



KM10

10" Borehole Submersible Electric Water Cooled Rewindable Motors

Models Range

Standard: Double Flange

Power Range

From: 75 HP (56 kW)

To: 270 HP (200 kW)

Voltage Range

380 ~ 415 Volts @ 50 Hertz

460 Volts @ 60 Hertz

Speed Range

2 Poles, 2900 RPM

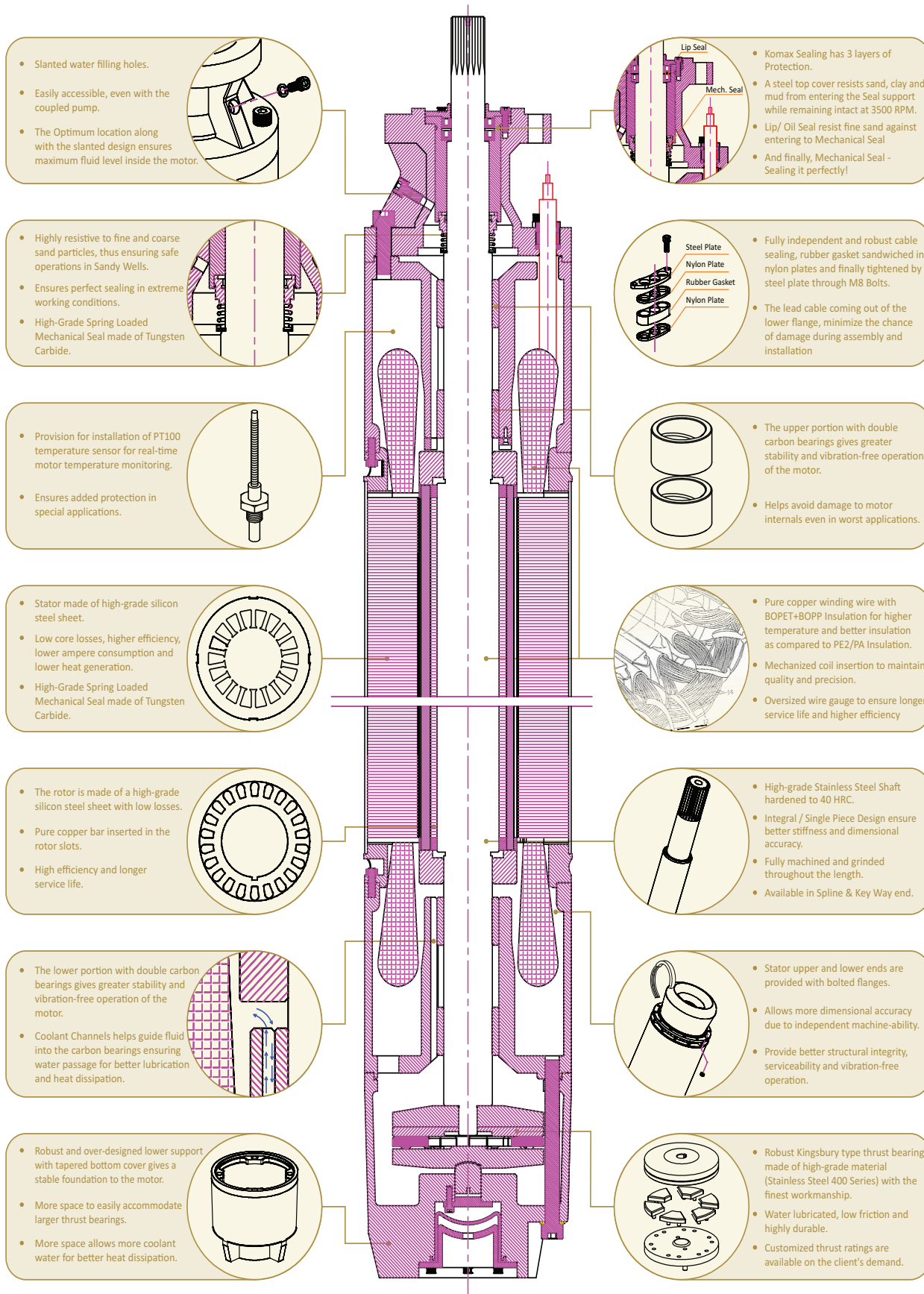
2 Poles, 3600 RPM

Construction Material

Standard: Cast Iron with NSF Certified
Expoxy

Optional: Complete 316L Stainless Steel







Salient Features

KM10 10" water-filled submersible electric motors have asynchronous three-phase rewindable stator and squirrel cage rotor.

