

ELECTRICAL MOTORS



VINCKE



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MAIN APPLICATIONS OF MOTORS



Building water supply



Crane



Animal husbandry circulation fan



Floor grinding equipment



Stone machinery



Textile machinery



Hydraulic equipment



Spraying equipment



Wind power generator

NAMEPLATE

VINCKE		THREE PHASE			UK		CE	
		INDUCTION MOTOR			CA		IE3 82.5 %	
TYPE VNKTM3-8024		BS	IP 55	INS. CLF	No.			
CONN	V	Hz	kW	r/min	A	kg		
Δ/Y	230/400	50	0.75	1445	3.04/1.75	12		
Δ/Y	265/460	60	0.75	1734	2.81/1.51		S.F.1.15	
Date:	Power factor: 0.75	Duty: S1		Standard: IEC60034-1				
VINCKE HYDRAULICS S.A.								

- 1 Trade mark/ Logo
- 2 Product model
- 3 Rated output (kw)
- 4 Rated voltage (V)
- 5 Rated current (A)
- 6 Rated speed (r/min)
- 7 Weight (Kg)
- 8 Power factor
- 9 Connetion method
- 10 Company name
- 11 Series number of production
- 12 Product Standard
- 13 Production date
- 14 Frequency
- 15 Insulation class
- 16 Duty
- 17 Producte certification
- 18 Efficiency value
- 19 Description of motor type
- 20 Protection grade
- 21 Efficiency grade
- 22 Mounting type

MECHANICAL CHARACTERISTICS

Connection box and cable entry

The connection box is located on the top of motor housing as standard. It is allowed to be rotated by $4 \times 90^\circ$ for easy connection from each direction.

Normally, there are 2 cable entries in connection box with two cable glands.



Bearing

- Bearing type**

Standard series of motors are supplied with ball bearing. These are either of the sealed or opened bearings. The open bearings will be used with re-greasable type of end shields together.

- Bearing lubrication**

The lubrication interval of re-greasable bearings depends on the running speed of the motor and the bearings temperature.

The table shows the recommended lubrication intervals for 70°C as a working temperature of the bearings of each pole of motor.

Smaller motors usually have greased, sealed for life bearings.

- Bearing nominal lifetime**

Generally, the bearing lifetime is defined by the bearing size, the bearing load, the operating condition, the speed and the grease lifetime.

The bearing lifetime of motors with horizontal type of construction, operated at 50Hz frequency is at least 40.000 hours theoretically if there is no additional axial loading at the coupling output and at least 20.000 hours with the maximum admissible loads.

When the motors operates outside of normal conditions, the bearing life will be reduced, such as the following conditions.

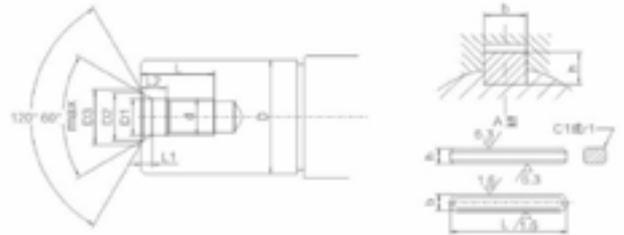
Power	Recommended re-greasing time interval		
	2P	4P	6P
7.5-22	4200	7000	8500
30-45	3100	6500	8500
55	2000	6000	7000
75-90	2000	6000	6500
110-200	1500	5500	6500
250-355	1000	4000	5000

- When motor runs beyond the rated speed, the increase of motor vibration will result in the extra radial and axial force on bearing. This will reduce the life of bearing;
- When the motor vibration increase due to the environment or other equipment, the bearing also will reduce the life of bearing;
- If the coolant temperature is increased by 10°C , the grease lifetime and re-greasing interval is halved.

Center hole and key slot dimensions of shaft extension

On shaft extension end, there are center hole and key slot for the connection with load through coupling.

The dimensions of center hole and key slot please refer to table below



Frame Size	Center hole	key slot width	key slot depth
		mm	mm
56	M4*10	3	1.8
63	M4*10	4	2.5
71	M5*13	5	3
80	M6*16	6	3.5
90	M8*24	8	4
100	M10*28	8	4
112	M10*28	8	4
132	M12*30	10	5

Frame Size	Center hole	key slot width	key slot depth
		mm	mm
160	M16*36	12	5
180	M16*36	14	5.5
200	M20*42	16	6
225	M20*42	18	7
250	M20*42	18	7
280	M20*42	20	7.5
315	M20*42	22	9
355	M24*50	25	9

Cooling and ventilation

The standard motors adopt IC411 (TEFC-totally enclosed fan cooling) method that in accordance with IEC 60034-6.

For VFD applications, while motors operate lower than 60%-70% of rate frequency, the self ventilation is not adequate, an optional external blower should be ordered.

For example:

- While motor operating at low speed, the separately constant-speed fan is recommended to be used to guarantee the ventilation effect.
- While motor operating significantly higher than the synchronous speed, the separately fan is also recommended to be used. It is helpful to reduce the motor noise.

The fan is optional with power supply 200V/380V at 50Hz.

Noise levels

- The motor noise with no load of A-weighted sound power level

Frame Size	Synchronous speed				
	(r/min)				
	3000	1500	1000	750	600
63	61	52	-	-	-
71	64	55	52	-	-
80	62	56	54	54	-
90	67	59	57	56	-
100	74	64	61	59	-
112	77	65	65	61	-
132	79	71	69	64	-
160	81	73	73	68	-
180	83	76	73	70	-
200	84	76	73	73	-
225	86	78	74	73	-
250	89	79	76	75	-
280	91	80	78	76	-
315	92	88	83	82	82
355	100	95	85	89	90

The noise level of totally enclosed fan cooling motors (cooling method: IC411) operating with no load at 50Hz refers to GB/T 28575-2020 "IE3 series (IP55) three phase induction motor technical specification, frame size 63-355".

The table shows the mean value of A-weighted sound power level specified in dB(A).

- The allowable increment of motor noise with full load of A-weighted sound power level

The table shows the allowable increment of motor noise operating with full load specified as A-weighted sound power level refer to standard GB/T 28575-2020 "IE3series (IP55) three phase motor technical specification (frame size 63-355).

Frame Size	Synchronous speed				
	(r/min)				
	3000	1500	1000	750	600
63<H<160	2	5	7	8	-
180<H<200	2	4	6	7	-
255<H<280	2	3	6	7	-
H=315	2	3	5	6	7
H=355	2	2	4	5	6

• **Vibration** 

The effective vibration of motor running at no load should not exceed the value in table below

Frame Size	63<H<132		H>132	
	Displacement	Speed	Displacement	Speed
Mounting arrangement	μm	mm/s	μm	mm/s
Free Suspension	45	2.8	45	2.8
Rigid mounting	-	-	37	2.3

Environmental conditions 

• The operation environment conditions of standard motor are as follow

- Protection degree: IP55
- Cooling method: IC411
- The standard motor would not be used over 1000m above sea level.
- Allowed ambient temperature: -15C +40°C.
- The output should be adjusted in case of motor operating environment conditions changed.
- The value in the table below shows the output of motor operating above 1000m, and higher ambient temperature.

Ambient or coolant temperature	Altitude above sea level (m)				
	1000	1500	2000	2500	3000
30°C	100%	100%	100%	98%	95%
35°C	100%	100%	97%	94%	91%
40°C	100%	97%	93%	90%	87%
45°C	95%	92%	88%	85%	83%
50°C	90%	87%	84%	81%	78%
55°C	85%	82%	80%	77%	74%
60°C	80%	76%	76%	73%	70%

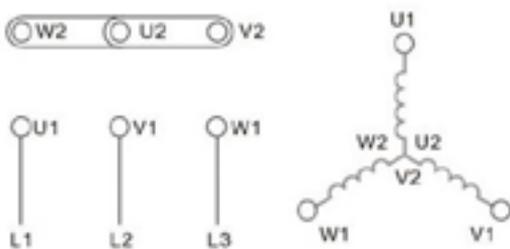
According to IEC 60034-1, it is classified into Category A (combination of voltage deviation $\pm 5\%$ and frequency deviation $\pm 2\%$) and Category B (combination of voltage deviation $\pm 10\%$ and frequency deviation $+3\%/-5\%$) for voltage and frequency fluctuations. The motors can supply their rated torque in both Category A and B. In Category A, the temperature rise is approximately 10K higher than during normal operation.

Standard 60034-1	Category A	Category B
Voltage deviation	$\pm 5\%$	$\pm 10\%$
Frequency deviation	$\pm 2\%$	3%/-5%

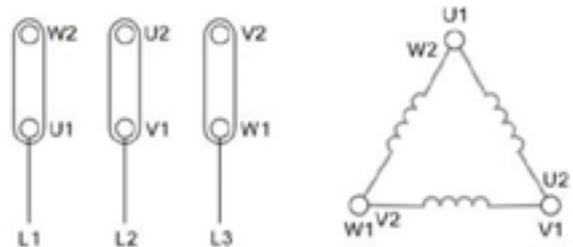
Cable connection

Generally, there are 6 leads from motor. The connection method is as follow, for example, an order with the rated voltage 380V.

- When $P_N < 3\text{kW}$, motor connected in Y type (using 220/380V scheme);
- When $P_N < 3\text{kW}$, motor connected in Δ type (using 220/380V scheme);
- Other special connection could be negotiated.



Y / Star connection



Δ / Delta connection

Motor surface treatment

- Our standard color for motor surface is:



- Anti-corrosion grade

The anti-corrosion grade of normal motor paint is C2. It can be reached up to C5H for customers special requirements.

Insulation class

- Generally it adopts class F insulation system with class B temperature rise for standard motor. It gives more safety margin that could extend the insulation life.

- The ambient temperature is calculated by 40°C according to standard, and leave 10K margin.

The temperature rise limits of commonly used insulation class are as follow.

