

MEG 150NM Technical data



Frequency	Hz	60
Continuous Electric Output @ 1.0pf	kWe	152
Mechanical Power	bhp	215
Max Permissible Oil Consumption	lb/hr	0.176

Engine Information	
Manufacturer	MAN
Model number	E 2676 E 302
Fuel type	Natural Gas
Aspiration	Rich
Cylinders	6 in-line
Min Methane Number	80
RPM	1800

Generator Information	
Manufacturer	Stamford
Model Number	UCI274H
Class - Temp Rise	Cont. F - 105°F Rise
Voltage	480
Phase	3
Ingress protection	IP23
Insulation class	H

Energy Balance			100%	75%	50%
Electrical Power Output @ 1.0PF	(+/-3%)	kW	152	114	76
Electric Efficiency (LHV)	(+/-5%)	%	36.97%	35.26%	30.64%
Thermal Efficiency (LHV)	(+/-8%)	%	54.77%	57.32%	61.88%
Combined Efficiency (LHV)	(+/-8%)	%	91.74%	92.58%	92.53%
Fuel Consumption (LHV)	(+ 5%)	BTU/hr	1,403,009	1,103,318	846,235
Heat Rate (LHV)		BTU/kWe-Hr	9,230	9,678	11,135
Total Heat Output	(+/-10%)	BTU/hr	768,444	632,419	523,680
Heat from water jacket	(+/-8%)	BTU/hr	415,366	364,721	338,376
Heat from exhaust (cooled to 248°F)	(+/-8%)	BTU/hr	353,078	267,698	185,304
Heat from Intercooler	(+/-8%)	BTU/hr	0	0	0
Radiated Output	(+/-25%)	BTU/hr	27,321	17,076	10,246
Cooling (absorption chiller single effect)	(+/-8%)	TONS	44.8	36.9	30.5
Steam Output @ 15 PSIG	(+/-8%)	Lb/hr	272	216	170
Exhaust temperature	(+/-20%)	DEG F	1,220	1,220	1,220
Combustion Mass Airflow	(+/-5%)	Lb/hr	1,062	844	665
Exhaust Mass flow (wet)	(+/-10%)	Lb/hr	1,127	896	705
Exhaust Volume Flow (cooled to 248°F)	(+/-5%)	ACFM	343	273	215

Secondary Hot water system		
Hot water loop flow rate	79	GPM
Hot water loop temperatures (in/out)	170/190	DEG F
Hot water loop pressure loss	3	PSID
Flange connection size	3	in
Glycol content	0	%

Electrical Details	
Alternator	Synchronous
Inverter option	Available
CHP main breaker size	400AF/200AT
Current per phase @ 1.0Pf	183.04A
Alternator efficiency @1.0Pf	93.0%
Current per phase @ 0.8Pf	228.8A
Alternator efficiency @0.8Pf	93.0%

Exhaust details		
Max Allowable backpressure	in H2O	16
Flange Type	ANSI B16.5 Class 150	
Flange Size	in	6

Package Emissions		
NO _x	g/BHP-hr	1.0
CO	g/BHP-hr	2.0
NMHC	g/BHP-hr	0.7

Fuel Gas Details		
Min/Max Supply pressure	in H2O/PSIG	18/5
Flange Type	ANSI B16.5 Class 150	
Lower Calorific Value	BTU/ft ³	905
Flange Size	in	2

Noise	
Sound power level @ 3ft	65 dBA
Sound pressure level @ 3ft	75 dBA

*For octave band frequency please contact Martin Energy Group

Ventilation details		
Air flow requirements	ACFM	3572
Connection size	in	32.75

Package overall dimensions		
Length	in	185
Width	in	65
Height	in	105

Notes

Energy balance data is stated at ISO 3046-1 conditions.

Values for part load are estimates only.

Noise data stated at free-field conditions.

All information detailed is for guidance only and is subject to change without notice due to our commitment to continuous improvement

Revision

0

Issue date

mm/dd/year