The new series of 10" submersible electric motors KM10 has been designed and produced according to the market's requirements. 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.

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



Technical Specification

IP68	degree of protection
A / B	insulation class
50 °C	ambient temperature
+6% / -10%	voltage tolerance
Vertical/Horizontal	mounting position
16 cm/sec	min. cooling flow rate speed
200 m	max. immersion depth
110	starts per 24 hours
Wooden case	packing



Specification

Winding:

Electrolytic Solid Copper wire wrapped in BOPET+BOPP Insulation rated for temperatures over 100 °C that allows more copper in the current slots. This technology allows the motor to run much cooler and achieve higher than normal horsepower ratings in standard frame sizes.

Stator:

All motors having interlocked M800 low-loss electrical magnetic sheet stator stack with an increased length for cooler running motor.

Rotor:

Increased interlocked stack length with M800 low-loss electrical magnetic sheet assembled and designed with the newest technology and highgrade copper bars.

Spline Shaft:

AISI 420 stainless steel induction hardened & ground to operate in severe conditions. Dimensions according to international 8"/10" NEMA standards.

Shaft Bearing/Bush:

Dual Water lubricated guide bearings made of high-grade carbon, are fixed in upper and lower brackets for optimal operation in sandy wells and pump vibration control.

Thrust Bearings:

All Komax submersible motors have Kingsbury type thrust bearing. The thrust assembly consists of a high-quality carbon disc with hardened stainless steel shoes to handle necessary pump thrust loads. Available with an axial load capacity of 80000 N.

Seal Configuration:

Komax offers a triple seal configuration that consists of two outer back to back lip seals in NBR with an inner Silicon Tungsten Carbide Seal for optimum protection in sandy wells.

Pressure Equalizing System:

Pressure compensation is managed by using a suitably sized NBR bellow to allow for expansion of the internal water as it heats up- or- from external pressure due to the depth of submergence.

Brackets:

High resistance cast iron upper & lower bearing housing with epoxy coating.

Filler Fluid:

Water mixed with non-toxic antifreeze 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.



Electrical DATA - 50 Hz & 60 Hz

Technical Data - Three Phase - 2 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz														
	Motor Type	Motor Size		RPM	Full Load Current (Amp.)	Safety Load Current (Amp.)	Starting Current (Amp.)	Efficiency at % Load			Cos. Φ at % Load			Service Factor
		HP	kW					50	75	100	50	75	100	
380-415V @ 50 Hz	KM10 075T	75	56	2900	111,5		535	80,6	86,7	86,4	0,71	0,80	0,84	1
	KM10 100T	100	75	2890	146,0		701	81,5	87,4	86,9	0,72	0,81	0,85	1
	KM10 125T	125	93	2895	183,6		900	81,9	87,4	87,1	0,72	0,80	0,84	1
	KM10 150T	150	112	2905	217,0		1085	82,7	88,1	87,7	0,73	0,81	0,85	1
	KM10 175T	175	130	2910	257,6		1366	83,9	87,9	87,3	0,73	0,80	0,84	1
	KM10 200T	200	150	2900	291,9		1576	84,5	87,9	87,0	0,75	0,81	0,85	1
	KM10 250T	250	186	2905	366,3		2051	84,7	88,1	87,3	0,74	0,81	0,84	1
460V @ 60 Hz	KM10 075T	75	56	3495	97,5	112,0	468	80,3	86,5	86,2	0,70	0,79	0,84	1,15
	KM10 100T	100	75	3490	127,7	147,0	613	81,3	87,1	86,7	0,71	0,80	0,85	1,15
	KM10 125T	125	93	3500	160,9	185,3	788	81,6	87,2	86,8	0,71	0,80	0,84	1,15
	KM10 150T	150	112	3505	189,5	218,7	948	82,2	87,9	87,5	0,72	0,81	0,85	1,15
	KM10 175T	175	130	3510	225,0	259,5	1193	83,8	87,7	87,1	0,72	0,80	0,84	1,15
	KM10 200T	200	150	3500	255,1	294,0	1377	84,3	87,7	86,8	0,74	0,81	0,85	1,15
	KM10 250T	250	186	3505	320,4	370,6	1794	84,4	87,8	87,1	0,73	0,80	0,84	1,15
	KM10 270T	270	200	3500	338,7	391,6	1965	85,0	88,5	87,6	0,75	0,82	0,85	1,15

