

 ***dinamik motor***
IE2 & IE3 SERIES

General purpose motors can be produced as 2-4-6 poles, 380 and 400V/50Hz for three-phase and 220V/50Hz and 230V/50Hz for single-phase. Special motors with special shafts, multi-speeds, various voltages and frequencies can be produced according to customer's requests.

Aluminum and cast iron frames are between 63-315, 0,12 kW - 200 kW. (Aluminum frame: 63 - 180. Cast iron frame: 160-315).

Their manufacturing and installation systems are IM B3, IM B5, IM B14 and B3/B5 (B35) and B3/B14 (B34) combined system format according to IEC 60034-7. Motors can also operate in vertical and appropriate installation positions.

Efficiency Class	: IE4, IE3, IE2, IE1
Cooling system	: IC411
Operation Type	: S1
Protection Class	: IP55
Working Height	: Maximum 1000 meters
Isolation class	: F
Temperature increase class	: B
Maximum ambient temperature for working	: 40°C

PTC thermistors in the windings are embedded in frame sizes 180 and bigger. PTC thermistors can be used in smaller sizes according to customer's request.

The voltages and frequencies for 2 and 4-pole, three-phase motors up to 3 kW and 6-pole, three-phase

motors up to 2,2 kW are 230 230VD/400VY 50 Hz. The voltages and frequencies for 2 and 4-pole, three-phase motors over 3 kW and 6-pole, three-phase motors over 2,2 kW are 400 VD/690VY 50 Hz.

Terminal boxes are made from aluminum alloy for three-phase motors and thermoplastic materials with capacitor slots for single-phase motors.

The standard position of the terminal box is on the upper part of the motors. Terminal boxes include six terminals for motor power supply. Grounding connection takes place in the terminal box. Additionally, there is a grounding connection in the motor frame.

Noise level is within IEC 60034-9 Standard.

Vibration intensity level is 'Normal' class according to 60034-14.

RAL 7031, gray colored, with single-component synthetic painting is standard and suitable for industrial environments. Upon customer's request different applications are possible.

VSD compatible motors can be produced upon customer's request.



DUTY TYPES

S1

Continuous running duty

Motor operates under fixed load until reaching heat balance. Without indications of the type of rated motor, S1 continuous running duty should be assumed. This is used in pump, fan, ventilation, and compressor applications.

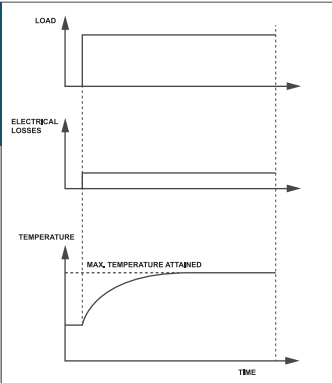


FIGURE 10: S-1 DUTY TYPE - Continuous running duty

S2

Short time duty

Motor operates under fixed load without reaching the heat balance. Motor cools down to ambient temperature in stop times. Operation time is recommended as 10, 30, 60 and 90 minutes. Dam covers, sirens and some cranes can be seen as examples of application.

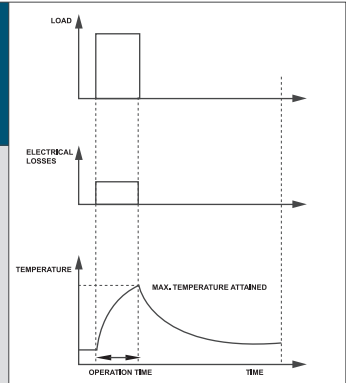


FIGURE 11: S-2 DUTY TYPE - Short-time duty

S3

Intermittent periodic duty not affected by the starting process

Operation periods are composed of a fixed load operation with a preceding stop. Starting current does not cause temperature increase. Unless otherwise specified operation period is 10 minutes. Relative operation period can be 15%, 25%, 40% and 60% of the period. Motor valve systems and wire pulling machines are classified in S3 operation type.

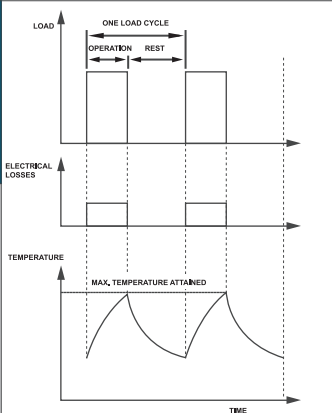


FIGURE 12: S-3 DUTY TYPE - Intermittent periodic duty

S4

Intermittent periodic duty affected by the starting process

This system is composed of identical operation period series. Each period has long starts, operating under a fixed load with stop periods that are not negligible. Due to very short operation periods, thermal balance cannot be reached. Overhead cranes, typical cranes, and elevators are examples of these types of applications.

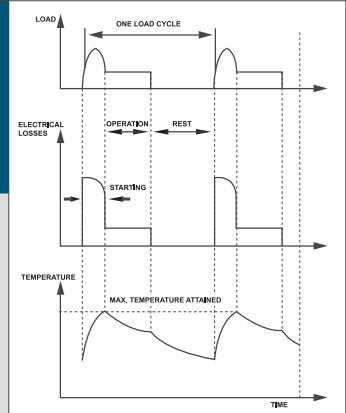


FIGURE 13: S-4 DUTY TYPE - Intermittent periodic duty with starting process

S5

Intermittent periodic duty affected by the starting process and by electric braking

This system is composed of an identical operation period series. Each period is composed of long starts, operating under a fixed load with instantaneous electrical braking and stop periods that are not negligible.

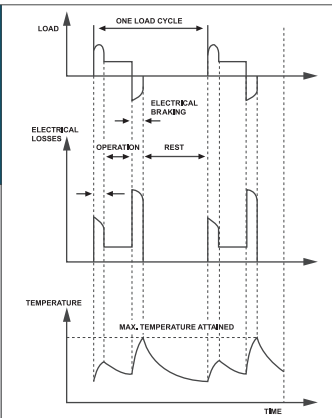


FIGURE 14: S-5 DUTY TYPE - Intermittent periodic duty with electric braking

S6

Continuous operation, periodic duty with intermittent load

This system is composed of an identical operation period series. Each period consists of two parts: one is operation under fixed load and the other is unloaded operation. Due to very short operation periods, thermal balance cannot be reached. Unless otherwise determined operation period is 10 minutes. Relative operation periods can be 15%, 25%, 40% and 60% of the period. Conveyors, machine tools and hand tools are covered in S6 operation type.

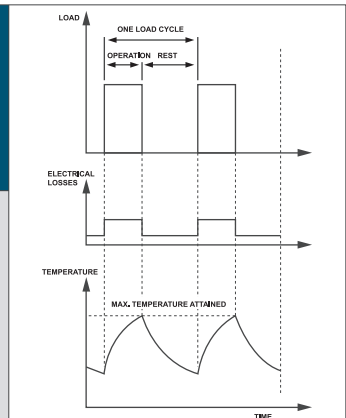


FIGURE 15: S-6 DUTY TYPE - Continuous operation duty with intermittent load

S7

Uninterrupted periodic duty, affected by the starting process and electric braking

This system comprises of a sequence of identical duty cycles. Each cycle has a period of starting current, a period of operation at constant load, and a period of electrical braking. The braking method is too short for thermal equilibrium to be obtained.

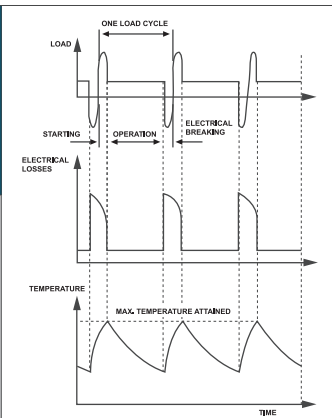


FIGURE 16: S-7 DUTY TYPE - Continuous operation periodic duty with electric braking

S8

Uninterrupted periodic duty with recurring speed and load changes

This system is a sequence of identical duty cycles, each period comprises of a period of operation at constant load (corresponding to a predetermined speed of rotation), and one or more periods of operation at other loads (corresponding to different speeds of rotation). The period of the duty cycle is too short for thermal equilibrium to be obtained. This type of duty cycle is used for pole changing motors. Applications which require different loads and different speeds are covered in S8 type operation

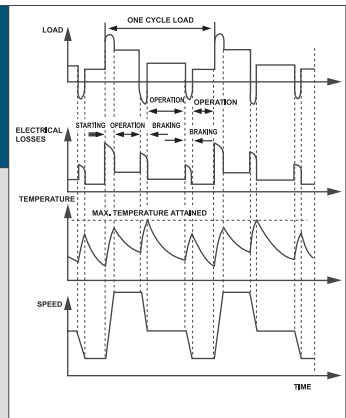


FIGURE 17: S-8 DUTY TYPE - Continuous operation periodic duty with related load/speed changes

PROTECTION CLASSES

Our motors are manufactured according to the IEC 60034-5 standard, protecting them against dust and squirting liquids. Our standard motors are manufactured in IP 55 protection class. IP56, IP65 and IP66 are available upon request.

