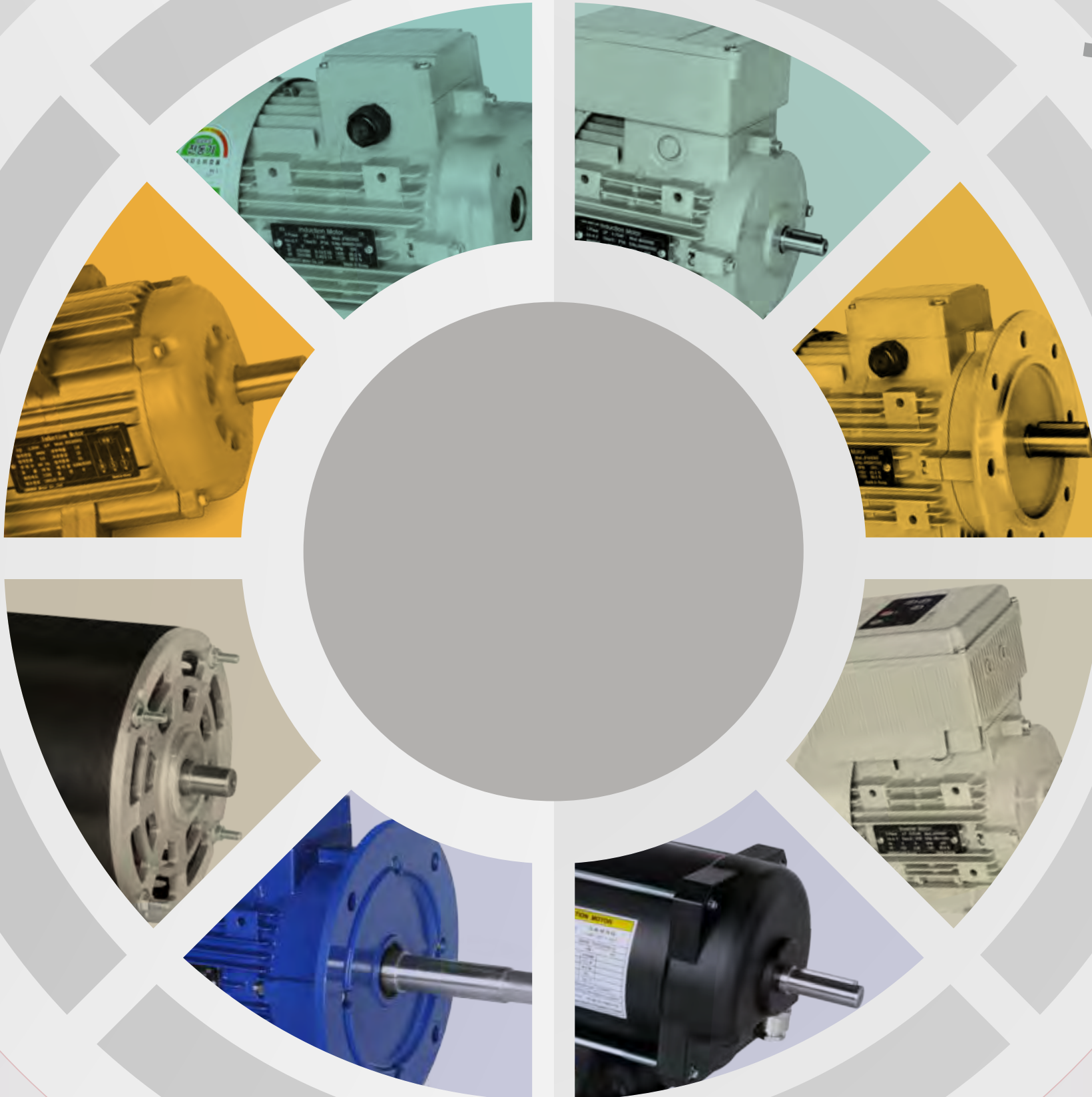




JUNGWOO MOTOR

The Innovation Leader
in Motor Industry



HEAD OFFICE ►

90 Hwanggeum1-ro, Yangchon-eup, Gimpo City,
Gyeonggi Province, Republic of Korea

Tel: +82-10-5421-4172 **Fax:** +82-31-996-4175

e-mail: export3@jem21.net **Website:** www.jem21.net



JungWoo Motor Co., Ltd. leading the technology for industrial motor

JungWoo Motor Co., Ltd. has accomplished outstanding results in the area of industrial motor manufacturing technology, and secured technical skills and competitiveness through diverse projects. In particular, we have been satisfying our customer companies with the differentiated know-how in the area of motor on demand. In addition, we are endeavoring to realize 100% customer satisfaction through a perfect service.

JungWoo Motor Co., Ltd. is a specialized company for developing and producing industrial motors.

Company Name	JungWoo Motor Co., Ltd.
Date of Establishment	July 1998
Corporate Registration Number	136-81-27928
Address	90 Hwanggeum1-ro, Yangchon-eup, Gimpo City, Gyeonggi Province, Republic of Korea
Tel	82-31-996-4172~4
Fax	82-31-996-4175
CEO	Kim, Sin Ho



CEO Message

We will be the enterprise that realizes customer impression with technology, quality and trust.

Our company has been growing up as a specialized one for manufacturing industrial motors ever since its establishment in 1998, and we are possessing and producing diverse products by prioritizing customer satisfaction and quality. We are endeavoring to provide the industrial motor business with a new vitality by developing and proliferating new growth engine in the overall industry. Apart from the motor on demand which already has a good reputation, we are satisfying our customers with a perfect and speedy service, and endeavoring for the satisfactory and prosperous future of our customers. All the members of our company will try the best to realize our customers' satisfaction and trust. We asking our customers for a full support in the future as well, and wishing you all the happiness and health. We will be the competitive JungWoo Motor Co., Ltd. a strong company in terms of quality, period of delivery and price.

