KSB SuPremE® in IE5* – The World’s Most Efficient Magnet-less Pump Motor

Applications:
- Centrifugal pump applications
- Service/drinking water supply
- Irrigation and drainage
- Heating and cooling circuits
- Fire-fighting water handling
- Condensate transport
- Rotating Equipment
- Positive displacement pumps
- Fans
- Compressors
- And much else

More information:
www.ksb.com/products

KSB SuPremE® motor 7,5 kW
KSB SuPremE® in IE5* – The World’s Most Efficient Magnet-less Pump Motor

- **Energy savings of 70 % or more are possible**
  The speed-controlled KSB SuPremE® motor works like an energy diet: The large efficiency gain of up to 60 % due to speed control is increased even further by an energy saving of up to 15 % in the motor alone.

- **Future-proof with efficiency class IE5**
  Meets the IE5* efficiency requirements.

- **Sustainable**
  Built completely without magnetic materials, its total environmental footprint is significantly smaller than that of permanent-magnet synchronous and asynchronous motors.

- **Robust**
  The use of non-critical, durable materials, as well as the fully matured reluctance principle make the KSB SuPremE® motor* a durable, reliable drive that is in no way inferior to other types of drive.

- **Compatible**
  Wherever there is room for an IE2 asynchronous motor, a KSB SuPremE® motor with identical connecting dimensions can also get the work done efficiently.

Unparalleled potential savings due to extremely high efficiency – especially in the part-load range.

The diagram shows the efficiency curve plotted over the load of a 7.5 kW, 1500 rpm KSB SuPremE® motor in comparison to a 2-pole, IE3 asynchronous motor. Load profile to “Blue Angel” requirements.

Source: Dipl.-Ing. M. Wiele, Prof. Prof. h. c. mult. Dr.-Ing. Peter F. Brosch, Hochschule Hannover, University of Applied Sciences and Arts, Faculty I, Drives and Automation Technology.

* IE5 in accordance with IEC/TS 60034-30-2

The products illustrated as examples are partly fitted with options and accessories incurring a surcharge.

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**Technical data**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
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<tbody>
<tr>
<td>Synchronous reluctance motor of efficiency class IE5*</td>
<td></td>
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<tr>
<td>Combination with KSB PumpDrive</td>
<td></td>
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<tr>
<td>Drive for dry-installed centrifugal pumps outside potentially explosive atmospheres</td>
<td></td>
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<tr>
<td>IEC power ratings</td>
<td>0.55 kW - 45 kW</td>
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<tr>
<td>Rated speed</td>
<td>1500 and 3000 rpm</td>
</tr>
<tr>
<td>Speed range</td>
<td>0 – 2100 rpm at 1500 rpm rated speed</td>
</tr>
<tr>
<td>Speed range</td>
<td>0 – 4200 rpm at 3000 rpm rated speed</td>
</tr>
<tr>
<td>Versorgungsspannung gemäß technischer Daten</td>
<td>KSB PumpDrive 380-480 V (3-phäsig) 50/60 Hz</td>
</tr>
<tr>
<td>Basic type of construction</td>
<td>B3 and V15, and many others</td>
</tr>
<tr>
<td>IP55 enclosure</td>
<td></td>
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<tr>
<td>Ambient temperature</td>
<td>40 °C without derating</td>
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</tbody>
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www.none-more-efficient.com