



SUBMERSIBLE ELECTRIC MOTOR KM6 6"

50 Hz

6-inch Water Cooled Series



KOMAX
IEC 60034-1, Made in Taiwan
Electric Submersible Motor

Model: KM6 150T	HP: 15
kW: 11	Amp: 24,2
V: 380 - 415	
Hz: 50	RPM: 2855
Cos ϕ : 0.85	
3 Phase Coll: DOL Max Amb. 140°C	
IP: 68	Cooling Flow: 16cm ³ /sec
Insulation class: "A"	S.F.: 1.00
Rewindable Stator	Wt: 66 kg
Thrust Load: 18000 N	Eff: 80.5%
ID 20411905	S.Nr 00011910282



✓ Salient Features

The new improved series of 6" submersible motors KM6 has been designed to achieve compatibility with inverter outputs (modified sine waves) making it the first choice for solar and other high efficiency applications.

In design and material selection all efforts have been made to offer an energy efficient product to our customers which stand for reliability, excellent quality, long and trouble free life. KM6 6" water filled submersible motors have asynchronous three phase rewindable stator and squirrel cage rotor.

- Wet Stator Design
- High Grade Material
- Easy Maintenance
- Long Service Life
- High Thermal Capacity
- High Efficiency
- Re-windable
- Eco Friendly
- Industrial, Commercial, Agriculture and Irrigation Purpose

⚙ Technical Specification

degree of protection	IP68
insulation class	A*
working temperature	upto 65 °C
voltage tolerance	+ 6% / - 10%
mounting position	vertical**
min. flow rate speed	16 cm/sec
max. immersion depth	150 m
starting per hour	25
packing	wooden case

* Higher insulation classes are available on request.

** Double carbon bush bearings in lower & upper supports for horizontal/inclined installation are available on request.

≡ Specifications

Winding:

Made of pure electrolytic copper wire sheeted with BOPP+BOPET insulation for high temperature. Robust winding having extra copper than standard version to lower the current density and the electric resistance resulting in reduced winding losses.

Stator:

Increased length with M800 low-losses electrical magnetic sheet fixed in stainless steel casing.

Rotor:

Increased length with M800 low-losses electrical magnetic sheet fixed with high grade copper bars.

Spline Shaft:

AISI 420 stainless steel induction hardened & grinded, flange dimensions according to 6" NEMA standard, over size designed to ensure stiffness in severe conditions.

Shaft Bearing/Bush:

Super finished water lubricated guide bearing/bush made of high grade carbon, are fixed in upper and lower brackets.

Thrust Bearings:

Super grade thrust sliding block bearings, self aligning Mitchell type, with axial load capacity of 18000 N (upto 30 HP), 24000 N (35 to 50 HP) and 60000 N (60 to 70 HP)

Mechanical Seal with Lip/Oil Seal:

Silicon Tungsten (WC) carbide mechanical seal for normal and sandy wells and new added Lip/Oil seal resist fine sand against entering to Mechanical Seal.

Pressure Equalizing System:

Consists of rubber diaphragm located at lower end providing compensative volume for internal pressure developed during operation.

Brackets:

High resistance cast iron upper & lower bracket supports are dressed in stainless steel jackets.

Filler Fluid:

Water mixed with non-toxic anti freeze provide cooling and lubrication, also protect and prevent inside parts from corrosion.

Connection:

Connected through rubber sheathed cable Available in Delta & WYE (Star) configuration.

Note: All specifications are subject to change without any prior notice.