CEO of
JungWoo Motor Co., Ltd. *Sinho Kim*



History

- 1998 • Establishment of the company
• Beginning of manufacturing industrial motors
- 1999 • Acquiring CE certification
• Establishing a specialized department for R&D (Institute of Technology)
- 2001 • Acquiring KS A 9001: ISO 9001 certifications
- 2006 • Acquiring certification for CLEAN business site
- 2007 • Adopting a vacuum immersion facility (Improving quality and insulation)
- 2008 • Acquiring additional CE certification
- 2009 • Selected as a small and medium business with innovative technology
• Acquiring venture business certification
• Acquiring safety certification for single phase explosion-proof enclosure motor
- 2010 • Registered as a protection device manufacturing business
• Acquiring certification for high-efficiency apparatus
- 2012 • Acquiring UL certification
• Establishing an affiliated research institute
- 2014 • Acquiring MAINBZ certification
- 2015 • Certified as a promising small and medium business in Gyeonggi-do
• Applying SAP ERP system
- 2016 • Acquiring safety certification for three phase explosion-proof enclosure motor
• Appointed for export supporting company by KOTRA
- 2017 • Corporate HQ/factory expansion, construction and relocation (Gimpo Yangchon Industrial Complex)
- 2018 • INNO-BIZ certification
• Appointment as a small and medium-sized enterprise with emphasis on talent promotion

Contents

10_P

Three-Phase
Induction Motor
B3, B5, B35, B14, B34



26_P

Premium Efficiency
Three-Phase
Induction Motor
B3, B5, B35, B14, B34



42_P

Single-Phase
Induction Motor
(Run)
B3, B5, B35, B14, B34



56_P

Brake
Induction Motor
Three-Phase (IE1, IE2, IE3)
B3, B5



64_P

Explosion Proof
Induction Motor
Three-Phase, Single-Phase



18_P

High Efficiency
Three-Phase
Induction Motor
B3, B5, B35, B14, B34



34_P

Single-Phase
Induction Motor
(Run & Start)
B3, B5, B35, B14, B34



50_P

Hydraulic
Induction Motor
Three-Phase (IE1, IE2, IE3)
Single-Phase (Run & Start)



60_P

Inverter Motor
Three-Phase, Single-Phase
B3, B5, B35, B14, B34

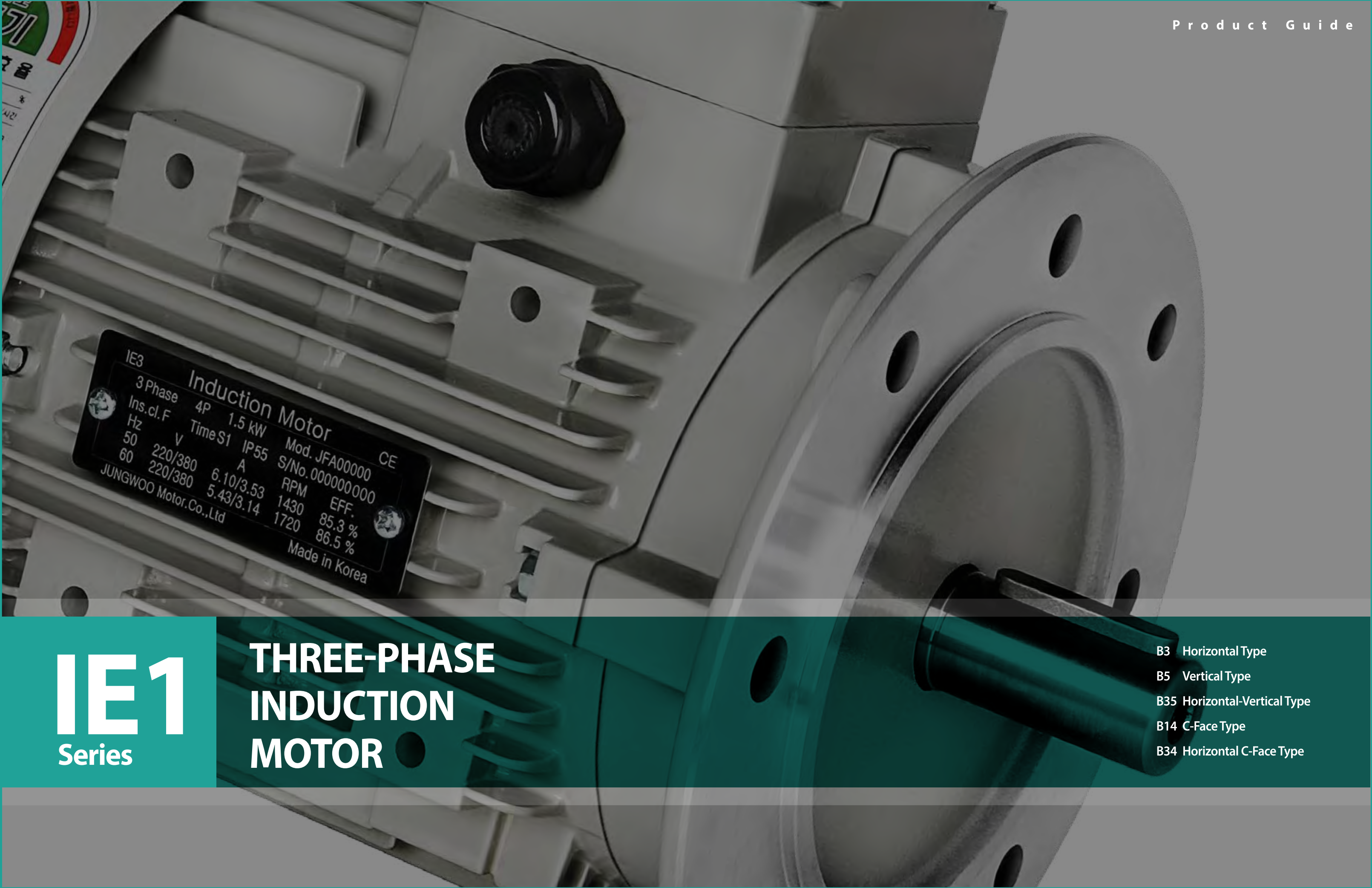


68_P

Customized &
Non-Standard Motors
Pump, Air duct, Hoist, Cooler, etc.



World
Best
JUNGWOO
MOTOR



IE1
Series

**THREE-PHASE
INDUCTION
MOTOR**

- B3 Horizontal Type
- B5 Vertical Type
- B35 Horizontal-Vertical Type
- B14 C-Face Type
- B34 Horizontal C-Face Type

IE2
Series

HIGH EFFICIENCY THREE-PHASE INDUCTION MOTOR

- B3 Horizontal Type
- B5 Vertical Type
- B35 Horizontal-Vertical Type
- B14 C-Face Type
- B34 Horizontal C-Face Type

