SYCON 2602:
Online analyzer with comfort functions

> for water softing plants

> for reverse osmosis systems

Drinking water **Raw water** **Waste water** **Boiler water** **Cooling water**

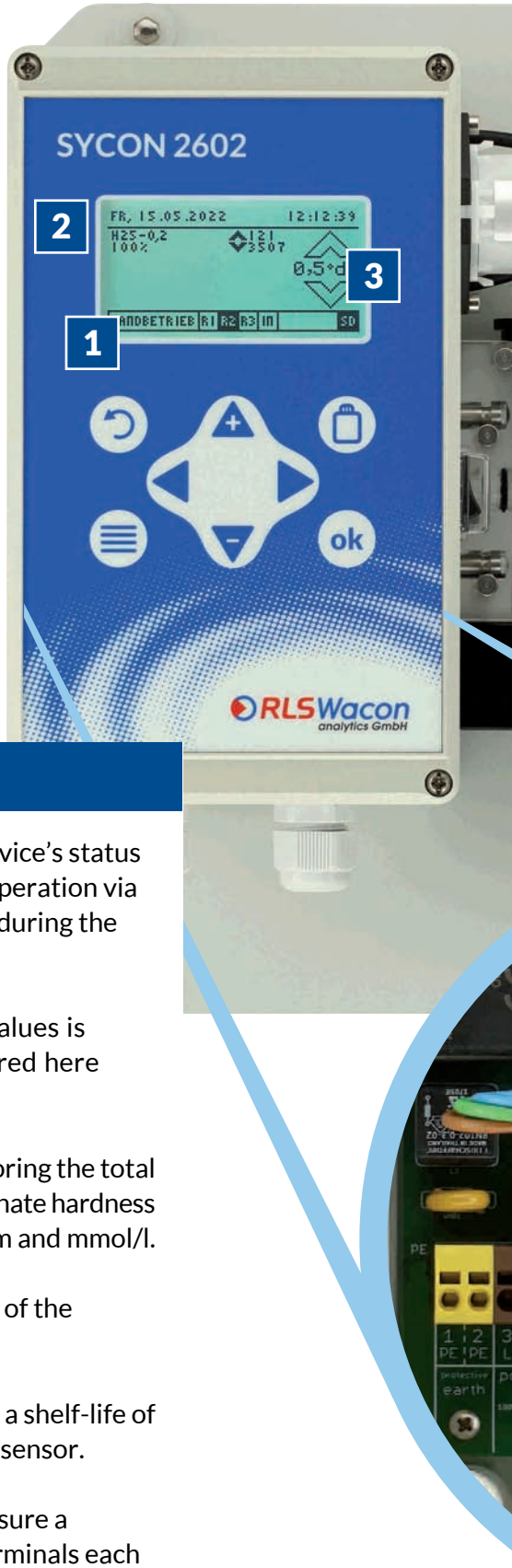
Safety reliably produced.

RLSWacon analytics GmbH

The limit value device
SYCON 2602

Since 2012 ...
... our SYCON analyzers stand the test in the daily use. The SYCON 2602 is used to monitor the limit value. In addition to the current measured values, the display also shows further information, for example the course of the last 100 measuring points.

It can be used ...
... where it depends on the precise compliance with individual limit values. With the SYCON 2602 we offer reliable analysis technology according to your requirements. The SYCON 2602 includes a demand-controlled regeneration triggering as well as the monitoring of the condensate recirculation for your boiler house. For this purpose, you choose the reagent with the appropriate limit value from our extensive range of products. The limit value is controlled in a fixed time interval and if exceeded, a signal is passed to the controller.



Advantages and highlights at a glance:

1 The display allows a quick and comprehensive metering of the device's status and shows the results of the last 100 measurements. Simplified operation via detailed, clear menu navigation. An installation wizard helps you during the initial startup.

2 A detailed evaluation beyond the internally stored measured values is made possible by the SD card. All measurement results are stored here with a time stamp.

3 The limit value depends on the reagent used. In addition to monitoring the total hardness with H25 reagents, it is also possible to monitor the carbonate hardness with C25 reagents. The unit can be switched between °dH, °f, ppm and mmol/l.

4 The maintenance-friendly design allows easy mounting, cleaning of the measuring chamber and replacement of wearing parts.

5 Our reagents are produced according to our own recipe and have a shelf-life of 24 months. They are optimally synchronized with the full- colour sensor.

6 The new colour-coded terminals facilitate the assignment and ensure a convenient connection of the cables. There are two additional terminals each with switched L- and N-conductors, which can be bridged to the relay contacts.

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Overview of performance features:

Intelligent and accurate
The device does not need to be calibrated. Due to the integrated measuring technology and a two-stage analysis procedure with zero point measurement, external measuring influences due to contamination of the measuring chamber, turbidity of the sample and extraneous light influences are automatically detected and eliminated in the evaluation of the analysis. The maintenance-free full colour sensor is one of the key components for the autonomous operation of the device.