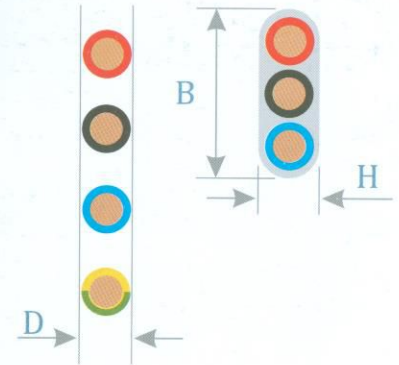


Technical DATA

Technical Data @ 50 Hz - Three Phase - 380 ~ 415 Volt - 2 Pole												
Motor Type	Motor Size		Voltage (V)	RPM	Full Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load		
	HP	KW					50	75	100	50	75	100
KM6 055T	5,5	4	380	2850	9,9	43,9	69,5	75,5	75,0	0,61	0,73	0,81
			400	2865	9,8	46,4	65,5	73,0	74,5	0,56	0,69	0,78
			415	2880	10,1	48,3	62,5	71,0	73,5	0,55	0,68	0,74
KM6 075T	7,5	5,5	380	2850	13,0	57,4	73,0	76,0	75,5	0,65	0,78	0,83
			400	2870	13,1	60,7	71,0	75,0	75,0	0,59	0,72	0,79
			415	2880	13,3	63,2	69,0	75,0	75,0	0,55	0,68	0,76
KM6 100T	10	7,5	380	2850	17,8	80,0	76,5	79,0	78,0	0,67	0,78	0,84
			400	2870	17,4	84,6	79,5	78,0	78,0	0,61	0,78	0,81
			415	2880	17,2	88,1	72,5	77,0	78,0	0,56	0,69	0,77
KM6 125T	12,5	9,3	380	2855	20,7	104	78,5	80,5	80,0	0,65	0,77	0,83
			400	2875	20,6	110	76,5	80,0	80,0	0,59	0,72	0,80
			415	2885	21,4	115	74,0	78,5	79,0	0,54	0,67	0,76
KM6 150T	15	11	380	2855	24,2	128	80,0	81,5	80,5	0,68	0,79	0,85
			400	2875	23,9	135	78,0	81,0	81,0	0,62	0,74	0,81
			415	2885	24,9	141	76,0	80,0	80,0	0,57	0,70	0,78
KM6 175T	17,5	13,0	380	2850	28,2	152	81,0	82,5	81,5	0,69	0,79	0,85
			400	2870	27,4	161	80,0	82,0	82,0	0,63	0,74	0,81
			415	2880	27,9	168	78,0	81,0	81,5	0,58	0,70	0,78
KM6 200T	20	15	380	2850	32,4	165	81,5	82,5	81,0	0,69	0,80	0,86
			400	2870	31,8	175	80,0	82,0	82,0	0,63	0,75	0,82
			415	2880	31,7	182	78,0	81,0	81,0	0,58	0,72	0,79
KM6 250T	25	18,5	380	2855	38,6	224	83,5	84,0	83,0	0,70	0,81	0,86
			400	2875	38,9	237	82,0	84,0	83,0	0,64	0,76	0,82
			415	2880	38,9	247	80,5	83,0	83,0	0,59	0,72	0,79
KM6 300T	30	22	380	2855	46,4	264	84,0	84,0	83,0	0,70	0,80	0,86
			400	2875	46,1	279	82,0	83,0	83,0	0,63	0,75	0,82
			415	2885	44,6	291	81,0	83,0	83,0	0,58	0,71	0,84
KM6 350T	35	26,5	380	2860	55,8	296	84,0	85,0	84,0	0,70	0,80	0,85
			400	2880	53,9	313	83,0	85,0	84,0	0,63	0,75	0,82
			415	2890	55,2	326	82,0	84,0	84,0	0,59	0,71	0,78
KM6 400T	40	30	380	2865	65,6	349	80,5	82,0	82,0	0,69	0,79	0,84
			400	2880	64,5	368	79,0	82,0	82,0	0,63	0,74	0,81
			415	2890	65,0	382	76,0	80,0	81,0	0,58	0,70	0,77
KM6 500T	50	37	380	2840	80,1	379	81,0	82,0	81,0	0,70	0,80	0,85
			400	2855	79,7	399	78,0	81,0	81,0	0,64	0,76	0,82
			415	2870	80,7	414	76,0	80,0	80,0	0,59	0,71	0,79
KM6 600T	60	45	380	2850	100,2	569	82,0	84,0	81,0	0,72	0,81	0,86
			400	2860	99,4	591	80,0	83,0	81,0	0,70	0,77	0,82
			415	2865	95,5	578	81,0	82,0	81,0	0,66	0,72	0,80
KM6 700T	70	52	380	2850	110,1	611	81,0	83,0	82,0	0,69	0,78	0,85
			400	2860	109,5	656	80,0	83,0	82,0	0,66	0,73	0,82
			415	2865	109,3	678	78,0	82,0	81,0	0,64	0,71	0,81