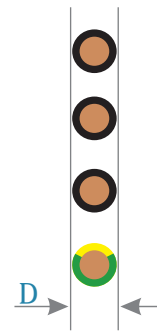


Technical DATA

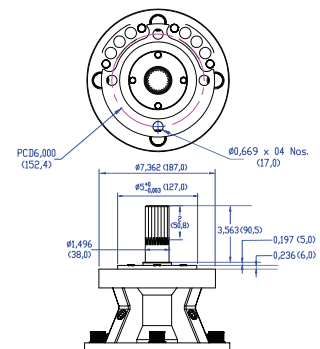
**Size & Dimensions Motor Tail Cable - Three Phase
2 Pole - 380~415 Volt @ 50 Hz - 460 Volt @ 60 Hz**

	Sr: No.	Motor Size		Cable Size Nos. x Cross Section (mm2)	Dimension B x H (mm)	Cable Length (mtr)	Qty (Nr.)
		HP	kW				
DOL	1	75	56.0	1 x 16	10,3	5	3
	2	100	75.0	1 x 25	11,7	5	3
	3	125 ~ 150	93 ~ 110	1 x 35	12,7	5	3
	4	175 ~ 270	112 ~ 150	1 x 70	17,3	5	3
SD	5	75 ~ 100	56 ~ 75	1 x 10 / 16	6,7 / 10,3	5	6
	6	125	93.0	1 x 16	10,3	5	6
	7	150 ~ 200	110 ~ 150	1 x 25	11,7	5	6
	8	250 ~ 270	186 ~ 150	1 x 35	12,7	5	6

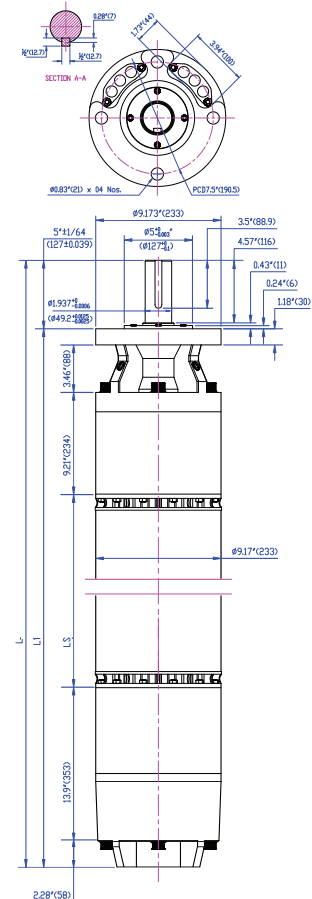
Additional core 1 x 10 mm² 5 meters for earthing.



