

AMF Series

400Hz Power Supply / Ground Power Unit



The AMF series power supply is designed for 400Hz aerospace and military applications, including laboratory use, ground power for hangar and repair station, airport and factory. Stable 400Hz power input helps users on inspections, aging tests, and supplying power to aircraft.

Output voltage of the AMF series is 115/200V with an adjustable range of 10%. Users can switch between output frequency 400Hz fixed and 350~450Hz adjustable. With overload drive capability and reverse energy protection, the AMF series is ideal for motor, aerospace and military types of application.

Output Power
500VA~400kVA

Interfaces

Option

RS-485

Applications

- Aerospace & Defense
- Component Verification
- Repair Stations
- Hangars

- Output voltage 115/200V with an adjustable range of 10% and two types of output frequency 400Hz fixed and 350~450Hz adjustable.
- Optional overload function: 120% for 60mins, 150% for 60secs, and 200% for 15secs.
- Follows standards of MIL-STD-704 F.
- 4 LED displays show measurements of voltage, current, frequency and power.
- Compact size for easier maintenance and high power density.
- Comprehensive protection with corresponding error codes.
- Able to operate under unbalanced load conditions.
- Able to handle reverse energy generated by motor type EUT.

SPECIFICATIONS

AMF Series Single-Phase Output (500VA - 100kVA)

Model		AMF-500W	AMF-11001	AMF-11003	AMF-11005	AMF-11010	AMF-11020	AMF-31030	AMF-31045	AMF-31060	AMF-31100
INPUT											
Phase		1 Ø / 2 Wire +G						3Ø / 4 Wire (Y) +G (Option : 3Ø / 3 Wire (Δ) +G)			
Voltage ^{*1}		220V±15%						220V/380V±15% (Option : 220V±15%)			
Frequency		50Hz ± 3Hz or 60Hz ± 3Hz									
Max. Current ^{*2}		7.4A	14.9A	21.7A	36.2A	72.3A	145A	72A	109A	145A	241A
Power Factor		≥0.8 (Max. Power)		≥0.85 (Max. Power)							
OUTPUT											
Power	VA	500VA	1kVA	3kVA	5kVA	10kVA	20kVA	30kVA	45kVA	60kVA	100kVA
Phase		1 Ø / 2 Wire + G									
Voltage Ranges		Standard : 115V±10% Option : 220V±10% or 230V±10%									
Voltage Resolution		0.1V									
Voltage Accuracy		0.5% F.S.+4 counts									
Frequency Range		400Hz fixed and 350Hz ~ 450Hz variable (contact us for other frequency range)									
Frequency Resolution		0.1Hz									
Frequency Accuracy		±0.5% F.S.									
Max. Current (RMS) at 115V		4.3A	8.7A	26.1A	43.5A	87A	173.9A	260.9A	391.3A	521.7A	869.6A
Max. Current (RMS) at 220V (Opt.)		2.3A	4.5A	13.6A	22.7A	45.5A	90.9A	136.4A	204.5A	272.7A	454.5A
Max. Current (RMS) at 230V (Opt.)		2.2A	4.3A	13.0A	21.7A	43.5A	87.0A	130.4A	195.7A	260.9A	434.8A
Line Regulation		≤ 0.5%		< 1%				< 1.5%			
Load Regulation		≤ 0.5% (Resistive Load)		≤ 1% (Resistive Load)				≤ 1.5% (Resistive Load)			
Total Harmonic Distortion (THD)		≤ 0.5% (Resistive Load)		≤ 2% (Resistive Load)				≤ 3% (Resistive Load)			
Response Time		≤ 2ms									
MEASUREMENT											
Voltage Range		0V-300.0V									
Voltage Resolution		0.1V									
Voltage Accuracy		0.5% F.S.+4 counts									
Frequency Range		0~999.9Hz									
Frequency Resolution		0.1Hz									
Frequency Accuracy		±0.5% F.S.									
Current Range (RMS)		0-999A									
Current Resolution (RMS)		0.001A / 0.01A		4 Digits Meter / Resolution : 0.1A				4.5 Digits Meter / Resolution : 0.1A			
Current Accuracy (RMS)		0.2% F.S.+4 counts									
GENERAL											
Efficiency		≥ 45% at Max. Power			≥ 87% at Max. Power						
HMI		Digital LED Meters									
Overload Capacity		-		120%/1 hour, 150%/1 minute, 200%/15 seconds ^{*3}							
Protection		Input / Ouput Circuit Breakers and Protection Circuitry for OVP, OCP, OPP, OTP and Short Circuit									
Opertional Temperature		-20°C ~ 45°C									
Humidity		0~90% (Non condensing)									
Altitude		< 1,500m									
Dimensions (H x W x D)		200 x 430 x 520 mm	720 x 430 x 520 mm			990 x 430 x 750 mm	1240 x 600 x 970 mm		1600 x 800 x 1090 mm		1800 x 1050 x 970 mm
		7.87 x 16.92 x 20.47 inch	28.34 x 16.92 x 20.47 inch			38.97 x 16.92 x 29.52 inch	48.81 x 23.62 x 38.18 inch		62.99 x 31.49 x 42.91 inch		70.86 x 41.33 x 38.18 inch
Weight		44kg	60kg	73kg	89kg	150kg	280kg	333kg	418kg	571kg	898kg
		97lbs	132.3lbs	160.9lbs	196.2lbs	330.7lbs	617.3lbs	734.1lbs	921.5lbs	1258.8lbs	1979.8lbs

