



AMF Series

400Hz Solid State Frequency Converter
Ground Power Unit

0.5kVA~300kVA

Leading Test & Measurement Power Supply Provider



ISO 9001 2008

AC POWER CORP

Distributed by: Reliant EMC LLC

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A M F -

3

Input
Phase

1

Output
Phase

060

Capacity
60KVA

F

Outlook
Free Standing

T

Input Voltage
220/380VAC

[Pls refer to P.3]

[Pls refer to Form I at P.4]

AMF Series Case Number & Size

[Unit of Measurement:.....mm Width Depth Height



AMF Series-Single Phase

Model		AMF-500W	AMF-11001	AMF-11003	AMF-11005	AMF-11010	AMF-31020	AMF-31030	AMF-31045	AMF-31060	AMF-31100	
Capacity		500VA	1KVA	3KVA	5KVA	10KVA	20KVA	30KVA	45KVA	60KVA	100KVA	
Circuit Type		Transistor Amplifier Type			IGBT / Pulse Width Modulation Type							
Input (AC)	Phase	1Phase 2 W + G						3Phase 3W+G or 3Phase 3W+N+G Y				
	Voltage	110(B) or 220V(G)	15%					220V G	220V/380V T	15%	11	
	Frequency	50Hz						3Hz 60Hz 3Hz				
Output (AC)	Phase	1Phase 2 W + G										
	Voltage	115V				C or 220V G ,230V H		Output Voltage +/-10% Adjustable				1
	Frequency	2-Step Output Frequency: 400HzFixed,350Hz~450Hz adjustable ('can comply with customer's specs)										
Frequency Stability		0.01%										
Load Regulation		1%						1.5%				
Total Harmonic Distortion		2%						3%				
Meter/ Res	4 Digit Freq. Meter	Res.0.1 Hz										
	4 Digit Voltmeter	Res.0.1V										
	Digit Ammeter	0.001A	0.01A	4 Digit Ammeter / Res. 0.1A				5 Digit Ammeter / Res. 0.1A				
Overload Capability		120% / 1hr,150% /1min,200% / 15sec,25% duty cycle.										
Protection		Input Circuit Breaker, Output Circuit Breaker, Electronic Circuits for fast detection and trip off protection for Over Current, Over Voltage, Over Load, Over Temperature, Short Circuit and Alarm system										
Isolation Resistance		500Vdc 20M										
Withstand Voltage		1 800Vac /5mA / 1 min										
Cooling System		Air Forced Fan										
Ambient Temperature		-20 ~45										
Relative Humidity		0~90% Non-condensing										
Case Number ²		1	2			3	4		5		6	
Net Weight(kg) ²		44	60	73	89	150	280	333	418	571	898	

- Remarks:
- 1 For the other voltages, please refer to Form I at Page 4.
 - 2 The dimensions and weights vary with voltage. For detailed information, please consult with our sales rep.
 - 3 The above dimensions and weights are for Free Standing type only. As to the other types(e.g.Trailer, Bridge Mount), please consult with our sales rep.
 - 4 One year warranty.
 - 5 All specifications are subject to change without prior notice.
 - 6 36VAC on request, or comply with customer's specs.
 - 7 Add on module of 400Hz Frequency Converter and 28VDC DC Power Supply on request.

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AMF Series-Inree Phase 0-75KVA)

