

NEW PARADIGM



KEMATROS



ADVANCED
EQUIPMENT
AND
MANAGEMENT

Single-Phase Motors

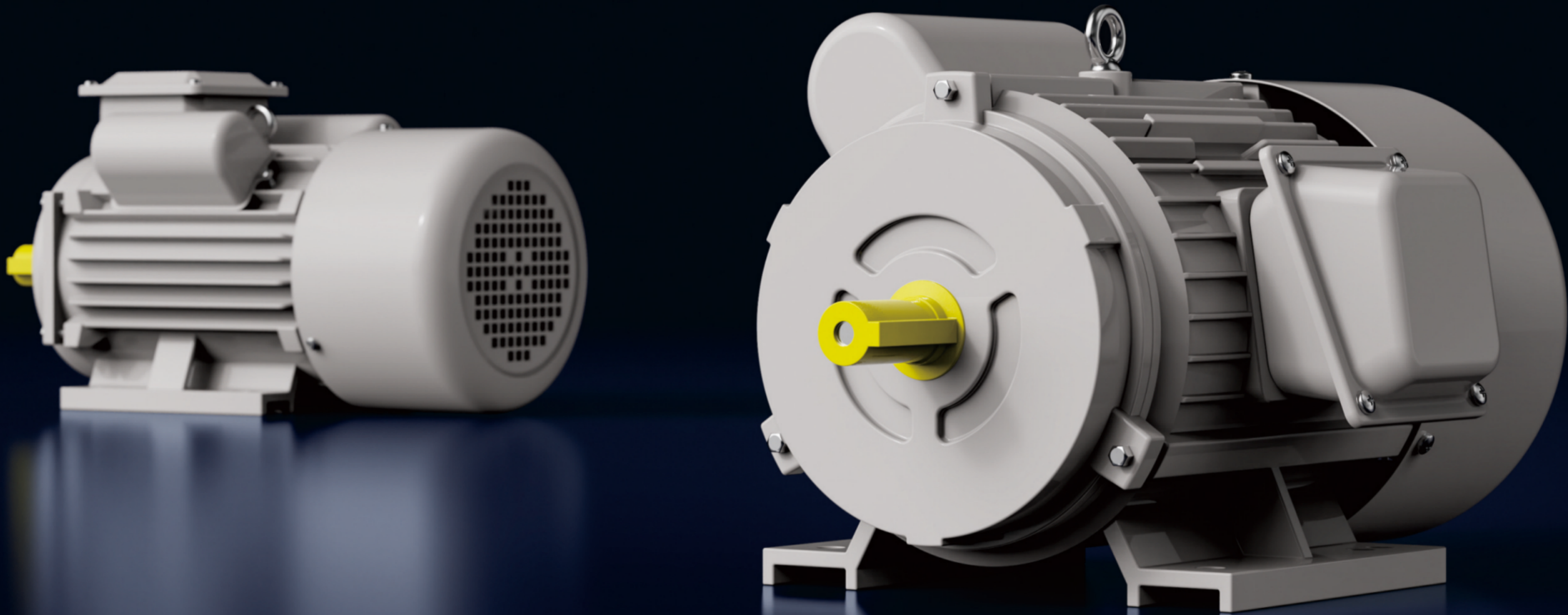
Contents

	JY SERIES SINGLE-PHASE CAPACITOR ASYNCHRONOUS MOTOR	01
	ML SERIES DOUBLE-CAPACITOR SINGLE-PHASE MOTOR	02
	YL SERIES DOUBLE-CAPACITOR SINGLE-PHASE MOTOR	03
	YL SERIES DOUBLE-CAPACITOR SINGLE-PHASE MOTOR	04
	YC SERIES CAPACITOR - START ASYNCHRONOUS MOTOR	05

The perfect combination of advanced equipment and management
An advanced digital management system enables digital control of the entire production process.
With advanced equipment, the winding equipment features high precision to ensure accurate winding parameters, and the automated assembly line is equipped with intelligent sensors to ensure efficient and accurate assembly. Strict quality control is implemented, and high-precision testing equipment guarantees the stable operation of the motor.

DOUBLE-VALUE CAPACITOR

Double-Value Capacitor Asynchronous Motor Series



DECODING THE TECHNOLOGICAL CORE OF ENERGY EFFICIENCY

KEMATROS

Start - up and Operation: Equipped with a dual - capacitor configuration, it has a large starting torque, suitable for loads requiring high starting force. The running capacitor ensures stable and efficient operation, reducing energy consumption and the risk of equipment abnormalities.

