



NIEUWKOOP

LEAFLET



ZU5100

D. OXYGEN + Pt100 SENSOR



TO MEASURE  TO KNOW

**DYSSOLVED OXYGEN CONTROLLER****Main features**

Scales: PPM – mg/l – % air sat. – mmHg
 Autoranging

Temperature readout
 Dual filter software

Calibration parameters display
 Dual set-point and alarm conditions display

Autocalibration in air
 Automatic or manual temperature compensation
 Pressure, R.H., salinity compensation

Isolated output:
 • 0/20 mA or 4/20 mA selectable
 • programmable input on the span

Automatic or manual operation
 Dual set-point with hysteresis, delay, and min/max programmable functions

Alarm:
 • continuous/flashing
 • min/max and delay programmable
 • on set-points timing
 • Autoclean relay and holding function for input and outputs

EEPROM parameters storage
 Automatic overload protection and reset
 Extractable terminal block
 96x96 (1/4 DIN) housing

Applications

- water treatment
- drinking water
- fish pond
- food industry
- biotechnology

**SZ 654.1**

Polarographic D.O. cell with built-in Pt100.
 250 nA, current in air at 20 °C, temperature 0/45 °C.
 Epoxy body L=110 mm, D=12 mm, cable 5 m.
 Ship with spare membrane and electrolyte.

SZ 659.R1 spare membrane/electrolyte.

**Technical Specifications**

in addition to those common in the series 7685

Polarographic Cell

Low Current cell: 25/75 nA
 High Current cell: 140/510 nA
 * Polarization: 0/1250 mV

Galvanic Cell

Input: 17/51 mV

Selectable scales

0/200.0 mmHg D.O. partial pressure
 0/200.0 % air saturation
 0/20.00 PPM
 0/20.00 mg/l
 * Software filter 90%RT: 0.4/20.0 s for small/large variations
 Zero adjustment: +/- 10%
 Sensitivity adjustment: 80/170 %
 Display resolution at 20°C: 1/1000

Secondary parameters

Pressure: 500/800 mmHg
 Salinity: 0/60,000 PPM
 Relative Humidity: 0/100 %

Temperature

Input: RTD Pt100 2/3 wires connection
 Measuring and compensation range: -2/+52 °C
 Resolution: ±0.1 °C
 Zero adjustment: ±2 °C
 Manual temp. comp.: 0/50 °C

Options

091.3713 dual analog programmable and isolated output.
 The operator may select an output for temperature.
091.701 RS232 isolated output.
091.404 24Vac power supply
091.4143 9/36VDC power supply



General information

The 7685 Series includes all of the most complete and most performing analyzers of B&C/Nieuwkoop.

They include all of the following measures:

- pH - ORP
- Conductivity - Resistivity
- Free residual chlorine, combined and total
- Residual chlorine dioxide
- Residual dissolved ozone
- Dissolved oxygen
- Turbidity and Suspended Solids
- Residual dissolved Sulfide/Sulfite
- ISE

All controllers are manufactured in robust aluminum enclosures DIN 43700, with front panels in polycarbonate. Their reliability and precision, along with their functionality, make them easy to use in all applications. Finally, 7685 Series guarantees one of the best performance-price ratio in the marketplace.

Common features

Selectable input.

Input from RTD Pt100 3 wires.

Temperature readout.

Dual filter software.

Operating mode: automatic and manual.

Calibration parameters display.

Set-point and alarm conditions display.

Automatic or manual temperature compensation
0/20 mA or 4/20 mA programmable isolated output.

Dual set-point with hysteresis, delay and min/max programmable functions.

Min/max and set-points timing alarm relay.

Software: 3 access levels, user friendly, keyboard lock, watch-dog EEPROM parameters storage.

Automatic overload protection and reset.

Extractable terminal blocks.

96X96 (1/4"DIN) housing.

Technical Specifications

Common to all instruments of the 7685 Series

Temperature

Input: RTD Pt100 2/3 wires

Set point A and B:

Operation: ON/OFF

Hysteresis: adjustable

Delay: 0.0/99.9 s

* Function: Max/Min

Relay contacts: SPDT 220V 5 A (resistive load)

Alarm:

Low/High: adjustable

Delay: 0.0/99.9 s

* Relay status: activated/deactivated

* Alarm on max. operating time of set-point A/B: ON/OFF

* Max operating time of set-point A/B: 0/60 minutes

* Relay contacts: SPDT 220V 5 A (resistive load)

Analog output N° 1

* Input corresponding to the analog output (option 091.371x): selectable

* Output range: 0-20/4-20 mA (it can be made to represent any

segment of the measuring scale

Response time: 2.5 s for 98%

Isolation: 250Vac

Load: 600 ohm max

Analog output N° 2 (option 091.371x)

* Input corresponding to the analog output: selectable

* Output range: 0-20/4-20 mA (it can be made to represent any segment of the measuring scale

Response time: 2.5 s for 98%

Isolation: 250Vac

Load: 600 ohm max

Configuration (*)

The above parameters indicated by asterisks "*", may be selected in the Configuration menu

General Specification

Alphanumeric display: 1 line x 16 characters

Operating temperature: 0/50 °C

Humidity: 95% without condensation

Power supply: 110/220Vac ± 10% 50/60 Hz

Isolation: 4 kV between primary and secondary (IEC 348)

Power: 5VA max.

Terminal block: extractable

Weight: 850 g

Dimensions: 96 x 96 x 155 mm

Options

091.701 RS 232 isolated output

The output sends the data to the serial port of the computer.

091.404 24Vac power supply

091.414X 9/36VDC power supply

The technical specifications could be changed without notice



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