As shown in Table 4, the first digit in the IP (Ingress Progress) diagram describes the protection against solid materials. The second digit shows the protection against liquid materials.

IP		5	5		
Protection Against Solid Materials	First Number	Second Number	Protection Against Liquid Materials		
Unprotected	0	0	Unprotected		
Protection against objects greater than 50 mm	1	1	Protection against water coming vertically		
Protection against objects greater than 12 mm	2	2	Protection against water coming vertically up to 15 ° angle		
Protection against objects greater than 2.5 mm	3	3	Protection against water coming vertically up to 60 ° angle		
Protection against objects greater than 1 mm	4	4	Protection against water splashing from all directions		
Protection against dust	5	5	Protection against water squirting from all directions		
Complete protection against dust	6	6	Protection against powerful water squirting from all directions		
	0	7	Protection against temporary water submersion between 0.15m and 1m		
	0	8	Protection against permanent water submersion		

TABLE 4: Protection Classes

MAIN COOLING TYPES ACCORDING TO IEC 60034-6

COOLING TYPE

The aim of cooling is to transfer the heat from the motor to ambient. The objective is to keep the temperature of isolation materials under the limit values.

The cooling type in Electrical Machines are determined with numbers between "1-9" that come after 'IC' (International Cooling), code letters according to the IEC 60034-6 standard.

Cooling air is supplied by a plastic fan which is connected to the motor shaft and operates inside a holed steel sheet protection cover; cooling is performed outside of the completely closed surface of the motor. Since Volt Electric motors are cooled with a fan from a completely closed outside surface, their cooling type is IC 411. IC 418 cooling type can also be manufactured upon special requests. Commonly used cooling examples for IEC 60034-6 standard are given in following Figure 18.



Cooling air is supplied by a plastic fan which is connected to the motor shaft and operates inside a holed steel sheet protection cover; cooling is performed outside of the completely closed surface of the motor.

FIGURE 18: Main Cooling Types According to IEC 60034-6

ISOLATION CLASSES

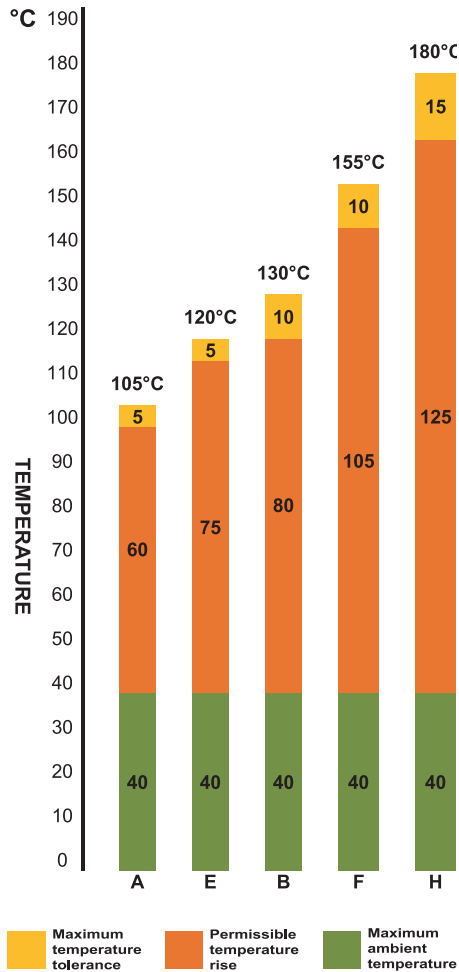


FIGURE 20: Isolation classes chart

Maximum Values that are permitted	Unit	Isolation Class					
		A	E	B	F	H	
Total winding temperature	$(t_{\text{ambient}} + \Delta t + t_{\text{tolerance}})$	°C	105	120	130	155	180
Winding temperature increase	(Δt)	K	60	75	80	105	125
Ambient Temperature	(t_{ambient})	°C	40	40	40	40	40
Tolerance	$(t_{\text{tolerance}})$	K	5	5	10	10	15

TABLE 10: Isolation classes

The temperature rise limit of Dinamik Motor is in class B. Stator windings are composed of copper conductors which are plated by double-layered enamel in class H. In phase windings (in each channel and in each winding start) and winding heads, complete isolation is provided by Lacquer absorption method which is high qualified and in class H (total 180 °C). Other isolation materials are also in class H. This enables a winding construction to stand up to 155 °C.

The classification of isolation materials based on their standing temperature are shown in Table 10.

There are also Y, 200, 220, 250 isolation classes according to IEC 60085. Y class defines 90 °C temperature limit, 200 class defines 200 °C limit, 220 class defines 220 °C limit and 250 class defines 250 °C temperature limit.

A graphical representation of above mentioned are shown in Figure 20.

VIBRATION LIMITS ACCORDING TO IEC 60034-14

Vibration Grade	Shaft Height (mm)	56 ≤ H ≤ 132			132 < H ≤ 280			H > 280			
		Mounting	Displac. μm	Vel. mm/s	Acc. m/s ²	Displac. μm	Vel. mm/s	Acc. m/s ²	Displac. μm	Vel. mm/s	Acc. m/s ²
A	Free Suspension		25	1,6	2,5	35	2,2	3,5	45	2,8	4,4
	Rigid Mounting		21	1,3	2,0	29	1,8	2,8	37	2,3	3,6
B	Free Suspension		11	0,7	1,1	18	1,1	1,7	29	1,8	2,8
	Rigid Mounting			-		14	0,9	1,4	24	1,5	2,4

TABLE 11: Vibration Limits according to IEC 60034-14

Grade "A" applies to machines with no special vibration requirements.

Grade "B" applies to machines with special vibration requirements. Rigid mounting is not considered acceptable for machines with shaft heights less than 132 mm.

The interface frequencies for displacement/velocity and velocity/acceleration are 10 Hz and 250 Hz respectively.

VIBRATION LIMITS ACCORDING TO IEC 60034-14

Permitted vibration densities are determined in IEC 60034-14 standards and these values which are given in Table 11 are recommended as upper limit values for motor producers. Three separate vibration density levels are determined according to this standard. Vibration levels of Dinamik Motors are within normal limits and meet the standard provisions. All our rotors are dynamically balanced by half key.

Duty types:

Duty type is an operational program that covers unloaded operation and stop period; and the load applying order and periods.

Operation regime type is the operation system that does not change one or more loads for a definite time period. Electrical motors are manufactured according to operational conditions. Standard operational duty types are classified according to IEC 60034-1.

BEARINGS

BEARINGS THAT ARE USED in SINGLE-PHASE MOTORS

Fixed-ball bearing, whose both sides are closed (ZZ), are used in motors with frame sizes 63-132 (Figure 22) as well as frame sizes 160-225 (Figure 22).

In some cases construction can be made (as seen in Figure 23) for preventing axial movement of shaft with respect to some applications in frame sizes 63-132.

Rubber dust gaskets (V-ring) are placed in front and rear covers. Oil seal can be placed upon on request.

