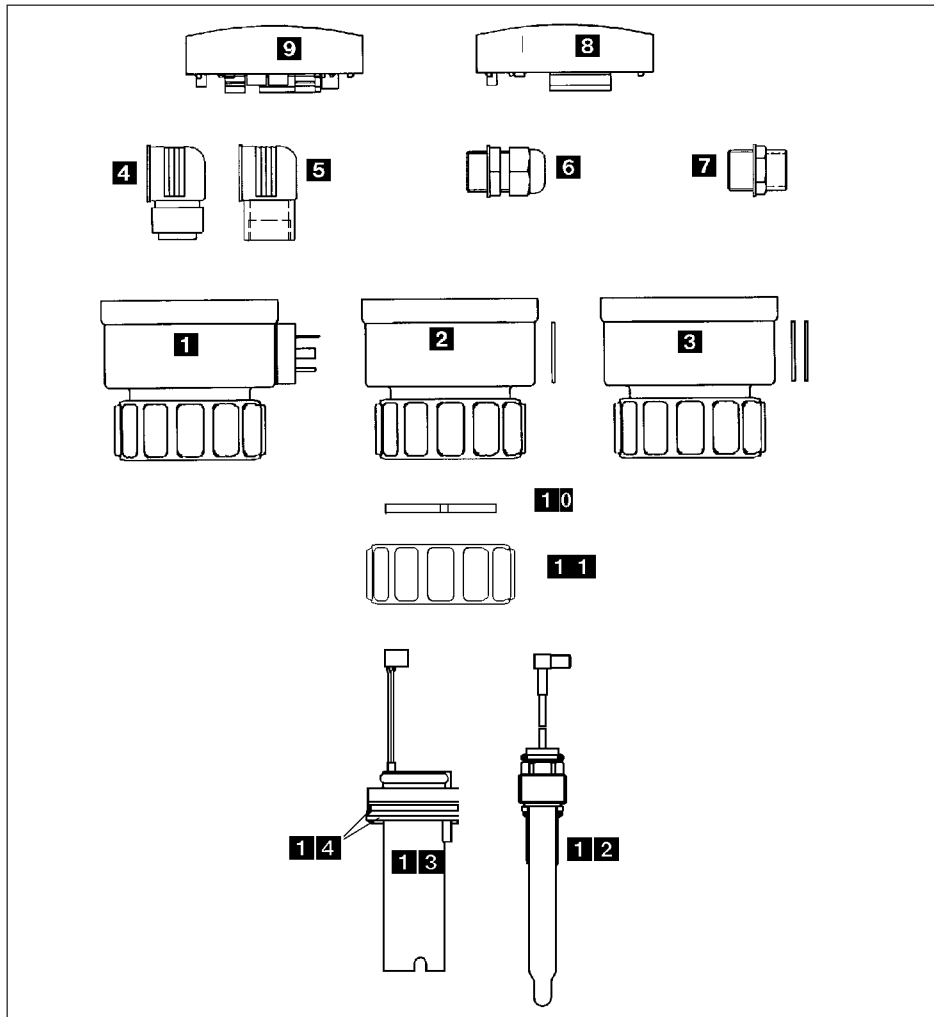


Fig 5.2 Spare parts exploded view type 8206 compact

5 MAINTENANCE

REDOX TRANSMITTER 8206

5.5.2 Spare parts redox-transmitter type 8206 panel version

| Item | Designation | Order N° |
|------|---|----------|
| 1 | Cover with screws, front panel and electronic card Transmitter 8206 panel version without relay. | 425547Q |
| 2 | Cover with screws, front panel and electronic card Transmitter 8206 panel version with relays | 425548Z |
| 3 | Gasket | 419350Q |
| 4 | Protective plate | 427099M |
| 5 | Mounting accessories (screws, lockwashers, spacer bolts, cable clips) | 418388A |
| | Instruction manual | 425549S |