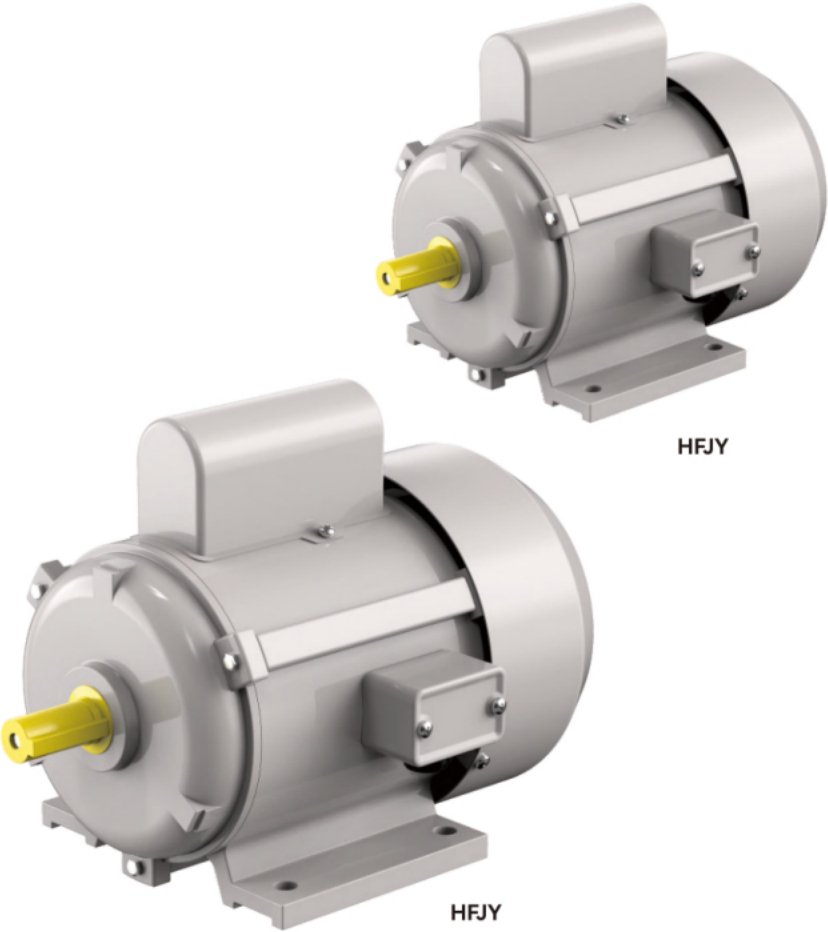
Structure and Adaptability: Compact structure, easy to install. It is adaptable to a wide voltage range and can work stably in scenarios with small voltage fluctuations, reducing breakdowns and shutdowns.

Energy - saving and Durable: Optimized design enables remarkable energy - saving performance. The reasonable combination of capacitors and manufacturing processes reduces wear and loss, prolongs service life, cuts operation and maintenance costs, and enhances equipment reliability.

JY SERIES

Single-phase Capacitor Asynchronous Motor

Insulation class: F
Protection class: IP44
Rated frequency: 50HZ
Cooling method: IC0141

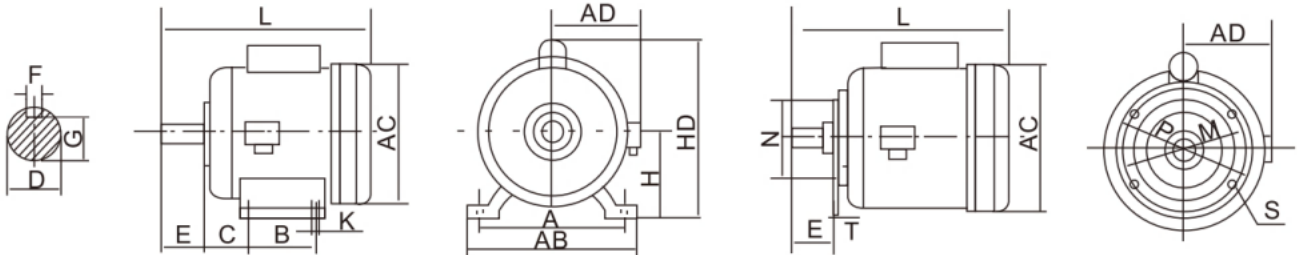


Product Overview

The HFJYseries single-phase capacitor-start asynchronous motors are suitable for occasions requiring large starting torque while having certain restrictions on starting current. They can be widely used in air compressors, refrigerators, medical devices, and various small machinery requiring full-load starting. Motors in this series are fully enclosed fan-type with three frame numbers: 09, 1, and 2. According to requirements, they can be manufactured with either aluminum or cast iron casings.

Note: If you have special requirements for motor frequency, voltage, operating environment, protection level, color, etc., please make them when ordering.