FRAME SIZE	POLE NUMBER	DE BEARING	NDE BEARING
63	2-4-6	6201 ZZ	6201 ZZ
71	2-4-6	6202 ZZ	6202 ZZ
80	2-4-6	6204 ZZ	6202 ZZ
90S	2-4-6	6204 ZZ	6203 ZZ
90Sa	2-4-6	6205 ZZ	6203 ZZ
90L	2-4-6	6205 ZZ	6203 ZZ
100	2-4-6	6206 ZZ C3	6204 ZZ C3

TABLE 17: Bearings that are used in Dinamik Motors according to Frame size (Single-phase motors)

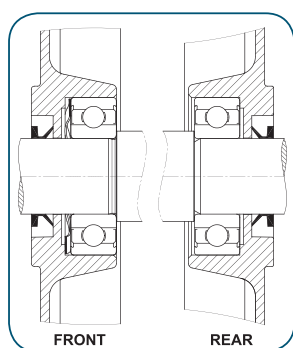


FIGURE: 22

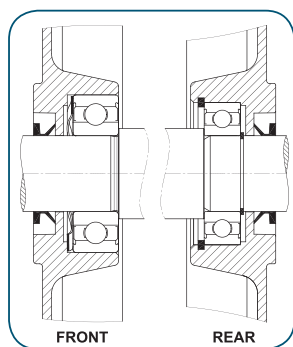


FIGURE: 23

BEARINGS THAT ARE USED in THREE-PHASE MOTORS

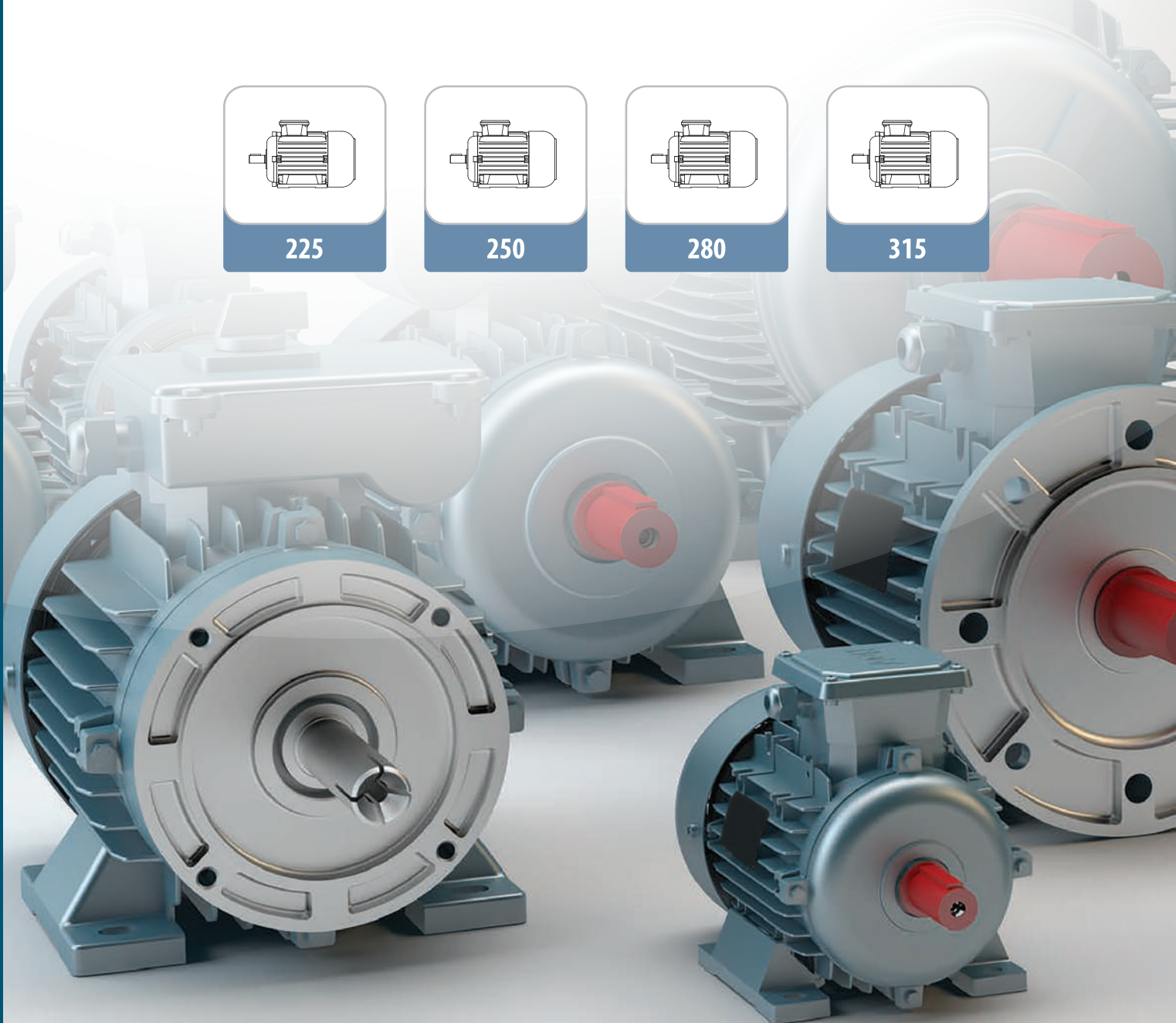
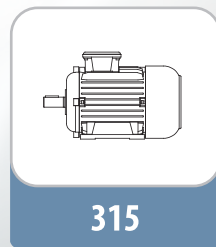
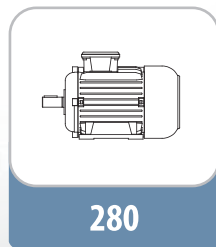
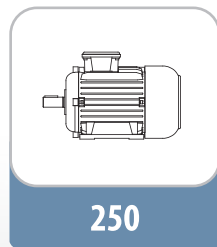
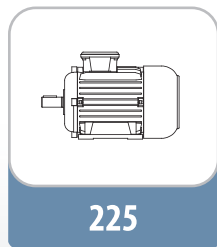
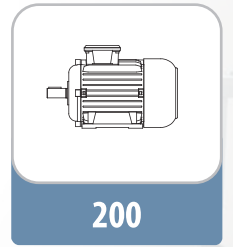
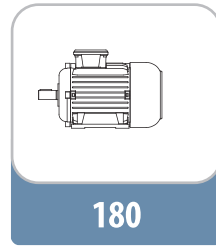
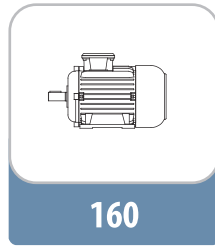
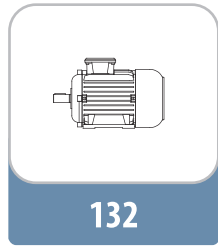
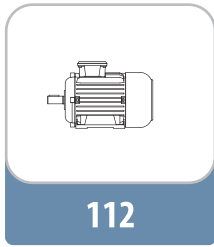
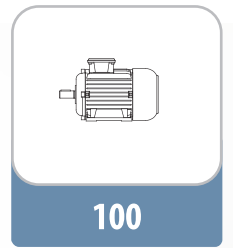
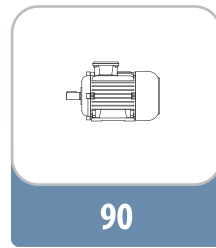
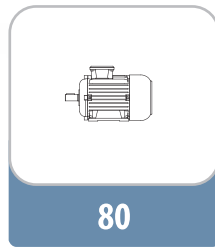
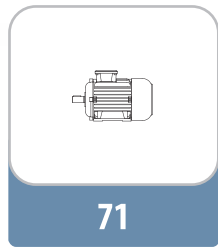
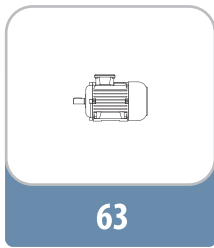
Bearing, Seal And Wedge Information Which Are Used In Dinamik Motors:

Dinamik Motors utilizes bearings that are produced with special radial space and grease, providing minimum friction loss, and serial and perfect operation during movement. Bearings that are used in Dinamik Motors are given in following Table 18.

FRAME SIZE	POLE	HOUSING MATERIAL	DRIVE END (DE) Bearing ZZ/C3	NONE DRIVE END (NDE) Bearing ZZ/C3
63	all	Aluminum	6201 - ZZ	6201 - ZZ
71	all	Aluminum	6202 - ZZ	6202 - ZZ
80	all	Aluminum	6204 - ZZ	6204 - ZZ
90	all	Aluminum	6205 - ZZ	6205 - ZZ
100	all	Aluminum	6206 - ZZ	6206 - ZZ
112	all	Aluminum	6206 - ZZ	6206 - ZZ
132	all	Aluminum	6208 - ZZ	6208 - ZZ
160	all	Aluminum	6309 - ZZ	6309 - ZZ
160	all	Cast Iron	6309 - ZZ	6209 - ZZ
180	all	Aluminum	6310 - ZZ	6210 - ZZ
180	all	Cast Iron	6310 - ZZ	6210 - ZZ
200	all	Cast Iron	6312 - ZZ	6212 - ZZ
225	all	Cast Iron	6313 - ZZ	6213 - ZZ
250	2	Cast Iron	6215 - ZZ	6215 - ZZ
250	4,6	Cast Iron	6315 - ZZ	6215 - ZZ
280	2	Cast Iron	6315 - ZZ	6315 - ZZ
280	4,6	Cast Iron	6316 - ZZ	6316 - ZZ
315	2	Cast Iron	6316 - ZZ	6316 - ZZ
315	4,6	Cast Iron	6318 - ZZ	6318 - ZZ