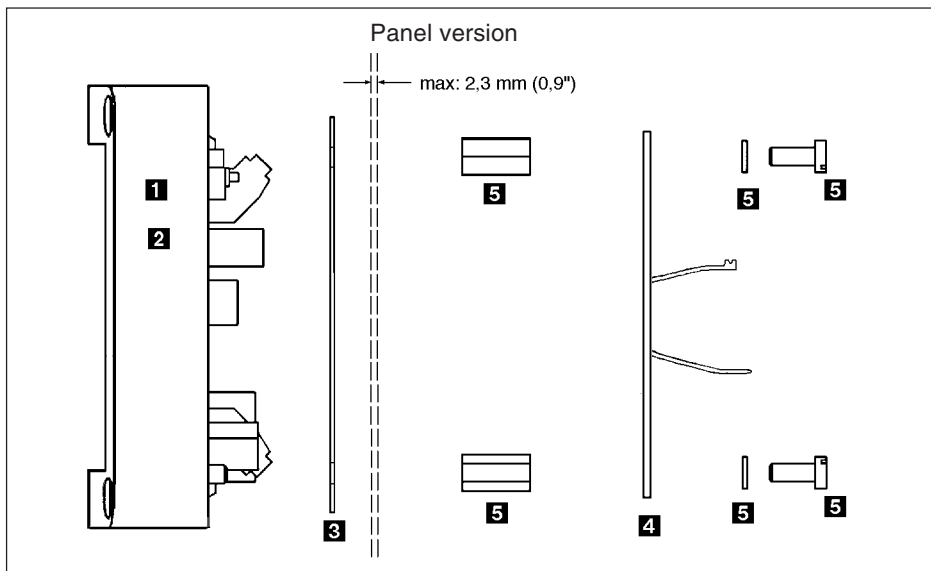


Fig 5.3 Spare parts exploded view type 8206 panel version

5 MAINTENANCE

REDOX TRANSMITTER 8206

5.5.3 Spare parts redox-transmitter type 8206 wall-mounted version

| Item | Designation | Order N° |
|------|--|--------------------|
| 6 | Electronic card 8206 wall-mounted without relay | 418063X |
| 7 | Electronic card 8206 wall-mounted with relays | 418064Y |
| 8 | Power card 12...30 VDC Power card 115/230 VAC | 419879F 419877V |
| 10 | Complete IP65 enclosure | 427096A |
| | Instruction manual | 425549S |

