



**NIEUWKOOP**

METEN.NL

# LEAFLET



## ZU3020

D. OXYGEN CONTROLLER, PANEL,  
2 RELAY



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



## 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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