TABLE 18: Bearings that are used in Dinamik Motors according to Frame size (three-phase motors)

Dinamik Motor Frame Sizes



IE2 HIGH EFFICIENCY ASYNCHRONOUS THREE-PHASE MOTORS - 400 V / 50 Hz, 2 POLES

CODE	Type	Rated Values				Efficiency				Starting Data				APPROX. Weight B3 Kg		
		Power		Current		Torque		Power Factor		Locked Rotor Current		Locked Rotor Torque		Breakdown Torque		
		kW	HP	Speed	I_N	A	T_N	Nm	$\cos \phi$	I_{LR} / I_N	Δ	Y	T_{LR} / T_N	Δ	Y	T_B / T_N
				rpm					1%						Synchronous Speed 3000 rpm	
2 Poles																
V2E-A-80-M-2-A	VM 80	0,75	1	2850	1,7	2,6	0,85	77,4	76,7	71,1	5,8	-	2,7	-	3,0	9,0
V2E-A-80-M-2-B	VM 80	1,1	1,5	2860	2,6	3,7	0,8	79,6	76,6	72,6	6,1	-	3,0	-	3,7	10,5
V2E-A-90-S-2-A	VM 90 S	1,5	2	2890	3,4	5	0,79	81,3	79,1	75	7,6	-	3,2	-	4,0	14,0
V2E-A-90-L-2-B	VM 90 L	2,2	3	2875	4,5	7,3	0,84	83,2	80,6	78,3	7,7	-	3,7	-	4,0	16,0
V2E-A-100-M-2-A	VM 100	3	4	2885	6	10	0,85	84,6	83,4	83	7,3	-	3,1	-	3,7	21,2
V2E-A-112-M-2-A	VM 112	4	5,5	2895	7,1	13,2	0,91	86,6	86,7	84,9	2,4	7,3	1,2	3,6	3,0	22,7
V2E-A-132-S-2-A	VM132 S	5,5	7,5	2955	10,9	17,8	0,85	87	84,6	80,6	3,3	9,8	1,3	3,9	4,7	39,5
V2E-A-132-S-2-B	VM 132 S	7,5	10	2940	13,8	24,4	0,9	88,1	86,5	84	2,8	8,5	1,1	3,3	3,6	44
V2E-A(G)-160-M-2-A	VM 160 M	11	15	2955	20	35,5	0,88	89,4	87,6	85	2,7	8,3	1,1	3,3	3,6	73,3
V2E-A(G)-160-L-2-B	VM 160 M	15	20	2950	26,9	48,7	0,89	90,3	88,3	86	2,7	8,1	1,2	3,6	3,5	81,0
V2E-A(G)-160-L-2-C	VM 160 L	18,5	25	2930	33,2	60,4	0,89	90,9	89,2	87,6	2,5	7,4	1,0	3,1	3,5	92,0
V2E-A(G)-180-M-2-A	VM 180 M	22	30	2950	38	71,4	0,93	91,3	89,3	84,8	2,3	7,0	1,0	3,0	2,8	117,0
V2E-G-200-L-2-A	VM 200 L	30	40	2970	52	96,5	0,91	92	87,2	85,4	2,7	8,1	0,8	2,3	2,5	210
V2E-G-200-L-2-B	VM 200 L	37	50	2970	64,6	119	0,93	92,5	90	89,5	2,5	7,6	0,9	2,7	3,0	241
V2E-G-225-M-2-A	VM 225 M	45	60	2975	77	145	0,91	92,9	91	90	2,3	7,0	0,8	2,5	2,6	345
V2E-G-250-M-2-A	VM 250 M	55	75	2980	91	176	0,92	93,2	93,7	92,2	2,8	8,7	0,9	2,9	3,0	433
V2E-G-280-S-2-A	VM 280 S	75	100	2980	127	240	0,91	93,9	94,1	92,5	2,6	8,5	0,9	2,9	3,2	510
V2E-G-280-M-2-B	VM 280 M	90	125	2980	151	288	0,91	94,2	94,2	92,7	2,7	8,0	0,9	2,7	3,0	585
V2E-G-315-S-2-A	VM 315 S	110	150	2982	186	352	0,86	94,3	94	93	2,6	7,8	0,8	2,0	3,0	675
V2E-G-315-M-2-B	VM 315 M	132	175	2982	219	423	0,89	94,6	94,4	94	2,6	7,5	0,8	2,3	3,0	742
V2E-G-315-M-2-C	VM 315 M	160	220	2980	264	513	0,89	94,8	94,6	94,1	2,6	7,6	0,8	2,4	3,0	810
V2E-G-315-L-2-D	VM 315 L	185	250	2980	305	592	0,9	95	94,8	94,4	2,6	7,7	0,8	2,5	3,0	910
V2E-G-315-L-2-E	VM 315 L	200	270	2980	330	640	0,9	95	94,8	94,4	2,6	8,0	0,8	2,7	3,0	911
*Progressive Motors																
V2E-A-100-M-2-B	VM 100 M	4	5,5	2890	7,8	13,2	0,86	85,8	85,4	84,4	-	4,5	-	3,5	2,7	23
V2E-A-112-M-2-B	VM 112 M	5,5	7,5	2920	10	18	0,91	87	86,2	84,2	-	3,3	-	3,6	3,0	24
V2E-A-132-M-2-C	VM132 M	11	15	2950	19,7	35,7	0,9	89,4	88,5	86,6	-	1,7	-	4,0	3,7	46
V2E-A(G)-160-L-2-D	VM 160L	22	30	2960	39,2	71,2	0,89	91,3	89,9	87,5	-	9,2	-	3,8	4,1	95

Dinamik Motor Right To Change All The Data Without Prior Notice

Voltage : 400V
 Frequency : 50 Hz
 I, Protection : IP 55
 Insulation Class : F
 Duty Type : S1
 IEC 60034

TABLE 31: IE2 high efficiency asynchronous three-phase motors - 400 V / 50 Hz, 2 poles