Common insulation class	B	F	H
Max permissible working temperature	130	155	180
Ambiental temperature	40	40	40
Temperature rise limit	80	105	125

VNKTM1 IE1 SERIES THREE PHASE INDUCTION MOTOR

PRODUCT INTRODUCTION

Conform to IEC standard.
Widely applied in industries which have high requirement on quality and reliability, such as commerce, manufacturing, construction, water supply and agricultural irrigation industries.

PRODUCT FEATURES

- IP55
- Multiple feet location
- Aluminium frame, end shields and base
- High strength cable gland
- Shaft key and protector supplied
- Superior paint finish
- Motors made to heavy duty services factors
- Can be made with stainless steel shaft
- Motors made for continuous S1 duty
- Grade F insulation
- High performance and efficiency
- All three phase motors are equipped with PTC 150°C
- RAL 7011

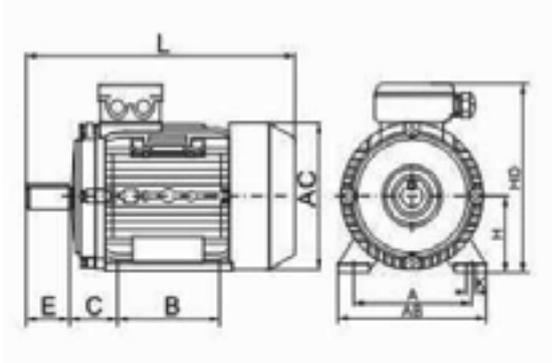
PRODUCT ADVANTATGE

- Water, dust and vermin resistant
- Quiet operation
- Energy saving
- Easy installation (bolt on feet or brackets as required)
- Corrosion resistant
- Dependable
- Superior life
- Reliable in country, city or factory environments

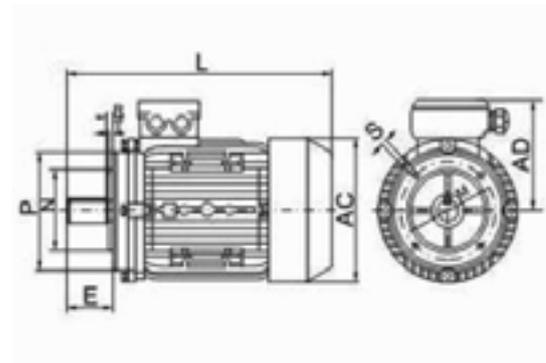


THREE PHASE IE1 MOTOR

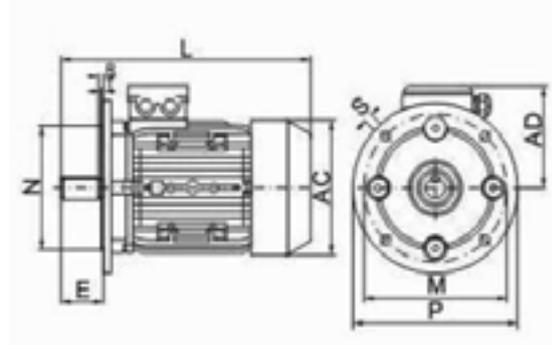
IMB3



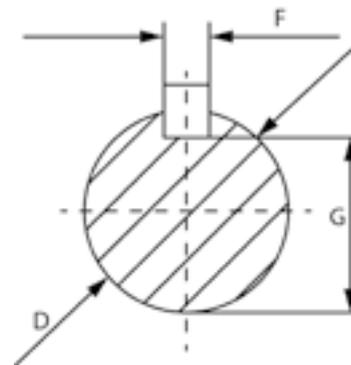
IMB14



IMB5



SHAFT



INSTALLATION AND OVERALL DIMENSIONS

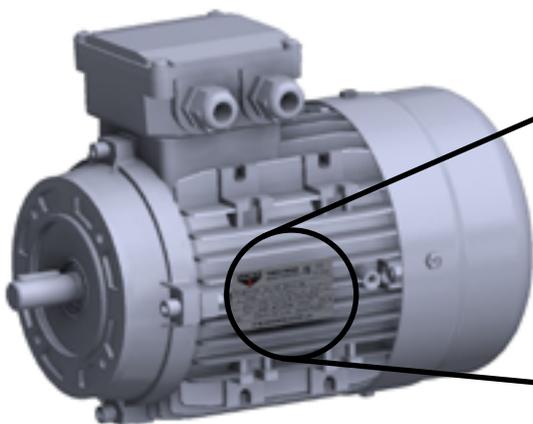
Frame Size	Mounting Dimensions (mm)																Shaft				Overall Dimensions					
	IMB3					IMB14						IMB5					D	E	F	G	AB	AC	AD	HD	L	
	A	B	C	H	K	M	N	P	R	S	T	M	N	P	R	S										T
56	90	71	36	56	5,8	65	50	80	0	M5	2,5	100	80	120	0	7	3	9	20	3	7,2	110	110	100	156	195
63	100	80	40	63	7	75	60	90	0	M5	2,5	115	95	140	0	10	3	11	23	4	8,5	122	120	104	167	213
63-34	100	80	40	63	7	75	60	90	0	M5	2,5	115	95	140	0	10	3	11	23	4	8,5	122	120	104	167	251
71	112	90	45	71	7	85	70	105	0	M6	2,5	130	110	160	0	10	3,5	14	30	5	11	138	139	115	186	250
80	125	100	50	80	10	100	80	120	0	M6	3	165	130	200	0	12	3,5	19	40	6	15,5	160	158	135	215	285
90S	140	100	56	90	10	115	95	140	0	M8	3	165	130	200	0	12	3,5	24	50	8	20	176	175	145	235	304
90L	140	125	56	90	10	115	95	140	0	M8	3	165	130	200	0	12	3,5	24	50	8	20	176	175	145	235	329
100L	160	140	63	100	12	130	110	160	0	M8	3,5	215	180	250	0	14,5	4	28	60	8	24	196	196	155	255	372
112M	190	140	70	112	12	130	110	160	0	M8	3,5	215	180	250	0	14,5	4	28	60	8	24	219	219	172	284	394
132S	216	140	89	132	12	165	130	200	0	M10	3,5	265	230	300	0	14,5	4	38	80	10	33	256	258	192	324	462
132M	216	178	89	132	12	165	130	200	0	M10	3,5	265	230	300	0	14,5	4	38	80	10	33	256	258	192	324	500
160M	254	210	108	160	15	215	180	250	0	M12	4	300	250	350	0	18,5	5	42	110	12	37	302	314	246	406	617
160L	254	254	108	160	15	215	180	250	0	M12	4	300	250	350	0	18,5	5	42	110	12	37	302	314	246	406	661

TECHNICAL DATA (50Hz) IE1-2 POLES

Model	Rated Power		Rated Current (A)										Speed	Tn	Eff.	P.F.	Tst/Ttn	Tmax/Tn	Ist/In	Wt.
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V	rpm	N.m	η(%)	cosφ	kg				
VNKTM1-561-2	0,09	0,12	0,59	0,34	0,20	0,56	0,32	0,19	0,54	0,31	0,18	2758	0,31	59,0	0,68	2,30	2,40	6,00	3,2	
VNKTM1-562-2	0,12	0,16	0,70	0,41	0,23	0,67	0,39	0,22	0,65	0,37	0,22	2780	41	63,0	0,71	2,30	2,40	6,00	3,4	
VNKTM1-631-2	0,18	0,25	0,91	0,53	0,30	0,87	0,50	0,29	0,83	0,48	0,28	2715	0,63	65,0	0,80	3,00	3,20	5,00	4	
VNKTM1-632-2	0,25	0,35	1,19	0,69	0,40	1,14	0,66	0,38	1,09	0,63	0,36	2715	0,88	68,0	0,81	3,20	3,30	5,00	4,5	
VNKTM1-711-2	0,37	0,5	1,71	0,99	0,57	1,64	0,94	0,55	1,57	0,91	0,52	2690	1,31	70,0	0,81	2,80	3,00	5,00	6	
VNKTM1-712-2	0,55	0,75	2,41	1,40	0,80	2,31	1,33	0,77	2,21	1,28	0,74	2715	1,93	73,0	0,82	3,30	3,50	5,00	6,5	
VNKTM1-801-2	0,75	1	3,29	1,90	1,10	3,15	1,81	1,05	3,01	1,74	1,00	2730	2,62	72,1	0,83	2,80	3,80	7,00	9,3	
VNKTM1-802-2	1,1	1,5	4,58	2,65	1,53	4,38	2,52	1,46	4,20	2,43	1,40	2746	3,83	75,0	0,84	2,80	3,50	7,00	10	
VNKTM1-803-2	1,5	2	6,07	3,51	2,02	5,81	3,34	1,94	5,56	3,22	1,85	2770	5,17	77,2	0,84	3,00	4,00	7,50	11,5	
VNKTM1-90S-2	1,5	2	6,07	3,51	2,02	5,81	3,34	1,94	5,56	3,22	1,85	2715	5,28	77,2	0,84	2,40	2,80	7,50	14	
VNKTM1-90L-2	2,2	3	8,52	4,93	2,84	8,15	4,69	2,72	7,81	4,52	2,60	2772	7,58	79,7	0,85	2,50	2,80	7,50	16	
VNKTM1-90L2-2	3	4	11,1	6,43	3,70	10,6	6,11	3,54	10,1	5,89	3,39	2800	10,2	81,5	0,87	3,00	3,20	7,50	18,5	
VNKTM1-100L-2	3	4	11,1	6,43	3,70	10,6	6,11	3,54	10,1	5,89	3,39	2870	10,0	81,5	0,87	2,60	3,20	7,30	21	
VNKTM1-100L2-2	4	5,5	14,4	8,31	4,78	13,7	7,90	4,58	13,1	7,61	4,39	2880	13,3	83,1	0,88	2,50	2,70	7,00	26	
VNKTM1-112M-2	4	5,5	14,4	8,31	4,78	13,7	7,90	4,58	13,1	7,61	4,39	2890	13,2	83,1	0,88	2,50	2,70	7,00	27	
VNKTM1-112M2-2	5,5	7,5	19,4	11,2	6,45	18,5	10,6	6,17	17,7	10,2	5,93	2900	18,1	84,7	0,88	2,50	2,70	7,00	30	
VNKTM1-112M3-2	7,5	10	26,0	15,0	8,7	24,8	14,3	8,29	23,8	13,7	7,95	2900	24,7	86,0	0,88	2,50	2,70	7,50	38	
VNKTM1-132S1-2	5,5	7,5	19,4	11,2	6,45	18,5	10,6	6,17	17,7	10,2	5,92	2910	18,0	84,7	0,88	2,50	2,70	7,50	39	
VNKTM1-132S2-2	7,5	10	26,0	15,0	8,67	24,8	14,3	8,29	23,8	13,7	7,95	2900	24,7	86,0	0,88	2,50	2,70	7,50	44	
VNKTM1-132M1-2	9,2	12,5	30,8	17,8	10,2	29,4	16,9	9,83	28,2	16,3	9,42	2910	30,2	88,0	0,89	2,50	2,70	7,50	51	
VNKTM1-132M2-2	11	15	37,0	21,4	12,3	35,4	20,3	11,8	33,9	19,6	11,3	2919	26,0	87,6	0,89	2,50	2,70	7,50	55,5	
VNKTM1-132M3-2	15	20	49,9	28,8	16,6	47,7	27,4	15,9	45,7	26,4	15,2	2920	24,1	88,7	0,89	2,50	2,70	7,50	61	
VNKTM1-160M1-2	11	15	37,0	21,4	12,3	35,4	20,3	11,8	33,9	19,6	11,3	2950	35,6	87,6	0,89	2,70	3,00	7,80	86	
VNKTM1-160M2-2	15	20	49,9	28,8	16,6	47,7	27,4	15,9	45,7	26,4	15,2	2970	48,2	88,7	0,89	2,70	3,00	7,80	87	
VNKTM1-160L-2	18,5	25	60,4	34,9	20,1	57,7	33,2	19,2	55,3	32,0	18,4	2970	59,5	89,3	0,90	2,70	3,00	7,80	94	