Installation Dimensions



Frame	Mounting Dimension															Overall Dimension				
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	AB	AC	AD	HD	L
2	160	112	63	19	40	6	21.5	100	12	115	95	140	0	M8	3	190	190	128	246	330
1	140	100	56	16	40	5	18	90	10	100	80	120	0	M8	3	176	176	121	220	286
09	125	100	50	14	30	4	15.5	80	10	85	70	105	0	M8	3	156	156	108	190	258

Performance Data

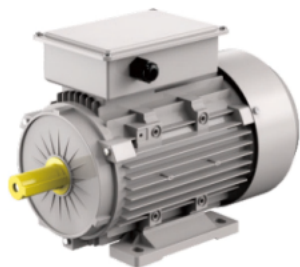
220V 50Hz

Frame Size	Type	Power		r/min	Eff %	Power factor	Locked rotor torque Rated torque	Breakdown torque Rated torque
		HP	KW					
2	HFJY2A-2	1.5	1.1	2850	0.77	71	2-3.5	1.8-2
	HFJY2B-2	1	0.75	2850	0.75	70	2-3.5	1.8-2
	HFJY2A-4	1	0.75	1400	0.68	69	2-3.5	1.8-2
	HFJY2B-4	3/4	0.55	1400	0.68	67	2-3.5	1.8-2
1	HFJY1A-2	3/4	0.55	2800	0.72	66	2-3.5	1.8-2
	HFJY1B-2	1/2	0.37	2800	0.72	66	2-3.5	1.8-2
	HFJY1A-4	1/2	0.37	1400	0.62	64	2-3.5	1.8-2
	HFJY1B-4	1/3	0.25	1400	0.62	60	2-3.5	1.8-2
09	HFJY09A-2	1/3	0.25	2800	0.72	63	2-3.5	1.8-2
	HFJY09B-2	1/4	0.18	2800	0.72	60	2-3.5	1.8-2
	HFJY09A-4	1/4	0.18	1400	0.62	56	2-3.5	1.8-2

Note:The motor is designed according to powersupplies 220V/110V,50Hz,Special design may be accommodated with the customers, particular requirements as 230V,50Hz or 220V/110V,60Hz,etc.

ML SERIES

Double-capacitor single-phase motor



HFML-B3



HFML-B3



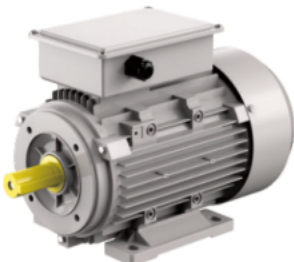
HFML-B5



HFML-B35



HFML-B34



HFML-B34

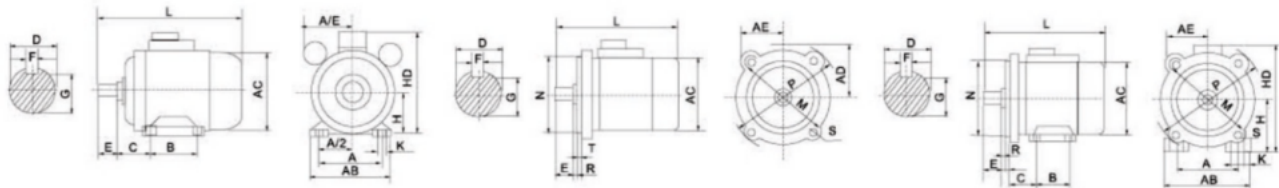
Ambient temperature: -15 °C ≤ 0 °C ≤ 40 °C
Altitude: Not exceeding 1000 meters
Rated voltage: 220V
Rated frequency: 50Hz, 60Hz
Protection class: IP44, IP54
Insulation class: B, F
Cooling method: ICO141
Duty cycle: S1 (Continuous)

Product Overview

The HFML series single-phase double-value capacitor asynchronous motors are manufactured in accordance with national standards. They offer advantages such as good starting and operating performance, low noise, small size, light weight, and convenient maintenance. These motors are widely used in air compressors, water pumps, refrigeration machines, medical machinery, and small-scale equipment, particularly in scenarios where only single-phase power supply is available.

Note: If you have special requirements for motor frequency, voltage, operating environment, protection level, color, etc., please make them when ordering.

Installation Dimensions



IMB3

IMB5

IMB35

机座号	Mounting Dimension									IMB5 mounting dimensions						IMB14 mounting dimensions						Overall dimensions				
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	HD	L
63	100	80	40	11	23	4	8.5	63	7	115	95	140	0	10	3	75	60	90	0	M5	2.5	130	130	125	180	230
71	112	90	45	14	30	5	11	71	7	130	110	160	0	10	3.5	85	70	105	0	M6	2.5	145	145	130	200	255
80	125	100	50	19	40	6	15.5	80	10	165	130	200	0	12	3.5	100	80	120	0	M6	3	160	160	160	240	295
90S	140	100	56	24	50	8	20	90	10	165	130	200	0	12	3.5	115	95	140	0	M8	3	180	180	175	260	335
90L	140	125	56	24	50	8	20	90	10	165	130	200	0	12	3.5	115	95	140	0	M8	3	180	180	275	260	360
100L	160	140	63	28	60	8	24	100	12	215	180	250	0	15	4	130	110	160	0	M8	3.5	205	205	200	280	390
112M	190	140	70	28	60	8	24	112	12	215	180	250	0	15	4	130	110	160	0	M8	3.5	245	245	210	300	410

