Njorgen

Specialists in alternators

For over 60 years Mecc Alte have been specializing in one thing only, producing the finest most reliable alternators for use across a multitude of applications.
Mini Wind Turbine

Small wind turbines are one of the most adaptable, flexible and easy to use technologies for generating sustainable and cheap electricity: for this reason this market demand is exploding right now.

Unfortunately, the market on this application is affected from the lack of industrialized components with a specific designed performance.

New turbine producers usually have to design on their own all the parts, increasing the costs and inflating the time to market.

Mecc Alte Njorgen Solution

In order to satisfy this particular application, MeccAlte decided to fill the gap in the current generator industry and to design a new series of alternator focused on this new application. The Njorgen series, ranging from 5kW to 20kW, is completing the great success found by the Eogen series (0.5kW – 5kW). By means of the oversized double bearing design, Njorgen are the perfect solution both for vertical and horizontal wind turbine as it can be used as rotating hub for the blades, which result in the better solution for the integrator.

Technical Specs:

- 34 Poles, Voltage tuned on customer request
- 20+ years life design
- NeFeB Magnets
- IP55, totally enclosed generator for a total reliability
- Low friction SKF bearings
- Nominal speed ~150rpm, Max speed up to 4200 rpm
- Starting and cogging torque minimized
- Efficiency >92.5%, cold copper design
- Mast or Hub integrated
### Njorgen

<table>
<thead>
<tr>
<th>Model</th>
<th>Njorgen 105/34</th>
<th>Njorgen 210/34</th>
<th>Njorgen 315/34</th>
<th>Njorgen 420/34</th>
</tr>
</thead>
<tbody>
<tr>
<td><em><em>Power (nominal speed)</em> [kW]</em>*</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td><strong>Voltage (nominal speed and load)† [V]</strong></td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td><strong>Nominal Speed ‡ [rpm]</strong></td>
<td>150</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td><strong>Weight [kg]</strong></td>
<td>178</td>
<td>256</td>
<td>332</td>
<td>410</td>
</tr>
<tr>
<td><strong>Dimension A [mm]</strong></td>
<td>445</td>
<td>550</td>
<td>655</td>
<td>760</td>
</tr>
<tr>
<td><strong>Dimension B [mm]</strong></td>
<td>305</td>
<td>410</td>
<td>515</td>
<td>620</td>
</tr>
<tr>
<td><strong>Bearing Size †</strong></td>
<td>6024 2Z</td>
<td>6024 2Z</td>
<td>6024 2Z</td>
<td>6024 2Z</td>
</tr>
<tr>
<td><strong>Max Axial load [kg]</strong></td>
<td>&gt;2550</td>
<td>&gt;2550</td>
<td>&gt;2550</td>
<td>&gt;2550</td>
</tr>
</tbody>
</table>

* Nominal power referred to class H continuous rating; 10% overload is accepted 1h every 6 hours of operations.

† Custom voltage, speed and power output are available on request.

‡ Custom mechanical solutions are also available on dedicated projects.

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All the data have to be considered as preliminary. Please contact a MeccAlte representative or consult [www.meccalte.com](http://www.meccalte.com) for confirmation.