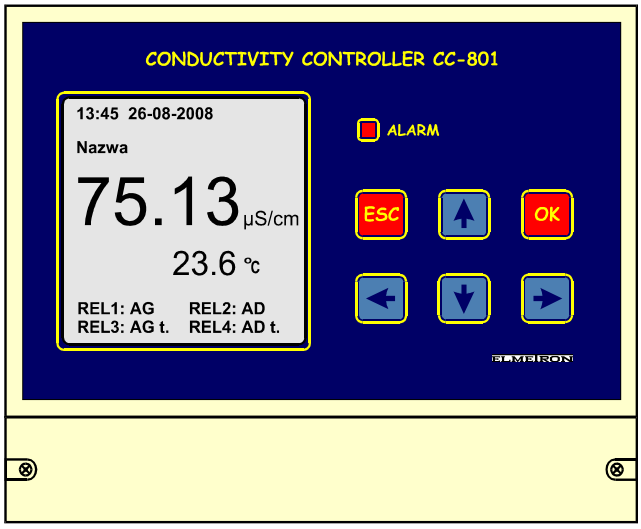
CONDUCTIVITY CONTROLLER CC-801

CC-801 conductivity controller for measurements in pure, ultra pure water, sewage and waste water, is one of the devices of new generation offering wide range of possibilities. Designed to work in power stations, heat and power plants, water treatment stations and waste water treatment plants. It is a stationary device in housing resistant to dust and humidity (IP-65).
High measurement accuracy and stability has been provided. The device has a large, graphic display, the conductivity and temperature results and the status of relays are showed simultaneously.
The graphic display enables to choose among the displayed information. Apart from the basic data – conductivity and temperature additional parameters like information about the relay's status or information about the last calibration date may be chosen to be displayed.
The modern electronic elements used in the controller have made the meter's memory independent from the power supply.
The device is easy, intuitive to operate, has an English menu. It is equipped with a collective optical signalisation of the correct work and the progress of the regulation process.
CC-801 controller has an automatic temperature compensation system, which co-operates with the Pt-1000 temperature sensor.
The device enables 1-point calibration of the conductivity cell by entering the known constant K value or in standard solution with automatic detection of the calibration point value.
It is possible to calibrate the meter without the need of disconnecting the outputs.
The **CC-801** controller is powered with standard voltage - 230V - which is galvanically isolated from the input clamps. It is possible to use other power voltage: 110/230/24V AC, 12-24V. Low voltage is signalised by the instrument.
Outputs: relays (alarm or PID control), isolated, digital: RS-485, MODBUS (ASCII and RTU); isolated current outputs: 0 ÷ 20 or 4 ÷ 20 mA.
The meter has also the real time clock with date.
In case of using the relays and exceeding the entered lower or higher limits, the proper relay is switched (minimum and maximum alarm) or fill in or frequency coefficient is changed (for the PID controller).
It's possible to connect to the remote panel (keyboard with display), which enables to control the device from up to 1 km distance.
24 months of warranty, quick warranty and after warranty service. The controller has CE certificate.

The conductivity cell cooperating with the meter is placed in a head. In case of measurements in tanks **GCZ-1t** immersion head is used in which a conductivity sensor with steel electrodes is built in (description in separate catalogue card). The length of the head may be agreed (from 0.5m to 4m), diameter of the head: 50 mm. The head is equipped with a special handle to be hanged on an arm or hook. The signal is amplified in the pre-amplifier, which is placed in the head.
The measurement in a pipeline is made with use of flow through head **GCP-1t** or **GXP-1** In case of high pressure in the pipeline the lateral circulation with free flow of small volume of the liquid may be used with the **GXP-01** head. The preamplifier is placed next to the head. The choice of the right head depends on the type of the measured liquid and the working conditions. Description of the heads in separate catalogue cards.

Optionally, there is a possibility of the radio data transmission from the measuring head to the controller.



TECHNICAL DATA

Conductivity - version for measurements in clean water:

RANGES	RESOLUTION	ACCURACY (±1 digit)*	FREQUENCY
0.000 ÷ 9.999 mS/cm	0.001 mS/cm	±0.5 %	100 Hz
10.00 ÷ 99.99 mS/cm	0.01 mS/cm	±0.5 %	1 kHz
100.0 ÷ 999.9 mS/cm	0.1 mS/cm	±0.5 %	2 kHz
1000 ÷ 9999 mS/cm	1 mS/cm	±0.5 %	5 kHz

Conductivity - version for measurements in sewage, waste water, etc.:

RANGES	RESOLUTION	ACCURACY* (±1 digit)	FREQUENCY
0.000 ÷ 9.999 mS/cm	0.001 mS/cm	±0.5 %	100 Hz
10.00 ÷ 99.99 mS/cm	0.01 mS/cm	±0.5 %	1 kHz
100.0 ÷ 999.9 mS/cm	0.1 mS/cm	±0.5 %	2 kHz

Temperature compensation	automatic
Temperature compensation range	-5 ÷ 70 °C
Temperature measurement range **	50 ÷ 200 °C
Temperature measurement accuracy *:	±0.2 ºC
K constant range	0.005 ÷ 20.000 cm^{-1}
α coefficient range	0.00 ÷ 10.00 %/ºC
Calibration	1 point, entering K constant or in standard
Relays' parameters	2A/250VAC/30VDC, PID control
Measurement input	isolated
Conductivity datalogger output	isolated, current loop 0÷20mA or 4÷20mA
Temperature datalogger output	isolated, current loop 0÷20mA or 4÷20mA
RS485 output	isolated
Maximal RS485 connection length	1000 m
Maximal preamplifier cable length	200 m
Max. distance between the cell and the preamplifier	10 m
Power supply:	240V/50Hz, for a special order: 170VAC÷250VAC, 24VDC/24 VAC
Isolation standard	compliant with PN-83/T-06500
Radio-electric interference	N level
Dimensions (W x H x L)	215 x 185 x 90 mm
Controller / preamplifier weight	2 kg / 150 g
Ambient temperature	-25 ÷ 40 ºC
Relative humidity: / atmospheric pressure	max. 80% / 80 ÷ 110 kPa
Atmospheric agressivity level	N/2/AG-U/C

*The accuracy given for the meter only, for the final value of the range.
**The temperature measuring range limited to working range of the measuring head and the conductivity cell.

Note: The ranges of frequency changes for the conductivity measurement given for K=1.
For other K constant values the ranges will be changing proportionally to the K constant changes.

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