Performance Data

220V 50Hz

Type	Power		Voltage V	Frequency HZ	Current A	Speed r/min	Efficiency (%)	Power	Tstart/Tn	ist/In	Tmax/Tn
	HP	KW									
HFML711-2	0.37	0.5	220	50	2.46	2800	72	0.95	1.8	6.0	1.8
HFML712-2	0.55	0.75	220	50	3.60	2800	73	0.95	1.8	6.0	1.8
HFML801-2	0.75	1	220	50	4.85	2800	74	0.95	1.8	6.0	1.8
HFML802-2	1.1	1.5	220	50	7.02	2800	75	0.95	1.8	6.0	1.8
HFML90S-2	1.5	2	220	50	9.32	2830	77	0.95	1.8	6.0	1.8
HFML90L-2	2.2	3	220	50	13.5	2830	78	0.95	1.8	6.0	1.8
HFML100L-2	3	4	220	50	18.17	2870	79	0.95	1.8	6.0	1.8
HFML711-4	0.25	0.34	220	50	1.79	1400	67	0.95	1.8	6.0	1.8
HFML712-4	0.37	0.5	220	50	2.49	1400	71	0.95	1.8	6.0	1.8
HFML801-4	0.55	0.75	220	50	3.65	1410	72	0.95	1.8	6.0	1.8
HFML802-4	0.75	1.0	220	50	4.85	1410	74	0.95	1.8	6.0	1.8
HFML90S-4	1.1	1.5	220	50	7.02	1430	75	0.95	1.8	6.0	1.8
HFML90L-4	1.5	2	220	50	9.44	1430	76	0.95	1.8	6.0	1.8
HFML100L1-4	2.2	3	220	50	13.5	1430	78	0.95	1.8	6.0	1.8
HFML100L2-4	3	4	220	50	18.17	1430	78	0.95	1.8	6.0	1.8
HFML112M-4	3.7	5	220	50	22.40	1430	79	0.95	1.8	6.0	1.8

Note:The motor is designed according to powersupplies 220V/110V,50Hz, Special design may be accommodatedwith the customers, particular requirements as 230V,50Hz or 220V/110V,60Hz,etc.

