



Product Data Sheet

SAL 400-FL (+60°C)

Relevant Test Standards

Salt Spray Test:

- DIN EN ISO 9227
- DIN 50942, DIN 53167
- ASTM B 117-73, ASTM B 287-74
- ASTM B 368-68
- ISO 7253 ISO 3678
- BS 1224, BS 2011, BS3900 F4
- BS 3900 F12
- BS 5466 Part I, BS 5466 Parts 2 + 3
- NFX 41002,
- AS 21331 Section 3.1
- SIS 1841190
- JIS Z 2371
- IEC 60028-2-1 KA



Product Description

These compact and easy to operate front loading corrosion test cabinet is designed for conducting salt spray tests pursuant to the most common international corrosion tests such as:

- **DIN EN ISO 9227 (SAL, ASS, CASS)**
- **ASTM B117-73**
- **IEC 60028-2-11 KA**

This type of cabinet also allows conducting standard water condensation (high humidity) tests acc. to ISO 6270-2 (CH) but only with manual refilling of the chamber with demineralized water. The compressed air and the solution pump should be also switched off manually.

Order Information

Basic model:

SAL 400-FL (V.711.062.020)

Other versions:

SAL 400-FL I CCL ST (V.711.762.320)

Options:

VA.711.300.000 Chamber cleaning

Sales & Support:

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Specification subject to changes
Pictures might differ from original

Customer Benefits

- Cost effective solution for basic salt spray (SAL)
- Compact front loading (cabinet) design
- The VLM technology allows the best possible reproducibility of the temperature conditions
- The test chamber with the bottom made of steel is more robust and less susceptible for damages compared to the competitive products made of glass reinforced plastic
- Lower cost of ownership compared to the competitive products where the test chamber is made of glass reinforced plastic (shorter test periods, better energy efficiency, easier for service and maintenance, longer life cycle, more resistive to mechanical damages)
- User friendly control system with preconfigured test parameters
- Possible to manually configure and operate this test cabinet acc. to ISO 6270-2 CH water condensation (high humidity) test
- Test cabinet is made of recyclable materials



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Figure 1 JUMO controller

Accessories Included

- 6 rods for supporting test specimen
- 2 m exhaust hose \varnothing 50 mm
- 2 m drain water hose \varnothing 18 mm
- 1 female connector for compressed air hose (size no. 5)

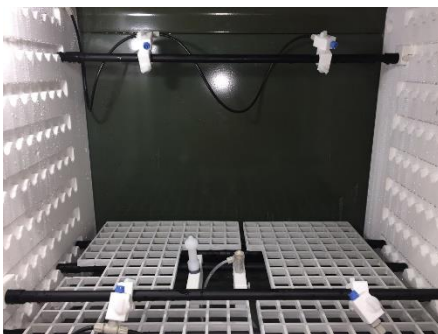


Figure 2 Option: System for specimen treatment

Technical Specifications

Capacity	ca. 400 L
Inner test chamber dimensions WxDxH1/H2	ca. 800 x 605 x 920 / 733 mm
Outer dimensions of the casing (overall) WxDxH	ca. 1210 x 922 x 1983 mm
Required power supply	230 V, 50/60 Hz, 1800 W
Materials used	The walls of the chamber are made of Polypropylene while the bottom is made of stainless steel and coated with ECTFE. The walls have milled openings for supporting rods
Heating	Flat Micanite heaters under the bottom of the chamber for fast and uniform heat transfer
Sensors	- 1x corrosion resistant and highly sensitive temperature sensor
Temperature stability	$\pm 0,2^{\circ}\text{C}$
Aeration	NA
Programmable tests	yes
Weight	256 kg
Communication	RS 232 interface (optional)
Max operating temp.	+ 60°C
Other specification	
Purity demineralized water / filling volume / fitting	< 5 $\mu\text{S}/\text{cm}$ / ca. 3,5 L / $\frac{3}{4}$ " outer diameter Option: Automatic water refill
Tap water (connection type)	Always via Ion-exchanging cartridge ($\frac{3}{4}$ " outer diameter)
Compressed Air	6-8 bar (connection nipple size 5)
Waste water, drain	Pipe fittings (spiral hose ID 18mm)
Exhaust pipe outer diameter	Pipe fitting (50 mm external diameter)
Supporting rods / max load	5 stainless steel rods coated with plastic / 30 kg each

Process control

- Basic version of the SAL 400-FL test chamber is equipped with the user friendly, microprocessor based Jumo dTRON controller (Figure 1)
- Programmable timer function
- **Option:** VisiCORR software for visualisation of test trends, only in combination with RS 232 (option)
- **Option:** the SAL 400-FL-I CCL ST version (with chamber cleaning and specimen treatment) is equipped with the Jumo IMAGO controller
- Restricted access for authorised operators (security code)

Operating system salt spray test (SAL) according to ISO 9227

- Electronically controlled membrane pump (flow monitor)
- High performance nozzle with adjustable air cap made of PEEK
- Transparent humidifier of Duran glass with easily replaceable PE-sintered filters for fine distribution of compressed air or full saturation with moisture and automatic water refill
- Manually controlled air purge in order to blow out the salt mist from the test area before opening the lid

Options

- **CCL:** Chamber cleaning with rotating nozzle after the salt spray test is finished
- **ST:** The specimen treatment option is required when test procedure prescribes the corrosion process to be stopped after the salt spray test is finished. It is done by flushing the specimens with demineralized water and drying them with warm air. A number of nozzles are used to spray the demineralized water directly upon specimens and removing the remnants of the salt crust. In addition a ventilation system with air heater is added to enable fast drying of the specimens.