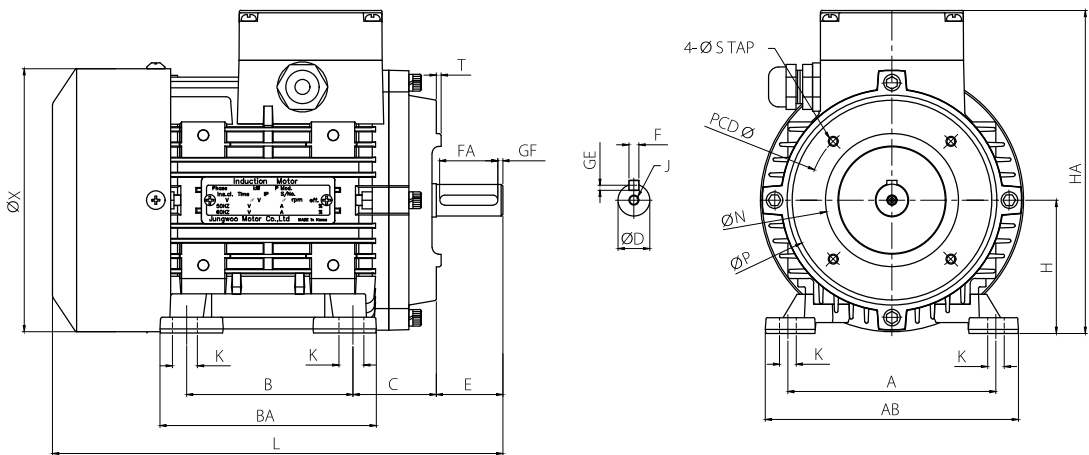


IE2
Series



Horizontal C-Face Type
B34 High Efficiency
Three-Phase
Induction Motor

Scale



Specification

Flange No.	Frame No.	Output (kW)				Dimensions (mm)																			Bearing				
		2P	4P	6P	8P	Hole		H	A	AB	K	B	BA	C	D	E	F	FA	GE	GF	HA	X	L	N	P	T	J	DE	ODE
						PCD	TAP																						
FT75	63M	02	02	-	-	75	M5	63	100	124	7	80	99	40	11	23	4	18	25	3	157	124	197	60	90	25	-	6202	6202
FT85	71M	04	04	02	-	85	M6	71	112	132	7	90	118	45	14	30	5	25	3	3	174	140	226	70	105	25	M5x15	6203	6202
		055	055																										
FT100	80M	0.75	0.55	04	02	100	M6	80	125	152	10	100	130	50	19	40	6	35	35	3	194	158	2705	80	120	3	M6x15	6204	6203
		09																											
		1.1																											
FT115	90L	15	1.1	0.75	0.4	115	M8	90	140	168	10	125	162	56	24	50	8	40	4	5	209	176	3155	95	140	35	M8x20	6205	6204
		22	15																										
FT130	100L	30	22	15	0.75	130	M8	100	160	199	12	140	178	63	28	60	8	50	4	5	240	198	363	110	160	35	M10x25	6206	6205
		37	30																										
	112M	-	-	-	-	130	M8	112	190	219	12	140	186	63	28	60	8	50	4	5	252	198	363	110	160	35	M10x25	6206	6205
FT165	132S	55	-	-	-	165	M10	132	216	258	12	140	192	83	38	80	10	70	5	5	282	220	403	130	196	35	M12x30	6208	6206
		75	55																										
	132M	-	75	-	-	165	M10	132	216	258	12	178	222	89	38	80	10	70	5	5	310	2594	445	130	200	35	M12x30	6208	6206
FT215	160M	11	75			215	M12	160	254	304	15	210	304	108	42	110	12	100	5	5	403	315	561	180	250	5	M12x30	6309	6308
FT265	160L	185	15	11		265	M12	160	254	304	15	254	304	108	42	110	12	100	5	5	403	315	561	230	250	5	M12x30	6309	6308

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.

QUALITY

JungWoo Motor Co., Ltd. leads quality improvement though our professionalism.
Constant investment for R&D promises best technology for electric motor and we
will leads the world in electric motor technology by our world best technology.



IE3
Series

PREMIUM EFFICIENCY THREE-PHASE INDUCTION MOTOR

- B3 Horizontal Type
- B5 Vertical Type
- B35 Horizontal-Vertical Type
- B14 C-Face Type
- B34 Horizontal C-Face Type

RUN & START

SINGLE-PHASE INDUCTION MOTOR

- B3 Horizontal Type (Start & Run)
- B5 Vertical Type (Start & Run)
- B35 Horizontal-Vertical Type (Start & Run)
- B14 C-Face Type (Start & Run)
- B34 Horizontal C-Face Type (Start & Run)

RUN
& START



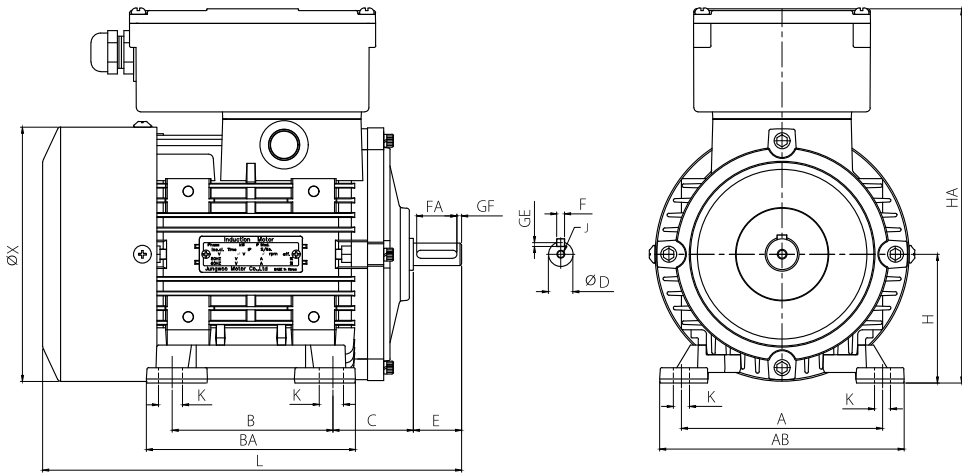
Horizontal Type
B3 Single-Phase Induction Motor



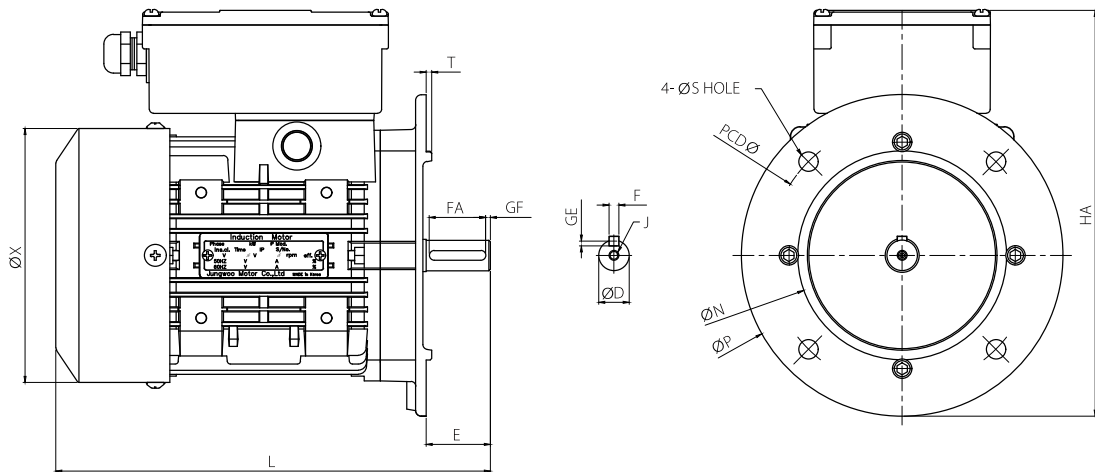
Vertical Type
B5 Single-Phase Induction Motor

