

Main features

Selectable input from:

- 2 electrodes
- 4 electrodes pre-amplified cell
- electrodeless pre-amplified cell

Scales: from 0.2 mS to 40 Siemens

Autoranging

Conversion in % - gr/l - Bè

Temperature readout

Dual filter software

Calibration parameters display

Dual set-point and alarm conditions display

Automatic or manual temperature compensation

Automatic or manual acquisition of the temperature compensation table

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

Automatic overload protection and reset

Extractable terminal block

96x96 (1/4 DIN) housing

Accessories

The controller can be used with all B&C Electronics conductivity cells, including the 4-electrodes and toroidal amplified probes

Applications

- deionized water
- drinking water
- food industry
- surface treatment



Input from 2-electrode cells

K cm ⁻¹	0,1	0,2	0,5	1,0	2,0	5,0	10,0
Range	0,2000µS	0,4000µS	1,000µS	2,000µS	4,000µS	10,00µS	20,00µS
	2,000µS	4,000µS	10,00µS	20,00µS	40,00µS	100,0µS	200,0µS
	20,00µS	40,00µS	100,0µS	200,0µS	400,0µS	1000µS	2000µS
	200,0µS	400,0µS	1000µS	2000µS	4000µS	10,00mS	20,00mS
	2000µS	4000µS	10,00mS	20,00mS	40,00mS	100,0mS	200,0mS

Input from microtransmitters 080310 connected to 4-electrode cells or input from microtransmitters 080315 connected to electrodeless cells

K cm ⁻¹	0,1	0,2	0,5	1,0	2,0	5,0	10,0
Range	0,2000mS	0,4000mS	1,000mS	2,000mS	4,000mS	10,00mS	20,00mS
	2,000mS	4,000mS	10,00mS	20,00mS	40,00mS	100,0mS	200,0mS
	20,00mS	40,00mS	100,0mS	200,0mS	400,0mS	1000mS	2000mS
	200,0mS	400,0mS	1000mS	2000mS	4000mS	10,00S	20,00S
	2000mS	4000mS	10,00S	20,00S	40,00S	100,0S	200,0S

Technical Specifications

in addition to those common in the series 7685

Scales (See tables Scales vs. K)

* Autoranging: on/off

* Indirect scale: on/off

Zero adjustment: ±10 %

Sens. adjustment: 60/160 %

* Software filter 90%RT: 0.4/20.0 s for small/large variations

Temperature

Measuring and compensation range: -10.0/+110.0 °C

Resolution: +/- 0.1 °C

Zero adjustment: +/- 1 °C

Manual Temp. comp: -10.0/+110.0 °C

Options

091.3713 dual analog programmable and isolated output.

The operator may select an output for Temperature.

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