YL SERIES

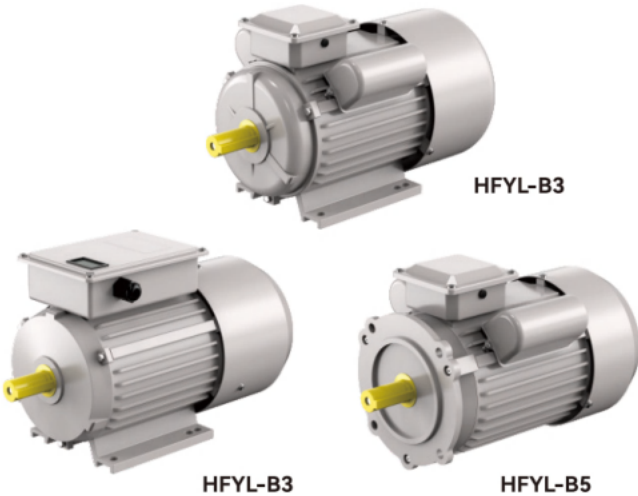
Double-capacitor single-phase motor

Frame size: 63-132

Power: 0.12-7.5kW

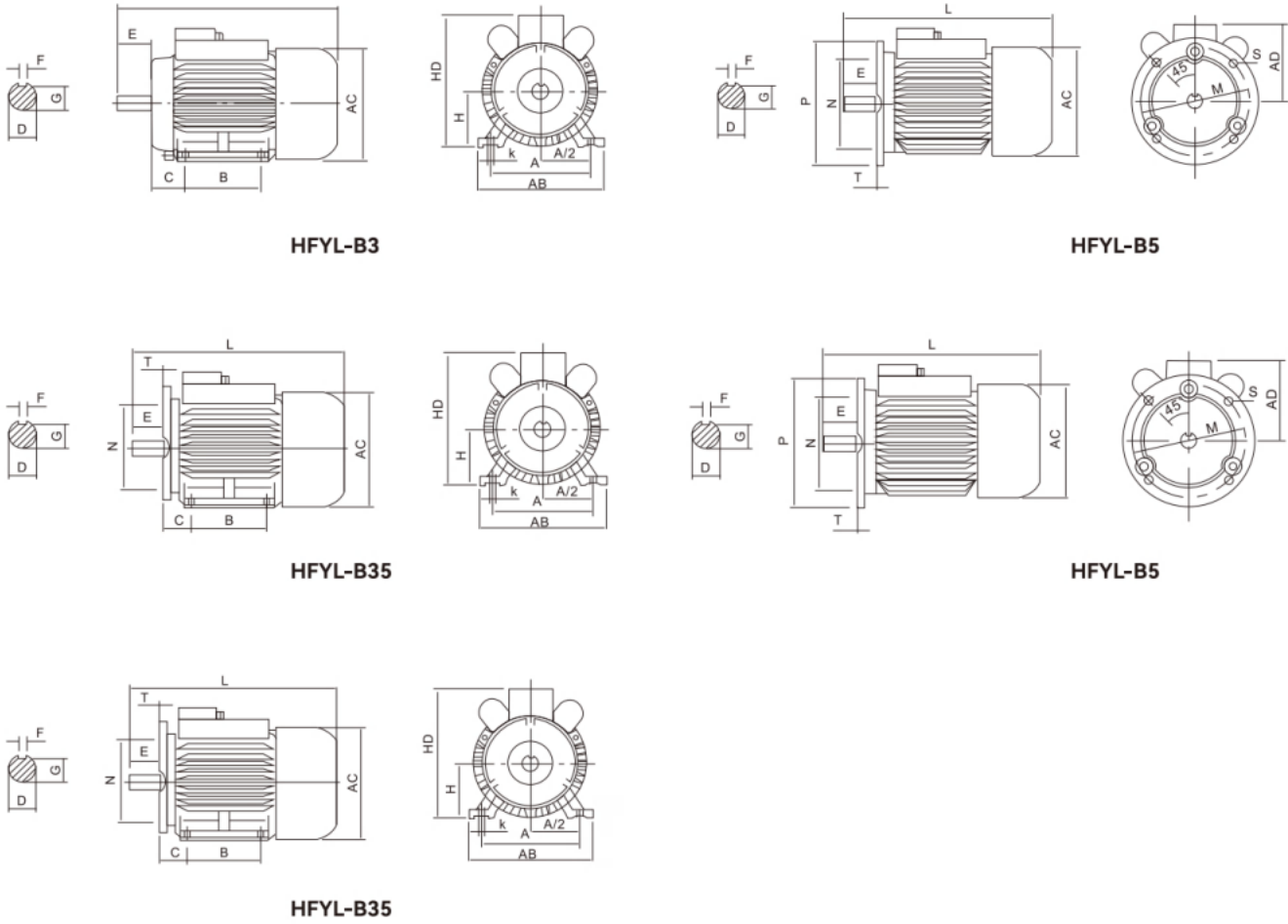
Insulation class: F

Protection class: IP44



Performance Data							220V 50Hz
Type	kW	Current A	r/min	Eff %	Power factor	Locked rotor torque Rated torque	Locked Rotor Current A
HFYL711-2	0.37	2.2	2800	67	0.92	1.8	16
HFYL712-2	0.55	3.9	2800	70	0.92	1.8	21
HFYL801-2	0.75	4.9	2800	72	0.95	1.8	29
HFYL802-2	1.1	7.0	2800	75	0.95	1.8	40
HFYL90S-2	1.5	9.4	2800	76	0.95	1.7	55
HFYL90L-2	2.2	13.7	2800	77	0.95	1.7	80
HFYL100L1-2	3	18.2	2800	79	0.95	1.7	110
HFYL112M-2	4	26.6	2850	77	0.82	2.2	175
HFYL711-4	0.25	2.0	1400	62	0.92	1.8	12
HFYL712-4	0.37	2.8	1400	65	0.92	1.8	16
HFYL801-4	0.55	4.0	1400	68	0.92	1.8	21
HFYL802-4	0.75	5.1	1400	71	0.92	1.8	29
HFYL90-4	1.1	7.3	1400	73	0.95	1.7	40
HFYL90-4	1.5	9.7	1400	75	0.95	1.7	55
HFYL100L1-4	2.2	13.9	1400	76	0.95	1.7	80
HFYL112M-4	3	18.6	1400	77	0.95	1.7	110
HFYL132S-4	4	27.1	1400	78	0.77	2.2	175
HFYL132M-4	5.5	31.2	1400	78	0.79	2.2	200

Installation Dimensions



Mounting Dimension																							Overall Dimension					
Frame	IMB3									IMB14			IMB34			IMB5			IMB35			IMB3						
	A	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	AE	HD	L	
71	112	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	—	10	3.5	145	145	140	95	180	255	
80	125	100	50	19	40	6	15.5	80	10	110	80	120	0	M6	3	165	130	200	0	12	3.5	160	165	150	110	200	295	
90S	140	100	56	24	50	8	20	90	10	115	95	140	0	M8	3	165	130	200	0	12	3.5	180	185	160	120	220	370	
90L	140	125	56	24	50	8	20	90	10	115	95	140	0	M8	3	165	130	200	0	12	3.5	180	185	160	120	220	400	
100L	160	140	63	28	60	8	24	100	12	—	—	—	—	—	—	215	180	250	0	15	4	205	200	180	130	260	430	
112M	190	140	70	28	60	8	24	112	12	—	—	—	—	—	—	215	180	250	0	15	4	245	250	190	140	300	455	
132S	216	140	89	38	80	10	33	132	12	—	—	—	—	—	—	265	230	300	0	15	4	280	290	210	155	350	525	
132M	216	178	89	38	80	10	33	132	12	—	—	—	—	—	—	265	230	300	0	15	4	280	290	210	155	350	565	

The other dimensions of IMB14, IMB34, and IMB 5 arethe same as those of IMB3.

