iPT Motor for BIG FANS

- 7/24 continuously full performance
- No derating
- Unbeatable size/torque ratio
- Very quiet
- 66 poles
Why iPT* Motor Serie is different than the rest of the motors in the world?

* Intelligent Premium Torque Motor

**Continuous Operation**
- 24/7 continuously full performance
- No heating
- No derating
- Direct drive
- HVLS solution
- Maximum air flow at all times!

**220 V - 400 V at the same motor**
- Reduced inventory cost
- Thanks to star-delta connection at the same motor.

**Energy Efficient**
- According to Asyn motor+gearbox energy consumption is lower than 30%.
- According to PM Syn and BLDC motors total energy consumption is lower than 20%.

**Advantages**
- Continuous Operation
- 220-400 V at the same motor
- Energy Efficient
- Ambient temperature 50 Celcius
- Sensorless PM control
- 66 poles
- Very quiet
- Gearless
- No oil
- No cooling
- Compact Size
- Very low cogging torque

**Benefits**
- Continuous air flow all the time
- Reduced inventory cost
- %20 less energy cost
- Full performance at high ambient temp.
- %20 less energy cost
- Best performance for HVLS application
- No noise
- No maintenace cost
- No risk for oil drop
- Less energy cost
- Less packaging cost, less bracket cost, less transportation cost
- Minimum Noise level

A Success Story with **iPT Motor Serie** by **Big Fan Application**

EMF Motor is used at a 66 poled iPT100-100 motor which characteristics are 120 Nm at 65 rpm, 200 V and 4.7 A, for a 7-meter diameter and 6 blades HVLS fan. The motor is coupled directly to the propeller (direct drive), operating at a maximum speed of 50 rpm where the speed control is performed by a potentiometer.

www.emfmotor.com
## Maximum airflow at all times

**iPT Motor for BIG FANS**

<table>
<thead>
<tr>
<th>Motor Code</th>
<th>Speed (rpm)</th>
<th>Weight (kg)</th>
<th>Rated Torque (Nm)</th>
<th>Efficiency (%)</th>
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*All the calculations are made up to 7 meters (24 ft) fan diameter. Please contact EMF Motor for other supply voltage, torque and speed values.*

### iPT 100-100 Torque - Speed - Efficiency Diagram

M, U and I = f(n) iPT100-100 in Star Connection

Data: 105 Nm 100 rpm 350 V 3.3 A S1

![iPT 100-100 Torque - Speed - Efficiency Diagram](image-url)
### Dimensions

| Motor Code | D  | DB  | E  | EB | EC | F  | G  | H  | HC | HD  | L   | M   | P   | PA  | S  | T  |
|------------|----|-----|----|----|----|----|----|----|----|-----|-----|-----|-----|----|----|
| IPT 73-60  | 38k6 | M12 | 69 | 71 | 76 | 10h6 | 41 | 73 | 146 | 189,2 | 233 |
|           |     |     |    |    |    |      |    |    |     |       | 273 |
|           |     |     |    |    |    |      |    |    |     |       | 313 |
|           |     |     |    |    |    |      |    |    |     |       | 353 |
| IPT 73-100| 130j6 | 146 | 180 | 11 | 5 |
| IPT 73-140|         |     |     |    |    |      |    |    |     |       |   |
| IPT 73-180|         |     |     |    |    |      |    |    |     |       |   |

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**EMF Motor**

info@emfmotor.com  
www.emfmotor.com

Germany  
EMF 97 GmbH  
Horchheimer Straße 74-78  
D-67547 Worms  

T. +49 6241 935 210  
F. +49 6241 935 215