



**28Vdc GROUND POWER UNIT**



ELIT Srl designs and manufactures 400Hz static frequency converters since 1987. To complete the airfield range of products are available 400Hz static frequency converters, 270Vdc ground power units, constant current regulating units (CCR) for ground lighting and control systems for commercial and military airports. All the equipment is distinguished by the use of technologically advanced components, reliability, and ease of maintenance.

### PRINCIPLES OF WORKING

The SE 28 600 ground power unit, equipped with a totally controlled thyristor rectifier, feeds a 28Vdc power supply by converting the mains voltage to 50 / 60Hz in a stabilized, galvanically insulated continuous voltage with voltage ripple lower than 1%. The control logic stabilizes the output voltage both statically and dynamically. Available in fixed, mobile, under bridge mounting or as an additional module to the 400Hz converter. It is a reliable solution for aircraft powering in hangars or on the airport runway outside.

### FEATURES

- Galvanic input / output isolation.
- Three-phase input voltage without neutral.
- High performance.
- High overload capacity.
- Output measurements V, A.

In option:

- Automatic drop line compensation (DLC).
- Remote Point of Reaction (POR).
- Interlock with possibility of EF bypass.
- Remote control.
- Emergency Power Off.
- Second additional output 28Vcc.
- Power history.
- RS485, RS232, SNMP and I / O communication interface
- Mobile or fixed version

### SWITCHES AND OPERATOR CONTROL

The SE 28 are provided with the following protections and controls:

- Input switch isolator with door lock
- Output switch isolator (optional output contactor)
- START / STOP converter buttons
- ON / OFF output buttons (optional)
- Local or Remote control selector (optional)
- ON / BYPASS interlock selector (optional)
- Voltage drop compensation max 8% (optional)
- LCD touchscreen display (optional)
- Remote command ON / OFF converter (optional)
- Optional interfaces SNMP, RS485, RS232, USB

### STANDARDS

CE Compliant.

MIL STD 704F: Aircraft Electric Power Characteristics

ISO 6858: Ground support electrical supplies.

EN 2282: Characteristics of aircraft electrical supplies  
– General requirements

EN 61000-6-2: Electromagnetic compatibility  
emission.

EN 61000-6-4: Electromagnetic compatibility.  
Immunity.

EN 13849-1: Safety of machinery - Safety-related  
parts of control systems.

DFS400 Specification for 400 Hz aircraft power

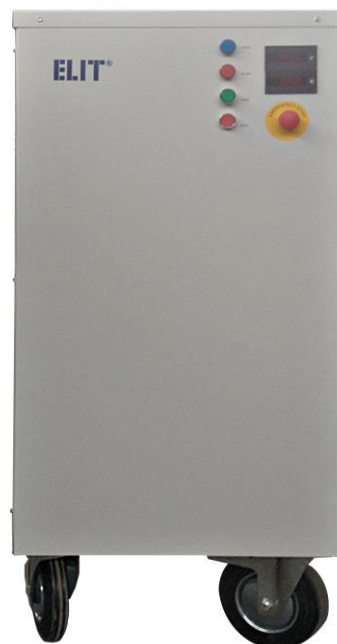
BS 2G 219: General requirements for ground support equipment.

SAE ARP 5015: Ground equipment 400 Hz ground power performance requirement.

### CUSTOM VERSIONS

Custom configurations and features are provided on request:

- Version with anti-vibration and / or customized dimensions,
- PCB tropicalization treatment,
- Additional output power module 28Vdc 200A – 400A – 600A – 800A,
- Customized voltages and frequencies,
- Mobile Version



Model	SE 28 400	SE 28 600
<b>INPUT</b>		
Nominal voltage	400V 3Ph (208V, 440V 480V and 575V on request)	
Voltage tolerance	+10% -15%	
Power factor	0.95 at full load	
Nominal frequency	50Hz/60Hz ±5%	
Inrush current	Absent	
Input current @ full load	17 A	25 A
<b>OUTPUT</b>		
Voltage	28.5Vdc	
Output current	400 A	600 A
Static Stability	±1%	
Dynamic stability	±8%	
Recovery time	10 msec.	
Overload 10 minutes	500 A	750 A
Overload 1 minute	600 A	900 A
Overload 30 seconds	800 A	1200 A
Overload 10 seconds	1200 A	1800 A
Overload 2 seconds	1600 A	2400 A
Ripple	<1%	
<b>MISCELLANEOUS</b>		
Dimensions	600x950x1200mm or 850x800x1100mm	
Weight	150kgs	180kgs
Eifficiency	>87%	
Operating temperature	from -10°C to +45°C (-20°C/+55°C -40°C/+60°C on request)	
Noise	< 65dBA	
IP protection	IP 20 (IP31, IP41, IP44, IP54, IP60 on request)	

ELIT Srl reserves his right to do modifications to his products without notice.