

# **Controller Instrument** Kontrol IOO SERIES



### **KONTROL 100**

The Kontrol 100-series are advanced controllers designed for high-end applications.

The units feature and independent proportional control output, probe quality checking and a variety of outputs.

The user has full programming authority.

## TECHNICAL CHARACTERISTICS

#### **Graphic display and Keypad**

128 by 128 pixel resolution monochrome display with graphic icons to show digital output status, washing cycle, alarms with red backlight.

Simultaneous flashing values for the measurement (numeric + bargraph) and temperature readings.

Five control keys for instrument calibration and configuration.

## **Enclosure Box and Power Supply**

Wall mounting ABS plastic material IP65 full box (144x144x122) Panel mounting ABS IP65 front panel only (96x96x42) Universal Power Supply 100+240 Vac 50/60 Hz Low Power Supply 12÷32 Vdc or 24 Vac

## **Current outputs with Galvanic isolation**

4÷20mA output

Two independent programmable Output Measures with Proportional routine regulation.

#### **Relay Outputs**

Two independent relais, two set points, alarm remote and back washing probe setting by software. On/OFF, Timed and Proportional (PWM) routine function setting.

# Solid State Relay (SSR)

Two Frequency output signal, two set points.

#### Snail Lock fixing system

Quick connection for panel mounting version.

### **APPLICATIONS**

- Waste water
- Diary
- CIP

- Fish farming
- Drinking water
- Cooling towers
- **Boilers**

Galvanic process

Reverse osmosis







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# **PRODUCTS KEY**

	1	PRODUCT TYPE								
	K	Kontrol								
		2/3/4	INSTR	RUIV	IENT TYPE					
		100	Kontro	ol 100	)					
5/6			6	MEASURE						
			PR	₹	pH/ORP					
			FX	(	Flow					
			CE	)	Conductiv	Conductivity				
					7	MOUNT	ING			
					Р	box type	96X96			
				w	<b>W</b> box type 144X144 (IP65)					
						8	POWER	SUPPLY		
						M	100÷240	Vac		
						N	12÷32Vdd	c , 24 Vac		
							9	OPTIONAL		
							0	None		
							Α	RS485 MODBUS		
								10/11/12 FREE		
	K	100	PF	₹	P	M	0	000		

# **MEASURE RANGE**

Model	Range	Accuracy
рН	0 ÷ 14,00 pH	±0,01pH
ORP	± 2000 mV	±1 mV
Conductivity	0,054÷ 200.000 μS(*)	±2%
Flow Rate	0÷99.999,99 Liters/Sec.(**)	±0,5Hz
Temperature(***)	-10÷+150°C (-58÷+302 °F)	±0,2°C

<sup>(\*)</sup> Conductivity Unit:  $\mu$ S, mS,  $K\Omega$ ,  $M\Omega$ , ppm, ppb. (\*\*) Setting by software following unit measures: I/s, I/m, I/h, m³/h, GPM (\*\*\*)Temperature measure by PT100/PT1000



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#### TECHNICAL SPECIFICATIONS FOR THE pH MEASURE

 $\begin{tabular}{lll} \mbox{Measure Range} & 0.00 \div 14.00 \mbox{pH} \\ \mbox{Resolution} & \pm 0.01 \mbox{pH} \\ \mbox{Precision} & 0.01 \mbox{pH} \\ \end{tabular}$ 

#### TECHNICAL SPECIFICATIONS FOR THE ORP MEASURE

#### TECHNICAL SPECIFICATIONS FOR THE TEMPERATURE MEASURE (SECONDARY)

**Precision** PT100:  $\pm 0.5^{\circ}$ C ( $\pm 0.9^{\circ}$ F) – PT1000:  $\pm 0.2^{\circ}$ C ( $\pm 0.4^{\circ}$ F)

#### TECHNICAL SPECIFICATIONS FOR THE FLOWRATE MEASURE

Sensor Hall, Reed or Push-Pull Sensor (Padwell rotor )

Measure Range 0,5 Hz at 1500 Hz

**Resolution**  $\pm 0.5 \text{ Hz}$ 

#### **OPERATING SPECIFICATIONS**

**Power Supply** 100÷240 Vac 50-60 Hz or 12÷32 Vdc / 24Vac

**Power Consumption** < 5VA (@100÷240Vac) and <3.5W (@12÷32Vdc / 24 Vac

Relay Outputs: mechanical 250 VAC/5A, 30 VCC/3 A

Alarms:

**Function** Delay, Faults and Min./Max

Delay time1÷3600secThreshold disablingEnable / DisableRelay functionClosed / Open

**Permanence Interval**  $0.00 \div 14.00 \text{pH} / -2000 \div +2000 \text{ mV}$ 

Permanence Time 1÷3600sec

For Alarm and Wash it is used the relay n. 2 with normally open contact, with maximum switching current of 5 Ampere at 230Vac. Maximum

switching power on resistive load 230VA.

SSR (Solid State Relay) 2-SPST 400 VAC, max 125 mA, Bidirectional, NPN, PNP

Frequency Output: 0 to 400 imp/min

Pulse Duration: 100 mSec

**HOLD Digital Input:** 

SEKO S.p.A. Input Voltage 12÷32 Vdc Absorption 10mA max

**Hold Alarm Value** 

**Analog Outputs:** 

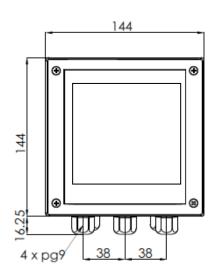
Outputs n.2 4-20mA Programmable

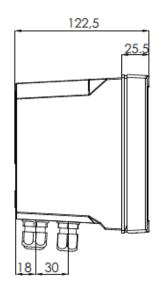
Maximum Load800 OhmNAMUR Alarm Output3.6 mA or 22 mA

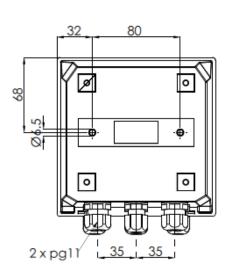


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## **DIMENSIONS**

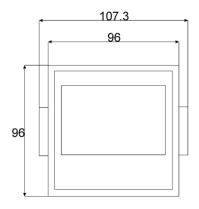


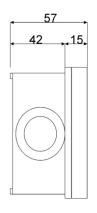


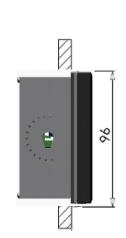


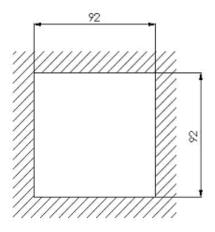
(With accessory Box code: 9900107331)

# Wall mounting size 144x144x122,5 mm









# Panel mounting size 96x96x42mm



SEKO S.p.A.

Technical data can be changed without notice. Kontrol\_100\_Series\_rev.1.0



Ertek Yapı ve Makina Endüstri Ekipmanları San. ve Tic. Ltd. Şti.

Halkapınar Mah. Pamuk Plaza İş Merkezi 1082 Sokak No:3 M 35170 Yenişehir Konak / İZMİR Tel: (0232) 469 43 53 Faks: (0232) 457 46 51 • www.ertek.com • info@ertek.com