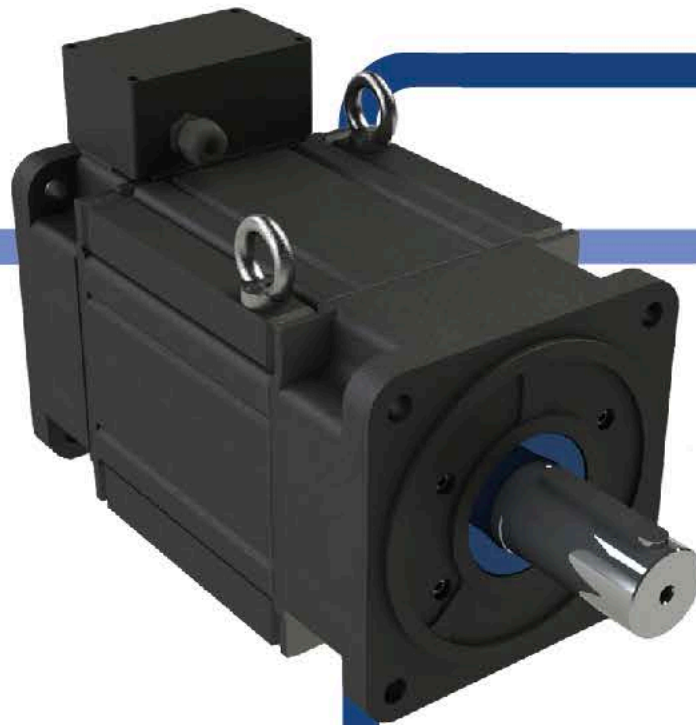


iPT* Motor
(*Intelligent Premium Torque)



Patented NEW Direct Drive Technology
iPT Motor for BIG FANS



- 7 /24 continuously full performance
- No derating
- Unbeatable size / torque ratio
- Very quiet
- 66 poles



EMF Motor®

Why iPT* Motor Serie is different than the rest of the motors in the world ?

* Intelligent Premium Torque Motor



Continuous Operation

7 /24 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

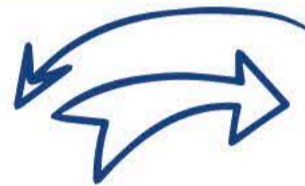
According to Asyn motor+gearbox
energy consumption is
lower than 30%.

According to PM Syn and BLDC motors
total energy consumption is
lower than 20%.

Advantages

- Continous 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 maintentance 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.