RUN
& START

Scale



Scale



Specification

Frame No.	Output (kW)		Dimensions (mm)																	Bearing	
	2P	4P	H	A	AB	K	B	BA	C	D	E	F	FA	GE	GF	HA	X	L	J	DE	ODE
71M	0.4	0.2	71	112	132	7	90	118	45	14	30	5	25	3	3	213	140	226	M5*15	6203	6202
	0.55	0.3																			
80M	-	0.4	80	125	152	10	100	130	50	14	30	5	25	3	3	232.5	158	260.5	M6*15	6204	6203
	-	0.55																			
	0.75	-	80	125	152	10	100	130	50	19	40	6	35	3.5	3	232.5	158	270.5	M6*15	6204	6203
	0.9	-																			
	1.1	-																			
90L	-	0.75	90	140	168	10	125	162	56	19	40	6	35	3.5	3	247.5	176	305.5	M6*15	6204	6203
	-	0.9																			
	-	1.1																			
	1.5	-	90	140	168	10	125	162	56	24	50	8	40	4	5	247.5	176	315.5	M8*20	6205	6204
	-	1.5																			
	2.2	-																			
100L	-	2.2	100	160	199	12	140	178	63	28	60	8	50	4	5	286.5	198	363	M10*20	6206	6205

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* Please contact us for customized model.

Specification

Flange No.	Frame No.	Output (kW)		Dimensions (mm)															Bearing	
		2P	4P	Hole		D	E	F	FA	GE	GF	HA	X	L	N	P	T	J	DE	ODE
				PCD	S															
FF130	71M	0.4	0.2	130	10	14	30	5	25	3	3	221.5	140	226	110	160	3	M5*15	6203	6202
		0.55	0.3																	
	80M	-	0.4	130	10	14	30	5	25	3	3	232.5	158	276	110	160	3	M6*15	6204	6203
		-	0.55																	
FF165	80M	0.75	-	165	12	19	40	6	35	3.5	3	252.5	158	270.5	130	200	3.5	M6*15	6204	6203
		0.9	-																	
		1.1	-																	
	90L	-	0.75	165	12	19	40	6	35	3.5	3	257.5	176	305.5	130	200	3.5	M6*15	6205	6204
		-	0.9																	
		-	1.1																	
		1.5	-	165	12	24	50	8	40	4	5	257.5	176	315.5	130	200	3.5	M8*20	6205	6204
		1.5	1.5																	
		2.2	-																	
FF215	100L	-	2.2	215	15	28	60	8	50	4	5	311.5	198	363	180	250	4	M10*25	6206	6205

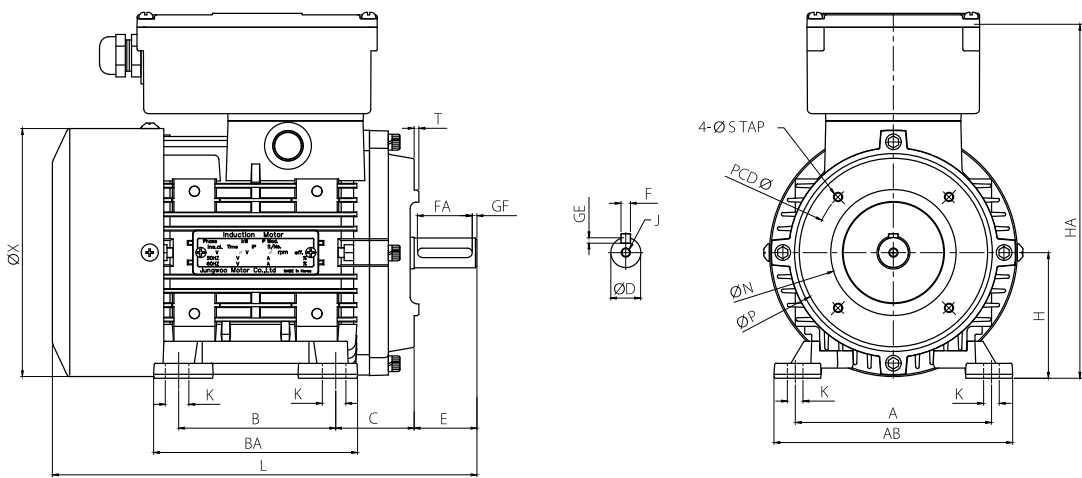
* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.

RUN
& START



Horizontal C-Face Type
B34 Single-Phase
Induction Motor

Scale



Specification

Flange No.	Frame No.	Output (kW)		Dimensions (mm)																				Bearing			
		2P	4P	Hole		H	A	AB	K	B	BA	C	D	E	F	FA	GE	GF	HA	X	L	N	P	T	J	DE	ODE
				PCD	TAP																						
FT85	71M	0.4	0.2	85	M6	71	112	131	7	90	118	45	14	30	5	25	3	3	213	140	226	70	105	25	M5*15	6203	6202
		0.55	0.3																								
	80M	-	0.4	85	M6	80	125	152	10	100	130	50	14	30	5	25	3	3	2325	158	2605	70	120	3	M6*15	6204	6203
		-	0.55																								
FT100	80M	0.75	-	100	M6	80	125	152	10	100	130	50	19	40	6	35	3.5	3	2325	158	2705	80	120	3	M6*15	6204	6203
		0.9	-																								
		1.1	-																								
	90L	-	0.75	100	M6	90	140	168	10	125	162	56	19	40	6	35	3.5	3	2475	176	3055	80	140	3.5	M6*15	6205	6204
		-	0.9																								
		-	1.1																								
FT115	90L	1.5	-	115	M8	90	140	168	10	125	162	56	24	50	8	40	4	5	2475	176	3155	95	140	3.5	M8*20	6205	6204
		-	1.5																								
		2.2	-																								
FT130	100L	-	2.2	130	M8	100	160	199	12	140	178	63	28	60	8	50	4	5	2865	198	363	110	160	3.5	M10*25	6206	6205

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.

FUTURE

The technology, to make people dream and come it true.
The technology, to challenge our limit and develop new value.
JungWoo Motor Co., Ltd. is establishing the dream for future and
technology for challenge.