10" x 8" NEMA Spline Shaft

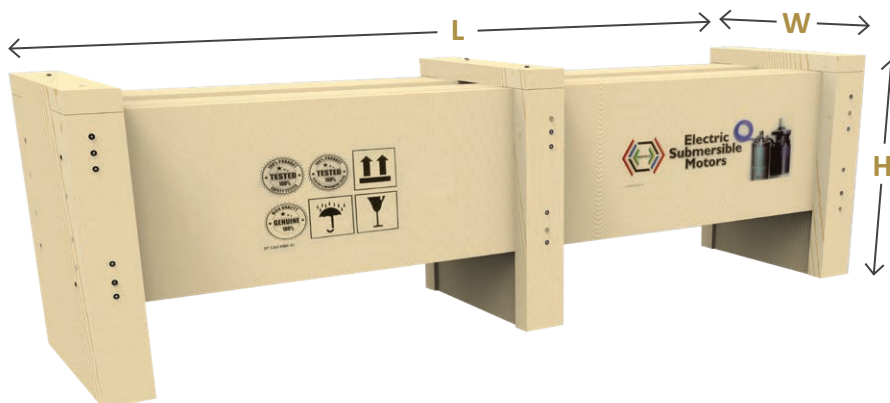


10" x 10" Key way Shaft



Motor Dimensions and Weights KM10

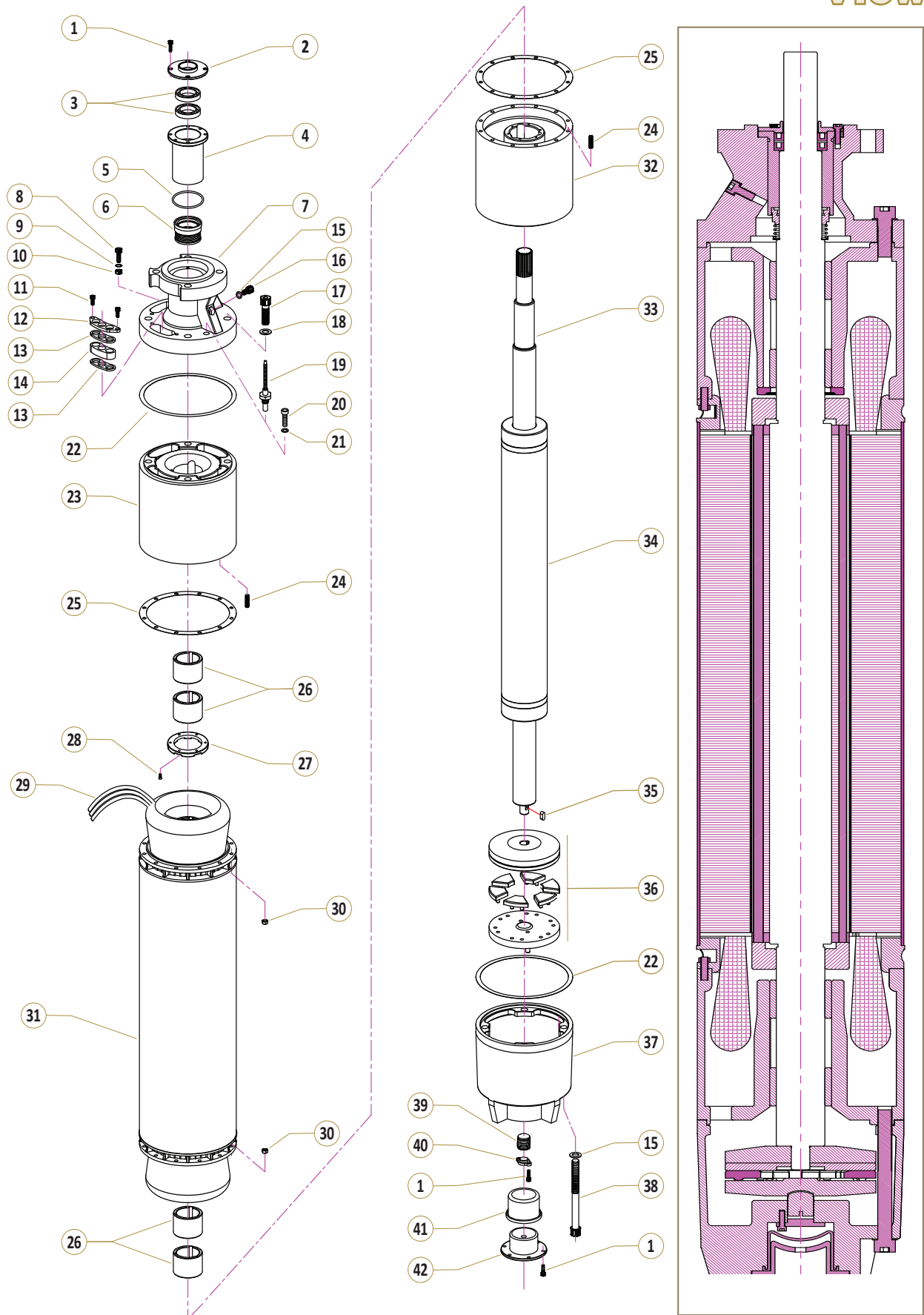
Motor Type	Motor Size		Thrust Load (N)	L Motor Length (mm)	L1 Motor Length (mm)	Packing Dimension W x H x L (mm)	Weight (Kg)	
	HP	kW					Without Packing	With Packing
KM10 075T	75	56	80000	701	1184	356x452x1336	176	198
KM10 100T	100	75	80000	953	1433	356x452x1585	304	332
KM10 125T	125	93	80000	953	1433	356x452x1585	304	332
KM10 150T	150	112	80000	1052	1532	356x452x1684	361	393
KM10 175T	175	130	80000	1252	1732	356x452x1885	451	490
KM10 200T	200	150	80000	1252	1732	356x452x1885	451	490
KM10 250T	250	186	80000	1453	1933	356x452x2085	562	607
KM10 270T	270	200	80000	1552	2032	356x452x2184	613	661