TECHNICAL DATA (50Hz) IE1-4 POLES

Model	Rated Power		Rated Current (A)									Speed	Tn	Eff.	P.F.	Tst/Ttn	Tmax/Tn	Ist/In	Wt. kg
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V	rpm	N.m	η(%)	cosφ				
VNKTM1-561-4	0,06	0,08	0,50	0,29	0,17	0,48	0,28	0,16	0,46	0,27	0,15	1371	0,42	53,0	0,59	2,30	2,40	4,50	3
VNKTM1-562-4	0,09	0,12	0,70	0,41	0,23	0,67	0,39	0,22	0,65	0,37	0,22	1350	0,64	55,0	0,61	2,30	2,40	4,50	3,4
VNKTM1-563-4	0,12	0,16	0,77	0,44	0,26	0,73	0,42	0,24	0,70	0,41	0,23	1380	0,83	57,0	0,72	2,30	2,40	4,50	3,5
VNKTM1-631-4	0,12	0,16	0,77	0,44	0,26	0,73	0,42	0,24	0,70	0,41	0,23	1350	0,85	57,0	0,72	2,20	2,40	4,50	4
VNKTM1-632-4	0,18	0,25	1,08	0,62	0,36	1,03	0,59	0,34	0,99	0,57	0,33	1340	1,28	60,0	0,73	2,20	2,40	4,50	4,9
VNKTM1-633-4	0,25	0,35	1,36	0,79	0,45	1,30	0,75	0,43	1,25	0,72	0,42	1350	1,77	65,0	0,74	2,20	2,40	4,50	5,5
VNKTM1-711-4	0,25	0,35	1,36	0,79	0,45	1,30	0,75	0,43	1,25	0,72	42	1390	1,72	65,0	0,74	2,40	2,80	4,50	6
VNKTM1-712-4	0,37	0,5	1,93	1,12	0,64	1,85	1,06	0,62	1,77	1,02	0,59	1375	2,57	67,0	0,75	2,40	2,80	4,50	6,4
VNKTM1-713-4	0,55	0,75	2,71	1,57	0,90	2,59	1,49	0,86	2,48	1,44	0,83	1380	3,81	71,0	0,75	2,50	2,80	5,00	7,5
VNKTM1-801-4	0,55	0,75	2,71	1,57	0,90	2,59	1,49	0,86	2,48	1,44	0,83	1370	3,83	71,0	0,75	2,40	2,60	5,00	9
VNKTM1-802-4	0,75	1	3,59	2,08	1,20	3,44	1,98	1,15	3,29	1,90	1,10	1380	5,19	72,1	0,76	2,40	2,60	500	10,5
VNKTM1-803-4	1,1	1,5	5,00	2,89	1,67	4,78	2,75	1,59	4,58	2,65	1,53	1380	7,61	75,0	0,77	2,40	2,60	5,00	11,5
VNKTM1-90S-4	1,1	1,5	5,00	2,89	1,67	4,78	2,75	1,59	4,58	2,65	1,53	1390	7,56	75,0	0,77	2,20	2,40	6,00	13,5
VNKTM1-90L-4	1,5	2	6,45	3,74	2,15	6,17	3,55	2,06	5,92	3,42	1,97	1400	10,2	77,2	0,79	2,20	2,40	6,00	16
VNKTM1-90L1-4	1,85	2,5	7,88	4,56	2,63	7,54	4,33	2,51	7,22	4,18	2,41	1400	12,6	78,0	0,79	2,20	2,40	6,00	17
VNKTM1-90L2-4	2,2	3	8,94	5,18	2,98	8,55	4,92	2,85	8,20	4,74	2,73	1400	15,0	79,7	0,81	2,50	2,70	6,00	18
VNKTM1-100L-4	2,2	3	8,94	5,18	2,98	8,55	4,92	2,85	8,20	4,74	2,73	1430	14,7	79,7	0,81	2,20	2,30	7,00	20
VNKTM1-100L2-4	3	4	11,8	6,82	3,93	11,2	6,48	3,76	10,8	6,25	3,60	1430	20,0	81,5	0,82	2,20	2,30	7,00	24
VNKTM1-100L3-4	4	5,5	15,4	8,92	5,14	14,7	8,47	4,91	14,1	8,17	4,71	1420	26,9	83,1	0,82	2,50	2,70	7,00	29
VNKTM1-112M-4	4	5,5	15,4	8,92	5,14	14,7	8,47	4,91	14,1	8,17	4,71	1430	26,7	83,1	82	2,40	3,00	7,00	30,5
VNKTM1-112M2-4	5,5	7,5	20,5	11,8	6,84	19,6	11,2	6,55	18,8	10,8	6,27	1435	36,6	84,7	0,83	2,70	3,00	7,00	41
VNKTM1-132S-4	5,5	7,5	20,5	11,8	6,84	19,6	11,2	6,55	18,8	10,8	6,27	1440	36,5	84,7	0,83	2,80	3,20	7,50	44
VNKTM1-132M-4	7,5	10	27,2	15,7	9,08	26,0	14,9	8,69	24,9	14,4	8,33	1450	49,4	86,0	0,84	2,80	3,20	7,50	54,5
VNKTM1-132M2-4	9,2	12,5	32,8	19,0	10,9	31,4	18,0	10,4	30,1	17,4	10,0	1460	60,2	87,5	0,84	2,80	3,20	7,50	62
VNKTM1-132M3-4	11	15	39,2	22,7	13,0	37,5	21,5	12,5	35,9	20,8	11,9	1460	72,0	87,6	0,84	2,50	2,70	7,00	66
VNKTM1-160M-4	11	15	39,2	22,7	13,0	37,5	21,5	12,5	35,9	20,8	11,9	1460	72,0	87,6	0,84	2,40	3,50	7,50	89
VNKTM1-160L-4	15	20	52,2	30,2	17,4	49,9	28,7	16,6	47,8	27,6	15,9	1460	98,1	88,7	0,85	2,40	3,50	7,50	108



VINCKE		THREE PHASE		UK	CE
		INDUCTION MOTOR		CA	IE1 73.0 %
TYPE	VNKTM1-802-4	B14	IP55	INS.CL.F	No.
CONN	V	Hz	kW	z/min	A
Δ/Y	230/400	50	0.75	1380	3.39/1.95
Δ/Y	265/460	60	0.9	1656	3.39/1.95
Date:	Powerfactor: 0.78		Duty: S1		Standard: IEC60034-1
VINCKE HYDRAULICS S.A.					

VNKTM3 IE3 SERIES THREE PHASE INDUCTION MOTOR

(ALUMINIUM HOUSING)

PRODUCT INTRODUCTION

This series of motor design conforms to IEC standard. It is widely applied in the field with high requirements on quality and reliability, such as manufacturing, commerce, construction, water supply and agricultural irrigation, etc.

