

DCK-3900/CCT-7320A HIGHT-TEMPERATURE CONDUCTIVITY CONTROLLER



Application

DCK-3900/CCT-7320A (CCT3900) conductivity instrument is an online measuring and control instrument for water quality conductivity of industrial process, which combines the measurement of conductivity and fluid temperature. Its functions include electrode constant check and input through keyboard, measurement setting, conductivity over limit alarming and control setting, etc. The instrument is widely used in pharmacy, chemical industry, electronic industry, food and beverage industry, etc. for monitoring of pure water.

Main features:

With intelligent microchip for data processing, it has features of direct reading, precise control, no loss of data settings in case of power down; stable zero point and full range, reliable operation, and strong adaptability to environment.

(1)With 485 isolated digit connection port and standard Modbus Agreement(RTU) ,it is easily connected to PLC and upper computer .Baud rate of 2400,4800 and 9600 can be set through keyboard.

(2)With red LED double windows digital display of conductivity and temperature, calculating temperature compensation ,compensation factor can be set .It can display value of conductivity or resistivity with 25°C or 90° as standard condition.

(3)It has functions of conductivity, temperature over limit alarm and control. Relay action point and backlash area can be set in the whole measurement range.

(4)Isolated 4 - 20 mA current output, switchable for active or passive, it is easily matched with the system of long distance.

(5)Any length of measurement electrode cable will not lead to errors ($\leq 30m$)

Main Technical Specifications:

Display mode: red LED digit double-window display

Measurement items: Resistivity/Conductivity/Temperature

Measuring range: 00,00 ~20,00 $\mu\text{S}/\text{cm}$ - Temperature: 0~170.0°C - Resistivity :0.05~18.25 $\text{M}\Omega\cdot\text{cm}$

Accuracy: $\leq 1.5\%$ (FS)

Stability: $\pm 2 \times 10^{-3}$ (FS)/24h

Medium temperature: 70 ~150°C

Automatic temperature compensation: calculate compensation with 90°C as standard condition, also could corresponding to conductivity / resistivity with 25°C standard.

Data connection port:RS485 port, Modbus agreement

Output current signal: isolated output 4 ~20mA, switchable between active and passive output.

Max. Load resistance: 500 Ω Max (24V DC).

Control output: ON/OFF double channels relays output; Over limit alarm of Conductivity/ resistivity; temperature low limit alarm; double channels control output.
Contact Capacity: AC 230/7A Max AC 250V/5 A Max - AC 115/10A Max (for resistance load).
Electrode configured: 0.1cm-1 stainless steel electrode
Screw thread size: 1/2"NPT (pipe thread) or Fast installation: ferrule sanitary 316L sensor (hossiman connection).
Working pressure of conductance cel: 0 ~1.0 MPa
Cable structure: RVP+ coaxial cable 75-2 (double shielding)
Cable length: normal 5m..
Power supply: AC 220V \pm 10% 50Hz
Power consumption: \leq 4W
Environment conditions: temperature: 0 ~50 °C humidity: \leq 85%RH
Dimension: 96mm \times 96mm \times 130mm(H \times W \times D)
Slot dimension: 91mm \times 91mm(H \times W)
Installation: Panel mounted.

Sensors selection:

- CON3313B-45 (0.1cm⁻¹) Fast installation ferrule sanitary 316L sensor (hossiman connection).
- CON3213A-45 (0.1cm⁻¹) Screw sanitary 316L sensor.



CON3213A-45



CON3313B-45