IE2 HIGH EFFICIENCY ASYNCHRONOUS THREE-PHASE MOTORS – 400 V / 50 HZ, 4 POLES

CODE	Type	Rated Values						Efficiency				Starting Data				Breakdown Torque		APPROX. Weight B3 (kg)	
		Power		Current		Torque		Power Factor		P _N % 100	P _N % 75	P _N % 50	Locked Rotor Current		Locked Rotor Torque		I _B / I _N	Aluminum	Cast Iron
		kW	HP	Speed	rpm	I _N	A	T _N	Nm				cos φ	Y	Δ	Y			
4 Poles																			
V2E-A-80-M-4-A	VM 80	0,75	1	1415	2,0	5,1	0,7	79,6	78,9	72,1	5,5	3,5	-	-	3,3	10			
V2E-A-90-S-4-A	VM 90 S	1,1	1,5	1420	2,6	7,5	0,77	81,4	79,8	77,2	6,1	3,2	-	-	3,3	13,8			
V2E-A-90-L-4-B	VM 90 L	1,5	2	1430	3,7	10	0,73	82,8	79,8	75,8	5,6	3,4	-	-	3,3	17,3			
V2E-A-100-M-4-A	VM 100	2,2	3	1430	4,7	14,7	0,79	84,3	82,6	80,5	5,7	3,2	-	-	2,9	21			
V2E-A-100-M-4-B	VM 100	3	4	1440	6,5	19,8	0,77	85,5	85	83,6	6	3,3	-	-	3,3	28			
V2E-A-112-M-4-A	VM 112	4	5,5	1440	8,1	26,6	0,82	86,6	85,6	84,7	1,9	0,9	2,6	2,9	36,2				
V2E-A-132-S-4-A	VM 132 S	5,5	7,5	1455	10,9	36,3	0,8	87,7	87,5	87	2,2	1	3	3,4	45				
V2E-A-132-M-4-B	VM 132 M	7,5	10	1450	15,1	49,4	0,81	88,7	87,5	86,5	2	1	2,9	3,1	56,5				
V2E-A(G)-160-M-4-A	VM 160 M	11	15	1465	21,1	71,6	0,83	89,8	89,8	89,4	2,2	0,9	2,8	3	100	131			
V2E-A(G)-160-L-4-B	VM 160 L	15	20	1460	28,7	98	0,83	90,6	90,5	90,5	2	0,8	2,6	3	110	140			
V2E-A(G)-180-M-4-A	VM 180 M	18,5	25	1470	34,5	120,7	0,83	91,2	90,5	89,8	2	0,8	2,3	2,6	174	174			
V2E-A(G)-180-L-4-B	VM 180 L	22	30	1470	41,7	144	0,84	91,6	91,5	90	1,8	0,7	2,1	2,3	185	185			
V2E-G-200-L-4-A	VM 200 L	30	40	1465	54,5	195,4	0,87	92,3	89,6	86,4	1,9	0,9	2,6	2,8	225				
V2E-G-225-S-4-A	VM 225 S	37	50	1475	66,8	240	0,86	92,7	92	91,5	2,5	1	3	3	315				
V2E-G-225-M-4-B	VM 225 M	45	60	1475	81,0	292	0,87	93,1	92,5	92	2	0,9	2,9	3	362				
V2E-G-250-M-4-A	VM 250 M	55	75	1480	96,5	355	0,88	93,5	93,8	93,2	2,5	1	3,1	2,9	420				
V2E-G-280-S-4-A	VM 280 S	75	100	1485	133,0	482	0,87	94	94,1	93,4	2,5	0,8	2,6	2,8	550				
V2E-G-280-M-4-B	VM 280 M	90	125	1485	158,0	579	0,87	94,3	94,5	93,8	2,4	0,9	2,9	3	615				
V2E-G-315-S-4-A	VM 315 S	110	150	1489	187,0	705	0,88	94,5	94,3	93,4	2,3	0,7	2	2,6	784				
V2E-G-315-M-4-B	VM 315 M	132	175	1489	224,0	846	0,89	94,7	94,5	93,5	2,3	0,7	2,5	2,6	860				
V2E-G-315-L-4-C	VM 315 L	160	220	1489	269,0	1026	0,89	94,9	94,6	93,7	2,3	0,7	2,6	2,6	880				
V2E-G-315-L-4-D	VM 315 L	185	250	1489	310,0	1185	0,89	95,1	94,8	94,1	2,3	0,7	2,8	2,6	960				
V2E-G-315-L-4-E	VM 315 L	200	270	1489	334,0	1282	0,89	95,1	94,8	94,1	2,3	0,7	2,9	2,6	1015				
*Progressive Motors																			
V2E-A-112-M-4-B	VM 112 M	5,5	7,5	1445	11,3	36,7	0,8	87,7	86,4	85,2	-	6,11	-	2,6	3,00	37			
V2E-A-132-M-4-C	VM 132 M	11	15	1455	22,0	72	0,81	89,8	88,0	86,7	-	7,14	-	7,0	3,44	58			
V2E-A(G)-160-L-4-C	VM 160 L	18,5	25	1465	35,3	121	0,84	91,2	90,1	89,4	-	6,82	-	2,7	2,93	112			
V2E-G-200-L-4-B	VM 200 L	37	50	1478	69,0	239	0,85	92,7	89,9	88,9	-	7,10	-	2,3	3,10	227			

TABLE 32: IE2 high efficiency asynchronous three-phase motors – 400 V / 50 Hz, 4 poles

Dynamik Motor Right To Change All The Data Without Prior Notice.

Voltage : 400V
 Frequency : 50 Hz
 I, Protection : IP 55
 Insulation Class : F
 Duty Type : S1
 IEC 60034

IE2 HIGH EFFICIENCY ASYNCHRONOUS THREE-PHASE MOTORS - 400 V / 50 Hz, 6 POLES

CODE	Type	Rated Values				Efficiency			Starting Data			Breakdown Torque		APPROX. Weight B3 Kg		
		Power		Speed	Current	Torque	Power Factor	P _N % 100	P _N % 75	P _N % 50	Locked Rotor Current		Locked Rotor Torque		T _B / T _N	
		kW	HP	rpm	I _N	A	T _N				Nm	Cos φ				I _{LR} / I _N
6 Poles																
V2E-A-90-S-6-A	VM 90S	0,75	1	930	2,1	7,7	0,7	75,9	72,9	70,1	3,8	—	2,1	—	2,3	13
V2E-A-90-L-6-B	VM 90L	1,1	1,5	920	2,8	11,5	0,74	78,1	75,3	73,2	3,9	—	2	—	2	15
V2E-A-100-M-6-A	VM 100	1,5	2	960	3,6	15	0,75	79,8	77,5	74	5,5	—	2,3	—	2,9	23
V2E-A-112-M-6-A	VM 112	2,2	3	965	5,7	22	0,69	81,8	79,5	75,7	5,3	—	2,7	—	2,8	30
V2E-A-132-S-6-A	VM 132 S	3	4	975	7,7	29,8	0,67	83,3	81,4	76,9	2,2	6,7	0,9	2,7	4	45
V2E-A-132-M-6-B	VM 132 M	4	5,5	965	9	40	0,75	85,2	85,1	83,2	2,1	6,4	0,8	2,3	3,3	50
V2E-A-132-M-6-C	VM 132 M	5,5	7,5	965	11,7	54,4	0,79	86	85,5	83,8	2,1	6,2	0,7	1,9	3,1	55
V2E-A(G)-160-M-6-A	VM 160 M	7,5	10	975	15,2	73,4	0,81	88,1	88,1	87,3	2,2	6,7	0,8	2,4	3,2	90
V2E-A(G)-160-L-6-B	VM 160 L	11	15	965	22	109,7	0,82	88,7	88	87,5	2	6,1	0,8	2,3	2,8	112
V2E-A(G)-180-L-6-A	VM 180 L	15	20	975	29,8	147,3	0,8	89,7	89,8	89,7	1,9	5,6	0,7	2	2,6	165
V2E-G-200-L-6-A	VM 200 L	18,5	25	980	35,6	185	0,82	90,4	89,2	88	1,7	5,1	0,6	1,7	2,3	225
V2E-G-200-L-6-B	VM 200 L	22	30	980	42,7	215	0,82	90,9	89,3	88,8	1,7	5,1	0,6	1,7	2,3	243
V2E-G-225-M-6-A	VM 225 M	30	40	980	57,8	280	0,82	91,7	91	89,5	2	6,1	0,7	2	2,4	330
V2E-G-250-M-6-A	VM 250 M	37	50	985	69	359	0,84	92,2	92,2	90,1	2,3	7	1	3	2,6	380
V2E-G-280-S-6-A	VM 280 S	45	60	990	92	434	0,76	92,7	92,7	90,9	2,3	7	1,1	3,3	2,6	500
V2E-G-280-M-6-B	VM 280 M	55	75	990	107	531	0,8	93,1	93,1	91,5	2,3	7	1,1	3,3	2,6	553
V2E-G-315-S-6-A	VM 315 S	75	100	990	140	723	0,82	93,7	93,7	92,4	2,3	7	0,8	2,5	3	727
V2E-G-315-M-6-B	VM 315 M	90	125	990	166	868	0,83	94	94	92,6	2,3	7	0,8	2,5	3	805
V2E-G-315-M-6-C	VM 315 M	110	150	990	198	1061	0,85	94,3	94,3	92,7	2,3	7	0,8	2,5	3	860
V2E-G-315-L-6-D	VM 315 L	132	175	990	235	1273	0,86	94,6	94,6	93	2,3	7	0,8	2,5	3	1020
V2E-G-315-L-6-E	VM 315 L	160	220	990	290	1543	0,84	94,8	94,8	94,6	2,3	7	0,8	2,5	3	1120

TABLE 33: IE2 high efficiency asynchronous three-phase motors - 400 V / 50 Hz, 6 poles

Dinamik Motor Right To Change All The Data Without Prior Notice.

