

Test stand for air turbine starters

>TATS1AF<



Test unit



Operation panel

Developed for testing of Air Turbine Starters of Airbus and Boeing aircrafts.

- > Measuring values: vibration, speed, torque, pressure, flow, temperature, resistance
- > Operation panel outside the test chamber
- > Video control of the test runs
- > Separate pressure and temperature controller for controlled pressure, temperature and quantity
- > Two individual connectable masses for mass simulation
- > Drive of the units under test via electro motor for Overrunning Test
- > Integrated hydraulic unit to supply the control circuits
- > All tests can be carried out manual, semi- and fully automatic (e.g.: Acceleration Time Test, Stall Air Flow Test, Overrunning Test)

TECHNICAL DATA

<p>> Electrical supply:</p> <p>3/N/PE AC 50 Hz 400 V, preliminary fuse 50 A 1/N/PE AC 50 Hz, nominal current 7 A, preliminary fuse 13 A</p>	<p>> Measurements:</p> <p>Vibration: Range: 0 - 150 mm/s Accuracy: $\pm 7\%$ o.m.r.</p> <p>Speed: Range: 0-18000 rpm Accuracy: ± 2 rpm</p> <p>Torque: Range: -1100 to 1100 Nm Accuracy: $\pm 0.5\%$ o.m.r.</p> <p>Pressure: Range: 0-10 bar / 800-1200 mbar abs. Accuracy: Cl. 0.25</p> <p>Flow: Range: 0.65 - 4.7 kg/s Accuracy: Cl. 2</p> <p>Temperature: Range: 0-100 / 200 / 300 / 400 °C Accuracy: $\pm 0.5\text{ °C}$ / $\pm 2\text{ °C}$</p> <p>Resistance: Range: 0 - 600 Ω Accuracy: $\pm 1\ \Omega$</p>
<p>> Compressed air supply:</p> <p>4.7 kg/s, max. 10 bar, ambient temperature 3.5 kg/s, max. 10 bar, 250 °C - 350 °C 7 - 10 bar, control air</p>	
<p>> Test unit:</p> <p>Flywheel mass 1: 6.78 kgm² max. 8000 rpm</p> <p>Flywheel mass 2: 22.1 kgm² max. 8000 rpm</p> <p>Test shaft: max. 18000 rpm (for Overrunning Test)</p>	
<p>> Circuits:</p> <p>Supply of the starter: 4.7 kg/s max. 6 bar max. 250 °C</p> <p>Hydraulic circuit: 20 lpm 150 bar</p>	

OPTIONS

Many options are possible for adaption, e.g.: adaption to other aircraft types, etc.

> **Mix group and hydraulic supply with assembled switch cabinet:**

Inlet lines with cold and hot air are merged via dynamic servo valves and mixed according to the computer setting to the adequate pressure, temperature and quantity

Hydraulic unit to control the servo valves



> **Measuring cabinet:**

Acquisition and evaluation of the measuring values determined in the test unit

Location of the PLC



> **Elevating truck:**

Adjustable for height

For transport and mounting of the units under test



> **Adapter cabinet:**

To store the adaptations



Technical data are subject to change!