The Intelligent Inverter VF66B with a DC drive mode makes it possible to keep using your DC motors.

### Standard Specifications

#### 200 Volt Class

<table>
<thead>
<tr>
<th>Model</th>
<th>2R222</th>
<th>3R722</th>
<th>5R522</th>
<th>7R622</th>
<th>1122</th>
<th>1522</th>
<th>2222</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated output current (A)</td>
<td>10</td>
<td>17</td>
<td>24</td>
<td>32.5</td>
<td>46</td>
<td>62.5</td>
<td>87</td>
</tr>
<tr>
<td>Application motor capacity (kW)</td>
<td>1.5</td>
<td>2.2</td>
<td>3.7</td>
<td>5.5</td>
<td>7.5</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Input voltage</td>
<td>3-phase, 3-wire 200 to 220 VAC ± 10%, 50/60 Hz ± 5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum output voltage</td>
<td>220 VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 400 Volt Class

<table>
<thead>
<tr>
<th>Model</th>
<th>2R244</th>
<th>3R744</th>
<th>5R544</th>
<th>7R644</th>
<th>1144</th>
<th>1544</th>
<th>2244</th>
<th>3044</th>
<th>3744</th>
<th>4544</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated output current (A)</td>
<td>5.5</td>
<td>9.2</td>
<td>13</td>
<td>17</td>
<td>24</td>
<td>32.5</td>
<td>46</td>
<td>62.5</td>
<td>75.5</td>
<td>92.5</td>
</tr>
<tr>
<td>Application motor capacity (kW)</td>
<td>1.5</td>
<td>2.2</td>
<td>3.7</td>
<td>5.5</td>
<td>7.5</td>
<td>11</td>
<td>15</td>
<td>18.5/22</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>Input voltage</td>
<td>3-phase, 3-wire 380 to 460 VAC ± 10%, 50/60 Hz ± 5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum output voltage</td>
<td>440 VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 600 Volt Class

<table>
<thead>
<tr>
<th>Model</th>
<th>5544</th>
<th>7544</th>
<th>11044</th>
<th>16044</th>
<th>2044</th>
<th>25044</th>
<th>31544</th>
<th>40044</th>
<th>50044</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated output current (A)</td>
<td>111</td>
<td>146</td>
<td>210</td>
<td>300</td>
<td>370</td>
<td>460</td>
<td>600</td>
<td>740</td>
<td>920</td>
</tr>
<tr>
<td>Application motor capacity (kW)</td>
<td>37</td>
<td>45/55</td>
<td>75</td>
<td>110</td>
<td>132/150</td>
<td>160</td>
<td>200</td>
<td>250</td>
<td>315</td>
</tr>
<tr>
<td>Input voltage</td>
<td>3-phase, 3-wire 380 to 460 VAC ± 10%, 50/60 Hz ± 5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum output voltage</td>
<td>440 VDC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Please contact us for details.
2. This will vary with the actual DC motor’s rated current.

### Common Specifications

- **Control mode:** Speed / Current / Voltage control
- **Overload capacity:** 150% 60 sec
- **Input signal:** Analog 0 to 10 V / ± 10 V / -4 to 20 mA (A standard is 1ch, An option is 2ch at the time of a maxima.)
  - Function terminal: 5 input (standard), 6 input (option)
- **Output signal:** Analog 0 to 10 V (1A standard is 1ch, An option is 2ch at the time of a maxima.)
  - Function terminal: 2 output (standard), 2 output (option)

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Implementation Benefits

**Benefits**

1. Reduce investment costs by continuing to use your DC motors.
2. DC cabling can all be used as is, for a shorter installation time.
3. Digital controls and interface with a variety of recent networks and programmable logic controllers (PLCs) deliver higher equipment performance.
4. Use VF66B as a normal inverter by changing the drive mode after upgraded to AC motors.
5. Third-party made DC motors can be driven.

**Network**

TNS (Toyo Network System)

- Power supply
- VF66R Regenerative converter (common converter)
- DC stage
- PROFIBUS DP
- FL-net (OPCN-2)
- OPCN-1
- Ethernet
- RS-422
- Touch panel
- Manufacturing execution system (MES)
- Computer
- μGPCsH
- FA controller
- Third-party PLC
- Inverter Board
- VF66B series inverter
- VF66B (DC drive mode)
- ED motor
- Permanent magnet synchronous motor
- UF motor
- Induction motor for inverter
- Manufacturing execution system (MES)
- Touch panel
- Manufacturing execution system (MES)
- Computer
- μGPCsH
- FA controller
- Third-party PLC
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- VF66B series inverter
- VF66B (DC drive mode)
- ED motor
- Permanent magnet synchronous motor
- UF motor
- Induction motor for inverter

**Step-by-step upgrade by implementing VF66B DC drive mode**

1. **1st Step**
   - Change from thyristor board to VF66B DC mode
   - Equipment can be upgraded with lower cost and shorter installation time.
   - Low cost
   - Short installation time
   - High performance

2. **2nd Step**
   - Change from DC motor to ED motor (AC motor)
   - Running costs are lower thanks to the high efficiency of our ED motor.
   - High efficiency
   - Energy saving

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Now I can upgrade just my control devices while keeping my DC motors! This will help me to **reduce costs** and **shorten time required for installation**.