Manufacturer’s statement
ACS880-01 and IE4 SynRM motor package efficiency

Drive: ACS880-01-087A-3
Motor: M3BL 200MLB, 3GBL202102-ASC, \( P_n \) 37 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>85,8 %</td>
</tr>
<tr>
<td>63 %</td>
<td>1890</td>
<td>25 %</td>
<td>89,1 %</td>
</tr>
<tr>
<td>75 %</td>
<td>2250</td>
<td>42 %</td>
<td>90,9 %</td>
</tr>
<tr>
<td>80 %</td>
<td>2400</td>
<td>51 %</td>
<td>91,3 %</td>
</tr>
<tr>
<td>91 %</td>
<td>2730</td>
<td>75 %</td>
<td>92,1 %</td>
</tr>
<tr>
<td>100 %**</td>
<td>3000</td>
<td>100 %**</td>
<td>92,6 %*</td>
</tr>
</tbody>
</table>

*Estimated tolerance according to IEC 60034-1:
\[ \leq 150\text{kW}: 0.15 \times (100 - \text{package efficiency} \%) \] at the nominal point
\[ > 150\text{kW}: 0.10 \times (100 - \text{package efficiency} \%) \] at the nominal point

**Measurement points according to EN 50598-2 (will be published 2014)
Package efficiency [%] for applications with other load characteristics:

- Color scales are comparable within following power ranges:
  1 to 3 kW
  >3 to 15 kW
  >15 to 350 kW

Points of measurement:

- Efficiency: \( \eta = \frac{P_2}{P_1} \)
- Efficiency measurements were made at:
  - ABB verification laboratory, Vaasa
  - ABB verification laboratory, Västerås
  - ABB verification laboratory, Helsinki