

## TOPAX® L 2 Controller

- pH value measuring and controller device.
- Temperature controller device.

### Measuring Unit

<b>Measurements</b>	pH value, temperature	
<b>Measuring range</b>	0.00 - 14.00 pH	pH measurement
	-22 - 284 °F	temperature measurement
<b>Display</b>	Measurement values with relative units. Status messages, sensors, calibration, controller and alarm.	
<b>Temperature compensation</b>	Either manually or automatically with Pt 100 measuring principle.	

### Controller Unit

<b>Switch points</b>	2 switch points with adjustable effective direction setting
<b>Controller options</b>	ON/OFF controller with optional hysteresis Proportional (P) controller - pulse-pause, pulse-frequency or continuous controller. Proportional Integral (PI) controller - pulse-pause, pulse-frequency or continuous controller.
<b>Hysteresis</b>	0.00 - 14.00 pH
<b>Proportional gain KP</b>	0.00 - 14.00 pH
<b>Reset time TN</b>	0 - 2000 sec
<b>Minimum impulse</b>	0.1 - 9.9 sec
<b>Pulse and pause time</b>	02 - 99 sec
<b>Impulse frequency</b>	100 - 7200 impulses/h
<b>Switch-on delay</b>	0 - 200 sec.
<b>Alarm function</b>	minimum and maximum threshold value and delay time



### Panel-mounted

Power Supply	Order No.
230 V AC, + 6 %, - 10 %, 1 Ph, 40 ... 60 Hz	40500122
130 V AC, 1 Ph, 50 ... 60 Hz	40500132
24 V AC, 1 Ph, 50 ... 60 Hz	40500152

### Wall-mounted

Power Supply	Order No.
230 V AC, + 6 %, - 10 %, 1 Ph, 50 ... 60 Hz	40500102
130 V AC, 1 Ph, 50 ... 60 Hz	40500112
24 V AC, 1 Ph, 50 ... 60 Hz	40500142

## Technical Data

Feature	TOPAX® L panel-mounted	TOPAX® L wall-mounted
Housing material	Noryl	ABS
Dimensions	3.78" x 3.78" x 5" (WxHxD) for panel mounting	6.5" x 6.3" x 3.15" (WxHxD) for wall mounting
Weight	1.76 pounds	2.645 pounds
Connectors	Push-screw terminal for up to maximum 1.5 mm <sup>2</sup> section wiring	Spring-load terminal for up to maximum 1.5 mm <sup>2</sup> section wiring
Protection class	IP 54 (front), IP 30 (housing)	IP 65
Supply voltage	230 V AC, + 6 %, - 10 %, 40 ... 60 Hz 130 V AC, 1 Ph, 50 ... 60 Hz 24 V AC, 1 Ph, 50 ... 60 Hz	230 V AC, + 6 %, - 10 %, 1 Ph, 40 ... 60 Hz 130 V AC, 1 Ph, 50 ... 60 Hz 24 V AC, 1 Ph, 50 ... 60 Hz
Power input	10 VA	10 VA
Internal fuse	None	230 V: 63 mA delayed-action fuse 110V: 125 mA delayed-action fuse 24 V: 800 mA semi delayed-action fuse
Display	Backlit LCD display, two 16 character text lines. Displays measurement values with relative units and additional temperature display. Relay state also displayed.	
Inout 1 / pH value	pH value, measurement range 0.00...14.00 pH, electrically isolated, accuracy < 0.1 mV	
Input 2 / temperature	Temperature, measurement range -22.0 ... +284.0 °F, Pt 100, dual lead connection, accuracy < 32.018 °F	
Digital input	External controller stop or water deficiency sensor. Controller stop (break contact element).	
Analog output	One 0/4 ... 20 mA, electrically isolated, configurable, maximum 500 Ohm apparent ohmic resistance, accuracy <0.1 mA.	
Voltage output	± 6V DC for the impedance transducer (pH-measurements)	
Relay outputs	3 potential-free dry contacts, freely configurable, 2 A, 250 V, max. 550 VA for control (2) and alarm alerts (1).	
Interface options	RS485, baud rate 9600, data format 8Bit, 1 start and 1 stop bit, no even parity	
Controller options	One on-off (with hysteresis) proportional (P) or proportional integral (PI) controller, either a pulse-pause or pulse-frequency or continuous (0/4 ... 20 mA) output controller, allocated to chlorine measuring, two limit values with timing relay for alarm alerts.	
Switch-points	Two dual switch points, adjustable within the metering range	
Alarm functions	Two, with maximum and minimum limit values and time delay	
3 potential-free dry contacts contact load	2 A/ 250 V, max. 550 VA ohmic resistive load (with RC-protective circuit)	
Operating temperature	32 - 122 °F	
Storage temperature	-4 - 144 °F	
Atmospheric moisture	0 - 90 % non condensing	
EMC	Compliant to DIN standards EN 50081 -1 and 50081 -2	
Conformity mark	CE	