



## Motor PMSM / High Efficiency



The Permanent Magnets Synchronous Motors (PMSM or PMAC) manufactured by **VERNIS MOTORS S.L.** are perfect for traction and mobility applications. Compared to induction classic motors, PMSM offer a high power with a much reduced weight and higher maximum torques, offering an alternative to internal-combustion engines for a variety of electrical vehicles.

*“ The permanent-magnet synchronous VERNIS motor, due to its high level of efficiency and compact design it is the most suitable solution for electric drives “*

### TECHNICAL CHARACTERISTICS

- Lightness. Low weight and high power density is a main focus in electro mobility
- High continuous torque (bigger than induction motors with same power).
- High torque density
- Great range of power and battery voltages.
- Drive by frequency converters.
- VERNIS PM Synchronous motors are available in many versions
- Powerful operating range housed in a compact device
- Maintenance-Free

### TECHNICAL DATA

Voltage	Type	Power (W)	Speed (rpm)	Torque (Nm)	Cooling
48 Vdc	T90/8-30	3000	4500	6.4	NO
		4000	4500	8.5	YES
	T90/8-60	5500	4500	11.7	NO
		7300	4500	15.6	YES
	T90/8-90	8000	4500	17.0	NO
		10700	4500	22.7	YES
72 Vdc	T112/8-75	8400	3500	22.9	NO
		11200	3500	30.6	YES
	T90/8-30	3300	5000	6.4	NO
		4500	5000	8.5	YES
	T90/8-90	6000	5000	11.5	NO
		8000	5000	15.3	YES
120 Vdc	T112/8-100	11200	3750	28.6	NO
		15000	3750	38.2	YES
	T90/8-30	3300	5000	6.4	NO
		4500	5000	8.5	YES
	T112/8-75	10000	4250	22.5	NO
		13500	4250	30.3	YES
T112/8-150	15000	4000	35.8	NO	
	20000	4000	47.8	YES	

### IMPLEMENTATION

- Power connection: Without
- Encoder connection: Cable length 2 m, open cable ends
- Temperature sensor: KTY84-130
- Cooling: External Ventilation (EV) generated independently from motor.

### APPLICATIONS



ELECTRIC CAR



ELECTRIC TAXI



POST CAR TAXI



ELECTRIC GOLF CAR



ELECTRIC FORKLIFT



INDUSTRIAL ELECTRIC VEHICLE