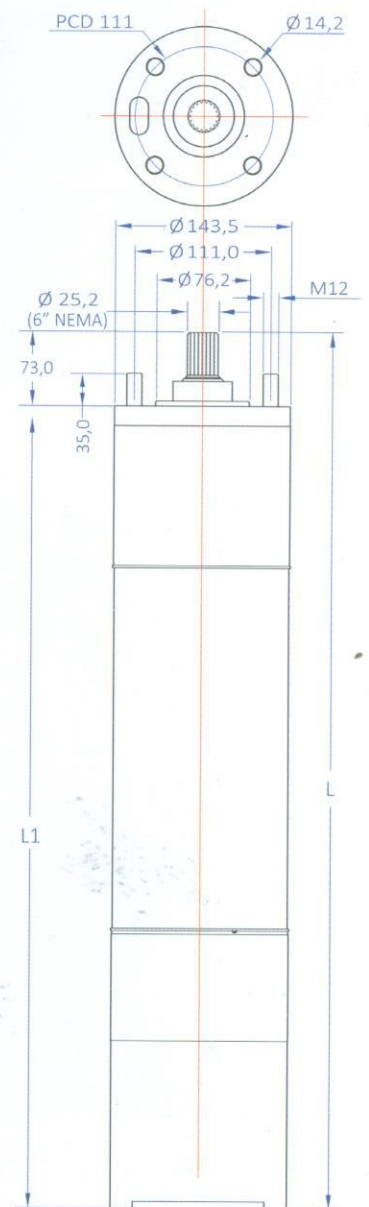
Technical DETAILS

Size & Dimensions Motor Tail Cable @ 400V							
Sr: No.	Connection Type	Motor Size		Cable Size Nos. x Cross Section (mm ²)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)
		HP	KW				
1	Direct on Line	5,5 ~ 30	4 ~ 22	3 x 6 1 x 10	19 x 8 D = 6	3 3	1 1
2		35 ~ 50	26,5 ~ 37	3 x 10 1 x 10	24 x 9 D = 6	3 3	1 1
3		60 ~ 70	45 ~ 52	1 x 16 1 x 10	D = 10,5 D = 6	3 3	3 1
4	Star Delta	5,5 ~ 60	4 ~ 45	3 x 6 1 x 10	19 x 8 D = 6	3 3	2 1



Dimensions and Weights								
Motor Type	Motor Size		Thrust Load (N)	L Motor Length (mm)	L1 Motor Length (mm)	Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	KW					Without Packing	With Packing
KM6 055T	5,5	4,0	18000	718	645	245 x 330 x 845	52	62
KM6 075T	7,5	5,5	18000	718	645	245 x 330 x 845	52	62
KM6 100T	10	7,5	18000	768	695	245 x 330 x 845	56	66
KM6 125T	12,5	9,3	18000	853	780	245 x 330 x 1010	66	76
KM6 150T	15	11	18000	853	870	245 x 330 x 1010	66	76
KM6 175T	17,5	13,0	18000	943	870	245 x 330 x 1010	75	86
KM6 200T	20	15	18000	943	870	245 x 330 x 1010	75	86
KM6 250T	25	18,5	18000	1033	960	245 x 330 x 1212	86	97
KM6 300T	30	22	18000	1118	1045	245 x 330 x 1212	95	106
KM6 350T	35	26,5	24000	1213	1140	245 x 330 x 1352	104	116
KM6 400T	40	30	24000	1253	1180	245 x 330 x 1352	109	122
KM6 500T	50	37	24000	1253	1180	245 x 330 x 1352	109	122
KM6 600T	60	45	60000	1321	1248	245 x 330 x 1420	117	131
KM6 700T	70	52	60000	1381	1308	245 x 330 x 1480	123	137