RUN

SINGLE-PHASE INDUCTION MOTOR

- B3 Horizontal Type (Run)
- B5 Vertical Type (Run)
- B35 Horizontal-Vertical Type (Run)
- B14 C-Face Type (Run)
- B34 Horizontal C-Face Type (Run)

RUN



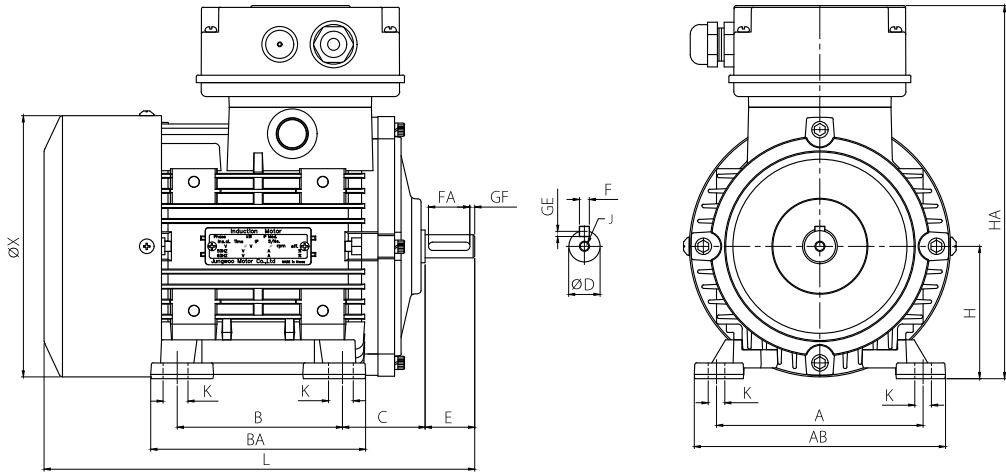
Horizontal Type
B3 Single-Phase Induction Motor



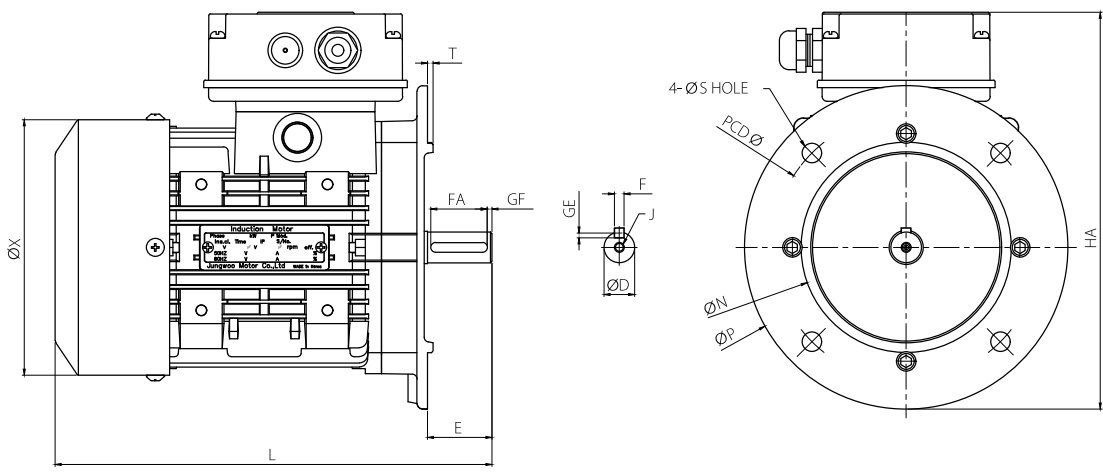
Vertical Type
B5 Single-Phase Induction Motor

RUN

Scale



Scale



Specification

Frame No.	Output (kW)		Dimensions (mm)																Bearing		
	2P	4P	H	A	AB	K	B	BA	C	D	E	F	FA	GE	GF	HA	X	L	J	DE	ODE
71M	0.4	0.2	71	112	132	7	90	118	45	14	30	5	25	3	3	204	140	226	M5*15	6203	6202
	0.55	0.3																			
80M	-	0.4	80	125	152	10	100	130	50	14	30	5	25	3	3	224	158	260.5	M6*15	6204	6203
	-	0.55																			
	0.75	-																			
	0.9	-																			
	1.1	-																			
90L	-	0.75	90	140	168	10	125	162	56	19	40	6	35	3.5	3	239	176	305.5	M6*15	6205	6204
	-	0.9																			
	-	1.1																			
	1.5	-	90	140	168	10	125	162	56	24	50	8	40	4	5	239	176	315.5	M8*20	6205	6204
	-	1.5																			
	2.2	-																			

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.

Specification

Flange No.	Frame No.	Output (kW)		Dimensions (mm)															Bearing	
		2P	4P	Hole		D	E	F	FA	GE	GF	HA	X	L	N	P	T	J	DE	ODE
				PCD	S															
FF130	71M	0.4	0.2	130	10	14	30	5	25	3	3	215	140	226	110	160	3	M5*15	6203	6202
		0.55	0.3																	
	80M	-	0.4	130	10	14	30	5	25	3	3	226	158	276	110	160	3	M6*15	6204	6203
		-	0.55																	
FF165	80M	0.75	-	165	12	19	40	6	35	3.5	3	246	158	270.5	130	200	3.5	M6*15	6204	6203
		0.9	-																	
		1.1	-																	
	90L	-	0.75	165	12	19	40	6	35	3.5	3	249	176	305.5	130	200	3.5	M6*15	6205	6204
		-	0.9																	
		-	1.1																	
		1.5	-	165	12	24	50	8	40	4	5	249	176	315.5	130	200	3.5	M8*20	6205	6204
		-	1.5																	
2.2	-																			

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.

