Cooling Tower
Direct Drive System
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In order to provide cooling towers with greater reliability and efficiency, WEG developed the Cooling Tower Direct Drive System to replace conventional cooling tower ventilation systems – formed by motor, driving shaft and gearbox – reducing mechanical losses, which enables higher performances.

The rotor of the Cooling Tower Direct Drive features permanent magnets which ensure high performance levels with high torque, even at low speeds. This new motor, since it does not require a gearbox, eliminates tower water contamination by the gearbox oil and presents great advantages to the system, such as lower consumption with the airflow control, fewer shutdowns for maintenance and lower noise.

The conventional tower ventilation system requires more mechanical repairs due to:

- Gearbox faults
- Oil contamination and leaks
- Mechanical misalignment
- Excessive vibrations

Benefits

- Greater power efficiency
- Greater coupling efficiency
- Greater safety and reliability
- Less noise
- Less maintenance
- Reduction of mechanical losses by eliminating gearbox and driving shaft
### Technical Data

#### Cooling Tower Direct Drive System

<table>
<thead>
<tr>
<th>Frame</th>
<th>Output cv (kW)</th>
<th>Speed (RPM)</th>
<th>Rated Torque (Nm)</th>
<th>Rated Current (A)</th>
<th>Efficiency η (%)</th>
<th>Power Factor cos φ</th>
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</thead>
<tbody>
<tr>
<td>280S/M</td>
<td>25(18.5)</td>
<td>320</td>
<td>552</td>
<td>36,8</td>
<td>93,4</td>
<td>0,97</td>
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<td>280S/M</td>
<td>40(30)</td>
<td>320</td>
<td>900</td>
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<td>0,97</td>
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<td>315S/M</td>
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<td>83,8</td>
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<td>0,90</td>
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<td>0,79</td>
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</tbody>
</table>

**Rated current 380 V**

#### Frame

- **D**
- **d1**
- **E**
- **ES**
- **F**
- **G**
- **GD**
- **L**
- **LA**
- **AD**
- **S1**
- **ØM**
- **ØN**
- **ØP**
- **S**
- **T**

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Dimensions in millimeters (mm)
For those countries where there is not a WEG own operation, find our local distributor at www.weg.net.