

# Conductive Sensors

## Amplifier

### Types S 194, H 494 (Charging)

CARLO GAVAZZI



- Control of CHARGING (swimming pools)
- S 194 Output: 10 A SPDT relay
- H 494 Output: 8 A DPDT relay
- LED-indications: Power supply and relay ON
- AC power supply

## Product Description

Level control relay for conductive liquids for swimming pool applications. The relay operates approx. 10 s after

the sensor is no longer immersed in the water. Amplifier for A94.. sensors.

## Ordering Key

**S 194 156 024**

Housing \_\_\_\_\_

Type/function \_\_\_\_\_

Output \_\_\_\_\_

Power supply \_\_\_\_\_

## Type Selection

Plug	Output	Supply: 24 VAC	Supply: 115 VAC	Supply: 230 VAC
Circular, 11 pin Screw terminals	SPDT DPDT	<b>S 194 156 024</b> <b>H 494 166 024</b>	<b>S 194 156 115</b> <b>H 494 166 115</b>	<b>S 194 156 230</b> <b>H 494 166 230</b>

## Output Specifications

	S194	H494
<b>Output</b> Rated insulation voltage	SPDT relay 250 VAC (rms) (Cont./elec.)	DPDT relay 250 VAC (rms) (Cont./elec., cont./cont.)
<b>Contact ratings (Ag-CdO)</b> Resistive loads	AC 1 DC 1 or	μ (micro gap) 10 A/250 VAC (2500 VAC) 1 A/250 VAC (250 W) 10 A/25 VDC (250 W) 2.5 A/230 VAC 5 A/24 VDC
Small inductive loads	AC 15 DC 13	μ (micro gap) 8 A/250 VAC (200 VA) 0,4 A/250 VDC (100 W) 4 A/25 VDC (100 W) 2.5 A/230 VAC 5 A/24 VDC
<b>Mechanical life</b>	≥ 5 x 10 <sup>7</sup> operations	≥ 30 x 10 <sup>5</sup> operations
<b>Electrical life</b>	≥ 10 <sup>5</sup> operations	≥ 125 x 10 <sup>16</sup> operations
<b>Operation frequency</b>	≤ 7200 operations/h	≤ 7200 operations/h
<b>Insulation voltages</b> Rated insulation voltage	AC DC	≥ 2.0 kVAC (rms) (Cont./elect.) None
Rated impulse withstand voltage	AC DC	4 kV (1.2/50 μs) (cont./elect.) (IEC 60664) 800 V
		≥ 2.0 kVAC (rms) (Cont./elect.) None
		4 kV (1.2/50 μs) (cont./elect.) (IEC 60664) 800 V

## General Specifications

<b>Indication for</b>	
Power supply ON S194 H494	LED, red
Output ON	LED, green
	LED, red
<b>Environment</b>	
Degree of protection	IP 20 B
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
<b>Connection</b>	
S194 H494	11-pin circular plus Screw terminals, for mounting on DIN-rail
<b>Material</b>	
Housing S194 H494	Noryl SE1 PC/ABS blend
Plug S194 H494	Nickel-plated brass CYCOLOYC 2100
<b>Approvals</b>	UL, CSA
<b>CE-marking</b>	Yes

## Accessories

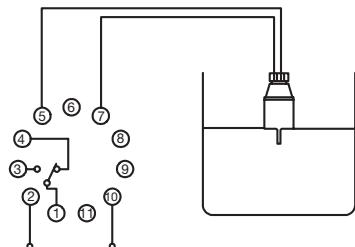
Conductive level probe:	A 94-10
Capacitive level probe:	A 94-20

## Input Specifications

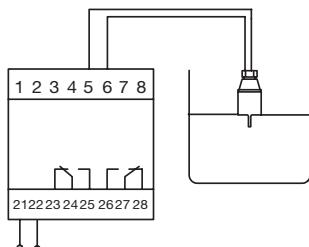
<b>Sensor type</b>	
Conductive	A 94-10
Capacitive	A 94-20
<b>Sensor voltage current</b>	
Conductive	24 VAC, 2.5 mA
Capacitive	8.2 VAC, max. 8 mA

## Wiring Diagrams

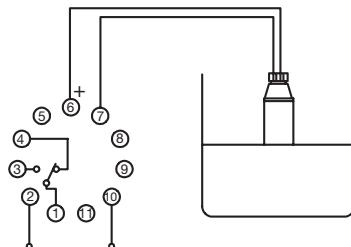
**S 194 (conductive)**



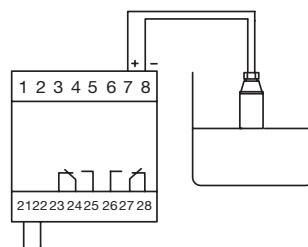
**H 494 (conductive)**



**S 194 (capacitive)**



**H 494 (capacitive)**



## Operation Diagram

### Conductive/capacitive