Limit value functionality
Hardness breakthroughs are reliably detected by using limit value reagents. Select the reagent that matches your limit value. No further configuration or calibration is necessary.

Very high accuracy
After a bad measurement, a reference measurement can be carried out to evaluate the result at intervals of 4 minutes. This prevents false alarms due to the negative ion effect.

Multilingual menu
The menu navigation is switchable between German, English, French, Spanish, Italian, Russian, Polish, Dutch and Danish.

Efficient reagent consumption
The reagent bottle can easily be exchanged. A 500 ml bottle allows more than 5,000 analyses.

Extensive alarm functions
If the limit value is exceeded, an alarm is emitted by switching a potential-free relay. This alarm output can be placed on a control room for signaling purposes or used to operate a horn, to close a valve or to head on a program for the regeneration of a water softening plant.

Diagnostic program
If you encounter technical problems with the device, a fault message is issued by switching a potential-free relay. The detailed diagnostic program guides you step by step through all functions in an easy to understand way. Thus, the device is roundly checked and the cause of the error message is clearly located.

Digital input
The potential-free switch of a flow meter, a timer or any other state switch can be connected to this input. When the contact is open, no analyses are run in the programmed interval. Alternatively, this input can be used as start input for analyses. In the quantity interval mode, the water meter is connected to the input.

Three potential-free relay outputs
The potential-free relay outputs can be used to report a limit value alarm, a device fault or an active analysis as a status e.g. to a control room. Alternatively, signaling devices or solenoid valves can be switched.

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General Specifications	*Value / Range*
Supply voltage	230 V (100 - 240 VAC at 50/60 Hz) *alternatively* 24 V (AC/DC ±10 % at 50 Hz)
Power consumption	25 VA (during operation)
IP-protection class	IP43 (with housing IP54)
Ambient temperature	10 - 45 °C (50 - 115 °F)
Temperature of water sample	5 - 40 °C (40 - 100 °F)
Humidity	20 - 90 % RH non-condensing
Inlet water pressure	0.5 - 5 bar

Technical Data	*Value / Range*
Installation	wall mounting in closed rooms
Dimensions	on wall bracket: 274 x 275 x 130 mm (W x L x H) with housing: 330 x 300 x 185 mm (W x L x H)
Weight	on wall holder: 1.7 kg with housing: 3.7 kg
Relay outputs	3 relays, 250 VAC / VDC 4 A potential free outputs NC/NO > limit value alert > device error > analysis active / cooling water for sample cooler, altern. BOB alarm
Signal input	input for potential-free contact for external analysis start, water meter or flow monitor
Connection inlet / outlet	tubes with 6 mm outer diameter

Analysis Features	*Value / Range*
Measuring method	colorimetrical
The limit value alarm is defined by the reagent used	**Total hardness limit value reagents:** 0.02 °dH 0.05 °dH 0.10 °dH 0.20 °dH 0.30 °dH 0.50 °dH 1 °dH 2 °dH 3 °dH 5 °dH 10 °dH **Carbonate hardness limit value reagents:** 1 °dKH 1.5 °dKH 2 °dKH 3 °dKH
Reagent consumption	< 0.10 ml / analysis up to 5000 analyses per 500 ml bottle
Shelf-life of reagents	24 months

Online analyser SYCON 2602	*Article number*
Version 230 V on wall bracket	30-110160
Version 230 V in housing	30-310160
Version 24 V AC/DC on wall bracket	30-313160
Version 24 V AC/DC in housing	30-311160

Our product range:

Water hardness measurement
With our analyzers of the SYCON series you can also monitor the function of your ion exchangers and reverse osmosis systems. For steam boiler houses we offer you an analyzer with approval for BoB operation. For each of your applications, you can obtain an optimized instrument with an individually configurable range of functions from RLS Wacon analytics.

Sample coolers
You will find coolers in our assortment that allow you to take samples for manual analysis. We also offer pre-coolers for analytical instruments. Body and cooling coil are made of stainless steel (type 1.4571) and are approved for a nominal pressure up to 16 bar.

Reagents
We can supply you with the right reagent for your analyzer. We will gladly send you an overview of the available reagents for your SYCON analyzer. In addition to the reagents of RLS Wacon analytics, our delivery program also includes compatible reagents for the analyzers of other manufacturers.

Test sets
We offer a wide range of test sets for the determination of water parameters. Besides many common quick tests for the control of residual hardness, total hardness, chlorine content and iron concentration you will also find many test sets which are needed for niche applications.

The RLS Wacon analytics GmbH is a family-owned enterprise based in Hildesheim, Germany. For more than 40 years, we are developing and manufacturing robust and safe measurement and sensor technology for demanding applications. We hereby consistently focus on quality and well-known products. Our particular interest is the dialogue with customers, partners and suppliers. That´s how ***safety is reliably produced.***

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