PRODUCT FEATURES

- Output: 0.12-18.5kW
- Frame size: 56-160
- Rated voltage: according to customer's requirements
- Rated frequency: 50/60Hz
- Efficiency: IE3 (GB-grade 3)
- Insulation class: F
- Protection grade: IP55
- Cooling method: IC411
- Duty type: S1
- Installation method: B3, B35, B5
- Removable frame, end shields and base
- High strength sealing
- Shaft key and protector supplied
- Stainless steel shaft is optional

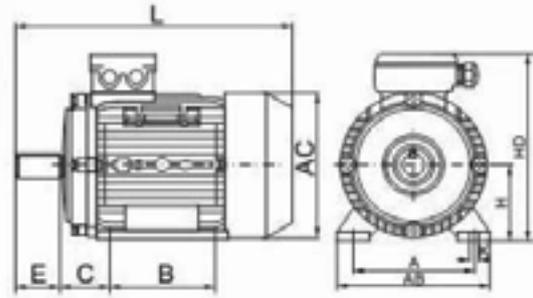
PRODUCT ADVANTAGE

- Low noise
- Energy saving
- Easy installation
- Anti-corrosion
- Reliable performance
- Long service life
- Suitable for industry, urban and rural areas

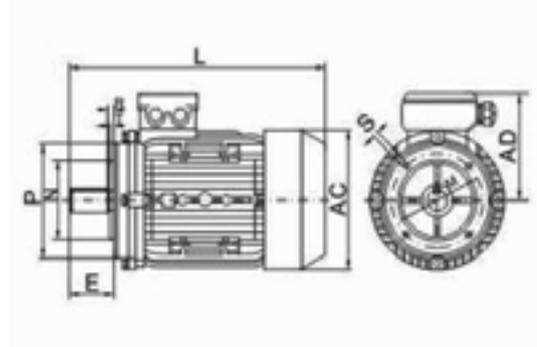


THREE PHASE IE3 MOTOR

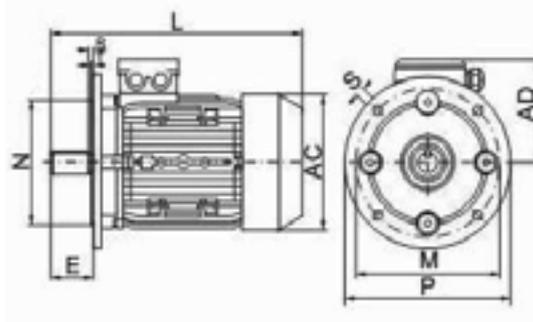
IMB3



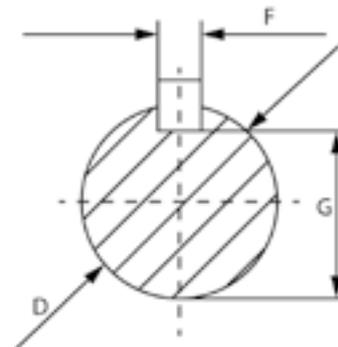
IMB14



IMB5



SHAFT



INSTALLATION AND OVERALL DIMENSIONS

Frame Size	Mounting Dimensions (mm)																Shaft				Overall Dimensions					
	IMB3					IMB14					IMB5															
	A	B	C	H	K	M	N	P	R	S	T	M	N	P	R	S	T	D	E	F	G	AB	AC	AD	HD	L
56	90	71	36	56	5.8	65	50	80	0	M5	2.5	100	80	120	0	7	3	9	20	3	7.2	110	110	100	156	195
63	100	80	40	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3	11	23	4	8.5	122	120	103	166	218
71	112	90	45	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	14	30	5	11	138	139	115	186	250
80	125	100	50	80	10	100	80	120	0	M6	3	165	130	200	0	12	3.5	19	40	6	15.5	159	158	126	206	295
90S	140	100/125	56	90	10	115	95	136	0	M8	3	165	130	200	0	12	3.5	24	50	8	20	177	175	132	222	338
90L	140	125	56	90	10	115	95	136	0	M8	3	165	130	200	0	12	3.5	24	50	8	20	177	175	132	222	363
100L	160	140	63	100	12	130	110	164	0	M8	3.5	215	180	250	0	14.5	4	28	60	8	24	205	198	147	247	401
112M	190	140	70	112	12	130	110	160	0	M8	3.5	215	180	250	0	14.5	4	28	60	8	24	222	228	169	281	405
112M-4	190	140	70	112	12	130	110	160	0	M8	3.5	215	180	250	0	14.5	4	28	60	8	24	222	228	169	281	430
132S	216	140	89	132	12	165	130	200	0	M10	3.5	265	230	300	0	14.5	4	38	80	10	33	257	268	188	320	467
132M	216	178	89	132	12	165	130	200	0	M10	3.5	265	230	300	0	14.5	4	38	80	10	33	257	268	188	320	505
160M	254	210	108	160	15	215	180	250	0	M12	4	300	250	350	0	18.5	5	42	110	12	37	302	314	246	406	617
160L	254	254	108	160	15	215	180	250	0	M12	4	300	250	350	0	18.5	5	42	110	12	37	302	314	246	406	661

TECHNICAL DATA IE3-2 POLES

Model	Rated Power		Rated Current (A)								
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V
VNKTM3-562-2	0,12	1/6	0,73	0,42	0,24	0,70	0,40	0,23	0,67	0,39	0,22
VNKTM3-631-2	0,18	1/4	0,96	0,55	0,32	0,91	0,53	0,30	0,88	0,51	0,29
VNKTM3-632-2	0,25	1/3	1,22	0,71	0,41	1,17	0,67	0,39	1,12	0,65	0,37
VNKTM3-711-2	0,37	1/2	1,69	0,98	0,56	1,61	0,93	0,54	1,55	0,89	0,52
VNKTM3-712-2	0,55	3/4	2,35	1,36	0,78	2,25	1,29	0,75	2,15	1,24	0,72
VNKTM3-801-2	0,75	1	2,97	1,72	0,99	2,85	1,64	0,95	2,73	1,58	0,91
VNKTM3-802-2	1,1	1 1/2	4,21	2,43	1,40	4,02	2,31	1,34	3,86	2,23	1,29
VNKTM3-90S-2	1,5	2	5,57	3,22	1,86	5,32	3,06	1,77	5,10	2,95	1,70
VNKTM3-90L-2	2,2	3	7,91	4,58	2,64	7,56	4,35	2,52	7,25	4,19	2,42
VNKTM3-100L-2	3	4	10,39	6,02	3,46	9,94	5,71	3,31	9,52	5,51	3,17
VNKTM3-112M-2	4	5 1/2	13,54	7,84	4,51	12,95	7,45	4,32	12,41	7,18	4,14
VNKTM3-132S1-2	5,5	7 1/2	18,39	10,65	6,13	17,59	10,11	5,86	16,86	9,75	5,62
VNKTM3-132S2-2	7,5	10	24,82	14,37	8,27	23,74	13,65	7,91	22,76	13,16	7,59
VNKTM3-132M1-2	9,2	12 1/2	30,28	17,53	10,09	28,97	16,66	9,66	27,76	16,05	9,25
VNKTM3-132M2-2	11	15	35,57	20,59	11,86	34,02	19,56	11,34	32,60	18,85	10,87
VNKTM3-160M1-2	11	15	35,57	20,59	11,86	34,02	19,56	11,34	32,60	18,85	10,87
VNKTM3-160M2-2	15	20	48,13	27,86	16,04	46,04	26,47	15,35	44,12	25,51	14,71
VNKTM3-160L-2	18,5	25	59,04	34,18	19,68	56,47	32,47	18,82	54,12	31,30	18,04

IE3-4 POLES

Model	Rated Power		Rated Current (A)								
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V
VNKTM3-631-4	0,12	1/6	0,74	0,43	0,25	0,70	0,40	0,23	0,67	0,39	0,22
VNKTM3-632-4	0,18	1/4	1,02	0,59	0,34	0,98	0,56	0,33	0,94	0,54	0,31
VNKTM3-711-4	0,25	1/3	1,29	0,75	0,43	1,24	0,71	0,41	1,19	0,69	0,40
VNKTM3-712-4	0,37	1/2	1,79	1,04	0,60	1,72	0,99	0,57	1,64	0,95	0,55
VNKTM3-801-4	0,55	0,75	2,48	1,44	0,83	2,37	1,36	0,79	2,27	1,32	0,76
VNKTM3-802-4	0,75	1	3,18	1,84	1,06	3,04	1,75	1,01	2,92	1,69	0,97
VNKTM3-90S-4	1,1	1,5	4,52	2,61	1,51	4,32	2,48	1,44	4,14	2,39	1,38
VNKTM3-90L-4	1,5	2	5,99	3,47	2,00	5,73	3,30	1,91	5,49	3,18	1,83
VNKTM3-100L1-4	2,2	3	8,22	4,76	2,74	7,86	4,52	2,62	7,54	4,36	2,51
VNKTM3-100L2-4	3	4	10,9	6,34	3,65	10,5	6,02	3,49	10,0	5,80	3,35
VNKTM3-112M-4	4	5,5	14,4	8,37	4,82	13,8	7,95	4,61	13,2	7,66	4,41
VNKTM3-132S-4	5,5	7,5	19,4	11,2	6,47	18,6	10,7	6,19	17,8	10,3	5,93
VNKTM3-132M-4	7,5	10	25,9	15,0	8,64	24,8	14,3	8,26	23,8	13,7	7,92
VNKTM3-132M2-4	9,2	12,5	31,6	18,3	10,54	30,2	17,4	10,08	29,0	16,8	9,66
VNKTM3-160M-4	11	15	37,2	21,5	12,39	35,5	20,4	11,85	34,1	19,7	11,35
VNKTM3-160L-4	15	20	49,7	28,8	16,57	47,5	27,3	15,85	45,6	26,3	15,19

	Speed	Efficiency η (%)			P.F.	Tn	Tst/Ttn	Tmax/Tn	Ist/In	Weight
	rpm	100%	75%	50%	cos ϕ	N.m				kg
	2720	60,8	61,5	60,4	0,71	0,42	3,0	3,1	4,6	3,9
	2780	65,9	66,3	65,8	0,75	0,62	2,7	2,8	4,9	5
	2780	69,7	70,4	69,3	0,77	0,86	3,3	3,4	5,6	6
	2780	73,8	74,1	73,1	0,78	1,27	2,8	2,8	4,9	7
	2850	77,8	78,3	76,9	0,79	1,84	3,4	3,2	6,2	7,5
	2900	80,7	80,6	78,7	0,82	2,49	2,5	3,0	7,3	9,5
	2910	82,7	83,0	82,5	0,83	3,65	2,8	3,5	8,7	10,5
	2900	84,2	84,8	84,0	0,84	4,95	2,4	3,2	8,5	15
	2915	85,9	86,2	85,5	0,85	7,26	2,6	3,5	8,5	19
	2910	87,1	87,9	86,2	0,87	9,90	3,2	3,5	8,5	25
	2920	88,1	88,5	87,8	0,88	13,15	2,6	3,0	8,6	34
	2920	89,2	89,5	88,8	0,88	17,93	2,5	2,8	8,6	49,5
	2925	90,1	90,7	89,6	0,88	24,45	2,5	3,0	8,5	55
	2930	90,6	90,9	90,2	0,88	30,00	2,6	3,2	8,8	62
	2945	91,2	91,6	90,6	0,89	35,67	2,7	3,6	8,8	76,5
	2945	91,2	91,6	90,6	0,89	35,67	2,7	3,6	8,8	99
	2945	91,9	92,0	91,2	0,89	48,64	2,6	3,6	9,0	108
	2940	92,4	92,5	92,0	0,89	60,09	2,7	3,6	9,0	118