6
YEARS IN FIELD

94
% EFFICIENCY

43
dB

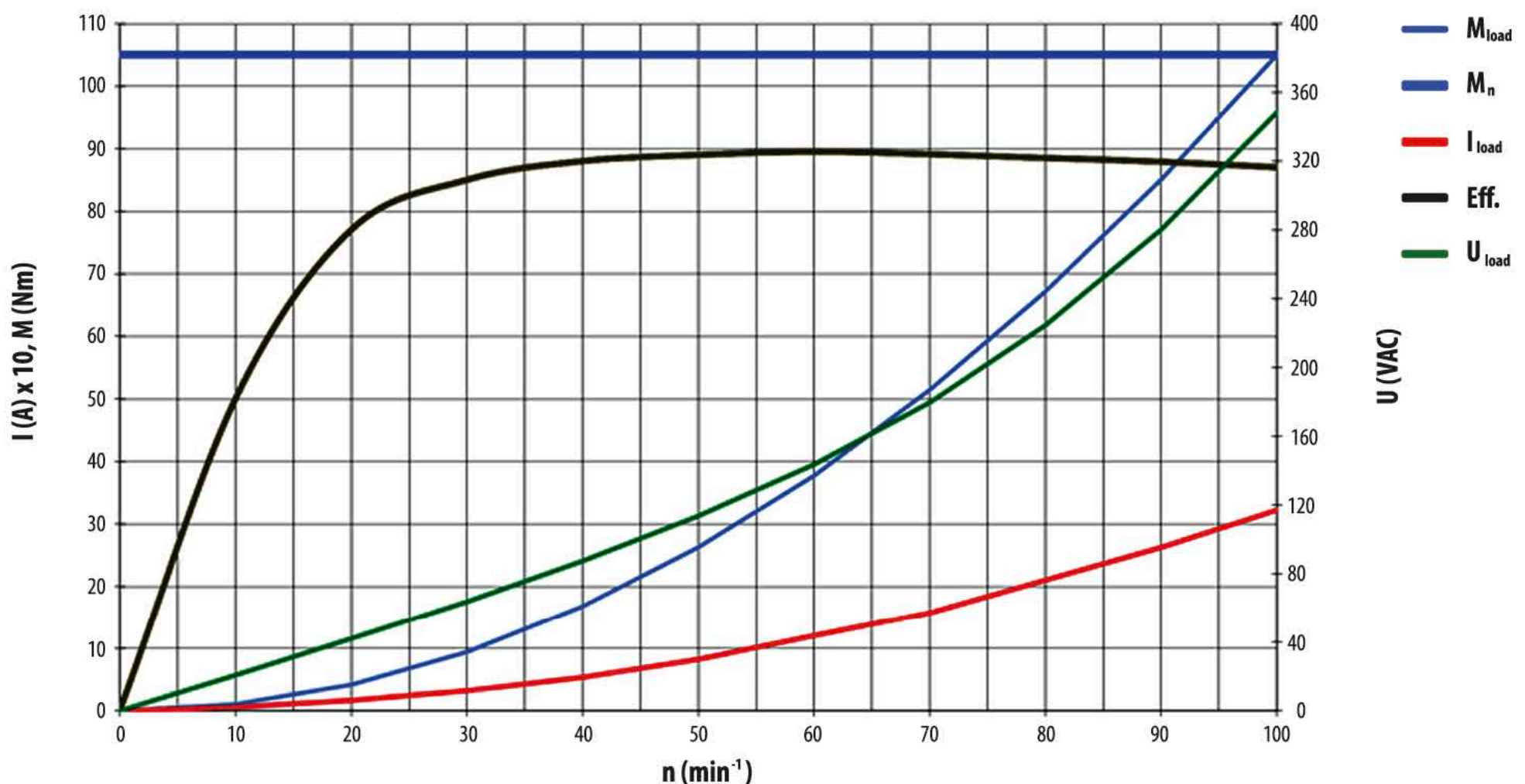
Motor Code	Speed (rpm)	Weight (kg)	Rated Torque (Nm)	Efficiency (%)
iPT 73-60	100	17	35	78
	150		32	82
	250		28	88
iPT 73-100	100	21	52	82
	150		48	86
	250		40	89
iPT 73-140	75	26	72	80
	100		68	85
	150		64	88
iPT 73-180	75	31	100	81
	100		90	85
	150		80	90
iPT 100-100	65	45	130	80
	100		120	87
iPT 100-140	60	55	170	81
	80		160	86
iPT 100-180	40	65	220	76
	60		205	85

