PH 3436

pH / ORP transmitter 4-20 mA and RS485

The transmitter can be configured for the measurement of pH or ORP and it can also work with the antimony pH electrodes. The measured values, along with support and instruction messages, are also visualized on an alphanumeric display. The transmitter displays the temperature value measured by a Pt100 and performs the manual/automatic compensation (pH only). The extractable terminal blocks and DIN rail mounting make easy the maintenance and the installation in the field.

Main Features

- 4-20 mA isolated 2-wire current loop
- RS485 isolated interface
- B&C and Modbus protocols
- Alphanumeric LCD 8x1 characters
- pH or ORP measurement
- Manual/automatic temperature compensation °C or °F temperature display
- Digital input with hold function Recognition of the standard solution Password at two levels
- Last calibration date
- Totalization of operating hours Power 9/36 Vcc
- Extractable terminal block DIN rail enclosure

Analog Mode

The transmitter can be connected to a PLC or instruments BC 7335 - BC 7635 - BC 7635.010 or BC 7687 - BC 6587 which provide the Vdc power supply, measuring values, two set point and the alarm. The digital input can place the current loop on hold.

Digital Mode

When in digital mode, the transmitter is a slave device interrogated by a master device with protocol B&C (ASCII) or Modbus (function 03).

Technical Specifications

Display	alphanumeric LCD 8x1 characters
Inputs	pH electrode (glass/ref) pH electrode (antimony/ref) ORP electrode (Pt/rif o Au/rif) digital input (free voltage contact)
pH scale	0/14.00 pH
ORP scales	0/1000 0/-1000 -1000/1000/0/2000 0/-2000 mV
Temperature scales	-10.0/110.0 °C, 14.0/230.0 °F
Temperature compensation	manual/automatic (pH)
Zero	± 2 pH, ± 100 mV
Sensitivity	80/110 % (glass and ORP electrodes)
Sensitivity	70/140 % (antimony electrode)
Zero temperature	± 5.0 °C, ± 9.0 °F
Input current	< 2 pA
Input resistance	> 1012 ohm
Analog output	4-20 mA two wires isolated
Digital output	RS485 isolated
B&C ID protocol	01 - 32
Modbus address	0 - 243
Ambient temperature	0/50 °C
Humidity	95% without condensation
Power supply	9/36 Vcc
Consumption	< 4 mA with loop disabled
Isolation	500 Vdc input/output
Enclosure	DIN rail in polycarbonate
Terminal blocks	extractable
Weight	250 g
Dimensions	71 x 95 x 58 mm (4 DIN rail modules)
EMC/RFI conformity	EN 61326
Registered design	002564666-001