

## TEMPERATURE CHAMBER WITH AN EMBEDDED DRIVE FOR ALTERNATOR TESTS

This is a temperature chamber with an embedded drive, electronic load, adjusting fixture, measuring system and PLC controller.

**Device No.:** 77116  
**Manufacturer:** LTdoo  
**Name / Type:**



### The device enables:

- active thermal cycling of one alternator by the desired parameters, which includes electric loading in the requested climate conditions
- endurance alternator tests in extreme temperature conditions.

### Technical data:

- Temperature chamber:
  - Volume 0.6m<sup>3</sup>
  - Temperature range: -50°C to +180°C
- Drive
  - Driving motor output: 1.5kW
  - Driving motor rotational speed: 0 – 3000min<sup>-1</sup>
  - Alternator rotational speed: 0 – 5000min<sup>-1</sup>
- Electronic load 12/24V : 150A

### Specifications:

- Iskra Avtoelektrika specifications
- Customers specifications

## TEMPERATURE CHAMBER

This is an autonomous temperature chamber.

**Device No.:** 77275  
**Manufacturer:** HERAEUS - VÖTSCH  
**Name / Type:** VMT 07/35



### The device enables:

- Tests of materials and products at variable temperature cycles and constant humidity.
- Time of duration and temperature conditions can be set by a programme or manually.

### Technical data:

- Temperature range: -70°C to +180°C ±1°C
- Heating speed: 4.5K/min
- Cooling-down speed: 3.5K/min
- Volume: 35l

## SALT SPRAY CHAMBER

with an embedded drive to determine the corrosion resistance of different materials in compliance with the below listed standards.

**Device No.:** 77897  
**Manufacturer:** ADVEST KOHLER  
**Name / Type:** HK500



### The device enables:

- tests of products, materials, and protections in neutral and aggressive salt spray atmosphere
- programme or manually pre-set cyclic tests of products operation in salt spray chamber or SO<sub>2</sub> atmosphere

### Technical data:

- Chamber volume: 500l
- Chamber/salt spray temperature: 23 – 55°C
- Temperature regulation in the chamber: ± 1K
- Chamber heating: indirectly through the cabinet walls
- Drive:
  - Asynchronous motor: 3kW
  - Drive rotational speed: 50 – 3000min<sup>-1</sup>

### Standard:

- ASTM B117
- DIN 50021 SS
- DIN 50018 v SO<sub>2</sub>
- ISO 9227
- DIN 50021 CASS
- ASTM B368
- VDA 621-415
- P-VW1210 oWL
- P-VW1210 mWL
- programme in compliance with the user requirement

## THERMAL SHOCK CHAMBER

This is an autonomous thermal shock chamber.

**Device No.:** 77945  
**Manufacturer:** FEUTRON  
**Name/Type:** FEUTRON



### The device enables:

- Accelerated ageing of EUT with a rapid temperature change at the constant humidity. Transitions between temperatures occur within 15 seconds.
- Tests of material and products with cyclic settable time change of temperature at the constant humidity.
- Duration time and temperature conditions are controlled manually or by a programme.

### Technical data:

- Volume: 160l
- Cold chamber:  $-75^{\circ}\text{C}$  to  $+180^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- Hot chamber:  $+10^{\circ}\text{C}$  to  $+200^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- Transition time  $\leq 10\text{sec}$

### Specifications:

- DIN EN 60068-2-14 Na, Nb
- MIL StD 883 D Meth. 1010.7, 1011.9
- IPC-TM-650
- by a programme in compliance with the user requirements

## TEMPERATURE CHAMBER WITH HUMIDITY

is a climate chamber with an embedded drive.

**Device No.:** 101431  
**Manufacturer:** VOTSCH  
**Name / Type:** VC4034



### The device enables:

- test of samples at the desired temperature and humidity in a specified time period
- active test of alternators at the specified humidity and temperature

### Technical data:

- Chamber volume: 350l
- Range of temperature without humidity: -40 – 180°C
- Temperature regulation in the chamber:  $\pm 1K$
- Humidity range: 10% - 98%RH
- Range of temp. for humidity: +10 – 95°C
- The embedded drive power: 3kW
- Drive rotational speed: 500 – 3000min<sup>-1</sup>

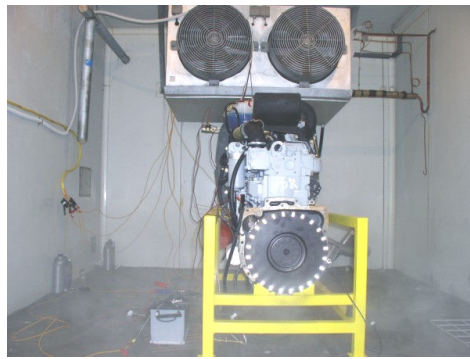
### Specifications:

- DIN 50016
- IEC 68-2-3
- IEC 68-2-30

## COLD CHAMBER

Cold chamber is equipped for different tests of thermal motors cranking and other types of drives at low temperatures.

**Device No.:**  
**Manufacturer:** ISKRA AVTOELEKTRIKA  
**Name / Type:** COLD CHAMBER



### The device enables:

- tests of starter motors on thermal motors at low temperatures
- with or without thermal motor ignition
- low temperature tests of AC/DC drive units

### Technical data:

#### Chamber:

- Temperature range: +23 to -40 °C
- Temperature regulation in the chamber  $\pm 1K$
- Chamber dimensions (l x w x h) 3000mm x 4000mm x 2500mm
- Cooling power at ko/tk -40 / -40°C: 4890W
- Condensing power: 8840W

#### Measuring equipment:

- Data acquisition system Agilent, 34970A
- Pulse counter Agilent, 53131A
- special software ISKRA
- current probe LEM LT 2000, range 0-2000A
- thermocouple J-type, K-type

#### Standards:

- QAE 11.920.209
- Customers specifications