

Main features

Input from any ISE and CO₂ electrodes
 Input form Pt100 3 wires

Measuring unit: PPM - mg/l - gr/l - mbar - mmHg
 Measuring range from 0.01 to 1000
 Autoranging
 Up to 5 points calibration

Temperature readout
 Calibration parameters display
 Dual set-point and alarm conditions display
 Automatic or manual temperature compensation
 Dual filter software

Isolated output:

- 0/20 mA or 4/20 mA selectable
- programmable input on the span
- dual output as option

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

EEPROM parameters storage
 Automatic overload protection and reset
 Extractable terminal blocks
 96X96 (1/4" DIN) housing

Accessories

This instrument may use all the ISE sensors for continuous operation.

Applications

- with ISE electrodes
- water softeners
- drinking water
- electroplating industry
- Aluminum surface coating
- CO₂ in biotechnology



Technical Specifications

in addition to those common in the series 7685

Operating mode

Automatic/manual

ISE input

* Ion type X⁻, X⁻, X⁺, X⁺⁺
 Measuring scales: 5 decades from 0.01 to 1000

* Scales

10.00 - 100.0 - 1000 autoranging
 Software filter 90%RT: 0.4/20.00 s for small/large variations

Calibration

Up to 5 points over all the measuring range
 Zero adjustment: ± 100.0 mV
 Range: ± 1100 mV

Temperature

Input: RTD Pt100 3 wires
 Measuring range: -10.0/110.0 °C
 Resolution: ± 0.1 °C
 Zero: ± 2 °C
 Manual Temperature: -10/110 °C

Temperature compensation

Selectable: able/disable
 Compensation range: -10/110 °C
 Reference Temperature: 20 °C

Option

091.4143 9/36VDC power supply

7685 Series microprocessor-based

General information

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

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