*1 Please contact us for other voltage specification.

*2 The rated input voltage is 220V or 220V/380V.

* all specifications are subject to change without notice.

*3 The unit needs a interval of at least 3 times of overload time for the next overload operation. For example, for every 1-hour of 120% overload operation, the unit needs at least 3 hours (1 hour*3) of interval for the next overload operation.

SPECIFICATIONS

AMF Series Three-Phase Output (6kVA - 75kVA)

Model	AMF-33006	AMF-33010	AMF-33015	AMF-33020	AMF-33030	AMF-33045	AMF-33060	AMF-33075	
INPUT									
Phase	3Ø / 4 Wire (Y)+G (Option : 3Ø / 3 Wire (Δ) +G)								
Voltage ^{*1}	220V/380V±15% (Option : 220V±15%)								
Frequency	50Hz ± 3Hz or 60Hz ± 3Hz								
Max. Current ^{*2}	14.5A	24.1A	36.2A	48.2A	72.3A	108.5A	144.6A	180.8A	
Power Factor	≥ 0.85 (Max. Power)								
OUTPUT									
Power	VA	6kVA	10kVA	15kVA	20kVA	30kVA	45kVA	60kVA	75kVA
Phase	3Ø / 4 Wire + G								
Voltage Ranges	115V/200V±10%								
Voltage Resolution	0.1V								
Voltage Accuracy	0.5% F.S.+4 counts								
Frequency Range	400Hz fixed and 350Hz ~ 450Hz variable (contact us for other frequency range)								
Frequency Resolution	0.1Hz								
Frequency Accuracy	±0.5% F.S.								
Max. Current (RMS)	17.4A	29A	43.5A	58A	87A	130.4A	173.9A	217.4A	
Line Regulation	≤ 0.5%						≤ 1%		
Load Regulation	≤ 1%						≤ 1.5%		
Total Harmonic Distortion (THD)	≤ 2%						≤ 3%		
Response Time	≤ 2ms								
MEASUREMENT									
Voltage Range	0V-300.0V								
Voltage Resolution	0.1V								
Voltage Accuracy	0.5% F.S.+4 counts								
Frequency Range	0~999.9Hz								
Frequency Resolution	0.1Hz								
Frequency Accuracy	±0.5% F.S.								
Current Range(RMS)	0-999A								
Current Resolution(RMS)	4 Digits Meter / Resolution : 0.1A						4.5 Digits Meter / Resolution : 0.1A		
Current Accuracy(RMS)	0.2% F.S.+4 counts								
GENERAL									
Efficiency	≥ 87% at Max. Power								
HMI	Digital LED Meters								
Phase Angle	For Balanced Load: ≤ ± 2° ; For 100% Unbalanced Load: ≤ ± 4°								
Overload Capacity	120%/1 hour, 150%/1 minute, 200%/15 seconds ^{*3}								
Protection	Input / Ouput Circuit Breakers and Protection Circuitry for OVP, OCP, OPP, OTP and Short Circuit								
Opertional Temperature	-20°C ~ 45°C								
Humidity	0~90% (Non condensing)								
Altitude	< 1,500m								
Dimensions (H x W x D)	990 x 430 x 750 mm		1240 x 600 x 970 mm			1600 x 800 x 1090 mm			
	38.97 x 16.92 x 29.52 inch		48.81 x 23.62 x 38.18 inch			62.99 x 31.49 x 42.91 inch			
Weight	150kg	175kg	265kg	345kg	385kg	528kg	635kg	700kg	
	330.7lbs	385.8lbs	584.2lbs	760.6lbs	848.8lbs	1164lbs	1399.9lbs	1543.2lbs	

*1 Please contact for other voltage specification.