YL SERIES

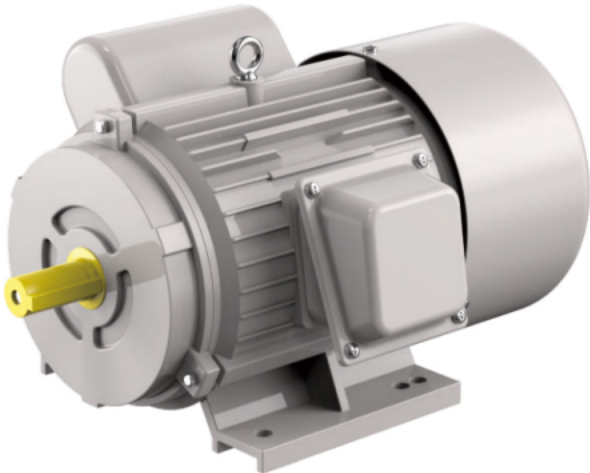
Double-capacitor single-phase motor

Frame size: 63-132

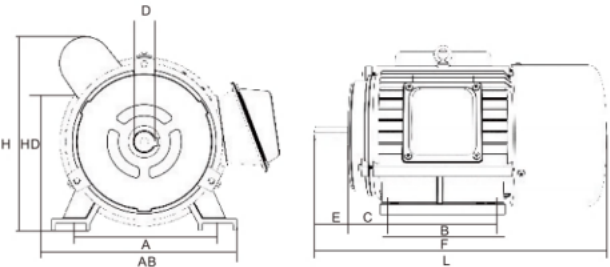
Power: 0.12-7.5kW

Insulation class: F

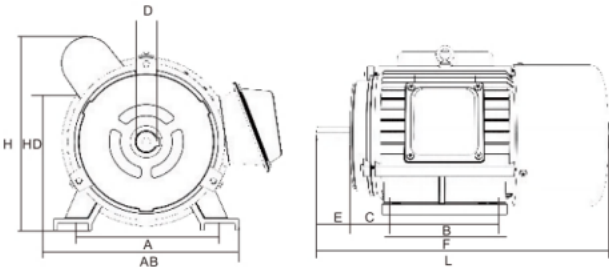
Protection class: IP44



Installation Dimensions										
Frame	Mounting Dimension									
	A	AB	HD	H	E	C	B	F	L	D
100	160	200	245	245	65	50	125	140	450	28

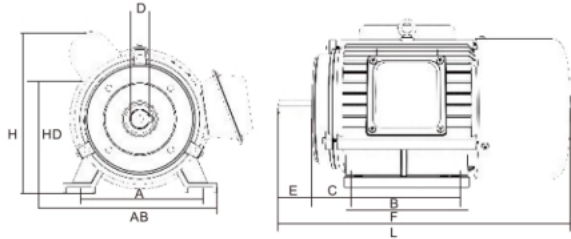


KMYL-B3

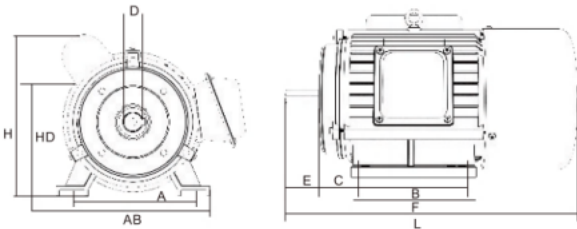


KMYL-B3

Installation Dimensions										
Frame	Mounting Dimension									
	A	AB	HD	H	E	C	B	F	L	D
112	190	240	255	255	65	50	125	140	450	28

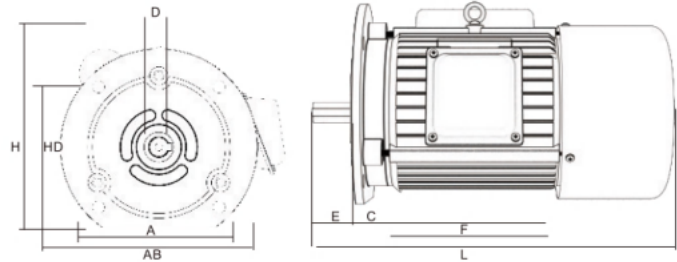


KMYL-B34

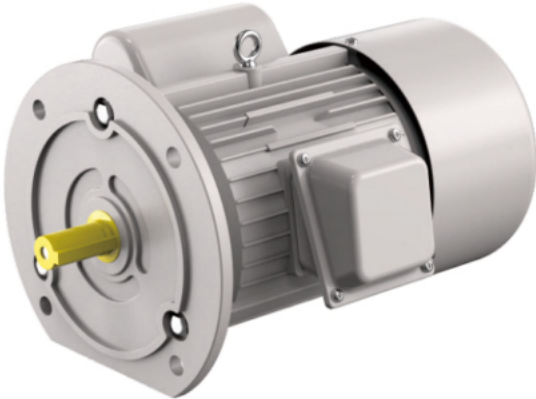


KMYL-B34

Installation Dimensions										
Frame	Mounting Dimension									
	A	AB	HD	H	E	C	B	F	L	D
112	190	240	255	255	65	50	125	140	450	28