All dimensions are in mm

Exploded View

Cross-Sectional View



**Parts LIST** with Material & Quantity

Pos.	Item Code	Part Name	Material	Qty	Unit
1	60161252	Bolt Allen M6 x 20	Stainless Steel	12	Nr
2	60161085	Mechanical Seal Cover	Stainless Steel	1	Nr
3	60161127	Oil Seal 38x60x10	NBR	2	Nr
4	60161125	Bush Seal Support	Cast Iron	1	Nr
5	60161115	O-Ring 65x2,5	NBR	1	Nr
6	60161275	Mechanical Seal Complete	Silicon Tungsten Carbide (WC) + NBR + Stainless Steel	1	Nr
7	60271000	Top Piece / Upper Support Double Flange	Cast Iron	1	Nr
8	60161254	Bolt Allen M8 x 35	Stainless Steel	1	Nr
9	60161263	Spring Washer M8	Stainless Steel	1	Nr
10	60161262	Nut Hex M8	Stainless Steel	1	Nr
11	60161253	Bolt Allen M8 x 25	Stainless Steel	2	Nr
12	60161150	Cable Top Cover Plate	Carbon Steel	2	Nr
13	60271165	Washer nylon	Nylon	2	Nr
14	60271180	Gasket Rubber	NBR	1	Nr
15	60101157	Washer Bonded / Dowty Seal M10	NBR / Stainless Steel	2	Nr
16	60101068	Bolt Allen M10 x 16	Stainless Steel	2	Nr
17	60161255	Bolt Allen M16 x 75	Stainless Steel	4	Nr
18	60161272	Washer Bonded / Dowty Seal M16	NBR / Stainless Steel	8	Nr
19	60101485	PT 100 Sensor	Stainless Steel	1	Nr
20	60161250	Bolt Allen M8x20	Stainless Steel	9	Nr
21	60161267	Washer Bonded / Dowty Seal M8	NBR / Stainless Steel	2	Nr
22	60271150	Gasket Upper & Lower	Tesnit	2	Nr
23	60161080	Upper Bearing Housing	Cast Iron	1	Nr
24	60271170	Setscrew / Stud Bolt M8x35	Stainless Steel	24	Nr
25	60271152	Gasket Stator	Tesnit	2	Nr
26	60271100	Carbon Bush	Carbon	4	Nr
27	60271030	Upper Thrust Bearing	Brass	1	Nr
28	60101142	Screw CSK M4x10	Stainless Steel	6	Nr
29A	601011XX	Cable Tail (1 x 10 / 16 / 25 / 35 / 70 mm ²)	PVC + Copper	48	Ft
29B	60101185	Cable Tail 1 x 10 mm ² (For Earthing)	PVC + Copper	16	Ft
30	60161262	Nut Hex M8	Stainless Steel	24	Nr
31	602712XX	Stator Stack (Assembly)	Silicon Steel (50C800) + S Steel	1	Set
32	60271040	Lower Bearing Housing	Cast Iron	1	Nr
33	602713XX	Motor Shaft	Stainless Steel	1	Nr
34	60271330	Rotor Lamination (Including Shaft + Copper Bars + End Ring)	Silicon Steel (50C800) + Stainless Steel + Copper	1	Set
35	60101145	Key for End Shaft	Stainless Steel	1	Nr
36	60271050	Thrust Bearing Complete	Stainless Steel / Carbon	1	Set
37	60271020	Thrust Support	Cast Iron	1	Nr
38	60271142	Bolt Allen M16x180	Stainless Steel	4	Nr
39	60271140	Adjustment Bolt	Stainless Steel	1	Nr
40	60161010	Lock Washer Adj. Bolt	MS	1	Nr
41	60271130	Diaphragm Rubber	NBR	1	Nr
42	60271135	Diaphragm Support	Cast Iron	1	Nr