# **GENERAL CHARACTERISTICS**

The level probes SLC series have the built-in management electronics and do not require auxiliary circuits to control alarms and / or actuators.

The probes, being of a static type, without moving parts, allow an extremely precise control of the level of liquid.

The system is based on measurement of the conductivity of the liquid to be controlled and works with low potential and with alternating currents, in order to avoid the incrustation of the electrodes and / or perforation of the tank normally caused by the use of direct currents, which cause a galvanic action on materials. The contact of the electrode with the liquid under control determines the actuation of a relay inside the control unit.

- AISI-316 Stainless steel electrodes
- Built-in electronics
- Relay output



Code

110V

| SLC | <br>10 |
|-----|--------|
|     |        |

(

| SL | C 50 |
|----|------|
|    |      |

| TECHNICAL DATA | Tab.1 |
|----------------|-------|
|                |       |

| Description            | Features                           | Code              |
|------------------------|------------------------------------|-------------------|
| Power supply           | 24 / 230 Vac <u>+</u> 10% 50/60 Hz | 24-230V           |
| Power consumption      | 5 VA                               |                   |
| Power supply to probes | 22 Vac                             | -                 |
| Output relay           | SPDT 250Vac 6A                     |                   |
| Sensitivity            | 10 –60 μS Factory set 20           | μS <b>10-60MS</b> |
| Sensitivity adjustment | Internal trimmer                   |                   |
| Operating temperature  | -20 ÷ +50 °C                       | -                 |
| Max. pressure          | 6 bar                              |                   |
| Haveine                | ABS 110 x 110 x 65 mm SL0          | C—10              |
| Housing                | ABS 160 x 118 x 75 mm SL0          | C—50              |
| Degree of mustastics   | IP 65 SLC                          | C—10 <b>IP65</b>  |
| Degree of protection   | IP 56 SLC                          | C—50 <b>IP56</b>  |
| Mounting               | On board                           |                   |
| Electrical connection  | Internal terminal board            | -                 |
| Cables input           | PG7                                |                   |

| 10-60MS | 1-10 μS | 1-10MS |
|---------|---------|--------|
|         |         |        |
| _       |         |        |
|         |         |        |

**Options** 

110 Vac

# **ELECTRA SLC--10**

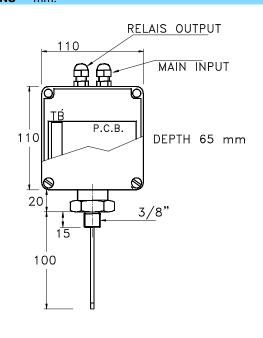
# **WIRING**

| Ground        |                                     |   |
|---------------|-------------------------------------|---|
| Electrode     |                                     |   |
|               | N.O.                                |   |
| Output relay  | Common                              |   |
|               | N.C.                                |   |
|               | 230                                 |   |
| Power supply  | 24                                  | Vac   |
|               | 0                                   |   |
| Option        |                                     |   |
| Power supply  | 110                                 | Vac   |
| i owei suppiy | 0                                   | v ac  |
|               | Electrode Output relay Power supply | Electrode  N.O.  Output relay  Common  N.C.  230  Power supply  Option  Power supply  110 |

# MATERIALS

| Electro         | des        | Code   | Options       | Code |
|-----------------|------------|--------|---------------|------|
| N. 1 x L 100 mm | AISI 316   | 1x0100 | Length L      |      |
| Coating         | Polyolefin | VL     | Kynar         | K    |
| Process cor     | nnection   | Code   | Options       | Code |
| Dimension       | 3/8"       | 10     | 1/2"          | 15   |
| Male thread     | UNI 228/1  | G      | UNI 7/1       | С    |
| Material        | Brass      | 0      | AISI-316      | S    |
|                 |            |        | Polypropylene | Р    |