	Speed	Efficiency η (%)			P.F.	Tn	Tst/Ttn	Tmax/Tn	Ist/In	Weight
	rpm	100%	75%	50%	cos ϕ	N.m				kg
	1330	64,8	63,2	62,3	0,66	0,86	2,5	2,7	3,5	5
	1360	69,9	68,6	67,1	0,66	1,26	2,5	2,7	3,6	6
	1380	73,5	73,7	73,1	0,69	1,73	2,3	2,6	4,6	7
	1400	77,3	77,5	76,8	0,7	2,52	2,6	2,8	5,1	9
	1430	80,8	80,9	79,2	0,72	3,67	2,6	3,0	6,2	11
	1445	82,5	82,6	81,1	0,75	5,04	3,0	3,6	7,2	13
	1445	84,1	84,0	83,2	0,76	7,27	2,5	3,0	8,0	14,5
	1445	85,3	84,8	83,8	0,77	9,91	2,9	3,2	8,1	18,5
	1455	86,7	86,6	84,8	0,81	14,6	3,1	3,7	8,1	27
	1450	87,7	87,7	86,2	0,82	20,0	3,2	3,7	8,6	30
	1455	88,6	88,5	87,4	0,82	26,5	3,0	3,7	8,8	38
	1460	89,6	89,5	88,5	0,83	36,0	2,8	3,6	8,6	50
	1460	90,4	90,2	89,3	0,84	49,1	3,2	3,6	8,6	58
	1460	90,9	90,7	90,2	0,84	60,2	3,2	3,6	8,6	68
	1465	91,4	91,2	89,7	0,85	71,7	3,5	3,8	8,8	111
	1465	92,1	92,0	91,5	0,86	97,8	3,5	3,8	8,8	117

TECHNICAL DATA IE3-6 POLES

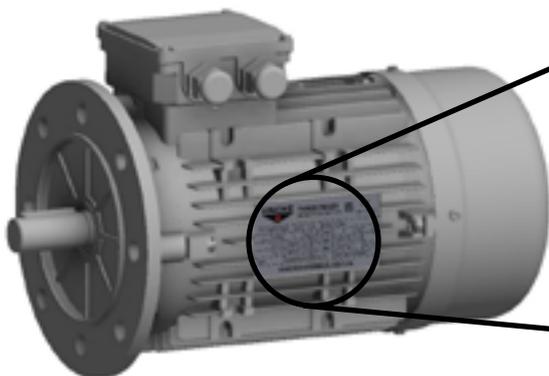
Model	Rated Power		Rated Current (A)								
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V
VNKTM3-632-6	0,12	0,16	0,94	0,54	0,31	0,90	0,52	0,30	0,86	0,50	0,29
VNKTM3-711-6	0,18	0,25	1,25	0,73	0,42	1,20	0,69	0,40	1,15	0,66	0,38
VNKTM3-712-6	0,25	0,35	1,62	0,94	0,54	1,55	0,89	0,52	1,49	0,86	0,50
VNKTM3-801-6	0,37	0,5	2,17	1,25	0,72	2,07	1,19	0,69	1,99	1,15	0,66
VNKTM3-802-6	0,55	0,75	3,02	1,75	1,01	2,88	1,66	0,96	2,76	1,60	0,92
VNKTM3-90S-6	0,75	1	3,51	2,03	1,17	3,36	1,93	1,12	3,22	1,86	1,07
VNKTM3-90L-6	1,1	1,5	4,88	2,83	1,63	4,67	2,69	1,56	4,48	2,59	1,49
VNKTM3-100L-6	1,5	2	6,54	3,78	2,18	6,25	3,59	2,08	5,99	3,47	2,00
VNKTM3-112M-6	2,2	3	9,26	5,36	3,09	8,85	5,09	2,95	8,48	4,91	2,83
VNKTM3-132M-6	3	4	12,4	7,20	4,14	11,9	6,84	3,96	11,4	6,59	3,80
VNKTM3-132M1-6	4	5,5	16,3	9,46	5,45	15,6	8,99	5,21	15,0	8,66	4,99
VNKTM3-132M2-6	5,5	7,5	21,9	12,7	7,29	20,9	12,0	6,97	20,0	11,6	6,68
VNKTM3-160M-6	7,5	10	28,0	16,2	9,32	26,7	15,4	8,92	25,6	14,8	8,54
VNKTM3-160L-6	11	15	40,0	23,1	13,3	38,2	22,0	12,7	36,6	21,2	12,2

IE3-8 POLES

Model	Rated Power		Rated Current (A)								
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V
VNKTM3-712-8	0,12	0,16	1,19	0,69	0,40	1,14	0,66	0,38	1,09	0,63	0,36
VNKTM3-801-8	0,18	0,25	1,52	0,88	0,51	1,45	0,84	0,48	1,39	0,80	0,46
VNKTM3-802-8	0,25	0,35	1,93	1,12	0,64	1,85	1,06	0,62	1,77	1,02	0,59
VNKTM3-90S-8	0,37	0,5	2,42	1,40	0,81	2,31	1,33	0,77	2,21	1,28	0,74
VNKTM3-90L-8	0,55	0,75	3,35	1,94	1,12	3,21	1,84	1,07	3,07	1,78	1,02
VNKTM3-100L1-8	0,75	1	4,04	2,34	1,35	3,86	2,22	1,29	3,70	2,14	1,23
VNKTM3-100L2-8	1,1	1,5	5,38	3,12	1,79	5,15	2,96	1,72	4,94	2,85	1,65
VNKTM3-112M1-8	1,5	5,5	7,06	4,08	2,35	6,75	3,88	2,25	6,47	3,74	2,16
VNKTM3-112M2-8	1,8	2,4	8,47	4,90	2,82	8,10	4,66	2,70	7,76	4,49	2,59
VNKTM3-122M3-8	2	2,7	9,41	5,45	3,14	9,00	5,17	3,00	8,62	4,99	2,87
VNKTM3-132S-8	2,2	3	9,93	5,75	3,31	9,50	5,46	3,17	9,10	5,26	3,03
VNKTM3-132M-8	3	4	13,10	7,58	4,37	12,53	7,20	4,18	12,00	6,94	4,00

Speed	Efficiency η (%)			P.F.	Tn	Tst/Ttn	Tmax/Tn	Ist/In	Weight
	rpm	100%	75%						
860	57,7	56,1	51,2	0,58	1,33	1,9	2,2	3,0	6,5
920	63,9	62,3	57,1	0,59	1,87	2,4	2,3	3,2	7
920	68,6	67,3	62,4	0,59	2,60	2,1	2,3	3,2	8
950	73,5	72,1	67,2	0,61	3,72	1,9	2,3	5,7	11,5
950	77,2	76,2	71,3	0,62	5,53	2,0	2,3	5,5	12,5
955	78,9	78	74,5	0,71	7,66	1,9	2,3	6,0	15
955	81,0	81,2	78,8	0,73	11,1	2,6	3,0	6,0	20
960	82,5	82,7	81,5	0,73	15,1	2,6	3,1	6,5	27
965	84,3	84,5	82,4	0,74	22,0	2,2	3,0	6,6	35,5
968	85,6	85,7	83,3	0,74	29,6	2,7	3,8	7,8	46
968	86,8	86,9	84,8	0,74	39,5	2,3	2,7	7,8	55
968	88,0	88,5	87,5	0,75	54,3	2,3	2,7	8,1	65,5
970	89,1	89,2	87,5	0,79	73,8	2,4	3,1	7,8	123
970	90,3	90,2	88,3	0,8	108,3	1,9	2,4	7,8	138

Speed	Efficiency η (%)			P.F.	Tn	Tst/Ttn	Tmax/Tn	Ist/In	Weight
	rpm	100%	75%						
690	50,7	48,7	40,9	0,52	1,66	1,9	2,3	2,6	7
710	58,7	56,8	48,7	0,53	2,42	1,8	2,2	3,0	11,5
710	64,1	62,3	54,2	0,53	3,36	2,0	2,4	3,2	12,5
710	69,3	67,4	59,5	0,58	4,98	1,9	2,5	4,0	15,5
710	73,0	71,2	63,1	0,59	7,40	1,8	2,5	4,0	18,5
700	75,0	72,1	65,3	0,65	10,2	1,80	2,00	6,2	22
710	77,7	75,2	68,6	0,69	14,8	1,80	2,00	6,2	27,5
705	79,7	77,8	70,4	0,70	20,3	1,80	2,00	6,7	34
705	79,7	77,8	70,4	0,70	24,4	1,80	2,00	6,7	34
705	79,7	77,8	70,4	0,70	27,1	1,80	2,00	6,7	37
705	81,9	80,4	74,1	0,71	29,8	1,80	2,00	6,7	44
705	83,5	82,6	76,2	0,72	40,6	1,80	2,00	6,9	52,5



VINCKE THREE PHASE UK CE INDUCTION MOTOR CA IE3 82.5 %							
TYPE	VNKT	M3-802-4	B5	IP55	INS.CL.F	No.	
CONN	V	Hz	kW	r/min	A	kg	
Δ / Y	230/400	50	0.75	1445	3.04/1.75	12	
Δ / Y	265/460	60	0.75	1734	2.61/1.51		S.F.1.15
Date:	Power factor: 0.75		Duty: S1		Standard: IEC60034-1		
VINCKE HYDRAULICS S.A.							

VNKTM 3 IE3 SERIES THREE PHASE INDUCTION MOTOR

(CAST IRON)

PRODUCT INTRODUCTION

This series of motor design conforms IEC standard. It could be widely applied in the field with high requirement on quality and reliability, such as manufacturing, commerce, construction, water supply and agricultural irrigation, etc.

