Neon® EC
Conductivity measurement

Single channel water monitoring instrument

Neon® is a leading edge measuring and control instrument. Its range of functions can be tailored according to customers’ applications. The entry level version contains inputs for measurements and temperature, one digital input and an alarm relay. Various add-ons are available to expand the functionality as well as wall mounted or panel mounted housing.

Neon’s® water measurement process can be controlled at any time, from any place, on any device via Kuntze’s Cloud Connect® service. All Kuntze products are Made in Germany.

Applications

- Process Water
- Disinfection
- Drinking Water
- Food & Beverage
- Waste Water Treatment
- Pool & Spa
Neon® EC

Technical data

Measuring range

- Conductivity (inductive) up to 2.000 mS/cm, 20.00 mS/cm, 200.0 mS/cm, bis 2000 mS/cm
- Conductivity (conductive) up to 2.000 µS/cm C=0.05/cm (TDS 1.000 ppt)
  up to 20.00 µS/cm C=0.05/cm (TDS 10.00 ppt)
  up to 200.0 µS/cm C=0.05/cm (TDS 100.0 ppt)
  up to 2.000 mS/cm C=0.20/cm, 20.00 mS/cm C= 1.00/cm

Input characteristic

- Temperature measuring range -30.0.. +140.0 °C (-22.0 ° .. 284 °F)
- Temperature compensation 0.0 .. 8.0 % / K adjustable or ultrapure water compensated (EC)
- Digital input 1 as controller stop by external contact, option: 2nd as controller stop

Output characteristics

- Alarm relay 1 potential-free NO contact, max. 250 V, 6 A, 550 VA (invertable)
- Output signal Option: 2 x 0/4 .. 20 mA (scaleable, galvanically isolated)
  Load 500 Ohm
  Registration range Scaleable within the measuring range
- Storage media SD card up to 1 GB – Industry standard
- Serial interface Option RS 485 Modbus RTU
  Baud rate 19200 bps
  Data format 8 bit

Power supply

- Line voltage 85.. 265 V AC, +6/-10 %, 50.. 60 Hz; option: 24 V DC
- Power consumption 10 V

Ambient conditions

- Temperature Storage -20 .. +65 °C (-4 ° .. +149 °F)
  Operation 0 .. +50 °C (32 ° .. 122 °F)
- Humidity max. 90 % rH bei 40 °C (non-condensing)
- Protection class Wall mounted IP 65
  Panel mounted IP 54 (front), IP 30 (housing)

Controller

- Control response Option: on/off controller (adjustable hysteresis) P / PI / PID controller
  (pulse-frequency or continuous output) servo motor control
- Relay 2 relays, each with a potential-free N/O contact, max. 250 V, 6 A, 550 VA
- Start delay 0.. 200 seconds until controller active
- Controller stop Digital input

Certificates and approval

- CE-Symbol The product meets the requirements of the harmonized European standards and complies with the legal requirements of the EC directives.
- EMV/EMC EN 61000 6-1 (3) EN 61000 6-2 (4) EN 61326-1
### Design configuration

<table>
<thead>
<tr>
<th>Material</th>
<th>ABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>Panel mounted housing: 138 x 138 x 83 mm (max. Wall thickness: 5 mm)</td>
</tr>
<tr>
<td></td>
<td>Wall mounted housing: 144 x 144 x 156 mm</td>
</tr>
<tr>
<td>Mounting dimension</td>
<td>Panel mounted housing: 138 x 138 x 42 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>0.6 kg (wall mounted housing: 1 kg)</td>
</tr>
<tr>
<td>Connection</td>
<td>Cable inlet: 2 x M16, 2 x M12 + optional: 2 x M12 and 1 x M25</td>
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<tr>
<td></td>
<td>Plug-in terminal: rigid / flexibel 0.2 – 2.5 / 0.2 – 2.5 mm²</td>
</tr>
<tr>
<td>Measurement</td>
<td>rigid / flexibel 0.2 - 1 / 0.2 – 1.5 mm²</td>
</tr>
</tbody>
</table>

### Mechanical drawing

**Neon® panel mounted**

![Mechanical drawing of Neon® panel mounted]

**Neon® wall mounted**

![Mechanical drawing of Neon® wall mounted]