Voltage	: 400V
Frequency	: 50 Hz
I, Protection	: IP 55
Insulation Class	: F
Duty Type	: S1
IEC 60034	

IE3 PREMIUM EFFICIENCY ASYNCHRONOUS THREE-PHASE MOTORS - 400 V 50HZ

CODE	Type	Power			Speed			Current			Torque			Power Factor	Starting Data			Breakdown Torque			Efficiency			APPROX. Weight B3 Kg
		kW		HP	rpm		HP	A		Nm	T _N		Y		I _{LR} / I _N		Y	T _B / T _N		P _N % 100	P _N % 75	P _N % 50	J	
2 Poles																								
400/690V																								
V3E-A-132-S-2-B	VM 132S	7,5	10	2950	13,2	24,29	0,91	2,59	8	1,1	3,4	3,6	90,1	89,30	86,77	0,017	54							
V3E-A-160-M-2-A	VM 160M	11	15	2955	19,5	35,50	0,89	2,62	8,1	1,1	3,2	3,6	91,4	90,70	88,50	0,039	82							
V3E-A-160-M-2-B	VM 160M	15	20	2955	26,4	48,77	0,89	2,75	8,5	1,1	3,2	3,5	92,1	91,41	89,40	0,050	96							
V3E-A-160-L-2-C	VM 160L	18,5	25	2960	32	59,69	0,90	2,43	7,5	1,0	3,1	3,5	92,6	91,90	90,13	0,057	119							
V3E-A-180-M-2-A	VM 180M	22	30	2960	37,6	70,98	0,91	2,49	7,7	0,8	2,5	2,8	92,8	92,13	90,30	0,080	184							
V3E-G-200-L-2-A	VM 200L	30	40	2970	51,3	96,46	0,90	2,59	8	0,9	2,8	3	93,7	93,10	91,40	0,129	252							
V3E-G-200-L-2-B	VM 200L	37	50	2970	63,2	118,97	0,90	2,88	8,9	0,9	2,8	3	93,8	93,20	91,70	0,153	281							
V3E-G-225-M-2-A	VM 225M	45	60	2975	76,5	144,45	0,90	2,56	7,9	1,0	2,9	3,2	94,3	93,76	92,27	0,236	370							
V3E-G-250-M-2-A	VM 250M	55	75	2960	93,4	177,45	0,90	2,59	8	1	3	3,2	94,4	93,86	92,70	0,332	477							
V3E-G-280-S-2-A	VM 280S	75	90	2970	128,4	241,16	0,89	2,91	9	1	3	3,3	94,7	94,30	93,40	0,770	580							
V3E-G-280-M-2-B	VM 280M	90	120	2970	152,9	289,39	0,89	3,24	10	1	3	3,3	95,4	95,00	94,10	0,940	610							
V3E-G-315-S-2-A	VM 315S	110	150	2975	184,7	353,11	0,90	3,56	11	1	3	3,5	95,5	95,20	94,40	1,400	735							
V3E-G-315-M-2-B	VM 315M	132	175	2980	218	422,8	0,91	2,50	7,2	1	2,8	3,1	95,6	95,40	95,00	1,600	870							
V3E-G-315-M-2-C	VM 315L	160	210	2981	260	512	0,91	2,80	7,8	1	2,8	3,2	95,6	95,35	95,00	1,850	950							
V3E-G-315-L-2-D	VM 315L	200	270	2981	328	639,5	0,90	2,7	7,5	1	2,5	3,1	95,7	95,5	95,1	2,250	1100							
4 Poles																								
400/690																								
V3E-A-132-M-4-B	VM 132M	7,5	10	1460	14,9	35,99	0,80	1,94	6	1,0	2,9	3,1	90,7	89,70	87,70	0,046	61							
V3E-A-160-M-4-A	VM 160M	11	15	1470	21,1	71,46	0,82	2,52	7,8	0,9	2,8	3	91,7	90,78	88,95	0,083	94							
V3E-A-160-L-4-B	VM 160L	15	20	1470	28,3	97,46	0,83	2,56	7,9	0,9	2,6	3	92,1	91,18	89,60	0,099	128							
V3E-A-180-M-4-A	VM 180M	18,5	25	1475	34,2	119,78	0,84	2,49	7,7	0,8	2,3	2,6	92,9	91,97	90,60	0,130	196							
V3E-A-180-L-4-B	VM 180L	22	30	1475	41	142,40	0,83	2,69	8,3	0,8	2,3	2,6	93,3	92,37	91,20	0,172	207							
V3E-G-200-L-4-A	VM 200L	30	40	1478	54,3	193,84	0,85	2,72	8,4	0,9	2,6	2,8	93,8	93,14	91,90	0,259	254							
V3E-G-225-S-4-A	VM 225S	37	50	1478	66,8	239,07	0,85	2,52	7,8	0,9	2,8	3	94,1	93,44	92,40	0,290	370							
V3E-G-225-M-4-B	VM 225M	45	60	1480	80,1	290,37	0,86	2,59	8	0,9	2,8	3	94,3	93,92	92,90	0,473	376							
V3E-G-250-M-4-A	VM 250M	55	75	1480	96,3	354,90	0,87	2,59	8	0,9	2,8	3	94,7	94,32	93,50	0,705	471							
V3E-G-280-S-4-A	VM 280S	75	90	1480	133,6	483,95	0,85	2,59	8	1,0	3	3,2	95,3	95,11	94,50	0,810	585							
V3E-G-280-M-4-B	VM 280M	90	120	1480	160,3	580,74	0,85	2,59	8	1,0	3,1	3,3	95,4	95,21	94,60	0,989	620							
V3E-G-315-S-4-A	VM 315S	110	150	1485	191,2	707,41	0,87	2,59	8	1,1	3,3	3,5	95,5	95,31	94,90	1,521	750							
V3E-G-315-M-4-B	VM 315M	132	175	1487	225	845,00	0,88	2,50	7,5	1,0	3,2	3,4	95,6	95,40	95,10	1,725	895							
V3E-G-315-M-4-C	VM 315L	160	210	1490	267	1024,00	0,88	2,50	7,5	1,0	3,2	3,4	95,8	95,50	95,10	2,000	975							
V2E-G-315-L-4-D	VM 315L	200	270	1490	335	1283	0,88	2,5	7,5	1	3,2	3,5	96,1	95,7	95,2	2,750	1130							

TABLE 28: IE3 premium efficiency asynchronous three-phase motors - 400V 50Hz

IE3 PREMIUM EFFICIENCY ASYNCHRONOUS THREE-PHASE MOTORS - 400 V 50HZ

CODE	Type	Rated Values				Starting Data				Breakdown Torque			Efficiency			APPROX. Weight B3 Kg				
		Power		Current		Torque		Locked Rotor Current		Locked Rotor Torque		T _B / T _N	P _N % 100	P _N % 75	P _N % 50		J			
		kW	HP	Speed rpm	I _N	A	T _N	Nm	I _{L,R} / I _N	Y	Δ							T _{L,R} / T _N	Y	Δ
2 Poles																				
V3E-A-132-S-2-B	VM 132S	7,5	10	2950	13,2	24,29	0,91	2,59	8	1,1	3,4	3,6	90,1	89,30	86,77	0,017	54			
V3E-A-160-M-2-A	VM 160M	11	15	2955	19,5	35,50	0,89	2,62	8,1	1,1	3,2	3,6	91,4	90,70	88,50	0,039	82			
V3E-A-160-M-2-B	VM 160M	15	20	2955	26,4	48,77	0,89	2,75	8,5	1,1	3,2	3,5	92,1	91,41	89,40	0,050	96			
V3E-A-160-L-2-C	VM 160L	18,5	25	2960	32	59,69	0,90	2,43	7,5	1,0	3,1	3,5	92,6	91,90	90,13	0,057	119			
V3E-A-180-M-2-A	VM 180M	22	30	2960	37,6	70,98	0,91	2,49	7,7	0,8	2,5	2,8	92,8	92,13	90,30	0,080	184			
V3E-G-200-L-2-A	VM 200L	30	40	2970	51,3	96,46	0,90	2,59	8	0,9	2,8	3	93,7	93,10	91,40	0,129	252			
V3E-G-200-L-2-B	VM 200L	37	50	2970	63,2	118,97	0,90	2,88	8,9	0,9	2,8	3	93,8	93,20	91,70	0,153	281			
V3E-G-225-M-2-A	VM 225M	45	60	2975	76,5	144,45	0,90	2,56	7,9	1,0	2,9	3,2	94,3	93,76	92,27	0,236	370			
V3E-G-250-M-2-A	VM 250M	55	75	2960	93,4	177,45	0,90	2,59	8	1	3	3,2	94,4	93,86	92,70	0,332	477			
V3E-G-280-S-2-A	VM 280S	75	90	2970	128,4	241,16	0,89	2,91	9	1	3	3,3	94,7	94,30	93,40	0,770	580			
V3E-G-280-M-2-B	VM 280M	90	120	2970	152,9	289,39	0,89	3,24	10	1	3	3,3	95,4	95,00	94,10	0,940	610			
V3E-G-315-S-2-A	VM 315S	110	150	2975	184,7	353,11	0,90	3,56	11	1	3	3,5	95,5	95,20	94,40	1,400	735			
V3E-G-315-M-2-B	VM 315M	132	175	2980	218	422,8	0,91	2,50	7,2	1	2,8	3,1	95,6	95,40	95,00	1,600	870			
V3E-G-315-M-2-C	VM 315L	160	210	2981	260	512	0,91	2,80	7,8	1	2,8	3,2	95,6	95,35	95,00	1,850	950			
V3E-G-315-L-2-D	VM 315L	200	270	2981	328	639,5	0,90	2,7	7,5	1	2,5	3,1	95,7	95,5	95,1	2,250	1100			
4 Poles																				
V3E-A-132-M-4-B	VM 132M	7,5	10	1460	14,9	35,99	0,80	1,94	6	1,0	2,9	3,1	90,7	89,70	87,70	0,046	61			
V3E-A-160-M-4-A	VM 160M	11	15	1470	21,1	71,46	0,82	2,52	7,8	0,9	2,8	3	91,7	90,78	88,95	0,083	94			
V3E-A-160-L-4-B	VM 160L	15	20	1470	28,3	97,46	0,83	2,56	7,9	0,9	2,6	3	92,1	91,18	89,60	0,099	128			
V3E-A-180-M-4-A	VM 180M	18,5	25	1475	34,2	119,78	0,84	2,49	7,7	0,8	2,3	2,6	92,9	91,97	90,60	0,130	196			
V3E-A-180-L-4-B	VM 180L	22	30	1475	41	142,40	0,83	2,69	8,3	0,8	2,3	2,6	93,3	92,37	91,20	0,172	207			
V3E-G-200-L-4-A	VM 200L	30	40	1478	54,3	193,84	0,85	2,72	8,4	0,9	2,6	2,8	93,8	93,14	91,90	0,259	254			
V3E-G-225-S-4-A	VM 225S	37	50	1478	66,8	239,07	0,85	2,52	7,8	0,9	2,8	3	94,1	93,44	92,40	0,290	370			
V3E-G-225-M-4-B	VM 225M	45	60	1480	80,1	290,37	0,86	2,59	8	0,9	2,8	3	94,3	93,92	92,90	0,473	376			
V3E-G-250-M-4-A	VM 250M	55	75	1480	96,3	354,90	0,87	2,59	8	0,9	2,8	3	94,7	94,32	93,50	0,705	471			
V3E-G-280-S-4-A	VM 280S	75	90	1480	133,6	483,95	0,85	2,59	8	1,0	3	3,2	95,3	95,11	94,50	0,810	585			
V3E-G-280-M-4-B	VM 280M	90	120	1480	160,3	580,74	0,85	2,59	8	1,0	3,1	3,3	95,4	95,21	94,60	0,989	620			
V3E-G-315-S-4-A	VM 315S	110	150	1485	191,2	707,41	0,87	2,59	8	1,1	3,3	3,5	95,5	95,31	94,90	1,521	750			
V3E-G-315-M-4-B	VM 315M	132	175	1487	225	845,00	0,88	2,50	7,5	1,0	3,2	3,4	95,6	95,40	95,10	1,725	895			
V3E-G-315-M-4-C	VM 315L	160	210	1490	267	1024,00	0,88	2,50	7,5	1,0	3,2	3,4	95,8	95,50	95,10	2,000	975			
V2E-G-315-L-4-D	VM 315L	200	270	1490	335	1283	0,88	2,5	7,5	1	3,2	3,5	96,1	95,7	95,2	2,750	1130			