RUN

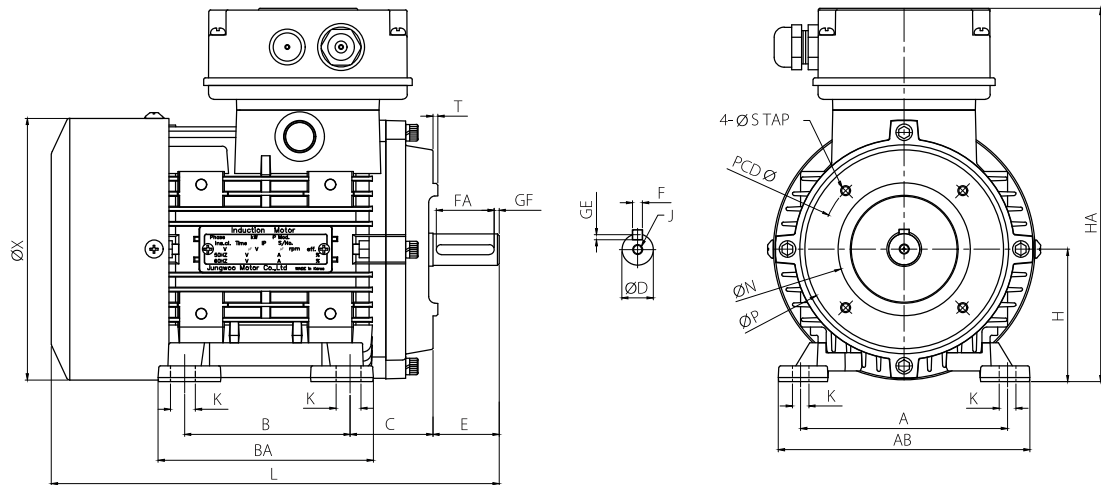


Horizontal C-Face Type

B34

Single-Phase Induction Motor

Scale



Specification

Flange No.	Frame No.	Output (kW)		Dimensions (mm)																				Bearing			
		2P	4P	Hole		H	A	AB	K	B	BA	C	D	E	F	FA	GE	GF	HA	X	L	N	P	T	J	DE	ODE
				PCD	TAP																						
FT85	71M	0.4	0.2	85	M6	71	112	132	7	90	118	45	14	30	5	25	3	3	204	140	226	70	105	2.5	M5*15	6203	6202
		0.55	0.3																								
	80M	-	0.4	85	M6	80	125	152	10	100	130	50	14	30	5	25	3	3	224	158	260.5	70	120	3	M6*15	6204	6203
		-	0.55																								
FT100	80M	0.75	-	100	M6	80	125	152	10	100	130	50	19	40	6	35	3.5	3	224	158	270.5	80	120	3	M6*15	6204	6203
		0.9	-																								
		1.1	-																								
	90L	-	0.75	100	M6	90	140	168	10	125	162	56	19	40	6	35	3.5	3	239	176	305.5	80	140	3.5	M6*15	6205	6204
		-	0.9																								
		-	1.1																								
FT115	90L	1.5	-	115	M8	90	140	168	10	125	162	56	24	50	8	40	4	5	239	176	315.5	95	140	3.5	M8*20	6205	6204
		-	1.5																								
		2.2	-																								

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.



HAPPINESS

The technology for better world is a dream, JungWoo Co., Ltd.
contribute various endeavor for better world.

A Type / C Type / D Type

HYDRAULIC INDUCTION MOTOR

THREE-PHASE IE1, IE2, IE3
SINGLE-PHASE Run & Start

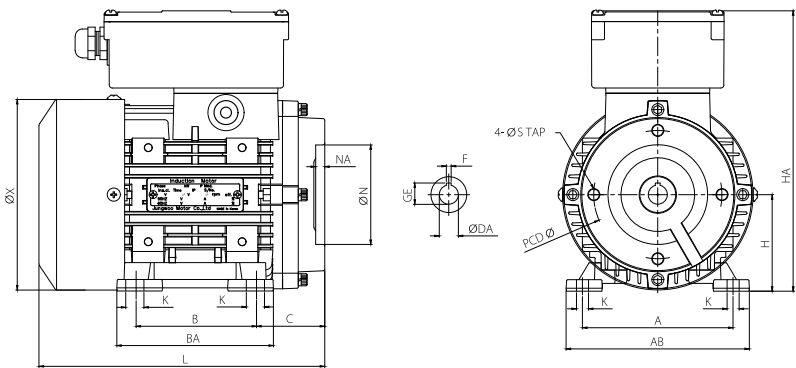
HYDRAULIC

Hydraulic
Single-Phase Induction Motor
(Run & Start)

