

6" Encapsulated Motors



6" Encapsulated Motors



Submersible Motors Quality in the Well

These 6" encapsulated motors, manufactured in ISO 9001 certified facilities, are built for dependable operation in 6" diameter or larger water wells.

Water lubricated thrust and radial bearings enable a maintenance free operation. A special diaphragm ensures pressure compensation inside the motor. The motor is filled with a special FES91 fluid, providing frost protection down to -15°C storage temperature. The Sand fighter® SiC seal system is standard.

Product advantages:

- Hermetically sealed stator, anti track, self healing stator resin prevents motor burn out
- 37 and 45kW up to 50°C ambient temperature
- Removable "Water Bloc" lead connector
- Cable material according to drinking water regulations (KTW approved)
- „Sand fighter®“ Motor with SiC-Mechanical Seal
- High efficiency electrical design for low operation cost
- All motors prefilled and 100% tested
Max. storage temperature -15°C - + 60°C
- Non contaminating FES91 -filled design
- 45kN Thrust Capacity for 37kW and 45kW motors

Technical Specifications Standard Motor:

- 4 ... 45 kW
- 6" NEMA flange
- Protection: IP 68
- Starts per hour: 20
- Installation: vertical/horizontal
- Standard Voltage: 380-415V/50Hz, 460V/60Hz
- Voltage tolerance 50Hz: -10% / +6% U_N [(380-10%) - (415+6%)]
- Voltage tolerance 60Hz: $\pm 10\% U_N$
- Motor protection: Select thermal overloads according to DIN 60947-4-1, trip class 10 or 10A, trip time < 10 s at $5 \times I_N$
- Insulation: Class F
- YΔ - start (pos. of cables 90°)
- „Sand fighter®“ Motor with SiC-Mechanical Seal
- Rated ambient temperature: 4- 30kW up to 30°C; 37 & 45 kW up to 50°C
- Cooling flow: min. 0,16 m/s
- Motor lead in 4m length (KTW approved)

Options

- Other voltages
- 45kN High Thrust Version on request (standard in 37kW and 45kW motors)
- Motors complete in 304SS and 316 SS
- PT 100 temperature sensor (sold separately)
- Special Lead lengths up to 50m
- Built-in PTC temperature sensor
- Built-in SubMonitor Transmitter (standard for 37&45kW)



6"											
3~/ 400 V / 50 Hz											
P_N [kW]	Thrust [N]	n_N [min ⁻¹]	I_N [A]	I_A [A]	η [%]	$\cos \varphi$ [%]	T_N [Nm]	T_A [Nm]	L [mm]	m [kg]	
4,0	15.500	2860	9,3	43	78,0	0,82	12,3	20,2	581,2	37,5	
5,5	15.500	2870	12,5	64	79,0	0,82	18,6	35,0	614,4	41,1	
7,5	15.500	2860	16,0	83	79,0	0,86	25,0	47,7	646,2	45,2	
9,3	15.500	2870	20,7	112	81,0	0,80	31,1	68,2	678,7	47,5	
11,0	15.500	2860	23,3	129	81,0	0,85	37,3	78,3	711,2	50,9	
15,0	15.500	2860	31,3	169	81,0	0,85	49,9	107,3	776,2	56,7	
18,5	15.500	2860	38,5	231	82,0	0,85	62,4	154,6	841,5	63,3	
22,0	15.500	2860	45,3	268	83,0	0,86	74,7	177,6	906,5	69,3	
30,0	27.500	2860	63,5	393	83,0	0,84	99,4	263,1	1036,6	83,9	
37,0	45.000	2875	79,0	411	81,0	0,85	123,6	280,8	1476,7	136	
45,0	45.000	2875	95,2	509	82,0	0,84	148,4	332,3	1629,2	154	