# DIMENSIONS - mm.



We reserve the right to change the data without notice

BE#094/8-02/2014









Tab.2



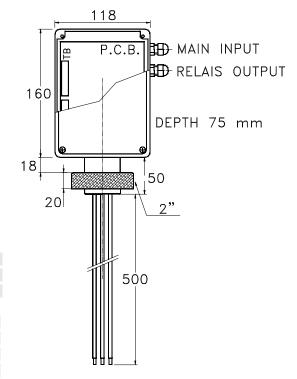


# **ELECTRA SLC--50**

### **WIRING**

| Terminal |                                   |        |     |
|----------|-----------------------------------|--------|-----|
| 2        | Minimum level electrode           |        |     |
| 3        | Maximum level electrode           |        |     |
| 5        | 0 1 1                             | N.O.   |     |
| 6        | Output relay Auto fill-up section | Common |     |
| 7        | Auto IIII-up section              | N.C.   |     |
| 11       | Ground electrode                  |        |     |
| 13       | Alarm electrode (min o max)       |        |     |
| 15       |                                   | N.O.   |     |
| 16       | Output relay Alarm section        | Common |     |
| 17       | Alaim Section                     | N.C.   |     |
| 18       |                                   | 230    |     |
| 19       | Power supply                      | 24     | Vac |
| 20       |                                   | 0      |     |
|          | Option                            |        |     |
| 18       | Device events                     | 110    | \/a |
| 20       | Power supply                      | 0      | Vac |

# **DIMENSIONS** - mm.



# MATERIALS Tab.3

| Electro         | des        | Code   | Options  | Code |
|-----------------|------------|--------|----------|------|
| N. 4 x L 500 mm | AISI 316   | 4x0500 | Length L |      |
| Coating         | Polyolefin | VL     | Kynar    | K    |

| Process cor   | nection       | Code | Options  | Code |
|---------------|---------------|------|----------|------|
| Dimension     | 2"            | 50   | -        | -    |
| Female thread | UNI 228/1     | G    | -        | -    |
| Material      | Polypropylene | Р    | Brass    | 0    |
|               |               |      | AISI-316 | S    |

# **CONTROL AND ADJUSTMENT**

### • ELECTRA SLC-10

#### Control.

Open the case, remove the leads from the terminals of the electrodes, terminals 1 and 3.

Short circuit the terminals 1 and 3 of the terminal board, in these conditions, the relay must switch on and led has to light.

### Sensitivity adjustment.

The unit is supplied with a factory setting of 20  $\mu$ S. Install the control unit on the tank you have to control the level

(The fitting acts as a ground electrode).

Fill-up the tank to place the electrode in the liquid to be tested, turn the trimmer on the PCB to obtain the switching of the relay.

### • ELECTRA SLC-50

#### Control.

Open the case, remove the leads from the terminals of the electrodes (terminals 2-3-11-13).

Short circuit terminals 11 and 13 of the terminal board, in these conditions, the red led has to light and the corresponding relay must switch on.

Short circuit terminals 3 and 11 of the terminal board, in these conditions, the green led has to light and the corresponding relay must switch on.

# Sensitivity adjustment.

The unit is supplied with a factory setting of 20  $\mu$ S.

Submerge the electrodes in the liquid to be tested, turn the trimmer on the printed circuit board until the red led light-on and the corresponding relay switch-on.

The calibration of the sensitivity for the alarm section also applies to the auto-fill section.

### **NOMENCLATURE**

| SLC | 10GO | 10-60MS | 1x0100 | VL | IP65 | 24-230V |         |
|-----|------|---------|--------|----|------|---------|---------|
| •   |      |         |        |    |      |         |         |
|     | •    |         |        |    |      |         | Tab.2-3 |
|     |      | •       |        |    |      |         | Tab.1   |
|     |      |         | •      |    |      |         | Tab.2-3 |
|     |      |         |        | •  |      |         | Tab.2-3 |
|     |      |         |        |    | •    |         | Tab.1   |
|     |      |         |        |    |      | •       | Tab.1   |

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