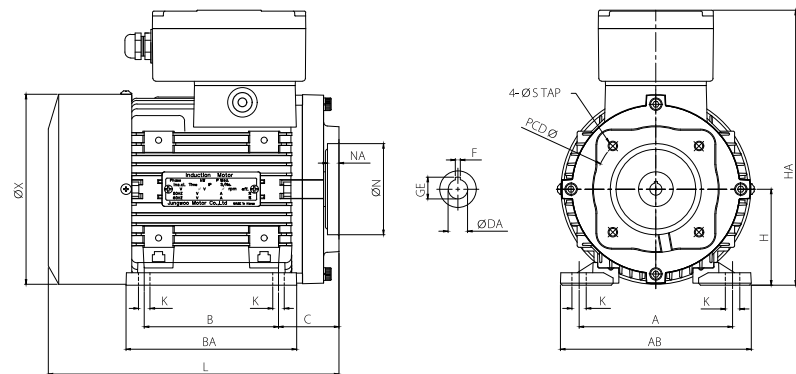
HYDRAULIC



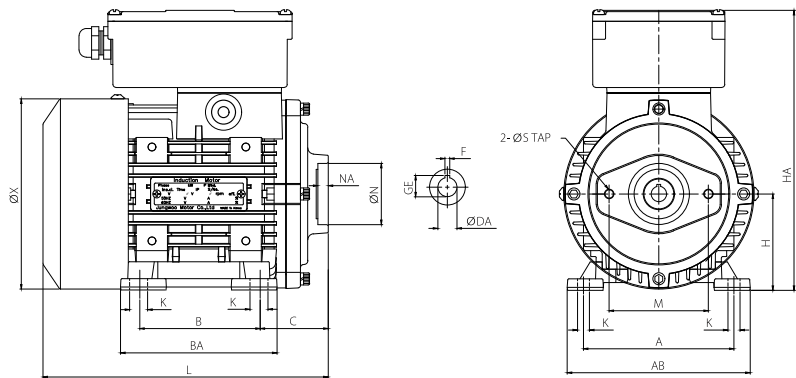
A Type



C Type



D Type



Specification

Flange No.	Frame No.	Output (kW)	Dimensions (mm)																		Bearing		
		4P	TYPE	FLANGE		TAP		SHAFT				A	AB	B	BA	K	H	C	HA	L	X	DE	ODE
				N	NA	PCD	S	DA	GE	F	DP												
90L	S4075G1A0	0.75	G1-A	50.8	8.5	82.55	M8	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4075G1D0	0.75	G1-D	50.8	8.5	82.55	M8	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4075G2A2	0.75	G2-A	82.55	7.5	106.4	M10	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4075G2A0							15.88	17.7	4													
	S4075G2A1							19.05	21.4	4.76													
	S4075G2D2	0.75	G2-D	82.55	7.5	106.4	M10	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4075G2D0							15.88	17.7	4													
	S4075G2D1							19.05	21.4	4.76													
90L	S4150G1A0	1.5	G1-A	50.8	8.5	82.55	M8	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4150G1D0	1.5	G1-D	50.8	8.5	82.55	M8	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4150G2A2	1.5	G2-A	82.55	7.5	106.4	M10	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4150G2A0							15.88	17.7	4													
	S4150G2A1							19.05	21.4	4.76													
	S4150G2D2	1.5	G2-D	82.55	7.5	106.4	M10	12.7	14.3	3.18	44	140	168	125	162	10	90	55	247.5	265.5	176	6206	6204
	S4150G2D0							15.88	17.7	4													
	S4150G2D1							19.05	21.4	4.76													
100L	S4220G1A0	2.2	G1-A	50.8	8.5	82.55	M8	12.7	14.3	3.18	44	160	199	140	178	12	100	63	286.5	303	198	6206	6305
	S4220G1D0	2.2	G1-D	50.8	8.5	82.55	M8	12.7	14.3	3.18	44	160	199	140	178	12	100	63	286.5	303	198	6206	6305
	S4220G2A2	2.2	G2-A	82.55	12	106.4	M10	12.7	14.3	3.18	44	160	199	140	178	12	100	63	286.5	303	198	6207	6305
	S4220G2A0							15.88	17.7	4													
	S4220G2A1							19.05	21.4	4.76													
	S4220G2D2	2.2	G2-D	82.55	12	106.4	M10	12.7	14.3	3.18	44	160	199	140	178	12	100	63	286.5	303	198	6207	6305
	S4220G2D0							15.88	17.7	4													
	S4220G2D1							19.05	21.4	4.76													

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.

BRAKE

INDUCTION MOTOR

THREE-PHASE
IE1, IE2, IE3

B3 Horizontal Type

B5 Vertical Type

INVERTER MOTOR

THREE-PHASE SINGLE-PHASE

- B3 Horizontal Type
- B5 Vertical Type
- B35 Horizontal-Vertical Type
- B14 C-Face Type
- B34 Horizontal C-Face Type

INVERTER
MOTOR

JUNGWOO
INVERTER MOTOR

INVERTER
MOTOR



JUNGWOO inverter motors are applicable to all types of industrial machinery

Pumps, Fans, Compressors, Reducers, Coolers, Conveyor systems, Treadmills(running machines), Automatic doors, General industrial equipment

Product Characteristics

Easy to install

- An integrated motor-inverter design eliminates the need for separate inverter installation, maximizing user convenience

Sensorless vector control

- Generates a 6-70Hz static torque and can accommodate up to 150Hz (max)
- Sensorless vector control makes JW inverter motors a perfect fit for low-speed / heavy-duty applications (conveyor loads, etc.)

Easy manipulation

- JW motors are easy to operate. Also, remote manipulation available via a separate module (optional)

IP rating

- IP55

Communication features

- Embedded with basic communication functions, JW inverter motors control a single or multiple units of equipment when connected to PC or other devices without additional components (interface card, etc.). (Separate protocol adjustments, RS-485)

High efficiency & high performance

- Our optimized product design materializes premium efficiency and outstanding cooling performance

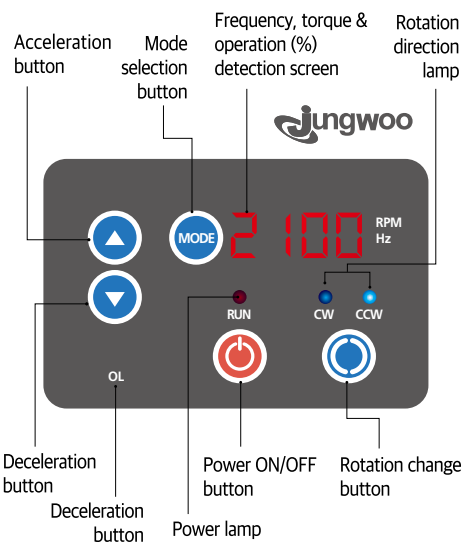
Higher stability

- The embedded basic filtering reduces harmonic interference. The built-in protection features (undervoltage, overvoltage, overcurrent, communication error detection) ensure stable motor usability

Product Features

- **Product Features** : Sensorless vector control
- **Operation type** : Operating mode → Consistent speed control (RPM/frequency), RS-485 communication standard, selectable regular/reverse operation
- **Cooling type** : Forced-air cooling, motor fan cooling
- **Braking type** : Built-in port that accommodates regenerative braking mechanism (separate external RBM module attachable)
- **Protection feature** : Can detect error in overcurrent (ErOC), overheating (ErOH), overvoltage (ErOV), low voltage (ErLV), and communication (ErIF)
- **Service environment** :
 - Ambient temperature: -10℃ - 40℃
 - Holding temperature: -20℃ - 60℃
 - Ambient/relative humidity: At or below 90% of RH
 - IP rating: IP55
- **Auxiliary feature (optional)** : External voltage control (0-10V), emergency stop input, pressure control (with sensing), contact status output (operation, stop, error)

