

## APOJET S 20 - 90

### Advanced Solid State Aircraft GPU\*

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

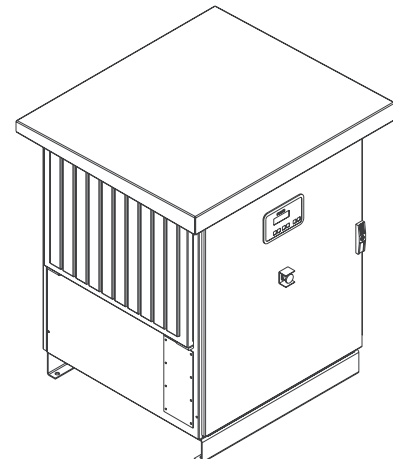
The APOJET S 20 to 90 solid state frequency converter are designed to generate 400Hz power in workshops for aircraft equipment service or in hangars. Using the latest state-of-the-art technology and newest trends in the power electronics field and digital control, the system offers the best solution for aircraft ground power supply systems without any harmful harmonic distortion back into the mains.



#### Rating 20 to 90KVA

- regulated rectifier with IGBT's (THD at input current < 5%)
- 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
- high degree of user-friendliness
- interface for remote control and centralised control/indication, PC or modem connection

\* Ground Power Unit



**Nothing protects quite like Piller**

# TECHNICAL DATA SHEET

## APOJET S 20 - 90 Advanced Solid State Aircraft GPU



Converter Type	AJS 20	AJS 40	AJS 60	AJS 90
Total efficiency*	~ 88%	~ 90%	~ 91%	~ 92%
Weight approx. kg / lbs	395 / 871	395 / 871	492 / 1085	557 / 1228
Dimensions (w x d x h) mm /IN				
- indoor IP 43 / NEMA 1			856 x 842 x 1100 / 33.7 x 33.2 x 43.3	
- outdoor IP 54 / NEMA 3R			1000 x 900 x 1160 / 39.8 x 35.4 x 45.7	
Ingress protection			IP 43 / NEMA 1 or optional IP 54 / NEMA 3R	
Ambient temperature °C / °F			0 to +40 (-20 to + 40) / +32 to +104 (0 to +104)	
Humidity			max. 95% without condensation	
Cable entry			bottom entry, left or right hand side entry	
Paint finish			RAL 7035 (other colors on request)	
Paint treatment			phosphatized, primed and powder sprayed	

### Input Data

Nominal input current				
@ 400V, 50Hz	27A	51A	78A	116A
@ 480V, 60Hz	33A	46A	64A	97A
Nominal voltage, 3 phase			400V ±10% / 480V ±10%	
Nominal frequency			50Hz ± 5% / 60Hz ± 5%	
Harmonic content at mains current			< 5%	
Power factor*			~ 1	

### Output Data

Nominal output current	58A	116A	173A	260A
Output power at p.f. 0.8	20KVA	40KVA	60KVA	90KVA
Nominal frequency			400Hz ± 0.1 %	
Nominal voltage 3ph, 4 wires			200/115V	
Voltage adjustment range			± 5%	
Automatic line drop compensation			+ 12% with activated 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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