PRODUCT FEATURES

- Output: 4 -315 kW
- Frame size: 160-355
- Rated voltage: according to customer's requirements
- Rated frequency: 50/60 Hz
- Efficiency: IE3
- Insulation class: F
- Protection grade: IP55
- Cooling method: IC411
- Duty type: S1
- Installation method: B3, B35 B5

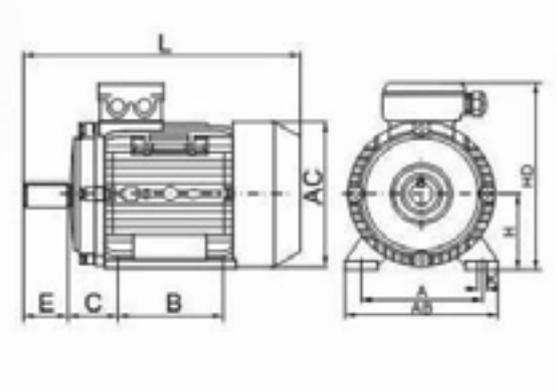
PRODUCT ADVANTAGE

- Compact structure design
- Attractive appearance
- Low noise
- High starting torque
- Suitable for heavy duty application
- High efficiency and energy saving
- Easy installation and maintenance
- Reliable and durable

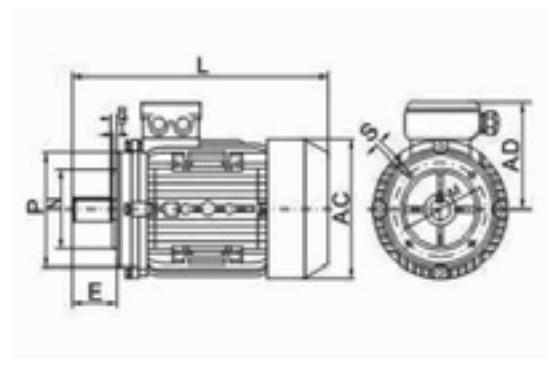


THREE PHASE IE3 MOTOR

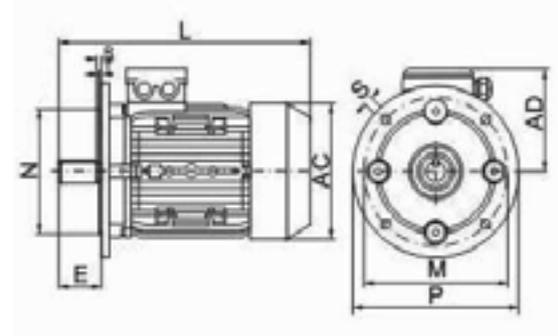
IMB3



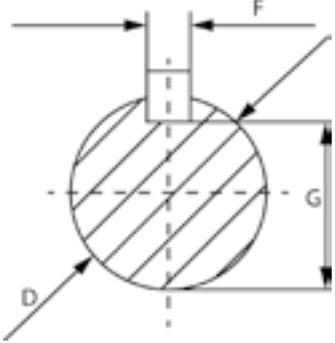
IMB35



IMB5



SHAFT



INSTALLATION AND OVERALL DIMENSIONS

Frame Size	Mounting Dimensions (mm)											Shaft								Overall Dimensions (mm)					
	A	B	C	H	K	M	N	P	R	S	T	D		E		F		G		AB	AC	AD	HD	L	
												2P	4,6,8,10P	2P	4,6,8,10P	2P	4,6,8,10P	2P	4,6,8,10P					2P	4,6,8,10P
160M	254	210	108	160	14.5	300	250	350	0	4-18.5	5	42	110	12	37	314	314	264	424	610					
160L	254	254	108	160	14.5	300	250	350	0	4-18.5	5	42	110	12	37	314	314	264	424	654					
180M	279	241	121	180	14.5	300	250	350	0	4-18.5	5	48	110	14	42.5	349	354	283	463	686					
180L	279	279	121	180	14.5	300	250	350	0	4-18.5	5	48	110	14	42.5	349	354	283	463	724					
200L	318	305	133	200	18.5	350	300	400	0	4-18.5	5	55	110	16	49	388	396	312	512	769					
225S	356	286	149	225	18.5	400	350	450	0	8-18.5	5	-	60	-	140	-	18	-	53	431	445	333	558	-	823
225M	356	311	149	225	18.5	400	350	450	0	8-18.5	5	55	60	110	140	16	18	49	53	431	445	333	558	818	848
250M	406	349	168	250	24	500	450	550	0	8-18.5	5	60	65	140	18	53	58	58	484	484	367	617	909		
280S	457	368	190	280	24	500	450	550	0	8-18.5	5	65	75	140	18	20	58	67.5	542	546	396	676	959	979	
280M	457	419	190	280	24	500	450	550	0	8-18.5	5	65	75	140	18	20	58	67.5	542	546	396	676	1010	1030	
315S	508	406	216	315	28	600	550	660	0	8-24	6	65	80	140	170	18	22	58	71	628	620	540	855	1193	1223
315M	508	457	216	315	28	600	550	660	0	8-24	6	65	80	140	170	18	22	58	71	628	620	540	855	1303	1333
315L	508	508	216	315	28	600	550	660	0	8-24	6	65	80	140	170	18	22	58	71	628	620	540	855	1303	1333
355M	610	560	254	355	28	740	680	800	0	8-24	6	75	95	140	170	20	25	67.5	86	726	701	666	1021	1509	1539
355L	610	630	254	355	28	740	680	800	0	8-24	6	75	95	140	170	20	25	67.5	86	726	701	666	1021	1509	1539

TECHNICAL DATA IE3-2 POLES

Model	Rated Power		Rated Current (A)										Speed	Tn	Eff.	P.F.	Tst/Ttn	Tmax/Tn	Ist/In	Wt.
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V	rpm	N.m	η(%)	cosφ	kg				
VNKT3-180M-2	22	30	70.0	40.5	23.3	66.9	38.5	22.3	64.1	37.1	21.4	2945	71.3	92.7	0.89	2.7	3.2	8.8	198	
VNKT3-200L1-2	30	40	94.8	54.9	31.6	90.7	52.1	30.2	86.9	20.3	29.0	2950	97.1	93.3	0.89	2.0	2.7	8.2	244	
VNKT3-200L2-2	37	50	116	67.4	38.8	111	64.0	37.1	107	61.7	35.6	2950	120	93.7	0.89	2.7	3.0	8.4	261	
VNKT3-225M-2	45	60	141	81.7	47.1	135	77.6	45.0	19	74.8	43.1	2970	145	94.0	0.89	3.2	2.6	9.4	324	
VNKT3-250M-2	55	75	172	100	57.3	165	95	54.8	158	91.2	52.5	2965	177	94.3	0.89	2.5	3.2	7.8	407	
VNKT3-280S-2	75	100	234	135	77.8	223	128	74.5	214	124	71.4	2970	241	94.7	0.89	2.5	3.1	7.8	575	
VNKT3-280M-2	90	125	279	162	93.1	267	156	89.1	256	148	85.4	2970	289	95.0	0.89	2.6	3.0	7.5	600	
VNKT3-315S-2	110	150	337	195	112	322	182	107	309	179	103	2975	353	95.2	0.9	2.1	2.8	7.4	876	
VNKT3-315M-2	132	180	403	234	134	386	222	129	370	214	123	2975	424	95.4	0.9	2.0	2.7	7.0	974	
VNKT3-315L1-2	160	220	483	279	161	462	265	154	442	2556	147	2975	514	95.6	0.91	1.9	2.7	6.4	1009	
VNKT3-315L2-2	200	270	602	349	201	576	331	192	552	319	184	2975	642	95.8	0.91	2.1	2.8	8.6	1132	
VNKT3-355-2	250	340	753	436	251	820	414	240	690	399	230	2980	801	95.8	0.91	1.7	2.3	8.7	1643	
VNKT3-355L-2	315	430	948	549	316	907	522	302	869	503	290	2980	1009	95.8	0.91	1.7	2.3	6.6	1800	

TECHNICAL DATA IE3-4 POLES

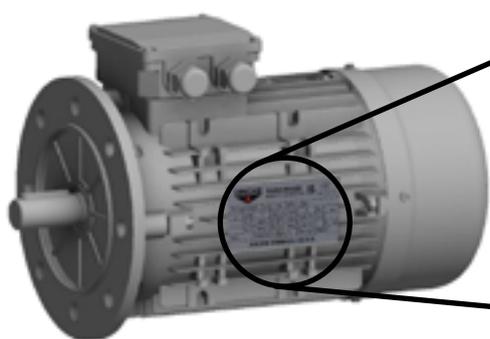
Model	Rated Power		Rated Current (A)										Speed	Tn	Eff.	P.F.	Tst/Ttn	Tmax/Tn	Ist/In	Wt.
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V	rpm	N.m	η(%)	cosφ	kg				
VNKTМ3-180M-4	18.5	25	61.0	35.3	20.3	58.3	33.5	19.4	55.9	32.3	18.6	1465	121	92.6	0.86	2.5	3.4	7.8	182	
VNKTМ3-180L-4	22	30	71.2	41.8	24.1	69.0	39.7	23.0	66.2	28.3	22.1	1465	143	93.0	0.86	2.6	2.7	8.0	209	
VNKTМ3-200L-4	30	40	97.8	56.6	32.6	93.6	53.8	31.2	89.7	51.8	29.9	1475	194	93.6	0.86	3.0	3.7	8.6	280	
VNKTМ3-225S-4	37	50	120	69.6	40.1	115	66.1	38.3	110	63.7	36.7	1480	239	93.9	0.86	3.4	3.3	9.4	308	
VNKTМ3-225M-4	45	60	146	84.4	48.6	139	80.2	46.5	134	77.3	44.5	1480	190	94.2	0.86	3.2	3.5	9.0	343	
VNKTМ3-250M-4	55	75	177	103	59.1	170	97.6	56.6	163	94.1	54.2	1485	354	94.6	0.86	3.0	3.1	8.5	456	
VNKTМ3-280S-4	75	100	235	136	78.5	225	129	75.1	216	125	71.9	1480	484	95.0	0.88	2.7	2.8	8.0	565	
VNKTМ3-280M-4	90	125	282	163	94.0	270	155	89.9	258	149	86.1	1485	579	95.2	0.88	2.7	2.8	8.0	657	
VNKTМ3-315S-4	110	150	344	199	115	329	189	110	315	182	105	1480	710	95.4	0.88	2.6	2.7	8.2	876	
VNKTМ3-315M-4	132	180	412	238	137	394	226	131	377	218	126	1480	852	95.6	0.88	2.5	2.8	8.1	994	
VNKTМ3-315L1-4	160	220	492	285	164	471	271	157	451	261	150	1480	1032	95.8	0.89	2.3	2.7	7.8	1078	
VNKTМ3-315L2-4	200	270	614	356	205	588	338	196	563	326	188	1480	1291	96.0	0.89	2.1	2.5	7.3	1238	
VNKTМ3-355M-4	250	340	759	440	253	726	418	242	696	403	232	1490	1602	96.0	0.9	2.1	2.5	7.3	1719	
VNKTМ3-355L-4	315	430	957	554	319	915	526	305	877	507	292	1490	2019	96.0	0.9	2.3	2.5	7.5	1823	

