

MEG 240NM Technical Data

Engine Information		
MAN Engine ID		E 2676 LE 202
Model Number		E 2676 LE 202
RPM		1800
Fuel Type		Natural Gas
Aspiration & NO _x	<i>g/bhp-hr</i>	Lean, 1.0
Supply Fuel Pressure	<i>psi</i>	3-5

Generator Model Information	
Newage	HCI434D
KVA	239
Voltage	480
Frequency	<i>Hz</i> 60
Power Factor	1.0
Base rating: 276 KW @ (Amb. 40°C 105°C Rise Class H 0.8PF)	

Engine Performance		Unit	100%	75%	50%
Electrical Power		kWe	239	179	118
Mechanical Power		bHP	335	252	168
Exhaust Flow		lb/h	3,126	2,357	1,649
Exhaust Temp		°F	824	824	824
Heat to Radiation	<i>(Ambient)</i>	BTU/h	44,340	34,140	23,880
Fuel Consumption	<i>(LHV)</i>	BTU/h	2,159,880	1,671,960	1,190,820
Fuel Consumption	<i>(LHV)</i>	BTU/bHP-hr	6,447	6,635	7,088
Fuel Consumption	<i>(LHV)</i>	BTU/kWh	9,056	9,336	10,076

Energy Balance			100%	75%	50%
Total Primary Heat Recovered		BTU/h	632,276	487,509	379,433
Total Secondary Heat Recovered		BTU/h	0	0	0
Total Steam Recovered		BTU/h	355,972	268,402	187,779
Total Heat Recovered		BTU/h	988,248	755,912	567,212
Electrical Efficiency	<i>(LHV)</i>	%	37.68%	36.55%	33.86%
Thermal Efficiency	<i>(LHV)</i>	%	45.75%	45.21%	47.63%
Total Efficiency	<i>(LHV)</i>	%	83.43%	81.76%	81.49%

Primary Circuit		<i>Water</i>		100%	75%	50%
Process Water Flow		GPM		76	61	49
Process Water Temp Inlet		°F		170	170	170
Process Water Temp Outlet		°F		187	186	186

Secondary Circuit		<i>None</i>		100%	75%	50%
Secondary Water Flow		GPM		0	0	0
Secondary Water Temp Inlet		°F		0	0	0
Secondary Water Temp Outlet		°F		0	0	0

Steam Production		<i>Feed: 200 °F @ 60 psig</i>	<i>(Exhaust cooled to: 407 °F)</i>		100%	75%	50%
Steam Produced	<i>Steam temp: 307 °F</i>			lb/h	351	264	185

Engine HT Circuit		<i>50% Ethylene glycol</i>		100%	75%	50%
Jacket Water Heat		BTU/h		501,600	388,980	310,500
Exhaust Heat	<i>cooled to 248 °F [eco]</i>	BTU/h		130,676	98,529	68,933
HT Radiator Rejection		BTU/h		0	0	0
Jacket Water Temp Inlet		°F		182	184	185
Jacket Water Temp Outlet		°F		190	190	190
Jacket Water Flowrate		GPM		150	150	150

Engine LT Circuit		<i>50% Ethylene glycol</i>		100%	75%	50%
Intercooler Heat		BTU/h		71,640	68,220	54,600
LT Radiator Rejection		BTU/h		-71,640	-68,220	-54,600
Intercooler Water Temp Inlet		°F		104	104	104
Intercooler Water Temp Outlet		°F		107	107	107
Intercooler Water Flowrate		GPM		50	50	50

Radiator Specifications	% Oversize	Capacity BTU/h	Ambient	Altitude	Voltage
HT Radiator	10	551,760	105 °F	1,000 ft	480
LT Radiator	25	89,550			

Notes

Energy balance data is stated at ISO 3046-1 conditions

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