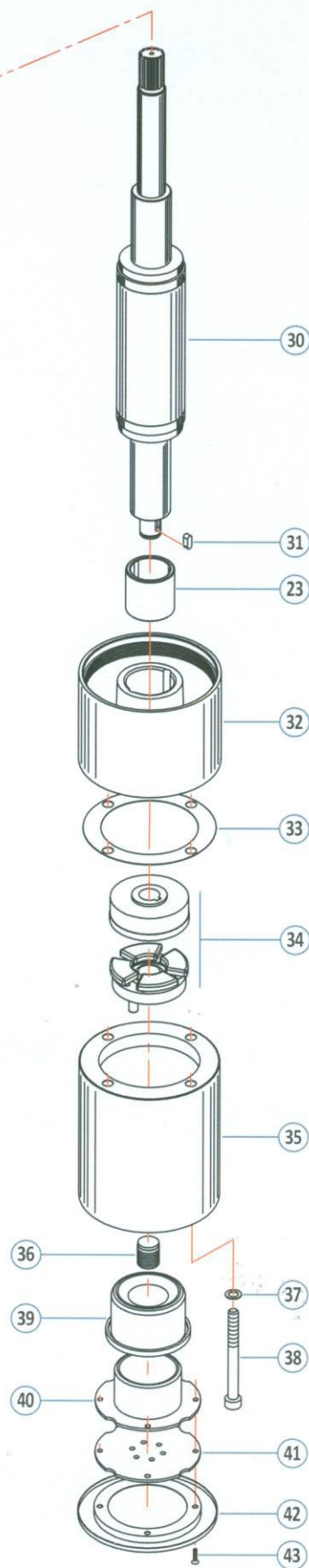
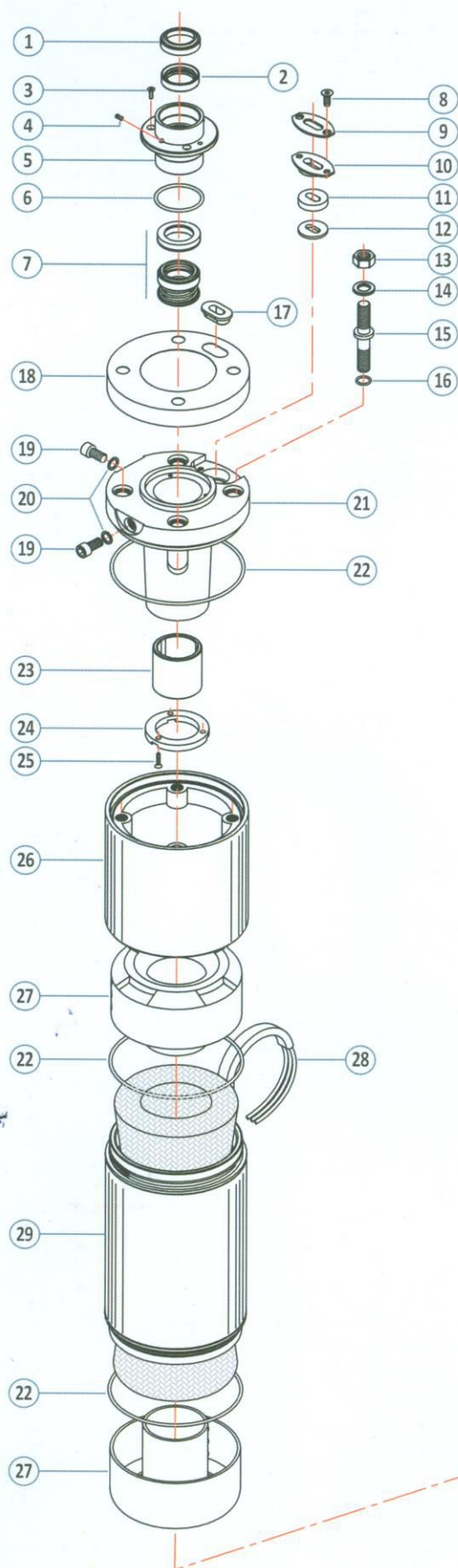
* Higher thrust bearing capacity upto 60000N are available on request.