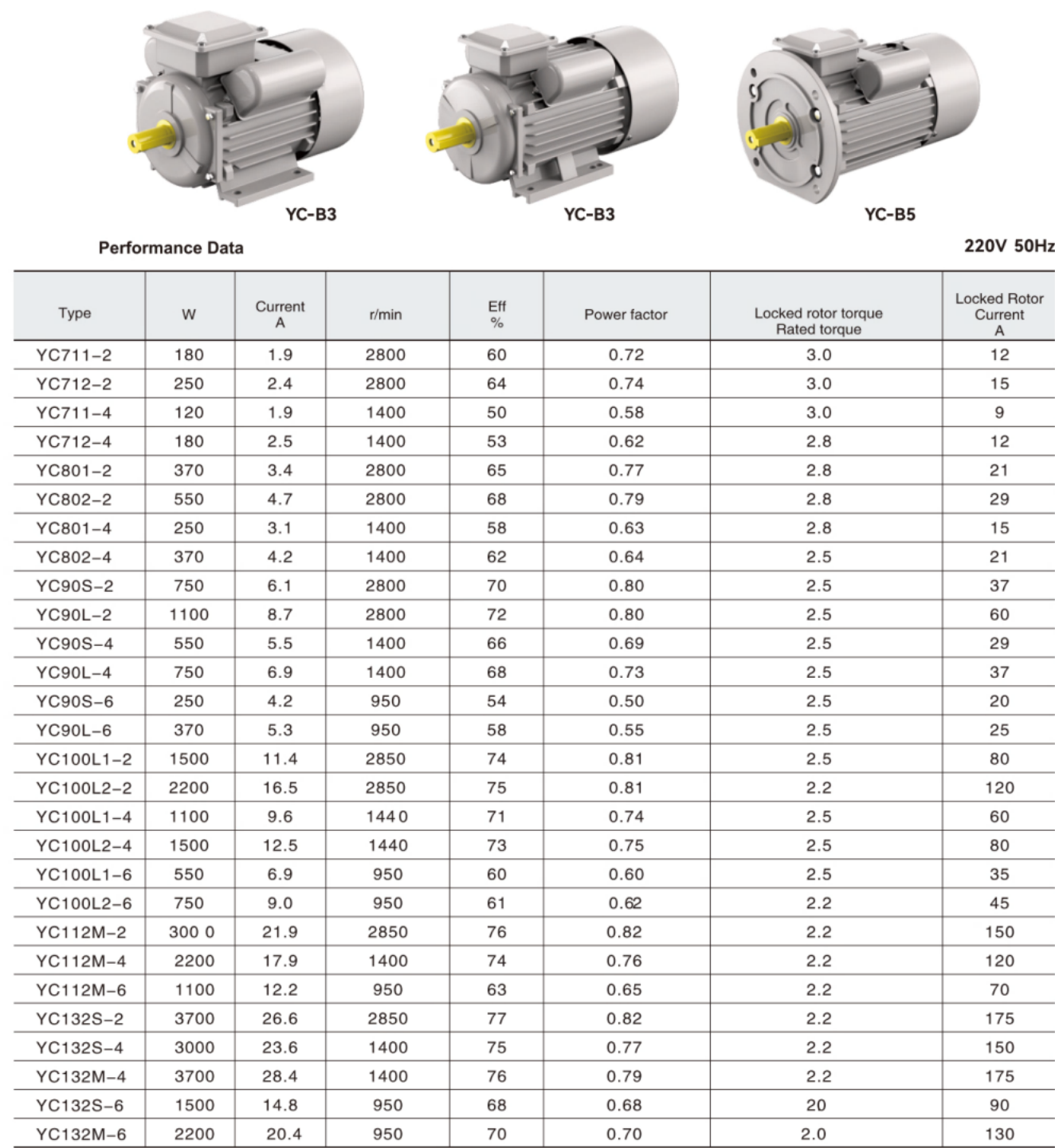


KMYL-B5



YC SERIES

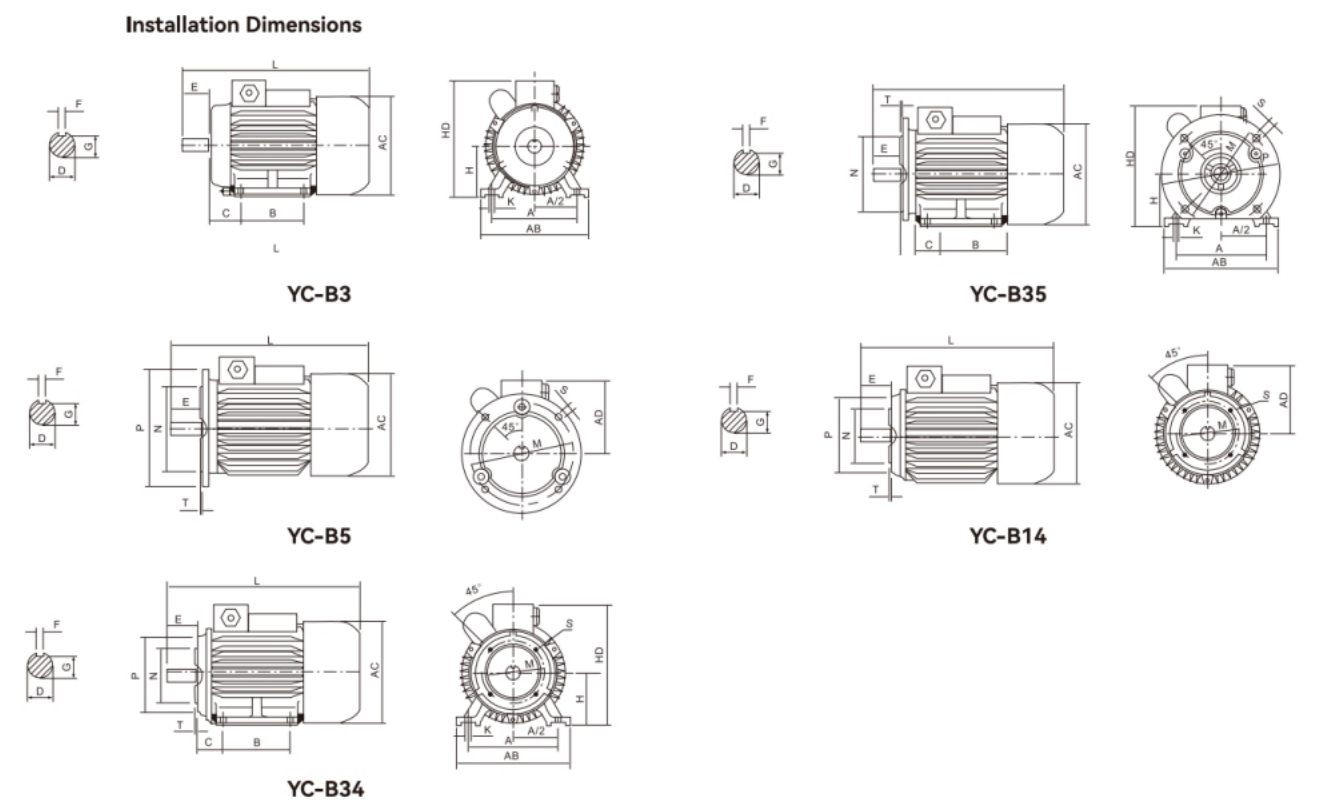
Capacitor – Start Asynchronous Motor



Product Overview

Application: Can be used as a power unit for machinery such as air compressors, refrigerators, and medical devices.

Features: Large starting torque, excellent performance, energy-saving, reliable structure, and strong versatility. The rated power supply of the basic series motors is 220V/50Hz. Upon request, motors with 110V/220V, 110V, 240V, 60Hz, etc., are available.



Mounting Dimension																							Overall Dimension						
Frame	IMB3											IMB14			IMB34			IMB5			IMB35			IMB3					
	A	A/2	B	C	D	E	F	G	H	K	M	N	P	R	S	T	M	N	P	R	S	T	AB	AC	AD	AE	HD	L	
71	112	56	90	45	14	30	5	11	71	7	85	70	105	0	M6	2.5	130	110	160	—	10	3.5	145	145	140	95	180	255	
80	125	62.5	100	50	19	40	6	15.5	80	10	110	80	120	0	M6	3	165	130	200	0	12	3.5	160	165	150	110	200	295	
90S	140	70	100	56	24	50	8	20	90	10	115	95	140	0	M8	3	165	130	200	0	12	3.5	180	185	160	120	220	370	
90L	140	70	125	56	24	50	8	20	90	10	115	95	140	0	M8	3	165	130	200	0	12	3.5	180	185	160	120	220	400	
100L	160	80	140	63	28	60	8	24	100	12	—	—	—	—	—	—	215	180	250	0	15	4	205	200	180	130	260	430	
112M	190	95	140	70	28	60	8	24	112	12	—	—	—	—	—	—	215	180	250	0	15	4	245	250	190	140	300	455	
132S	216	108	140	89	38	80	10	33	132	12	—	—	—	—	—	—	265	230	300	0	15	4	280	290	210	155	350	525	
132M	216	108	178	89	38	80	10	33	132	12	—	—	—	—	—	—	265	230	300	0	15	4	280	290	210	155	350	565	

The other dimensions of IMB14, IMB34, and IMB 5 are the same as those of IMB3.