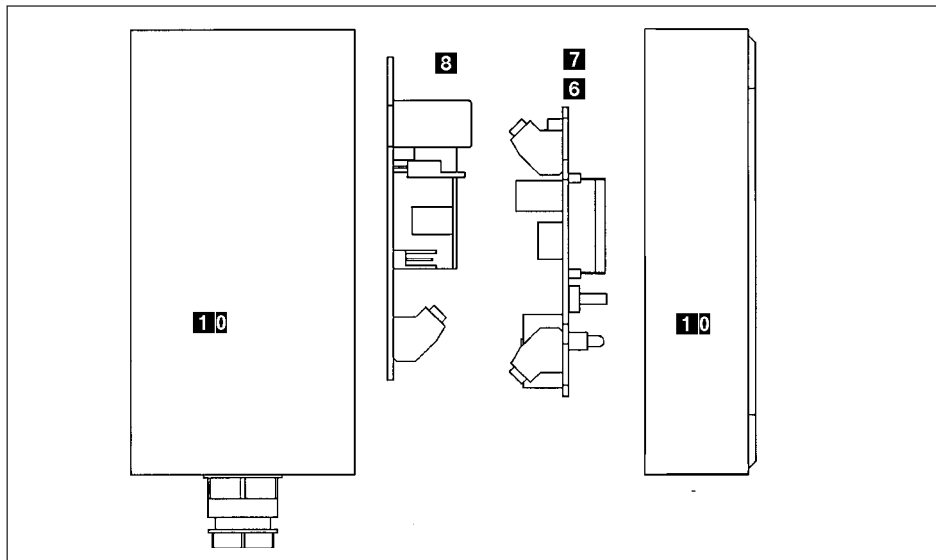
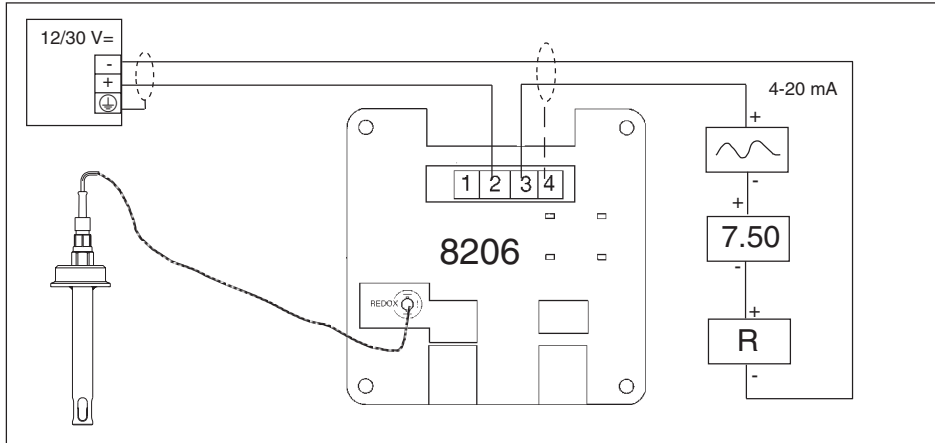


