

90kVA STATIC GROUND POWER UNIT (SGPU)



Reliable 400Hz Ground Power Solutions for
Commercial, Defence and MRO Operations



FIVE DECADES OF ENGINEERING EXCELLENCE FOR DEFENCE & CIVIL AVIATION

For over five decades, MAK has engineered mission-critical power systems for demanding defence and civil aviation applications.



40+ COUNTRIES
WORLDWIDE



MISSION-CRITICAL
POWER SYSTEMS



COMMERCIAL
DEFENCE
MRO

ENGINEERED FOR PERFORMANCE. BUILT FOR RELIABILITY.



MISSION-PROVEN RELIABILITY

Proven in the most
demanding defence and
airport environments.



CLEAN & STABLE POWER

IGBT technology with active
PFC for low THD <5% and
high power quality.



HIGH EFFICIENCY >93%

Lower energy consumption
and reduced operating
costs.



INTELLIGENT DIGITAL CONTROL

7" Colour HMI, event
logging, predictive
diagnostics & remote
monitoring.



RUGGED & WEATHER PROOF

Ip54 enclosure for outdoor
use in harsh airport and
field conditions.



COMPREHENSIVE PROTECTION

Complete electrical and
operational protection for
safe operations.

— IDEAL FOR —



COMMERCIAL AIRPORTS



MILITARY AIRBASES



MRO & MAINTENANCE



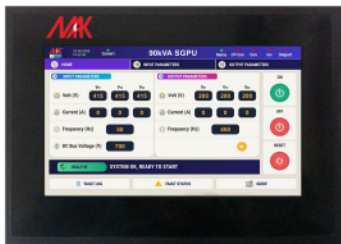
FBO & PRIVATE AVIATION

MISSION READY. BUILT TO PERFORM. ANYTIME. ANYWHERE.

MAK SGPU
90kVA

90kVA STATIC GROUND POWER UNIT (400Hz)

INTELLIGENT DIGITAL CONTROL SYSTEM



- ▶ 7" Colour Touch Screen HMI
- ▶ Real-Time Measurements & Status
- ▶ Event Logging & Alarm Management
- ▶ Predictive Diagnostics
- ▶ Remote Monitoring & Connectivity
- ▶ Password Protected Access

MISSION-CRITICAL OVERLOAD PERFORMANCE

110%	CONTINUOUS DUTY 1 HOUR
125%	10 MINUTES
150%	1 MINUTE
200%	30 SECONDS
300%	10 SECONDS
400%	1 SECOND

Designed to support demanding aircraft transient loads and mission-critical operating conditions.

Configurations:

Towable | PBB Mounted | Fixed |
Shelter Mounted | Custom Solutions

Power Ratings:

10-180 kVA | 50Hz & 400Hz |
Custom Configurations Available

TECHNICAL SPECIFICATIONS

INPUT

Voltage	3phase, 415VAC (+15%/-25%)
Power Factor (full load)	0.99
Frequency	45Hz upto 65Hz
Rectification	IGBT based Active PFC
Current THD	<5%

OUTPUT

Voltage	3phase, 200V(L-L)±1%
Frequency	400Hz
Power Factor	0.8-1PF
Voltage Regulation	<1%
Power	90kVA

EFFICIENCY & ENVIRONMENTAL

Overall Efficiency	>93%
Operating Temperature	-20°C to +55°C
Altitude	Upto 2000m with out derating
Relative Humidity	10 to 100%
Enclosure Protection	Ip54 (Outdoor suitable)

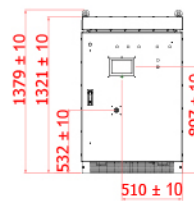
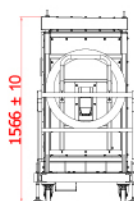
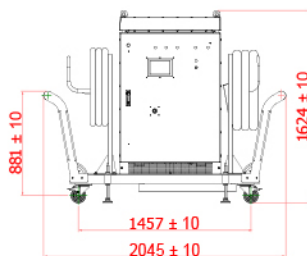
COMPREHENSIVE PROTECTIONS

- ✓ Under Voltage & Over Voltage Protection
- ✓ Over Load & Over Frequency Protection
- ✓ Under Frequency Protection
- ✓ Phase Reversal & Short Circuit Protection
- ✓ Over Temperature Protection
- ✓ Aircraft Interlock Safety System

KEY STANDARDS & COMPLIANCE

- AS 9100 Rev. D
- EN 61000-6-2/EN 61000-6-4(EMC)
- EN 61558-2-6
- EN 62040-1-1
- BS 2G 219
- ISO 6858
- DFS 400 Spec. for 400Hz
- CE Certified
- Aircraft Ground Power Supplies Standards

Physical Dimensions & Weight (Approx.)



WEIGHT
~775kg
(Approx.)

All dimensions are in mm

TRUSTED BY MISSION-CRITICAL OPERATORS WORLDWIDE



AIRPORTS



AIRBASES



DEFENCE
ESTABLISHMENTS



MROs



OEMs



GOVERNMENT
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