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 350V 3,3 A S1

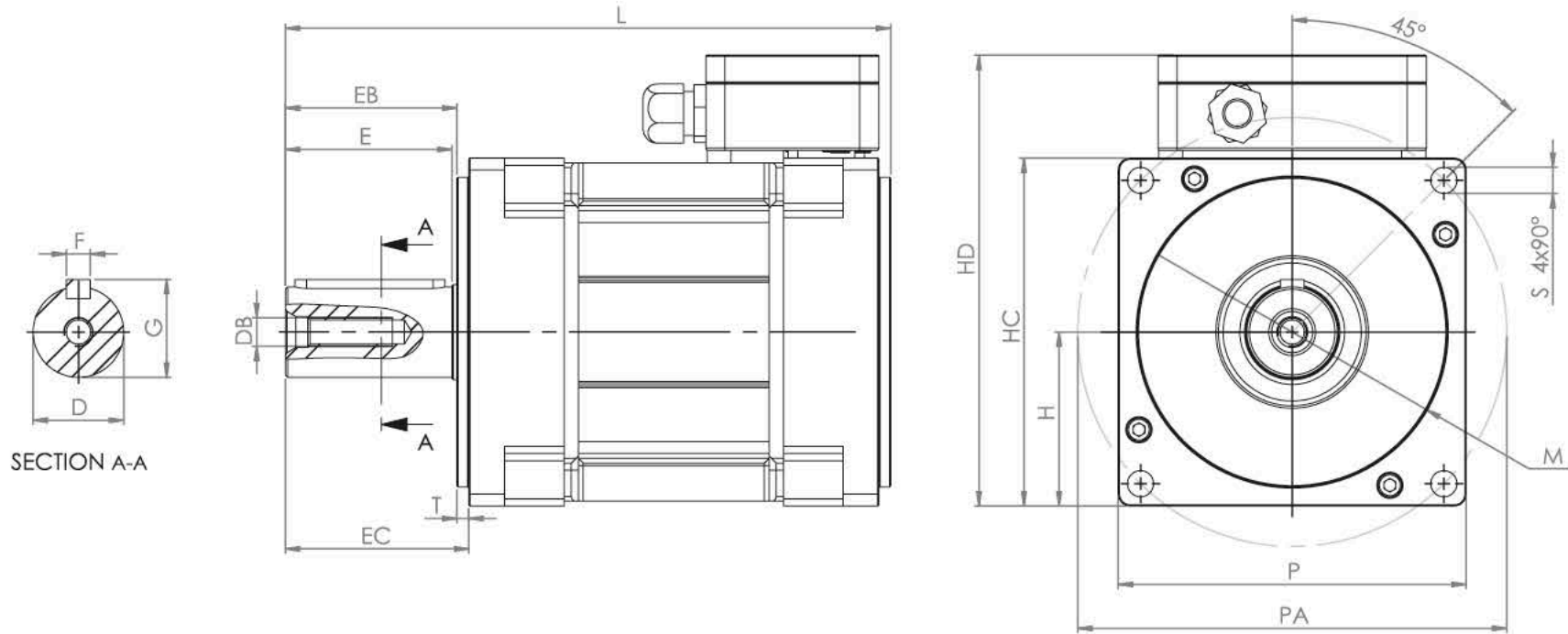


Maximum **air flow** at all times

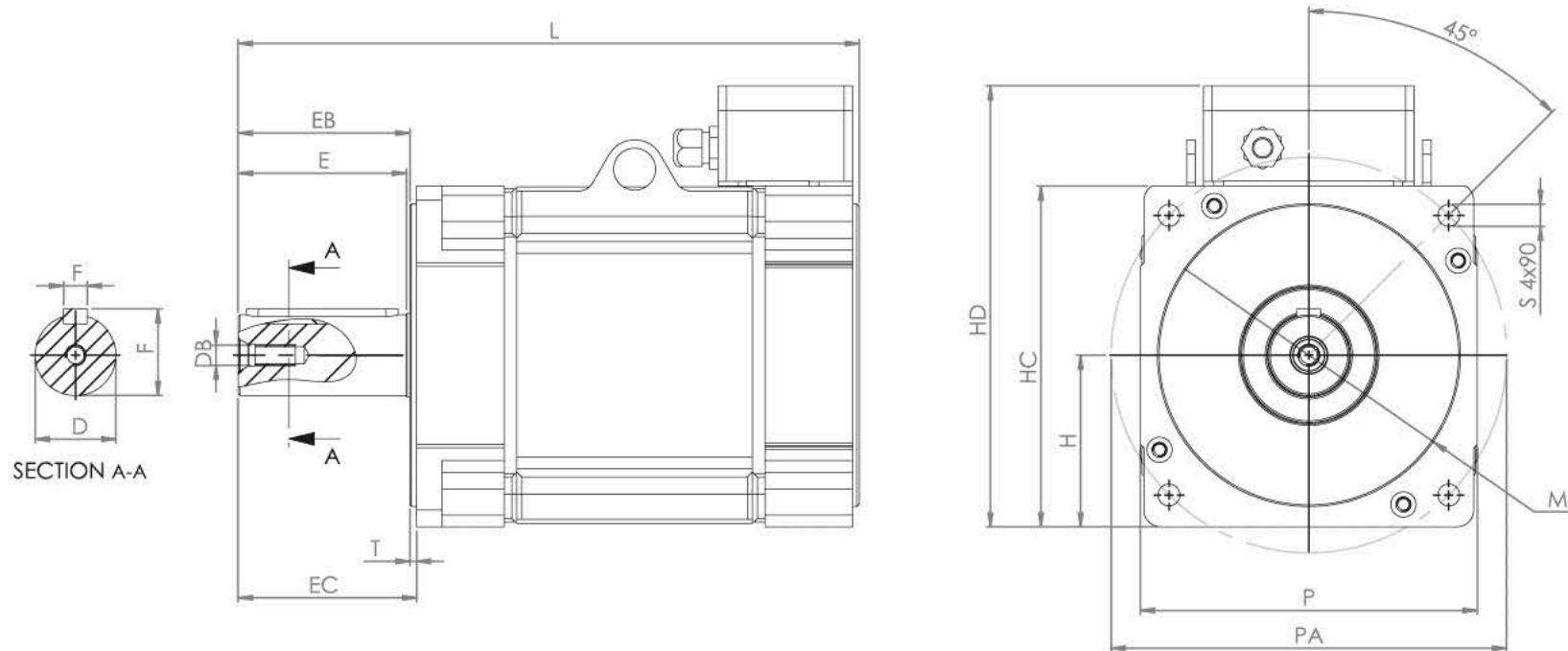
iPT Motor for **BIG FANS**

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	130j6	146	180	11	5
iPT 73-100											273					
iPT 73-140											313					
iPT 73-180											353					



Motor Code	D	DB	E	EB	EC	F	G	H	HC	HD	L	M	P	PA	S	T
iPT 100-100	48k6	M12	100	102	106	14h6	51,5	102	202,5	262,2	329	180j6	200	235	13	4
iPT 100-140											369					
iPT 100-180											409					



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