Model		AMF-33006	AMF-33010	AMF-33015	AMF-33020	AMF-33030	AMF-33045	AMF-33060	AMF-33075
Capacity		6KVA	10KVA	15KVA	20KVA	30KVA	45KVA	60KVA	75KVA
Circuit Type		IGBT / Pulse Width Modulation Type							
Input (AC)	Phase	3Phase 3W+G or 3Phase 3W+N+G Y							
	Voltage	3W+G 220V G or 3W+N+G				220V/380V T		15% 1	
	Frequency	50Hz 3Hz 60Hz				3Hz			
Output (AC)	Phase	3Phase 3W+N+G Y							
	Voltage	Output Voltage +/-10% Adjustable 1							
	Frequency	2-Step Output Frequency: 400Hz Fixed,350Hz-450Hz adjustable ('can comply with customer's specs)							
Frequency Stability		0.01%							
Load Regulation		1%						1.5%	
Total Harmonic Distortion		2%						3%	
Meter/ Res	4 Digit Freq. Meter	Res.0.1Hz							
	4 Digit Voltmeter	Res.0.1V							
	Digit Ammeter	4 Digit Ammeter / Res. 0.1A						5 Digit Ammeter/ Res. 0.1A	
Phase Shift		Balanced Load / Empty Load: 2 ; 100% Unbalanced Load: 4							
Overload Capability		120% / 1hr,150% /1min,200% / 15sec,25% duty cycle.							
Protection		Input Circuit Breaker, Output Circuit Breaker, Electronic Circuits for fast detection and trip off protection for Over Current, Over Voltage, Over Load, Over Temperature, Short Circuit and Alarm system							
Isolation Resistance		500Vdc 20M							
Withstand Voltage		1800Vac /5mA / 1min							
Cooling System		Air Forced Fan							
Ambient Temperature		-20 -45							
Relative Humidity		0-90% Non-condensing							
Case Number 2		3		4			5		
Net Weight(kg) 2		150	175	265	345	385	528	635	700

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 - One year warranty.
 - All specifications are subject to change without prior notice.
 - 36VAC on request, or comply with customer's specs.
 - Add on module of 400Hz Frequency Converter and 28VDC DC Power Supply on request.



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AMF Series Outlook



F - Free Standing Unit



T - Trailer Unit



B - Bridge Mounted Unit

AMF Series-Three Phase (100-300kVA)

Model		AMF-33100	AMF-33120	AMF-33150	AMF-33180	AMF-33200	AMF-33250	AMF-33300	
Capacity		100kVA	120kVA	150kVA	180kVA	200kVA	250kVA	300kVA	
Circuit Type		IGBT / Pulse Width Modulation Type							
Input (AC)	Phase	3Phase 3W+G				or 3Phase 3W+N+G Y			
	Voltage	3W+G 220V G or 3W+N+G				220V/380V T	15%		
	Frequency	50Hz 3Hz 60Hz 3Hz							
Output	Phase	3Phase 3W+N+G Y							
	Voltage	Output Voltage +/-10% Adjustable					1(AC)		
	Frequency	2-Step Output Frequency: 400Hz Fixed,350Hz-450Hz adjustable ('can complywith customer's specs)							
Frequency Stability		0.01%							
Load Regulation		1.5%							
Total Harmonic Distortion		3%							
Meter/ Res	4 Digit Freq. Meter	Res.0.1 Hz							
	4 Digit Voltmeter	Res.0.1V							
	Digit Ammeter	5 Digit Ammeter/ Res. 0.1A							
Phase Shift		Balanced Load / Empty Load:				2	; 100% Unbalanced Load: 4		
Overload Capability		120% / 1hr,150% /1min,200% / 15sec,25% duty cycle.							
Protection		Input Circuit Breaker, Output Circuit Breaker, Electronic Circuits for fast detection and trip off protection for Over Current, Over Voltage, Over Load, Over Temperature, Short Circuit and Alarm system							
Isolation Resistance		500Vdc 20M							
Withstand Voltage		1800Vac / 5mA / 1min							
Cooling System		Air Forced Fan							
Ambient Temperature		-20			-45				
Relative Humidity		0-90% Non-condensing							
Case Number 2		6			78				
Net Weight(kg) 2		1000	1200	1350	1800	2000	2270	2740	

Remarks:

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- The above dimensions and weights are for Free Standing type only. As to the other types (e.g.Trailer, Bridge Mount), please consult with our sales rep.
- One year warranty.
- All specifications are subject to change without prior notice.
- 36VAC on request, or comply with customer's specs.
- Add on module of 400Hz Frequency Converter and 28VDC DC Power Supply on request.