IE3-6 POLES

Model	Rated Power		Rated Current (A)										Speed	Tn	Eff.	P.F.	Tst/Ttn	Tmax/Tn	Ist/In	Wt.
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V	rpm	N.m	η(%)	cosφ	kg				
VNKTМ3-180L-6	15	20	53.3	30.9	17.8	51.0	29.3	17.0	48.8	28.2	16.3	980	146	91.2	0.81	2.2	2.6	6.0	186	
VNKTМ3-200L1-6	18.5	25	65.4	37.8	21.8	62.5	35.9	20.8	59.9	34.7	20.0	980	180	91.7	0.81	2.2	2.5	6.5	235	
VNKTМ3-200L2-6	22	30	76.4	44.2	25.5	73.0	42.0	24.3	70.0	40.5	23.3	980	214	92.2	0.82	2.4	2.8	7.0	253	
VNKTМ3-225M-6	30	40	105	60.6	34.9	100	57.5	33.4	95.9	55.5	32.0	985	291	92.9	0.81	2.0	2.3	6.5	295	
VNKTМ3-250M-6	37	50	124	71.7	41.3	119	68.1	39.5	114	65.7	37.9	985	359	93.3	0.84	2.1	2.3	6.8	398	
VNKTМ3-280S-6	45	60	147	84.8	48.9	140	80.6	46.7	134	77.7	44.8	985	436	93.7	0.86	2.0	2.3	6.5	499	
VNKTМ3-280M-6	55	75	178	103	59.5	171	98.1	56.9	163	94.6	54.5	985	533	94.1	0.86	2.0	2.3	6.0	576	
VNKTМ3-315S-6	75	100	242	140	80.6	231	133	77.1	222	128	73.9	985	727	94.6	0.86	2.0	2.3	5.8	864	
VNKTМ3-315M-6	90	125	289	168	96.5	277	159	92.3	265	153	88.4	985	873	94.9	0.86	1.9	2.2	5.7	970	
VNKTМ3-315L1-6	110	150	353	204	118	338	194	113	324	187	108	985	1066	95.1	0.86	2.4	2.6	7.0	1064	
VNKTМ3-315L2-6	132	180	422	244	141	404	232	135	387	224	129	985	1280	95.4	0.86	2.2	2.4	6.8	1174	
VNKTМ3-355M1-6	160	220	505	292	168	483	278	161	463	168	154	990	1543	95.6	0.87	2.0	2.2	7.0	1565	
VNKTМ3-355M2-6	200	270	630	365	210	602	346	201	577	334	192	990	1929	95.8	0.87	2.0	2.2	7.0	1720	
VNKTМ3-355L-6	250	340	787	456	262	753	433	251	722	417	241	990	2412	95.8	0.87	2.0	2.2	7.0	1972	

TECHNICAL DATA IE3-8 POLES

Model	Rated Power		Rated Current (A)									Speed	Tn	Eff.	P.F.	Tst/Ttn	Tmax/Tn	Ist/In	Wt.
	kW	HP	220V	380V	660V	230V	400V	690V	240V	415V	720V	rpm	N.m	$\eta(\%)$	cos ϕ				kg
VNKTМ3-160M1-8	4	5	17.0	9.82	5.65	16.2	9.33	5.41	15.5	8.99	5.18	720	53.1	84.8	0.73	2.5	2.9	5.8	112
VNKTМ3-160M2-8	5.5	7.5	22.6	13.1	7.54	21.6	12.4	7.21	20.7	12.0	6.91	720	73.0	86.2	0.74	2.6	2.8	6.0	113
VNKTМ3-160L-8	7.5	10	30.1	17.4	10.0	28.8	16.5	9.58	27.6	15.9	9.19	720	98.9	87.3	0.75	2.7	2.9	6.5	140
VNKTМ3-180L-8	11	15	42.9	24.8	14.3	41.0	23.6	13.7	39.3	22.7	13.1	730	144.6	88.6	0.76	2.6	2.7	6.7	166
VNKTМ3-200L-8	15	20	57.8	33.5	19.3	55.3	31.8	18.4	53.0	30.6	17.7	730	195.8	89.6	0.76	2.6	2.7	6.7	214
VNKTМ3-225S-8	18.5	25	70.9	41.0	23.6	67.8	39.0	22.6	65.0	37.6	21.7	740	240.9	90.1	0.76	2.1	2.6	7.0	255
VNKTМ3-225M-8	22	30	81.7	47.3	27.2	78.1	44.9	26.0	74.9	43.3	25.0	740	286.5	90.6	0.78	2.2	2.6	5.7	284
VNKTМ3-250M-8	30	40	109	63.2	36.4	104	60.0	34.8	100	57.9	33.4	740	390.8	91.3	0.79	2.0	2.6	5.8	380
VNKTМ3-280S-8	37	50	134	77.5	44.6	128	73.6	42.7	123	71.0	40.9	740	480.2	91.8	0.79	2.2	2.4	6.7	496
VNKTМ3-280M-8	45	60	162	93.9	54.0	155	89.2	51.7	149	85.9	49.5	740	584.7	92.2	0.79	1.9	2.0	6.8	520
VNKTМ3-315S-8	55	75	193	112	64.2	184	106	61.4	177	102	58.9	740	714.6	92.5	0.81	1.8	2.0	6.0	900
VNKTМ3-315M-8	75	100	261	151	87.0	250	144	83.2	239	138	79.8	740	968.2	93.1	0.81	1.9	2.3	6.4	1000
VNKTМ3-315L1-8	90	125	308	179	103	295	170	98.3	283	163	94.2	740	1161.5	93.4	0.82	1.8	2.0	6.4	1060
VNKTМ3-315L2-8	110	150	376	218	125	359	201	120	344	199	115	740	1419.6	93.7	0.82	1.8	2.0	6.4	1130
VNKTМ3-355M1-8	132	180	449	260	150	430	247	143	412	238	137	740	1698.9	94.0	0.82	1.8	2.0	6.4	1500
VNKTМ3-355M2-8	160	220	543	314	181	519	199	173	498	288	166	740	2059.3	94.3	0.82	1.8	2.0	6.4	1600
VNKTМ3-355L-8	200	270	668	387	223	639	368	213	613	354	204	740	2563.8	94.6	0.83	1.8	2.0	6.4	1700



VINCKE		THREE PHASE		UK	CE
		INDUCTION MOTOR		CA	IE3 82.5 %
TYPE VNKTМ3-802-4	B5	IP55	INS.CL.F	No.	
CONN	V	Hz	kW	r/min	A
Δ/Y	230/400	50	0.75	1445	3.04/1.75
Δ/Y	265/480	60	0.75	1734	2.61/1.51
Date:	Powerfactor: 0.75		Duty: S1		Standard: IEC60034-1
VINCKE HYDRAULICS S.A.					

VNKMM SERIES SINGLE PHASE DUAL-VALUE INDUCTION MOTOR

PRODUCT INTRODUCTION

- Conform to the IEC standard
- Be made of selected quality materials, latest design in entirety
- Good performance, low noise, little vibration, and safety and reliable operation
- Nice appearance, light weight
- Be maintained very conveniently, simple construction
- Starting torque is 1.8-2.5 times of rated torque

PRODUCT FEATURES

- IP55
- Multiple feet locations
- Aluminium frame, end shields and base
- High strength cable gland
- Shaft key and protector supplied
- Superior paint finish
- Motors made to heavy duty service factors
- Can be made with stainless steel shaft
- Motors made for continuous S1 duty
- Grade F insulation
- High performance and efficiency

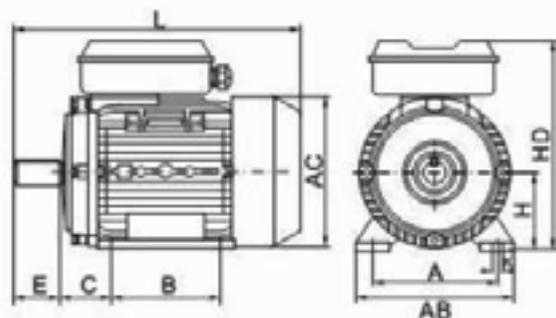
PRODUCT ADVANTAGE

- Water, dust and vermin resistant
- Quiet operation
- Energy saving
- Easy installation (bolt on feet or brackets as required)
- Corrosion resistant
- Dependable
- Superior life
- Reliable in country, city or factory environments

