

60/400 Hz for Airfield Ground Power

Standard Motor-Generators



	Voltage	kW	kVA
Six standard models	200-208	75	93.75
	200-208	144	180
	575	144	180
	575	250	312
	575	320	400
	575	400	400

MG Set

Speed: 1200 RPM

Efficiency: See table on reverse

Duty Cycle: Continuous

Overload: 110%, 2/24 hours

Temperature: 95°C rise/40°C ambient

Insulation: Class F

Excitation: Brushless synchronous

Construction: Open drip-proof enclosure for rotating part. Common frame single-shaft two-bearing horizontal construction for low vibration and ease of maintenance. Stator built with silicon electrical steel laminations. Coils are film-insulated copper wire vacuum-pressure impregnated with a Class F insulation system. Rotor is laminated steel with field winding of insulated copper wire, impregnated with 100% solids resin. Bearings are re-greasable anti-friction with grease fittings accessible while running.

Motor component

Type: Synchronous

Poles: 6

Frequency: 60 Hz

Phase: 3

Connection: Wye

Voltage: 480 V

Power Factor: 1.0 nominal

NEMA Code: "A" in S-P start

Inrush Amps: See table on reverse

Starts/hour: 2 (1 cold/1 hot per NEMA MG-1 21.13.1)

Transient: Per table on reverse

Generator component

Type: Synchronous

Poles: 40

Frequency: 400 Hz

Phase: 3

Connection: Wye

kVA and kW: See table on reverse

Voltage: See table on reverse

Power Factor: 0.8

Voltage Balance: 1% with balanced load (MIL-STD-705), 4% with 33% unbalanced current

Waveform: 3% max. T.H.D., 2% max. individual harmonic w.r.t. fundamental, linear load

Transient: See table on reverse

Controls component

Enclosure: NEMA 1 steel mounted on top of the M-G set. Cable entry through top.

Key functions, features:

Motor starter, 3 phase, reduced current, with overload relay and START/STOP controls

Motor Ammeter 3 1/2"

Generator Voltmeter (digital) and Ammeter 3 1/2"

Output Disconnect Contactor

Output Circuit Breaker

Protective Relays:
Overload
Underfrequency
Undervoltage
Overvoltage

Paralleling Controls (selected models)

Options:

- Input Circuit Breaker
- Input Phase Sequence Relay
- 4 1/2" Meters
- Space Heaters
- Audible Alarm
- UL 508 on Control Panel
- EMI suppression (to MIL 461)
- Weather-proof enclosure
- Trailer mount



Generator

Voltage	200-208	200-208	575	575	575	575
Rated kW	75	144	144	250	320	400
Rated kVA	93.75	180	180	312	400	400
Transient						
0-50% load	-9.0%	-8.0%	-8.0%	-7.0%	-12.5%	-8.3%
Sec to 95%	0.150	0.150	0.050	0.260	0.260	0.150
0-100% load:	-18.0%	-16.0%	-16.0%	-14.0%	-22.5%	-15%
Sec to 95%	0.150	0.150	0.150	0.320	0.320	0.150
50-0% load	11.0%	10.0%	10.0%	8.0%	13.5%	9%
Sec to 105%	0.160	0.160	0.160	0.260	0.260	0.160
100-0% load	22%	20%	20%	16%	28%	20%
Sec to 105%	0.160	0.160	0.160	0.320	0.320	0.160

Motor

HP at Gen FL	125	210	210	360	470	560
Amps at FL	116	205	205	355	445	550
A-Series start	185	390	390	750	850	900
SkVA/Hp (ser)	1.3	1.5	1.5	1.6	1.5	1.3
Code letter	A	A	A	A	A	A

MG Set

Efficiency at P.F.						
@ 2/4 Load	80.6%	82.3%	82.3%	82.0%	84.0%	85.2%
@ 4/4 Load	81.2%	84.5%	84.5%	86.0%	87.0%	89.0%
Paralleling	No	No	No	Yes	Yes	Yes

Values are typical but may vary slightly.



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