Fig 5.4 Spare Parts Explosion type 8206 Drawing Wall-mounted Version

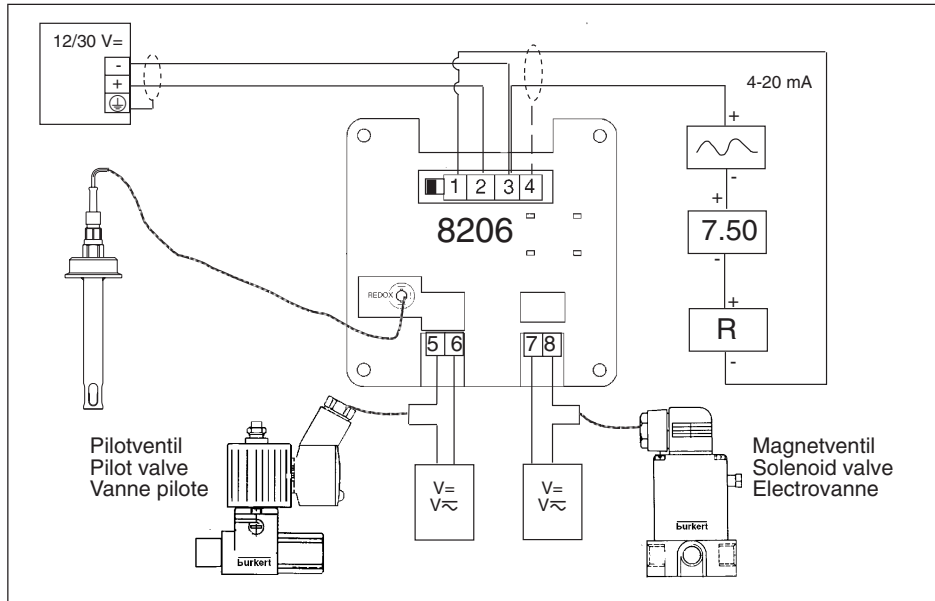


Beispiel - Example - Exemple: *Easy LINK*

Anschluss Redox-Transmitter 8206 Schalttafel-Montage ohne Relais

Connection Redox transmitter 8206 panel 12-30 VDC without Relays

Connexion transmetteur de Rédox 8206 encastré 12-30 VCC sans relais

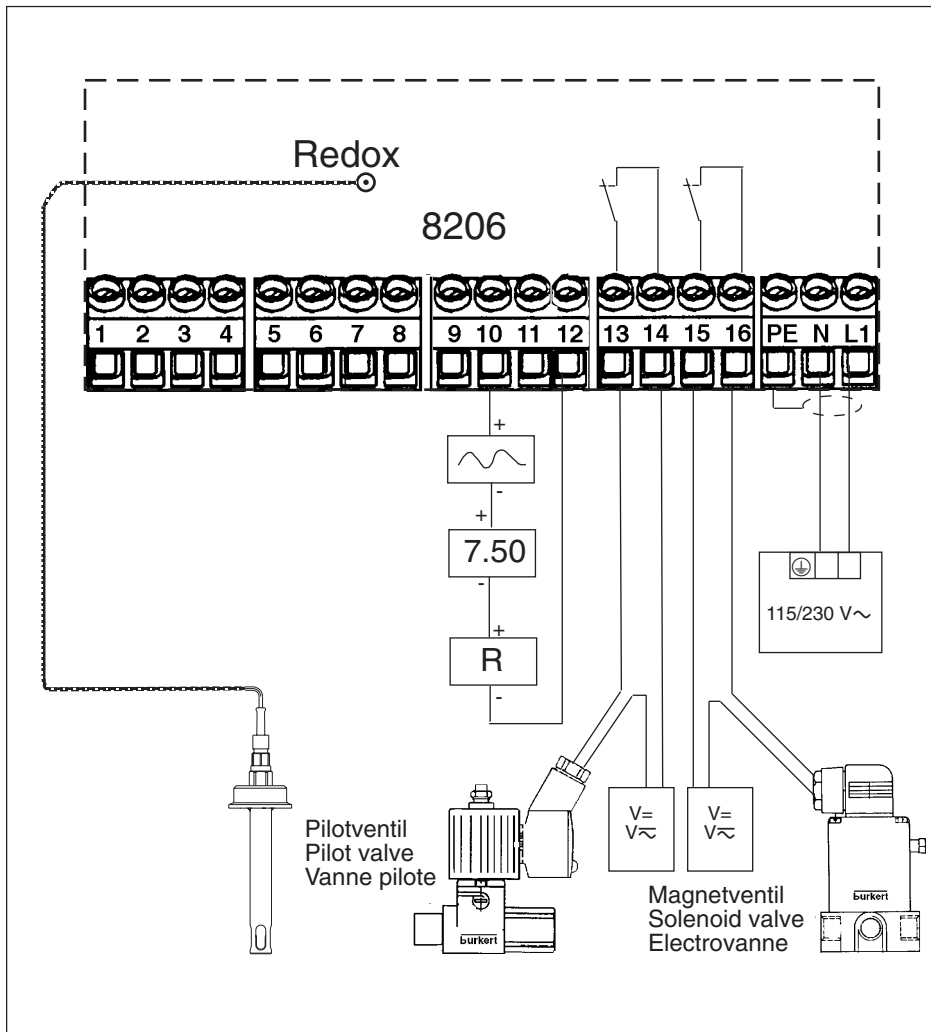


Beispiel - Example - Exemple: *Easy LINK*

Anschluss Redox-Transmitter 8206 Schalttafel-Montage 12-30 VDC mit Relais

Connection Redox transmitter 8206 panel 12-30 VDC with relays

Connexion transmetteur de rédox 8206 encastré 12-30 VCC avec relais



Beispiel - Example - Exemple: *Easy* LINK

Anschluss Redox-Transmitter 8206 Wandmontage 115-230 VAC mit Relais
 Connection Redox transmitter 8206 wall-mounted 115-230 VAC with relays
 Connexion transmetteur de rédox 8206 mural 115-230 VAC avec relais

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