Exploded VIEW

Cross-Sectional VIEW



**Parts LIST** with Material & Quantity

Pos.	Item Code	Part Name	Material	Qty	Unit
1	60101480	Wiper Seal	NBR + Stainless Steel	1	Nr
2	60101475	Lip Seal / Oil Seal	NBR + Stainless Steel	1	Nr
3	60101075	Allen Bolt (Seal Support)	Stainless Steel	3	Nr
4	60101490	Grub Screw M5 X 5	Stainless Steel	1	Nr
5	60101090	Seal Support KM6	Stainless Steel	1	Nr
6	60101095	O. Ring (Seal Support)	NBR	1	Nr
7	60101080	Mechanical Seal	Silicon Carbide + NBR + SS	1	Nr
8	60101077	Screw (Tail Cable)	Stainless Steel	2	Nr
9	60101137	Cable Top Plate (Tail Cable)	Stainless Steel	1	Nr
10	60101225	Washer Nylon (Tail Cable)	Nylon	1	Nr
11	60101125	Gasket Rubber (Tail Cable)	NBR	1	Nr
12	60101130	Cable Washer (Tail Cable)	Stainless Steel	1	Nr
13	60101117	Hex: M12 Nut	Stainless Steel	4	Nr
14	60101120	Spring Washer for M12	Stainless Steel	4	Nr
15	60101115	Bolt M12	Stainless Steel	4	Nr
16	60101156	Washer Bonded / Dowty Seal	NBR + Carbon Steel	4	Nr
17	60101122	Gasket for Top Cover (Tail Cable)	NBR	1	Nr
18	60101039	Top Cover KM6 (Top Piece)	Stainless Steel	1	Nr
19	60101068	Allen Bolt (Top Piece)	Stainless Steel	2	Nr
20	60101155	Copper Washer (Top Piece) / Dowty Washer	Copper	2	Nr
21	60101002	Upper Support / Top Piece	Cast Iron	1	Nr
22	60101065	O. Ring 3500	NBR	3	Nr
23	60101055	Carbon Bush Large (Lower & Upper)	Carbon	2	Nr
24	60101087	Upper Thrust Bearing	Brass	1	Nr
25	60101142	Screw (Upper Thrust)	Stainless Steel	3	Nr
26	60101010	Upper Threaded Socket	Cast Iron	1	Nr
27	60101202	Winding Protection Cover (Lower & Upper)	LDPE	2	Nr
28	60101170	Motor Tail Cable (03 Core)	Copper + Rubber	3	Mtr
29	60101305	Stator Stack (Assembly)	Silicon Steel (M800-50A)	1	Set
30	60101350	Rotor Lamination (Assembly)	Silicon Steel (M800-50A)	1	Set
31	60101145	Key for Rotor Shaft	Stainless Steel	1	Nr
32	60101013	Lower Support	Cast Iron	1	Nr
33	60101212	Gasket	Fiberglass	1	Nr
34	60101025	Thrust Bearing	Stainless Steel + Carbon	1	Nr
35	60101018	Thrust Support	Cast Iron	1	Nr
36	60101030	Adjustment Bolt (Thrust Bearing)	Stainless Steel	1	Nr
37	60101157	Washer Bonded / Dowty Seal	NBR + Carbon Steel	4	Nr
38	60101071	Bolt Allen MS M10x170	Carbon Steel	4	Nr
39	60101045	Diaphragm Rubber	NBR	1	Nr
40	60101216	Diaphragm Support	Polycarbonate	1	Nr
41	60101050	End Cover of Diaphragm	Stainless Steel	1	Nr
42	60101052	Cover for Thrust Support	Stainless Steel	1	Nr
43	60101143	Allen Bolt (Lower Thrust Plate)	Stainless Steel	4	Nr



- η Improved Efficiency and Wider Voltage Range**
- High Quality Bearing and SiC - SiC Mechanical Seal**
- High Endurance in Sandy Wells**
- Can Sustain in Low Voltages**

KOMAX
Pump Unit
Model: KSD-100
Max. Depth: 100m
Max. Flow: 100m³/h
Max. Power: 100W
Max. Voltage: 240V
Max. Current: 10A
Max. Temperature: 40°C
Max. Humidity: 95%
Max. Vibration: 10mm/s²
Max. Shock: 10g
Max. Weight: 10kg
Max. Length: 10m
Max. Diameter: 100mm
Max. Material: SS 304
Max. Finish: Polished
Max. Marking: Laser Etched
Max. Date: 10/2019
Max. Lot: 1001234567