*2 The rated input voltage is 220V/380V.

* all specifications are subject to change without notice.

*3 The unit needs a interval of at least 3 times of overload time for the next overload operation. For example, for every 1-hour of 120% overload operation, the unit needs at least 3 hours (1 hour*3) of interval for the next overload operation.

SPECIFICATIONS

AMF Series Three-Phase Output (100kVA - 400kVA)

Model		AMF-33100	AMF-33120	AMF-33150	AMF-33180	AMF-33200	AMF-33250	AMF-33300	AMF-33400
INPUT									
Phase		3Ø / 4 Wire (Y)+G (Option : 3Ø / 3 Wire (Δ) +G)							
Voltage ^{*1}		220V/380V±15% (Option : 220V±15%)							
Frequency		50Hz ± 3Hz or 60Hz ± 3Hz							
Max. Current ^{*2}		241A	289.3A	361.6A	433.9A	482.1A	602.6A	723.1A	964.2A
Power Factor		≥ 0.85 (Max. Power)							
OUTPUT									
Power	VA	100kVA	120kVA	150kVA	180kVA	200kVA	250kVA	300kVA	400kVA
Phase		3Ø / 4 Wire + G							
Voltage Ranges		115V/200V±10%							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+4 counts							
Frequency Range		400Hz fixed and 350Hz ~ 450Hz variable (contact us for other frequency range)							
Frequency Resolution		0.1Hz							
Frequency Accuracy		±0.5% F.S.							
Max. Current (RMS)		289.9A	347.8A	434.8A	521.7A	579.7A	724.6A	869.6A	1159.4A
Line Regulation		≤ 1%							
Load Regulation		≤ 1.5%							
Total Harmonic Distortion(THD)		≤ 3 %							
Response Time		≤ 2ms							
MEASUREMENT									
Voltage Range		0V-300.0V							
Voltage Resolution		0.1V							
Voltage Accuracy		0.5% F.S.+4 counts							
Frequency Range		0~999.9Hz							
Frequency Resolution		0.1Hz							
Frequency Accuracy		±0.5% F.S.							
Current Range(RMS)		0-999A							
Current Resolution(RMS)		4.5 Digits Meter / Resolution : 0.1A							
Current Accuracy(RMS)		0.2% F.S.+4 counts							
GENERAL									
Efficiency		≥ 87% at Max. Power							
HMI		Digital LED Meters							
Phase Angle		For Balanced Load: ≤ ± 2° ; For 100% Unbalanced Load: ≤ ± 4°							
Overload Capacity		120%/1 hour, 150%/1 minute, 200%/15 seconds ^{*3}							
Protection		Input / Ouput Circuit Breakers and Protection Circuitry for OVP, OCP, OPP, OTP and Short Circuit							
Opertional Temperature		-20°C ~ 45°C							
Humidity		0~90% (Non condensing)							
Altitude		< 1,500m							
Dimensions (H x W x D)		1800 x 1050 x 970 mm		1900 x 1150 x 1240 mm				2000 x 2240 x 1240 mm	
		70.86 x 41.33 x 38.18 inch		74.8 x 45.27 x 48.81 inch				78.7 x 88.18 x 48.81 inch	
Weight		1000kg	1200kg	1350kg	1800kg	2000kg	2270kg	2740kg	3030kg
		2204.62lbs	2645.54lbs	2976.24lbs	3968.32lbs	4409.24lbs	5004.49lbs	6040.66lbs	6680lbs

*1 Please contact for other voltage specification.

*2 The rated input voltage is 220V/380V.

* all specifications are subject to change without notice.

*3 The unit needs a interval of at least 3 times of overload time for the next overload operation. For example, for every 1-hour of 120% overload operation, the unit needs at least 3 hours (1 hour*3) of interval for the next overload operation.