INDUSTRIAL SYSTEM SOLUTIONS

Enabling Productivity, Precision and Energy Efficiency

- 70+ years experience
- 10,000 servo solutions
- 4 million motors
- 20,000 gearless machines for elevators
MOTORS PRODUCT RANGE

**LV MOTORS: SAFE AREA**

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>Frame</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE2 Motors</td>
<td>71 to 355</td>
<td>0.37 to 355</td>
</tr>
<tr>
<td>IE3 Motors</td>
<td>80 to 355</td>
<td>0.55 to 355</td>
</tr>
</tbody>
</table>
| IE4 Motors                 | 112 to 225| 0.55 to 45 
| Large LV Motors (DCCA)     | 355 to 450| 280 to 1250|

**LV MOTORS: HAZARDOUS AREA**

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>Frame</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE2 Flame Proof Motors</td>
<td>80 to 315</td>
<td>0.37 to 200</td>
</tr>
<tr>
<td>IE3 Flame Proof Motors</td>
<td>80 to 315</td>
<td>0.75 to 180</td>
</tr>
<tr>
<td>IE2 Non Sparking Motors</td>
<td>71 to 355</td>
<td>0.37 to 355</td>
</tr>
</tbody>
</table>

**LV MOTORS: SPECIAL PURPOSE**

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>Frame</th>
<th>Power (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crane &amp; Hoist Duty Motors</td>
<td>71 to 355</td>
<td>0.37 to 400</td>
</tr>
<tr>
<td>Cane Unloader Motors</td>
<td>160 to 225</td>
<td>11 to 30</td>
</tr>
<tr>
<td>Brake Motors</td>
<td>71 to 132</td>
<td>0.25 to 9.3</td>
</tr>
<tr>
<td>Slip ring Motors</td>
<td>100 to 160</td>
<td>1.10 to 10</td>
</tr>
<tr>
<td>Textile Motors</td>
<td>100 to 160</td>
<td>1.1 to 15</td>
</tr>
</tbody>
</table>

**MEDIUM VOLTAGE MOTORS UPTO 1250 kW**

**PERMANENT MAGNET GEARLESS MACHINES FOR ELEVATORS**

Home elevator - upto 300 kg
Passenger elevator - upto 20 passengers
Goods elevator - upto 5 tons
Suitable for machine-room less applications

**HIGH TORQUE MACHINES FOR DIRECT DRIVE APPLICATIONS**

High efficiency
Significant power saving
No oil spillage and cleaning issues
Gearbox is eliminated
Powered by KEB Drives - SCL Technology without Encoder

To calculate energy saving and payback period for IE4 motor visit [www.bharatbijlee.com/ie4-motors-synchrovert](http://www.bharatbijlee.com/ie4-motors-synchrovert)

**SynchroVERT**

IE4 Motors

Super Premium IE4 class of efficiency as per IEC 60034-30-1-2014
Operates without a VFD
Line Start Permanent Magnet Synchronous Motor (LSPMSM) technology
Remarkably short payback periods

Winner of CII’s ‘Most Innovative Energy Saving Product’ 2016

*Patent Pending*
Bharat Bijlee's Industrial Systems product portfolio caters to a spectrum of applications and spans the machine automation pyramid.
C6 HMI WITH LOGIC CONTROLLER
IN PARTNERSHIP WITH KEB AUTOMATION, GERMANY

4Q DIGITAL DC DRIVES & STACK CONTROLLERS

AC DRIVES UPTO 900 KW IN PARTNERSHIP WITH KEB AUTOMATION, GERMANY
Basic F5
Compact F5
Regenerative Drive R6 & AFE Solutions

SERVO DRIVES IN PARTNERSHIP WITH KEB AUTOMATION, GERMANY
S6 Intelligent Servo
F5 Multi
H6 Multi Axis
P6 Pitch Control
F6K

PERMANENT MAGNET SYNCHRONOUS AND SPINDLE/VECTOR ASYNCHRONOUS SERVO MOTORS

GEARED MOTORS IN PARTNERSHIP WITH KEB AUTOMATION, GERMANY
Helical geared motors
Shaft mounted helical geared motors
Helical bevel geared motors
Helical worm geared motors
Geared motor with integrated frequency inverter

C6 MULTIAXIS MOTION CONTROLLERS; C6 IPC AND C6 COMMUNICATION ROUTER
IN PARTNERSHIP WITH KEB AUTOMATION, GERMANY

GENERAL PURPOSE AC DRIVES UPTO 75KW - BBVERT BL51 & BL52
INDUSTRIES

- Automobile
- Cement
- Chemical
- Metal
- Machine Tool
- Mining
- Oil & Gas
- Plastic
- Power
- Pulp & Paper
- Steel
- Textile
- Waste Water
- Water
- Windmill

APPLICATION EXPERTISE

- High speed block-type wire drawing machine
- High speed CTL for corrugated board and paper cutting machine
- Motor Test Bench
- Continuous shear control for CTL in rolling mill
- Textile machinery
- Crane
- High Speed Spindle
- Pipe Cutting Machine
- Plastics machinery
- Slitter for Steel
- Hydraulic Press
- Pitch & Yaw Control for Wind Turbine