

MEG 60NM

Engine Information		
MAN Engine ID		E 0834 E 302
Model Number		E 0834 E 302
RPM		1800
Fuel Type		Natural Gas
Aspiration & NO _x	<i>g/bhp-hr</i>	Rich, 17.4
Supply Fuel Pressure	<i>psi</i>	3-5

Generator Model Information	
Newage	UCI224F
KVA	58
Voltage	480
Frequency	<i>Hz</i> 60
Power Factor	1.0
Base rating: 66 KW @ (Amb. 40°C 105°C Rise Class H 0.8PF)	

Engine Performance	Unit	100%	75%	50%
Electrical Power	kWe	58	44	29
Mechanical Power	bHP	83	63	42
Exhaust Flow	lb/h	487	395	298
Exhaust Temp	°F	1,202	1,148	1,076
Heat to Radiation	<i>(Ambient)</i> BTU/h	47,760	47,760	47,760
Fuel Consumption	<i>(LHV)</i> BTU/h	580,080	470,880	354,840
Fuel Consumption	<i>(LHV)</i> BTU/bHP-hr	6,989	7,474	8,449
Fuel Consumption	<i>(LHV)</i> BTU/kWh	10,023	10,723	12,218

Energy Balance				
Total Primary Heat Recovered	BTU/h	308,301	255,946	203,828
Total Secondary Heat Recovered	BTU/h	0	0	0
Total Steam Recovered	BTU/h	0	0	0
Total Heat Recovered	BTU/h	308,301	255,946	203,828
Electrical Efficiency	<i>(LHV)</i> %	34.04%	31.82%	27.93%
Thermal Efficiency	<i>(LHV)</i> %	53.15%	54.35%	57.44%
Total Efficiency	<i>(LHV)</i> %	87.19%	86.17%	85.37%

Primary Circuit <i>Water</i>				
Process Water Flow	GPM	32	26	22
Process Water Temp Inlet	°F	170	170	170
Process Water Temp Outlet	°F	190	190	189

Secondary Circuit <i>None</i>				
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				
Steam Produced	lb/h	N/A	N/A	N/A

Engine HT Circuit <i>50% Ethylene glycol</i>				
Jacket Water Heat	BTU/h	174,000	153,540	133,080
Exhaust Heat	<i>cooled to 248 °F</i> BTU/h	134,301	102,406	70,748
HT Radiator Rejection	BTU/h	0	0	0
Jacket Water Temp Inlet	°F	180	181	182
Jacket Water Temp Outlet	°F	190	190	190
Jacket Water Flowrate	GPM	38	38	38

Engine LT Circuit <i>50% Ethylene glycol</i>				
Intercooler Heat	BTU/h	0	0	0
LT Radiator Rejection	BTU/h	0	0	0
Intercooler Water Temp Inlet	°F	0	0	0
Intercooler Water Temp Outlet	°F	0	0	0
Intercooler Water Flowrate	GPM	0	0	0

Radiator Specifications	% Oversize	Capacity BTU/h	Ambient	Altitude	Voltage
HT Radiator	10	191,400	105 °F	1,000 ft	480
LT Radiator	25	0			

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

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Issue Date
1/2/2019