Product Data Sheet

CCT 600-TL I (+55°C)

Relevant Test Standards:

Cyclic Corrosion Tests:

- DIN EN ISO 11997-1:2006 Cycle B (previously VDA 621-415)
- VW PV 1210 (climate module required)
- Prohesion (ASTM G85 A5)

Water condensation tests:

- DIN EN ISO 6270-2:2005 (CH, AT, AHT)
- BS 3900 F2
- BS 3900 F15
- ASTM D2247

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
- IEC 60028-2-11 KA
- AS 21331 Section 3.1
- SIS 1841190
- JIS Z 2371

Legend

SAL – Salt spray test

CH – Constant Humidity

AT – Alternating Temperature

AHT- Alternating Humidity and

- Temperature
- AIR Forced air circulation
- AWRF Automatic water refill
- WA Warm Air

Order Information

Basic model: CCT 600-TL-I Article numbers version: - V.734.065.150 (CCT 600-TL I) - V.634.465.150 (CCT 600-TL WA I)

Sales & Support: +49 5205 87963 0 Monday to Friday 8:00 am - 17:00 pm

VLM GmbH Heideblümchenweg 50

33689 Bielefeld

info@vlm-labtec.com www.vlm-labtec.com

Specification subject to changes Pictures might differ from original

1 CCT 600-TL I | VLM GmbH



Product Description

Compact front loading cabinet model developed for the automated conduction of standard cyclic corrosion tests pursuant to the most of the corporate standards in the international automotive industry i.e.:

- DIN EN ISO 11997-1:2006 Cycle B (previously VDA 621-415)
- VW PV 1210 (external climate module required)
- Prohesion (e.g. ASTM G85 A5)

Also suitable for the standard corrosion tests:

- Water Condensation test acc. DIN EN ISO 6270-2:2005, ASTM D2247
- Salt Spray test acc. to ISO 9227 (NSS, CASS), IEC 60028-2-11 KA

Customer Benefits

- Cost effective solution for standard corporate tests DIN EN ISO 11997-1:2006 Cycle B (previously VDA 621-415) and VW PV 1210 as well as basic salt spray (SAL) and water condensation corrosion tests (CH, AT, AHT)
- Compact top loading (chest) 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 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

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

- Electronically controlled self-venting membrane pump with electronic flow check (flow quantity and bubble detector)
- Hi-end nozzle for two fluids (test solution and compressed air) with adjustable air cap made of polycarbonate with 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 activated air purge in order to blow out the salt mist from the test area before opening the lid

Version: v7/20.09.2015

Product Data Sheet

CCT 600-TL I (+55°C)

Relevant Test Standards:

Cyclic Climate Tests:

- DIN EN ISO 11997-1:2006 Cycle B (previously VDA 621-415)
- VW PV 1210 (climate module required)
- Prohesion (ASTM G85 A5)

Water condensation tests:

- DIN EN ISO 6270-2:2005
- BS 3900 F2
- BS 3900 F15
- ASTM D2247



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
- IEC 60028-2-11 KA
- AS 21331 Section 3.1
- SIS 1841190
- JIS Z 2371



Figure 1 Jumo Imago controller

Accessories included:

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



Capacity	ca. 600 L
Inner test chamber dimensions (WxDxH1/H2)	ca. 910 x 710 x 660 / 1000 mm
Outer dimensions of the casing (WxDxH)	ca. 1436 x 795 x 1192 mm
Required power supply	230V, 50/60Hz, 2800W
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, Air heating system for ventilation with warm air
Sensors	 1x corrosion resistant and highly sensitive temperature sensor
Temperature stability	±0,5°C
Aeration	timer controlled built-in fan (capacity ca. 16 m ³ /h)
Controller	Versatile Jumo Imago programmable controller with colour display. Ability to store up to 50 test programs. Note: Data logging is not possible with this configuration
Weight	230 kg
Communication	RS 232 interface (optional)
Other specification	
Purity demineralized water / filling volume / fitting	< 5 µS/cm / ca. 3,5 L / ¾" outer diameter Option: Automatic water refill
Tap water (connection type)	Always via Ion-exchanging cartridge (¾" outer diameter)
Compressed Air	6-8 bar (connection nipple size 5)
Waste water, drain	Pipe fittings (spiral hose ID 32 mm)
Exhaust pipe outer diameter	Pipe fitting (50 mm external diameter)
Number of supporting rods / max load	5 stainless steel rods coated with plastic / 30 kg each

- User friendly, menu guided Jumo Imago controller with colour graphic display
- Restricted access for operators to three different operating levels
- Memory storage with the capacity to hold up to 50 test programs with most common corrosion tests already preconfigured in the factory
- The controller steers the external climate module for the tests which require air conditioning (typically PV 1210)
- Full overview of all digital and analog inputs / outputs
- Note: this configuration allow only real time monitoring of test data; data-logging is not possible

Operating system Constant Humidity (CH) according to ISO 6270-2

- Flat heaters under the bottom of the chamber for uniform and rapid heating of the water in the trough
- Temperature stability in the chamber ± 0,5°C
- Air fan with adjustable rotation speed for controllable drying of specimen in the Drying Phase;
- Parameters for standard water condensation tests are already preconfigured

Operating system Forced Air Drying / Aeration

- Aeration with environmental air
- Aeration with warm air (optional)
- Adjustable air distribution system inside the test chamber for uniform drying of the test specimens
- Fan with controllable rotation speed
- Option: Air conditioning module for providing standard climate acc. to DIN 50014: ambient air at 23°C ±2°C and 50% ±5% RH

2 CCT 600-TL I | VLM GmbH Version: v7/20.09.2015