# MEG 240NM Technical Data

## Generator Model Information
- Newage: HCI434D
- KVA: 239
- Voltage: 480
- Frequency: Hz 60
- Power Factor: 1.0

Base rating: 276 KW @ (Amb. 40°C | 105°C Rise | Class H | 0.8PF)

## Engine Information
- MAN Engine ID: E 2676 LE 202
- Model Number: E 2676 LE 202
- RPM: 1800
- Fuel Type: Natural Gas
- Aspiration & NOx: Lean, 1.0
- Supply Fuel Pressure: psi 3-5

## Engine Performance

<table>
<thead>
<tr>
<th>Unit</th>
<th>100%</th>
<th>75%</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Power</td>
<td>kWe</td>
<td>239</td>
<td>179</td>
</tr>
<tr>
<td>Mechanical Power</td>
<td>bHP</td>
<td>335</td>
<td>252</td>
</tr>
<tr>
<td>Exhaust Flow</td>
<td>lb/h</td>
<td>3,126</td>
<td>2,357</td>
</tr>
<tr>
<td>Exhaust Temp</td>
<td>°F</td>
<td>824</td>
<td>824</td>
</tr>
<tr>
<td>Heat to Radiation (Ambient)</td>
<td>BTU/h</td>
<td>44,340</td>
<td>34,140</td>
</tr>
<tr>
<td>Fuel Consumption (LHV)</td>
<td>BTU/h</td>
<td>2,159,880</td>
<td>1,671,960</td>
</tr>
<tr>
<td>Fuel Consumption (LHV)</td>
<td>BTU/kWh</td>
<td>9,056</td>
<td>9,336</td>
</tr>
</tbody>
</table>

## Energy Balance

- Total Primary Heat Recovered: 632,276 BTU/h
- Total Secondary Heat Recovered: 0 BTU/h
- Total Steam Recovered: 355,972 BTU/h
- Total Heat Recovered: 986,248 BTU/h
- Electrical Efficiency (LHV): % 37.68%
- Thermal Efficiency (LHV): % 45.75%
- Total Efficiency (LHV): % 83.43%

- Total Primary Heat Recovered: 487,509 BTU/h
- Total Secondary Heat Recovered: 0 BTU/h
- Total Steam Recovered: 268,402 BTU/h
- Total Heat Recovered: 755,912 BTU/h
- Electrical Efficiency (LHV): % 36.55%
- Thermal Efficiency (LHV): % 45.21%
- Total Efficiency (LHV): % 81.76%

## Primary Circuit
- Water
  - Process Water Flow: GPM 76
  - Process Water Temp Inlet: °F 170
  - Process Water Temp Outlet: °F 187

## Secondary Circuit
- Water
  - Secondary Water Flow: GPM 0
  - Secondary Water Temp Inlet: °F 0
  - Secondary Water Temp Outlet: °F 0

## Steam Production
- Feed: 200 °F @ 60 psig
- Exhaust cooled to: 407 °F
- Steam Temp: 307 °F
- Steam Produced: lb/h 351
- Steam Produced: Calories 264
- Steam Produced: BTU 185

## Engine HT Circuit
- 50% Ethylene glycol
  - Jacket Water Heat: BTU/h 501,600
  - Exhaust Heat: BTU/h 130,676
  - Jacket Water Temp Inlet: °F 182
  - Jacket Water Temp Outlet: °F 190
  - Jacket Water Flowrate: GPM 150

## Engine LT Circuit
- 50% Ethylene glycol
  - Intercooler Heat: BTU/h 71,640
  - LT Radiator Rejection: BTU/h -71,640
  - Intercooler Water Temp Inlet: °F 104
  - Intercooler Water Temp Outlet: °F 107
  - Intercooler Water Flowrate: GPM 50

## Radiator Specifications
- % Oversize | Capacity BTU/h | Ambient | Altitude | Voltage |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>HT Radiator</td>
<td>10</td>
<td>551,760</td>
<td>105 °F</td>
<td>1,000 ft</td>
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<tr>
<td>LT Radiator</td>
<td>25</td>
<td>89,550</td>
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</tbody>
</table>

## Notes
- Energy balance data is stated at ISO 3046-1 conditions
- Martin Energy Group v4.1.2.5
- Issue Date 11/15/2018