TABLE 28: IE3 premium efficiency asynchronous three-phase motors - 400V 50Hz

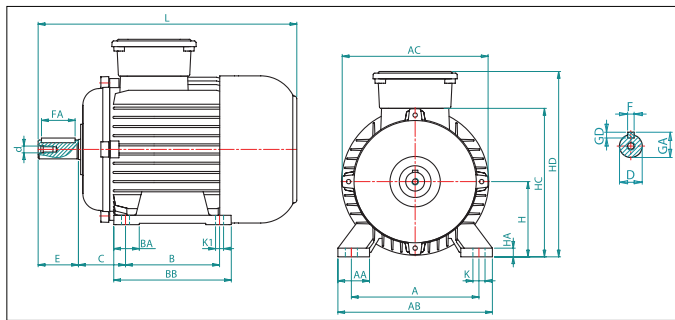
ASYNCHRONOUS THREE-PHASE MOTORS, ALUMINUM HOUSING, FOOT MOUNTED, B3

EN 50347

Type	A	AA	AB	AC	B	BB	BA	C	D	d	E	FA	F	GD	GA	H	HA	HC	HD	K	K1	L
63	100	22	119	125	80	100	23	40	11	M4	23	16	4	4	12,5	63	7	113,5	161	7	7	203
71	112	30	140	136	90	108	26	45	14	M5	30	18	5	5	16	71	10	129,5	180	11	7	242
80	125	35	159	154	100	125	32	50	19	M6	40	28	6	6	21,5	80	11	158	206	15	10	274
90S	140	40	181	172	100	130	34	56	24	M8	50	36	8	7	27	90	12	177	225	15	10	303
90L	140	40	179	172	125	155	35	56	24	M8	50	36	8	7	27	90	12	177	225	15	10	328
100	160	46	200	191	140	174	40	63	28	M10	60	50	8	7	31	100	13	197	245	18	12	371
112	190	51	228	215	140	175	38	70	28	M10	60	50	8	7	31	112	14	222	275,5	18	12	385
132S	216	58,5	260	255	140	180	37	89	38	M12	80	70	10	8	41	132	17,5	263	317	28	12	452
132M	216	58,5	260	255	178	218	37	89	38	M12	80	70	10	8	41	132	17,5	263	316	28	12	490
160M	254	72	316	305	210	264	52	108	42	M16	110	90	12	8	45	160	23	319,5	396,4	29,5	15	601
160L	254	72	316	305	254	308	52	108	42	M16	110	90	12	8	45	160	23	319,5	396,4	29,5	15	644
180M	279	73,5	344	341	241	291	42	121	48	M16	110	100	14	9	51,5	180	25	356	436	41	14,5	708
180L	279	73,5	344	341	279	329	42	121	48	M16	110	100	14	9	51,5	180	25	356	436	41	14,5	708

*Progressive Motors All dimensions in mm

100C	160	46	200	191	140	174	40	63	28	M10	60	50	8	7	31	100	13	197	245	18	12	389
112C	190	51	228	215	140	175	38	70	28	M10	60	50	8	7	31	112	14	222	276	18	12	390
132M-C	216	58,5	260	255	178	218	37	89	38	M12	80	70	10	8	41	132	17,5	263	316	28	12	537

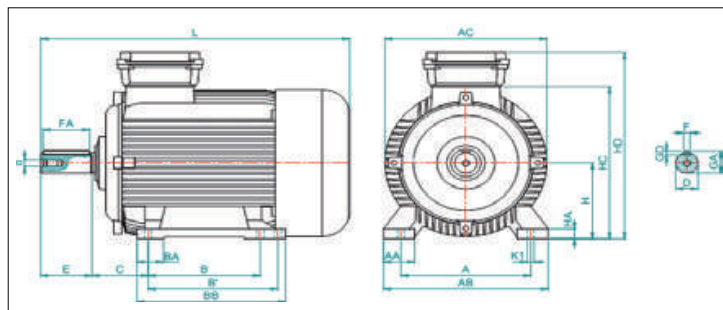


ASYNCHRONOUS THREE-PHASE MOTORS, CAST IRON HOUSING, FOOT MOUNTED, B3

EN 50347

Type	A	AA	AB	AC	B	B'	BB	BA	C	D	d	E	FA	F	GD	GA	H	HA	HC	HD	K	K1	L
180	M	279	68	354	348	241	279	319	57	121	48	M16	110	100	14	9	51,5	180	25	360,5	437,4	15	659
	L																						
200L	318	81	401	391	305	—	357	72	133	55	M20	110	100	16	10	59	200	27	405	489	18,5	747	
225 S/M	2 pole	356	83	441	435	286	—	365	76	149	55	M20	110	100	16	10	59	225	35	439	526	18,5	763
	4/6 pole	356	83	441	435	—	311	365	76	149	60	M20	140	125	18	11	64	225	35	439	526	18,5	793
250 M	2 pole	406	80	484	480	349	—	410	75	168	60	M20	140	125	18	11	64	250	35	472	580	24	896
	4/6 pole	406	80	484	480	349	—	410	75	168	65	M20	140	125	18	11	69	250	35	472	580	24	896
280 S/M	2 pole	457	120	550	544	368	—	474	85	190	65	M20	140	125	18	11	69	280	40	530	630	24	970
	4/6 pole	457	120	550	544	—	419	474	85	190	75	M20	140	125	20	12	79,5	280	40	530	630	24	970
315 S/M	2 pole	508	125	620	616	406	—	550	115	216	65	M20	140	125	18	11	69	315	50	613	825	28	1120
	4/6 pole	508	125	620	616	—	457	550	115	216	80	M20	170	140	22	14	85	315	50	613	825	28	1150
315 L	2 pole	508	125	620	616	508	—	600	125	216	65	M20	140	125	18	11	69	315	50	613	825	28	1190
	4/6 pole	508	125	620	616	508	—	600	125	216	80	M20	170	140	22	14	85	315	50	613	825	28	1220