Form I: AMF Input Voltage Range

A	100 V	
B	110 V	
C	115 V	1 2W+G
D	120 V	
E	200 V	
F	208 V	1 2W+G
G	220 V	or
H	230 V	3 3W+G
I	240 V	(-connection)
J	380 V	
K	400 V	3 3W+G
L	415 V	(-connection)
M	440 V	
N	480 V	

O	110/190 V	
P	115/200 V	
Q	120/208 V	3Ø4W+G
R	127/220 V	or
T	220/380 V	3Ø3W+N+G
U	230/400 V	(Y-connection)
V	240/415 V	
W	254/440 V	
X	100/200 V	
Y	110/220 V	1 3W+G
Z	115/230 V	

Other* Input Voltages not listed in this form are all
S Special Specification type.

AMF Series Features & Advantages

- **Small, Light & Space Saving:** Typically, 1/4 size of motor-generator sets of the same power output rating.
- **High Efficiency, Optimum Stability, Superior Heat Dissipation.**
- **Cost Effective:**
 - Modular design permits quick and easy replacement.
 - High efficiency features reduce operating costs through 25% and upward utility savings compared to motor-generator sets.
 - On-site repairs are easily accomplished.
 - Motor-generator sets quite often must be removed from location for repairs, resulting in costly construction charges.
 - Solid State design eliminates the need for a concrete pad for mounting.
- **Low Noise:**
 - Solid State frequency converters have no moving mechanical parts generating a loud noise.
 - Its low audible noise level eliminates the need for expensive sound insulation.
- **Low Harmonic Distortion:** Total harmonic distortion at 3% max.
- **Pure Output Power Quality:** Double Conversion. It provides clean and consistent sine wave output.
- **±10% Output Voltage Adjustable.**
 - **Two Stage Output Frequency:** 400Hz Fixed Frequency, 350Hz~450Hz Adjustable. (Can make as per customer's specification.)
 - **Abnormal Protection:** Electronic circuits for fast detection and trip off protection for Over current, over voltage, over temperature, short circuit and Alarm system.
 - **Strong Overload Capability:** 120% - 1 hour, 150% - 1 minute, 200% - 15 seconds at 25% duty cycle.
 - **Individual Phase Regulation at Output:** Excellent voltage regulation under 100% unbalance load.
- **Output Isolation Transformer, capable to sustain CEMF (Counter-Electromotive Force).**
- **MIL-STD-704 compliant.**
 - **Option:**
 - 36VAC input voltage or according to customer's specifications.
 - Add on module of Solid State frequency converter and 28VDC power supply on request.





AMF Series

400Hz Solid State Frequency Converter Ground Power Unit

Application

Aircraft manufacturing



Aircraft Maintenance Plant



Rotary Engine Manufacturing



Engine maintenance



Hangar



Airport apron



Air Bridge



Control Center



Military aircraft / helicopter



Navy System Diagnostics



Military System Diagnostics



Radar / Military Equipment

Aircrafts

Aerospatiale ATR-42 ATR-72

■ Airbus A300 A310 A320 A340

■ Boeing 727 737 747 757 767 777

■ British Aerospace BAC 1-11 Bae146

■ Canadair

■ Challenger

■ De Havilland

■ Dash 8

■ Fokker 70 100

■ Gulfstream G III G IV

■ Lockheed L-1011 C-5 C-130 C-141 P-3

■ McDonnell Douglas

■ RJ

DC-10 MD-11 MD-80 C-17

■ Saab SF-340

Helicopters

Aerospatiale

■ Super Puma AS-332

■ Boeing / Bell Osprey V-22

■

■ Boeing Helicopter Chinook CH-47

■ McDonnell Douglas Helicopter Apache AH-64

Sikorsky Black Hawk UH-60 Series H-53

Others

Aircraft Manufacturers

■ Aerospace Equipment Manufacturers

■ Hangar

■ Air Force Base

■ Passenger Boarding Bridge (PBB)

■ Aprons

■ Control Tower

■ Meter Control Center

■ Air Force System Diagnostics

■ Military System Diagnostics

■ Navy System Diagnostics

■ R&D Dept. of Military, Defense

■ Military Equipment

■ Power Supply for Warship

Power Supply for Radar

Rotary Engineer Manufacturers

AC Power Corp. offers products widely applied in multi-professional fields and provides the best power solutions to customers. Our mission is to satisfy customers' demand by considering the whole conditions including power environment, loading allocation, module solution alternative, thoughtful design, lean and efficient manufacturing, timely and comprehensive maintenance.

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