Levon Aviation's policy has always been to offer the best designed products that are environmentally friendly, simple to use, easy to maintain, exceptionally well manufactured, and thus meeting our clients' strict requirements, as well as complying with all standards and legislation.

Levon Aviation offers two models of 28VDC Transformer Rectifier Units:

- 300A continuous - 1200A Peak load
- 600A continuous - 2400A Peak load.

Levon Aviation ensures high quality, efficient, and secure electrical power supplies.
LEVON AVIATION 28VDC TRUs are continuous DC power supply units that supply DC power to aircraft that are on the ground to start the engine and the APU (Auxiliary Power Unit) of the aircraft as well as for the onboard power supply.

LEVON AVIATION 28 VDC TRUs are solid-state Ground Power Supplies that are offered in the following range:

- **300A continuous** - 1200A Peak load (450 enclosure)
- **600A continuous** - 2400A Peak load (500 enclosure)

The units are available in mobile and fixed options.

- **CE Mark Certified** (EN61000-6-4 Electromagnetic compatibility - Generic emission standard; EN61000-6-2 Electromagnetic compatibility - Generic immunity standard; Low Voltage Directive (LVD) 2006/95/EC)
- **State of the art semiconductor technology** (IGBT) guarantee **Unity Power Factor** and **Low Input Harmonics** (THDi < 3 %)
- **High Efficiency** (up to 90% efficiency)
- **User friendly control panel**
- **Data logging**
- **IP55 enclosures** for outdoor use in extreme environmental conditions
- **Low noise emission** (<65dBA@1m)
• State of the art semiconductor technology (IGBT) Rectifier
• Power Factor Correction (PF= 1)
• 95% efficiency
• 4 Quadrant Operation (better response of the system and safer operation for NBPT)
• Low input harmonics(< 1.5 % THDi), to comply with the strictest regulations@ any load

• RS232

• Communications Monitoring by Web and SNMP
  MODBUS RS485
  Remote control box
• Leakage current supervision

• 800Hz DC - DC Converter
• Galvanic Isolation

• ISO 6858 Aircraft ground support electrical supplies
• ISO 1540 Characteristics of aircraft electrical system
• MIL-STD-704 Aircraft electric power characteristics
• EN62040-1-1 General & safety requirement
• EN61558-2-6 General & safety requirement
• EN61000-6-4 Electromagnetic compatibility - Generic emission standard
• EN61000-6-2 Electromagnetic compatibility - Generic immunity standard

• Enclosure Protection class up to IP55
• Over/under voltage at input
  Under voltage <20V (4 sec)
  Over voltage >34V (4 sec)
  Short Circuit <5V (4 sec)
• Overload capability designed for:
  Power stage 150% - Continuous
  Magnetics 120% - Continuous
• Overload protections set at:
  125% for 600seconds
  150% for 60 seconds
  400% for 5 seconds
• Over temperature protection
# LEVON-TRU-28VDC

28VDC TRANSFORMER RECTIFIER UNIT - GROUND POWER

## SPECIFICATIONS

### INPUT

- 3 Phase, 3 Wire
- 3 Phase 400V/415VAC
- 50Hz or 60Hz
- Input Current Harmonics

### OUTPUT

- Output 28.5VDC
- Continuous current capability (at 28.5VDC) 300A/600A
- Maximum Current Limit (at 28.5VDC) 1200A/2400A for up to 5 sec
- Current Limit adjusting steps (from 600A) 300A
- Voltage regulation up to 600A +/- 0.5%
- Efficiency (at 600A) 90%
- Ripple <0.5%
- Dynamic Recovery to 90% VDC <40mS
- Voltage Compensation 0-4V up to 600A (remote feedback)

### ENVIRONMENTAL CONDITIONS

- Temperature range at sea level -30°C to +50°C (@ 100% Load)
- Relative Humidity 10% to 100%
- Noise Level < 65dBA @ 1 metre
- Protection Index IP55

* Other electronic overload limits available on request
* Other voltages and frequencies available on request

## DIMENSIONS (mm)

![Dimensions Diagram]

- Weight = 150kg - Dimensions for 450 enclosure
- Weight = 180kg - Dimensions for 500 enclosure

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