All dimensions in mm

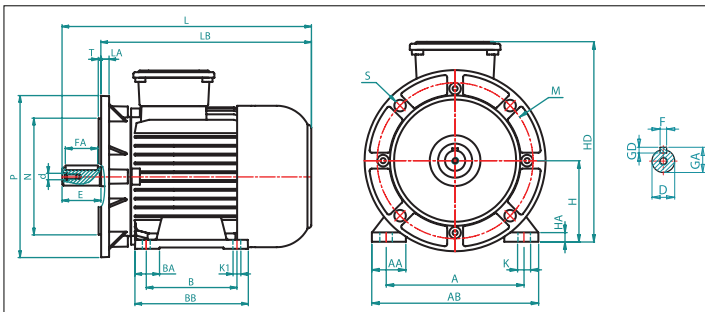


ASYNCHRONOUS THREE-PHASE MOTORS IE1 and IE2, CAST IRON HOUSING, FLANGE MOUNTED, B35

EN 50347

Type	A	AA	AB	B	BB	BA	D	d	E	FA	F	GD	GA	H	HA	HD	K	K1	L	LA	LB	M	N	P	S	T	
63	100	22	119	80	100	23	11	M4	23	16	4	4	12,5	63	7	161	7	7	203	8,5	180	115	95	140	10	3	
71	112	30	140	90	108	26	14	M5	30	18	5	5	16	71	10	177	11	7	242	8	212	130	110	160	10	3,5	
80	125	35	159	100	125	32	19	M6	40	28	6	6	21,5	80	11	206	15	10	274	10	234	165	130	200	12	3,5	
90S	140	40	181	100	130	34	24	M8	50	36	8	7	27	90	12	225	15	10	303	10	253	165	130	200	12	3,5	
90L	140	40	179	125	155	35	24	M8	50	36	8	7	27	90	12	225	15	10	328	10	278	165	130	200	12	3,5	
100	160	46	200	140	174	40	28	M10	60	50	8	7	31	100	13	245	18	12	371	13	311	215	180	250	15	4	
112	190	51	228	140	175	38	28	M10	60	50	8	7	31	112	14	276	18	12	385	13	323	215	180	250	15	4	
132S	216	58,5	260	140	180	37	38	M12	80	70	10	8	41	132	17,5	317	28	12	452	18	372	265	230	300	15	4	
132M	216	58,5	260	178	218	37	38	M12	80	70	10	8	41	132	17,5	316	28	12	490	18	410	265	230	300	15	4	
160M	254	72	316	210	264	52	42	M16	110	90	12	8	45	160	23	396,4	29,5	15	601	18	396,4	300	250	350	19	5	
160L	254	72	316	254	308	52	42	M16	110	90	12	8	45	160	23	396,4	29,5	15	644	18	534	300	250	350	19	5	
180M	279	73,5	344	241	291	42	48	M16	110	100	14	9	51,5	180	25	436	41	14,5	708	18,5	595	300	250	350	18,5	5	
180L	279	73,5	344	279	329	42	48	M16	110	100	14	9	51,5	180	25	436	41	14,5	708	18,5	595	300	250	350	18,5	5	
*Progressive Motors																											
100C	160	46	200	140	174	40	28	M10	60	50	8	7	31	100	13	245	18	12	389	13	311	215	180	250	15	4	
112C	190	51	228	140	175	38	28	M10	60	50	8	7	31	112	14	276	18	12	390	13	323	215	180	250	15	4	
132M-C	216	58,5	260	178	218	37	38	M12	80	70	10	8	41	132	17,5	316	28	12	537	18	410	265	230	300	15	4	

All dimensions in mm

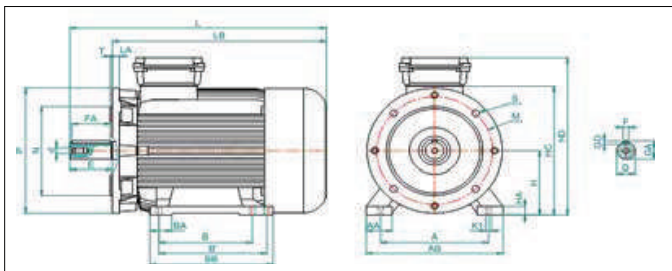


ASYNCHRONOUS THREE-PHASE MOTORS CAST IRON HOUSING, FLANGE MOUNTED, B35

EN 50347

Type					B'	BB	BA	D	d	E	FA	F	GD	GA	H	HA	HC	HD	K1	L	LA	LB	M	N	P	S	T	
180	M	279	68	354	241	279	319	57	48	M16	110	100	14	9	51,5	180	25	360,5	444	15	659	18,5	548	300	250	350	18,5	5
	L																											
200L		318	81	401	305	-	357	72	55	M20	110	100	16	10	59	200	27	405	492	18,5	747	22,5	639	350	300	400	18,5	5
225 S/M	2 pole	356	83	441	286	-	365	76	55	M20	110	100	16	10	59	225	35	439	526	18,5	763	24	653	400	350	450	18,5	5
	4/6 pole	356	83	441	-	311	365	76	60	M20	140	125	18	11	64	225	35	439	526	18,5	793	24	653	400	350	450	18,5	5
250M	2 pole	406	80	484	349	-	410	75	60	M20	140	125	18	11	64	250	35	472	580	24	896	24	746	500	450	550	18,5	5
	4/6 pole	406	80	484	349	-	410	75	65	M20	140	125	18	11	69	250	35	472	580	24	896	24	746	500	450	550	18,5	5
280 S/M	2 pole	457	120	550	368	-	474	85	65	M20	140	125	18	11	69	280	40	530	630	24	970	24	830	500	450	550	18,5	5
	4/6 pole	457	120	550	-	419	474	85	75	M20	140	125	20	12	79,5	280	40	530	630	24	970	24	830	500	450	550	18,5	5
315 S/M	2 pole	508	125	620	406	-	550	115	65	M20	140	125	18	11	69	315	50	613	825	28	1120	24	980	600	550	660	24	6
	4/6 pole	508	125	620	-	457	550	115	80	M20	170	140	22	14	85	315	50	613	825	28	1150	24	980	600	550	660	24	6
315 L	2 pole	508	125	620	508	-	600	125	65	M20	140	125	18	11	69	315	50	613	825	28	1190	24	1050	600	550	660	24	6
	4/6 pole	508	125	620	508	-	600	125	80	M20	170	140	22	14	85	315	50	613	825	28	1220	24	1050	600	550	660	24	6

All dimensions in mm



ASYNCHRONOUS THREE-PHASE MOTORS IE1 and IE2, CAST IRON HOUSING, FLANGE MOUNTED, B34

EN 50347

Type	A	AA	AB	AC	B	BB	BA	D	d	E	FA	F	GD	GA	H	HA	HC	HD	K	K1	L	LA	LB	M	N	P	S1	T
63	100	22	119	125	80	100	23	11	M4	23	16	4	4	12,5	63	7	113,5	161	7	7	203	26,5	180	75	60	90	M5	2,5
71	112	30	140	136	90	108	26	14	M5	30	18	5	5	16	71	10	129,5	177	11	7	242	34,5	212	85	70	105	M6	2,5
80	125	35	159	154	100	125	32	19	M6	40	28	6	6	21,5	80	11	158	206	15	10	274	34,5	234	100	80	120	M6	3
90S	140	40	181	172	100	130	34	24	M8	50	36	8	7	27	90	12	177	225	15	10	303	37,5	253	115	95	140	M8	3
90L	140	40	179	172	125	155	35	24	M8	50	36	8	7	27	90	12	177	225	15	10	328	37,5	278	115	95	140	M8	3
100	160	46	200	191	140	174	40	28	M10	60	50	8	7	31	100	13	197	245	18	12	371	43	311	130	110	157	M8	3,5
112	190	51	228	215	140	175	38	28	M10	60	50	8	7	31	112	14	222	276	18	12	385	47	323	130	110	160	M8	3,5
132S	216	58,5	260	255	140	180	37	38	M12	80	70	10	8	41	132	17,5	263	317	28	12	452	53	372	165	130	200	M10	3,5
132M	216	58,5	260	255	178	218	37	38	M12	80	70	10	8	41	132	17,5	263	316	28	12	490	53	410	165	130	200	M10	3,5

All dimensions in mm

