ElectroAir
QUALITY AND INNOVATION

LOAD BANK ANALYZER
EAL-450 SERIES

Load Bank Analyzer is a unique device, that is designed to simulate a connected to the aircraft GPU with a complete output power analysis.

There are 6 resistor modules in block:

- 2 x active resistance modules 72 kW;
- 2 x reactive resistance modules 54 kVAr;
- 1 x DC 28V, 2500A,1 x DC 56V, 1250A.

Is used for:

- maintenance of different power generation equipment - both GPUs and onboard generators;
- GPU`s parameters adjustment according to the specific operational environment;
- GPU`s characteristics check under different electrical loads.

Each module consists of resistive plates, that are made of stainless steel. Each resistive element is isolated by a ceramic isolator, that stands high temperatures from a current proceeded by these elements.

Main advantages of Load Bank Analyzer:

- Works continuously;
- Simultaneous operation of 4 inputs;
- Personal cooling system for each module;
- Unique control system, that allows to output, record and print parameters (power rate, unsinusoidality, voltage, frequency, transient processes etc.)

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MAIN TECHNICAL PARAMETERS

EAL-450 Load Bank Analyzer

General parameters

- Execution: trailer based
- Color: grey RAL 7035
- Protection class: IP 33
- Ambient temperature, °C: -15 to +50
- Dimensions without trailer, LWH, mm: 800x1756x2700
- Dimensions on trailer, LWH, mm: 2000x2280x4630
- Weight approx. without trailer, kg: 900
- Weight approx. on trailer: 1220
- Input power: 3p+N; PE 380V 50Hz 32A

Break system

- Extending side poles which are regulated and fixed in up position for moving and low position to stop

Towing bar with plug

- Plug-in with towing vehicle: parking lights and turn signals lightning-up
- Maximum permitted speed, km/h: 25 – on concrete and asphalt, 10 – off-road

AC input channel 1

- Rated power, kVA: 90
- Load voltage, V: 115/200 ± 10%
- Frequency, Hz: 400
- Load steps, kW: 6x12kW/6x9kV Ar
- Overload capacity, %: 125

AC input channel 2

- Rated power, kVA: 90
- Load voltage, V: 115/200 ± 10%
- Frequency, Hz: 400
- Load steps, kW: 5x12kW/6x9kV Ar
- Overload capacity, %: 125

Cooling system

- Type: horizontal forced ventilation
- Fan type: axial fan
- Air inlet: left side from control panel side view
- Air outlet: right side from control panel side view
- Fan power supply: external supply 230V, 50Hz
- Fans power: 4.1 kW total
- Fan quantity: 72 pcs

Measurement equipment

- Name of equipment: Tektronix Power Analyzer PA3000
- List of measurements:
  Transient curves
  Spikes and surge curves
  Frequency and voltage modulation curves
  Total harmonic distortion
  Waveform
  Phase voltage balance with unbalanced load
  Crest factor
- Temperature gauges of AC channels fans: mounted on inlet airflow (right) side, behind of fans, temperature cut limit 90 °C
- Temperature gauges of DC channels fans: mounted on inlet airflow (right) side, on the case`s surface, temperature cut limit 150 °C

DC input channel 3

- Load voltage, V: 28
- Current, A: 1500
- Peak DC current, A (30sec): 2500
- Load step resolution, A: 1-125, 2-250, 3-375, 4-750, 5-1500; (6-2000, 7-2500 for 30 sec)

DC input channel 4

- Load voltage, V: 56
- Current, A: 750
- Peak DC current, A (30sec): 1250
- Load step resolution, A: 1-62.5, 2-125, 3-187.5, 4-375, 5-750; (6-1000, 7-1250 for 30 sec)

Norms, standards and directives that we follow:

ISO6858, ISO1540, BS 2G 219, MIL-STD-704F, EN 62040-1, EN 61000-6-4, EN 61000-6-25, EN61558-2-6, EN 2282, EN 1915-1, SAEARP 50 15, IEC 60721, IEC 60529, DFS400, GOST 54073-2010, ISO 9001:2008, ISO 14001:2004, OHSAS 18001, 2014/35/EU, 2004/108/EC