

APOJET S 120 - 180

Advanced Solid State Aircraft GPU*

- **Maximum Power**
- **Best Efficiency**
- **No Mains Disturbance**
- **Galvanic Isolation**

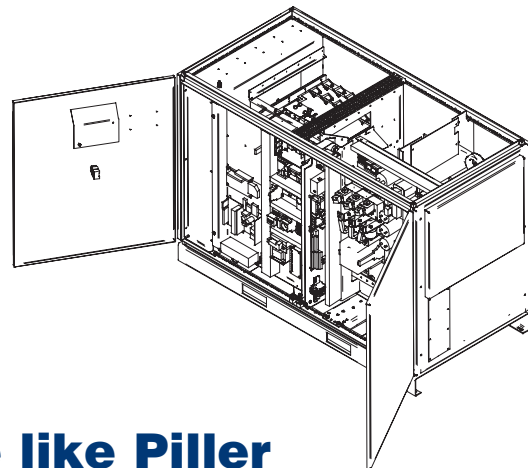
The APOJET S solid state frequency converter is designed to generate 400Hz power for aircrafts as a decentralized ground power system mounted on the apron or near by the rotunda. Using the latest state-of-the-art technology and newest trends in the power electronics field and digital control, the APOJET S offers the best solution for aircraft ground power supply systems without any mains disturbance.



Rating 120 to 180KVA

- regulated rectifier with IGBT's (THD at input current < 5%)
- one or two output contactors
- Parallel operation (optional)
- fully-controlled inverter with IGBT's
- pulse-width modulation
- special earth leakage protection
- stable operating performance due to microprocessor control
- low output distortion factor
- constant output voltage even with non-linear loads
- interface for remote control and centralised control/indication, PC or modem connection

* Ground Power Unit



Nothing protects quite like Piller

TECHNICAL DATA SHEET

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Converter Type	AJSC120	AJSC150	AJSC180
Total efficiency*	> 92%	> 92%	> 92%
Weight approx.	870kg / 1874lbs	930kg / 2050lbs	980kg / 2161lbs
Dimensions (w x d x h) mm /IN			
- indoor	1610 x 810 x 1110 / 63.4 x 31.9 x 43.7		
- outdoor	1800 x 900 x 1165 / 70.9 x 35.4 x 45.9		
Ingress protection	IP 43 / NEMA 1 (indoor) or IP 54 / NEMA 3R (outdoor)		
Ambient temperature °C / °F	0 to +40 / +32 to 104 indoor, (-20 to +40 / 0 to +104 outdoor)		
Humidity	max. 95% without condensation		
Cable entry	bottom or right side entry		
Paint finish	RAL 7032 (other colors on request)		
Paint treatment	phosphatized, primed and powder sprayed		

Input Data

Nominal input current			
@ 400V, 50Hz	164A	206A	246A
@ 480V, 60Hz	137A	172A	205A
Nominal voltage, 3 phase	400V ±10% / 480 V ±10%		
Nominal frequency	50Hz ± 5% / 60 Hz ± 5%		
Harmonic content at mains current	< 5%		
Power factor*	~ 1		

Output Data

Nominal output current	346A	433A	520A
Output power at p.f. 0.8	120KVA	150KVA	180KVA
Nominal frequency	400Hz ± 0.1%		
Nominal voltage 3ph, 4 wires	200/115V		
Voltage adjustment range	± 5%		
Automatic line drop compensation	+ 12 % with activated remote voltage sensing or I-Boost®		
Voltage characteristics	- steady state ± 1%		
	- dynamic ≤ 15% acc. to MIL-Std. 704 F, fig 3		
Harmonic content L - L	< 3% at linear, balanced load, p.f. 0.8		
Recovery time	≤ 200ms		
Wave form	sinusoidal		
Phase angle	120° ± 1.5°		

* at nominal power



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