

The **BC 6587** and **BC 7687** controllers are used when it is necessary to add to any transmitter the display, control, alarm and the automatic sensor cleaning functions. The 0-20 mA or 4-20 mA signal from the transmitter is sent to the instruments who perform the above functions.

In some cases, it is necessary to measure the value before and after the process. BC 6587 and BC 7687 are able to display and control the difference of the measurements of the two transmitters operating with the same full scale.



Main features

Range

-9999 / +9999

The instruments allow the configuration of the minimum and the maximum value of the scale and decimal point position.

Measuring unit

The user may select one of the proposed measuring units: %, NTU, FTU, mg/l, g/l, ppm, μ S, mS, pH, mV, or edit any custom unit.

Display

The multi-line graphic display shows the values of the measures and the messages which guide the user through set-up, configuration and during normal operation.

Keyboard

There are dedicated keys to directly access zero and sensitivity calibration as well as set point configuration.

Operating mode

The meters can operate in automatic, measure or simulated mode so to facilitate start-up or maintenance.

Two filters software

The user can set two filters in order to obtain a stable reading and a faster response to the variations of the measurement in the process.

Two analog outputs

Can be addressed to any input and programmable 0/4 – 20 mA on two points of the scale. They allow PID control or transmission of the measured values.

Two On/Off regulators

Independent and addressable to any input with programmable set point on the scale.

PID output

During PID control through the analog output, the level of the actuation is displayed.

The user can select an FM regulation (pulse frequency) or WM (pulse width) addressed to the assigned relay.

Alarm

The relay is dedicated to min/max values of the measures, the excessive activation of relays and the presence of the logic inputs.

Logic inputs

Two free voltage contacts can generate a hold or alarm condition.

Autocleaning

A relay is dedicated to an external device for the sensor self-cleaning. This function is fully programmable through the controllers' software.

Universal power supply

From 85 to 264 Vac, 50/60 Hz.

The low voltage option allows to power the unit from 9 to 36 Vdc or from 12 to 24 Vac, 50/60 Hz.

Easy installation

All 6587 series of controllers have IP65 protection rating. They are suitable for wall mounting, or for DIN rail and handrail by means of optional accessories.

Series 7687 has an IP65 front panel and it is designed for customers who prefer panel mounting.

Compatible and versatile

The analyzers are compatible with all B&C Electronics' probes with analog output and can be used with any transmitter or sensor with 0-20 mA or 4-20 mA output in all applications.

Applications

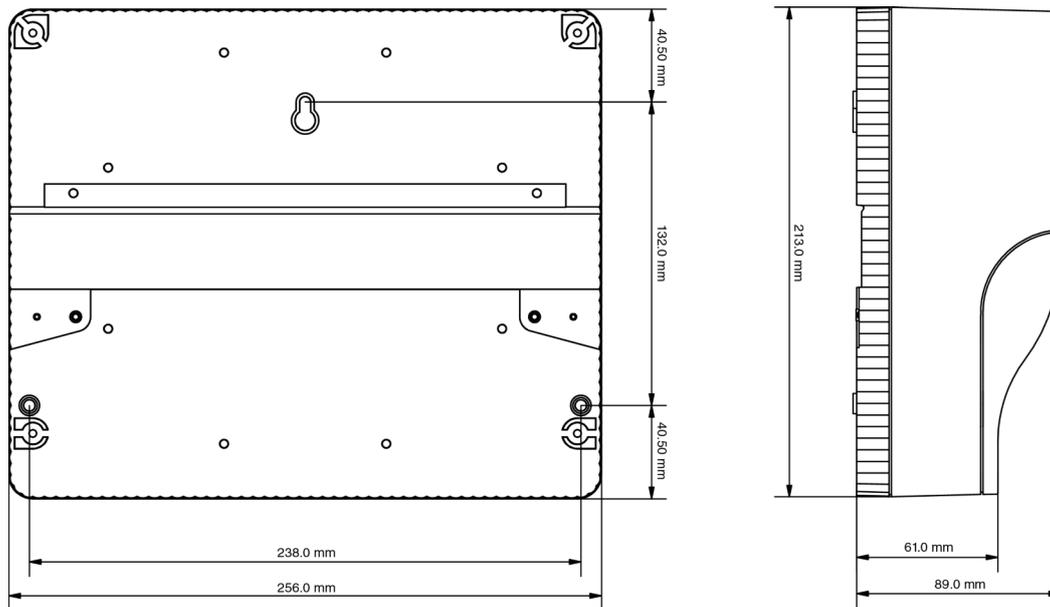
- Aquaculture
- Chemical industry
- Drinking water
- Electroplating
- Fertirrigation
- Food and beverage
- Paper and pulp
- Pharmaceutical
- Printing industry
- Swimming pools
- Textile industry
- Underground water
- Water treatment