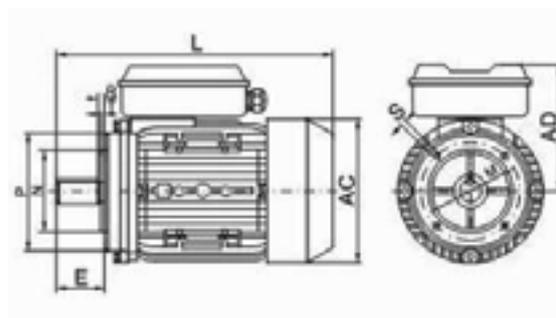


SINGLE PHASE MOTORS

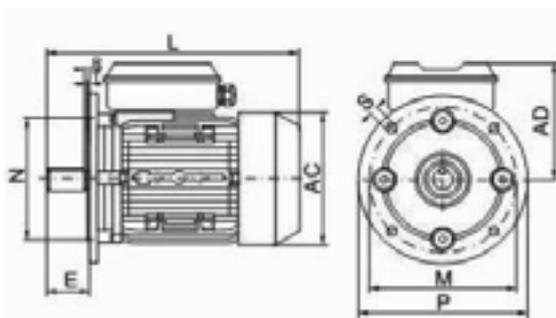
IMB3



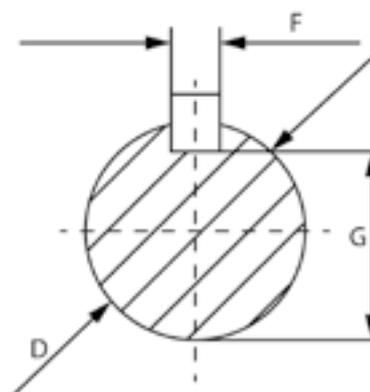
IMB14



IMB5



SHAFT



INSTALLATION AND OVERALL DIMENSIONS

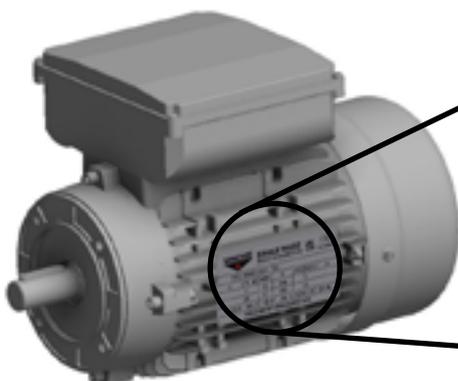
Frame Size	Mounting Dimensions (mm)																	Shaft				Overall Dimensions				
	IMB3					IMB14					IMB5															
	A	B	C	H	K	M	N	P	R	S	T	M	N	P	R	S	T	D	E	F	G	AB	AC	AD	HD	L
63	100	80	40	63	7	75	60	90	0	M5	2.5	115	95	140	0	10	3	11	23	4	8.5	130	130	120	188	235
71	112	90	45	71	7	85	70	105	0	M6	2.5	130	110	160	0	10	3.5	14	30	5	11	145	145	135	206	250
80	125	100	50	80	10	100	80	120	0	M6	3	165	130	200	0	12	3.5	19	40	6	15.5	160	165	145	225	305
90S	140	100	56	90	10	115	95	140	0	M8	3	165	130	200	0	12	3.5	24	50	8	20	180	185	155	245	335
90L	140	125	56	90	10	115	95	140	0	M8	3	165	130	200	0	12	3.5	24	50	8	20	180	185	155	245	360
100L	160	140	63	100	12	130	110	160	0	M8	3.5	215	180	250	0	15	4	28	60	8	24	205	215	170	270	405

TECHNICAL DATA 2 POLES

Model	Rated Power		Voltage	Rated Current	Speed	Eff.	P.F.	Tst/Tn	Tmax/Tn	Starting Current	Weight
	kW	HP									
VNKMM1-631-2	0,18	0,25	220	1,55	2800	63,0	0,92	2,0	1,8	5,0	5,0
VNKMM1-632-2	0,25	0,35	220	1,80	2800	65,0	0,92	2,0	1,8	6,0	5,5
VNKMM1-711-2	0,37	0,5	220	2,73	2800	67,0	0,92	2,3	1,8	16,0	7,0
VNKMM1-712-2	0,55	0,75	220	3,88	2800	70,0	0,92	2,5	1,8	21,0	8,0
VNKMM1-801-2	0,75	1	220	5,15	2800	72,0	0,92	2,5	1,8	30,0	8,5
VNKMM1-802-2	1,10	1,5	220	7,02	2800	75,0	0,95	2,5	1,8	40,0	9,5
VNKMM1-90S-2	1,50	2	220	9,44	2800	76,0	0,95	2,5	1,8	55,0	12,5
VNKMM1-90L-2	2,20	3	220	13,60	2800	77,0	0,95	2,5	1,8	80,0	14,0
VNKMM1-100L-2	3,00	4	220	18,20	2800	79,0	0,95	2,5	1,8	110,0	20,5

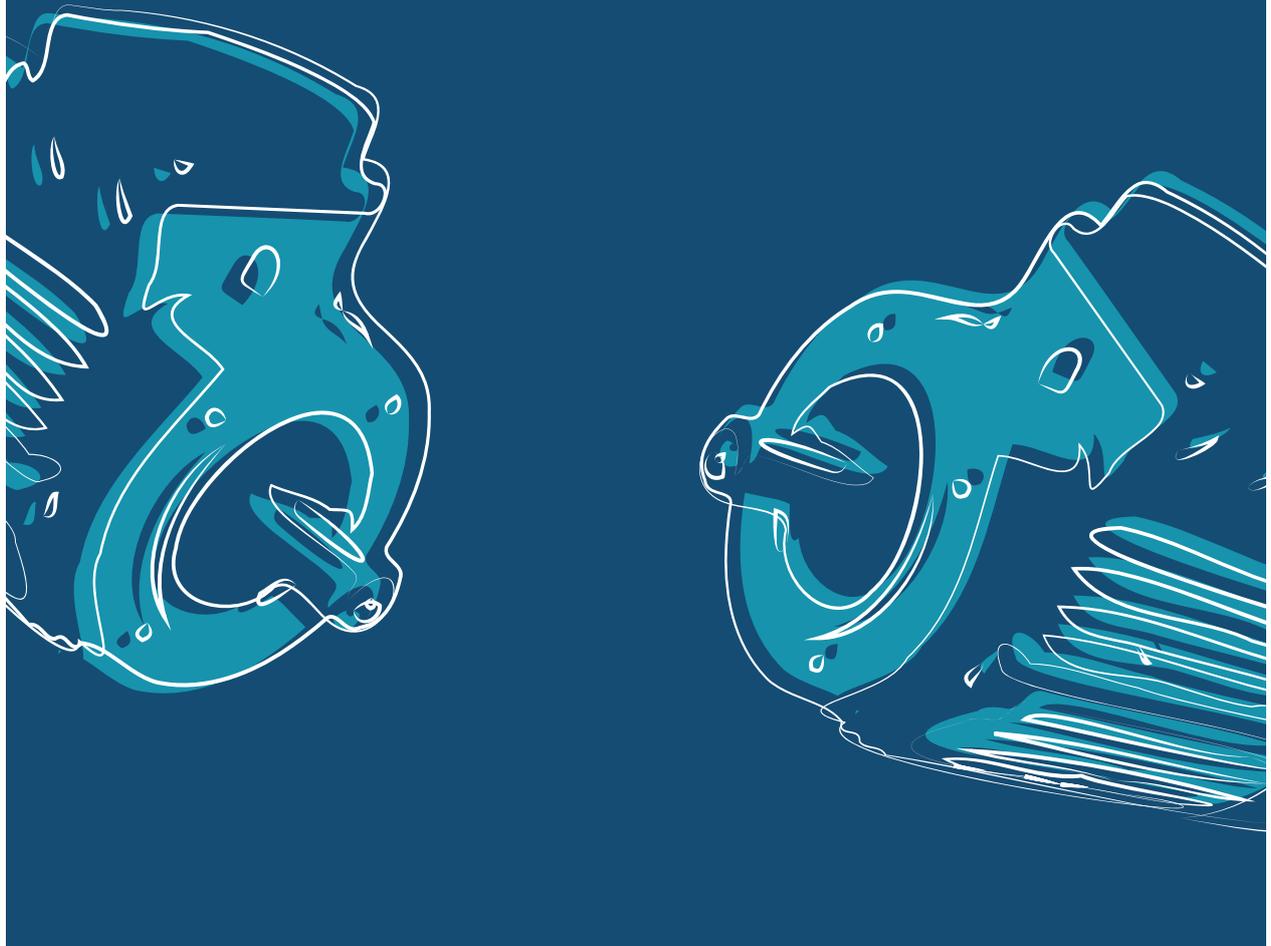
4 POLES

Model	Rated Power		Voltage	Rated Current	Speed	Eff.	P.F.	Tst/Tn	Tmax/Tn	Starting Current	Weight
	kW	HP									
VNKMM1-631-4	0,12	0,16	220	1,25	1400	53,0	0,92	2,0	1,7	3,0	5,0
VNKMM1-632-4	0,18	0,25	220	1,65	1400	54,0	0,92	2,0	1,7	5,0	5,5
VNKMM1-711-4	0,25	0,35	220	1,99	1400	62,0	0,92	2,5	1,8	12,0	6,9
VNKMM1-712-4	0,37	0,5	220	2,81	1400	65,0	0,92	2,5	1,8	16,0	8,1
VNKMM1-801-4	0,55	0,75	220	4,00	1400	68,0	0,92	2,5	1,8	21,0	8,9
VNKMM1-802-4	0,75	1	220	5,22	1400	71,0	0,92	2,5	1,8	30,0	9,6
VNKMM1-90S-4	1,10	1,5	220	7,20	1400	73,0	0,95	2,5	1,8	40,0	13,0
VNKMM1-90L-4	1,50	2	220	9,57	1400	75,0	0,95	2,5	1,8	55,0	16,0
VNKMM1-100L1-4	2,20	3	220	13,90	1400	76,0	0,95	2,5	1,8	80,0	23,0
VNKMM1-100L2-4	3,00	4	220	18,60	1400	77,0	0,95	2,5	1,8	110,0	27,0



VINCKE SINGLE PHASE UK CA IEC 60034		INDUCTION MOTOR		CE	
TYPE VNKMM1-802-4		No .			
0.75 kW	IMB14	S1	IP55	INS.CLF	
V	Hz	r/min	A		
230	50	1410	4.9		
30 μ F	450 V	150 μ F	250 V	$\cos\phi$ 0.95	11.5 kg
VINCKE HYDRAULICS S.A.					

ELECTRICAL MOTORS



VINCKE

Your Hydraulic Brand

