Manufacturer’s statement
ACS880-01 and High output SynRM motor package efficiency

Drive: ACS880-01-293A-3
Motor: M3BL 250SMB, 3GBL252007-ASB, $P_n$ 112 kW, 3000 rpm

<table>
<thead>
<tr>
<th>Speed</th>
<th>Speed rpm</th>
<th>$P/P_n$</th>
<th>Package efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 %**</td>
<td>1500</td>
<td>13 %**</td>
<td>85.5 %</td>
</tr>
<tr>
<td>63 %</td>
<td>1890</td>
<td>25 %</td>
<td>88.5 %</td>
</tr>
<tr>
<td>75 %</td>
<td>2250</td>
<td>42 %</td>
<td>90.3 %</td>
</tr>
<tr>
<td>80 %</td>
<td>2400</td>
<td>51 %</td>
<td>90.9 %</td>
</tr>
<tr>
<td>91 %</td>
<td>2730</td>
<td>75 %</td>
<td>92.0 %</td>
</tr>
<tr>
<td>100 %**</td>
<td>3000</td>
<td>100 %**</td>
<td>92.5 %*</td>
</tr>
</tbody>
</table>

*Estimated tolerance according to IEC 60034-1:
  ≤150kW: 0.15 x (100 - package efficiency (%)) at the nominal point
  >150kW: 0.10 x (100 - package efficiency (%)) at the nominal point
**Measurement points according to EN 50598-2 (will be published 2014)
Package efficiency [%] for applications with other load characteristics:

Efficiency $\eta = \frac{P_2}{P_1}$

Points of measurement

Electrical Power $P_1$

Mechanical Power $P_2$

Efficiency $\eta = \frac{P_2}{P_1}$

Efficiency measurements were made at:

<table>
<thead>
<tr>
<th>Location</th>
<th></th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB verification laboratory, Vaasa</td>
<td>X</td>
<td>ABB verification laboratory, Västerås</td>
</tr>
<tr>
<td>ABB verification laboratory, Helsinki</td>
<td></td>
<td></td>
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</tbody>
</table>