Technical specifications

Inputs:	4-20 mA, 0-20 mA active or passive single or differential
Power supply for passive transmitters:	24Vdc (50 mA max)
Zero:	± 10 %
Sensitivity:	12.5 % ÷ 250 %
Resolution:	1 digit
Accuracy:	0.2 %
Repeatability:	0.1 %
Non-linearity:	0.1 %
Dual filter software:	0.4 ÷ 50.0 seconds for small and large variations
Dual analog output:	0-20 mA / 4-20 mA Rmax 600 Ω
Dual set point HI/LO:	ON/OFF - PID - PFM - PWM, SPST relays
Hysteresis:	0 ÷ 10 %
Delay:	0 ÷ 100.0 seconds
Alarm:	SPDT relay with delay 0 ÷ 100.0 seconds
Cleaning function:	off / autoclean / manual, relay SPDT repetition time 0.1 ÷ 100.0 hours cleaning time 1.0 ÷ 60.0 seconds holding time 0.0 ÷ 20.0 minutes
SPST and SPDT relay contacts:	220V - 5 A resistive load
Operating temperature:	-10 ÷ 60 °C
Humidity:	95% without condensation
Power supply:	85 ÷ 264Vac - 50/60 Hz 9 ÷ 36Vdc, 12 ÷ 24Vac (option 091.42x)
Terminal blocks:	removable
Weight:	1360 g (BC 6587) 450 g (BC 7687)
Enclosure:	ABS, IP 65 protection (BC 6587) Metallic, IP 65 front panel only (BC 7687)
Dimensions:	256x230x89 mm (BC 6587) 98x98x104 mm, 90x90x95 mm panel cutout (BC 7687)
EMC/RFI conformity:	EN 61326
Registered design:	002564666-002 (BC 6587) 002564666-003 (BC 7687)

The technical specifications could be changed without notice.

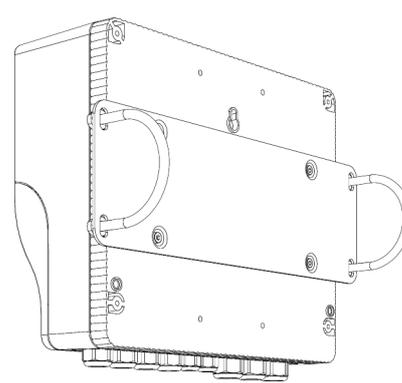
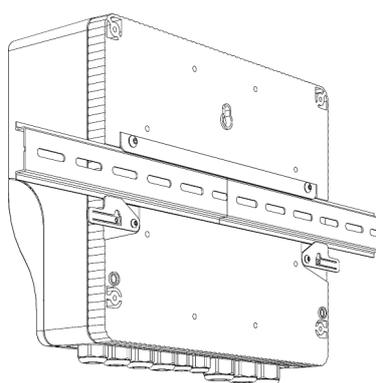
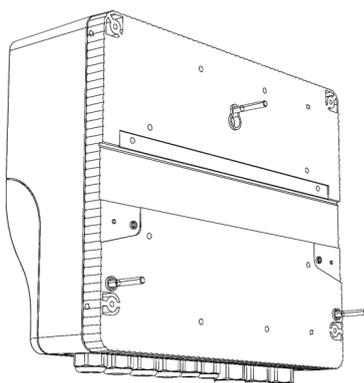
Series 6587 dimensions and installation



Wall

DIN rail

Handrail



Series 7687 dimensions