Display



Specification

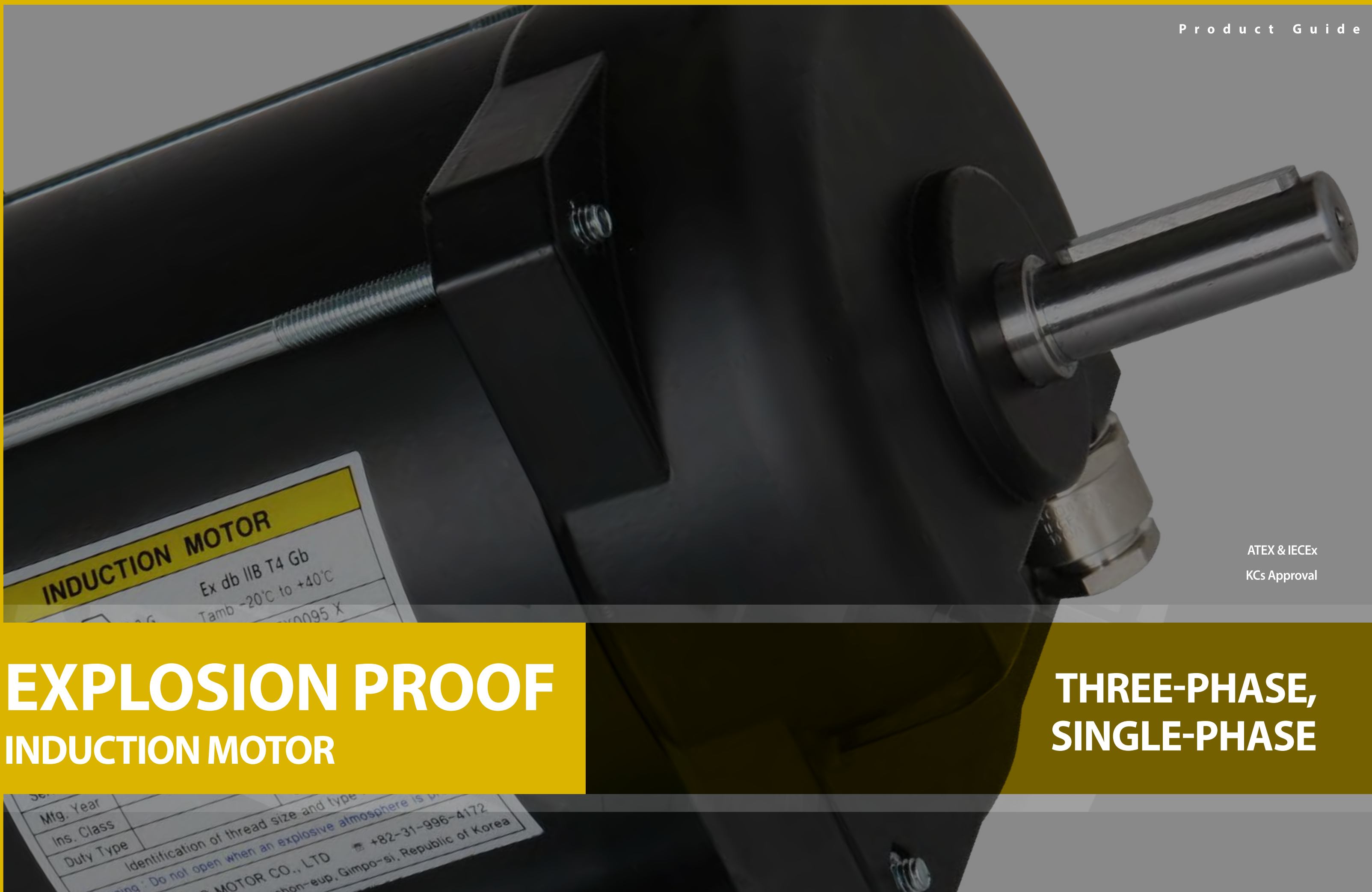
Input voltage	Model no.	Motor capacity		Frame reference		Motor exterior type	Input frequency	Output voltage	Output frequency	Power cable connection (basic spec. for product release)		
		HP	kW	2P	4P							
Single-phase AC 220V (±10%)	JIM-1040S	½	0.4	71M	71M	B3,B5,B35 B34,B14	60 Hz (±5%)	Three-phase 220V max.	6~150 Hz max.	• Single-phase: (Power Code) • Three-phase: (Terminal Block)		
	JIM-1055S	¾	0.55	71M	71M							
	JIM-1075S	1	0.75	80M	80M							
	JIM-1150S	2	1.5	90L	90L							
	JIM-1220S	3	2.2	90L	100L							
Three-phase AC 380 ~440V (±10%)	JIM-3075S	1	0.75	80M	80M			Three-phase 380~440V max.				
	JIM-3150S	2	1.5	90L	90L							
	JIM-3220S	3	2.2	90L	100L							
	JIM-3300S	4	3	100L								
	JIM-3370S	5	3.7	112M								

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* Please contact us for customized model.

ATEX & IECEx
KCs Approval

EXPLOSION PROOF INDUCTION MOTOR

THREE-PHASE, SINGLE-PHASE



II 2 G Ex db IIB T4 Gb

II 2 G Ex db IIB T4 Gb

EXPLOSION
PROOF

EXPLOSION
PROOF

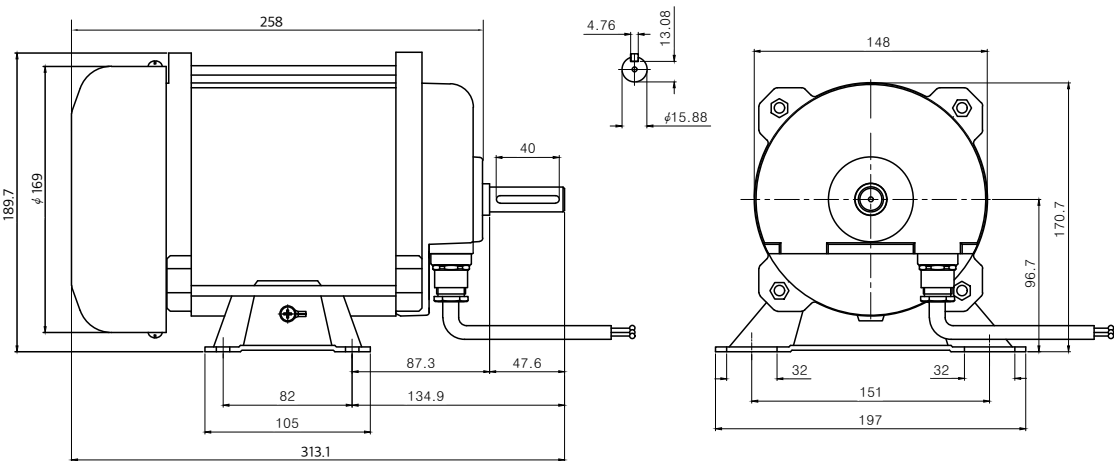


Three-Phase
ATEX & IECEx
KCs Approval

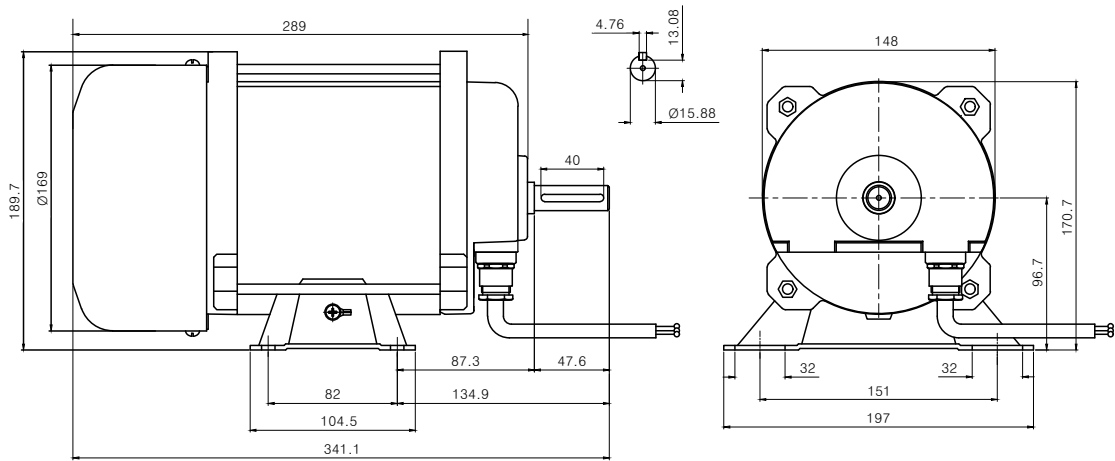


Single Phase
ATEX & IECEx
KCs Approval

Scale



Scale



Specification

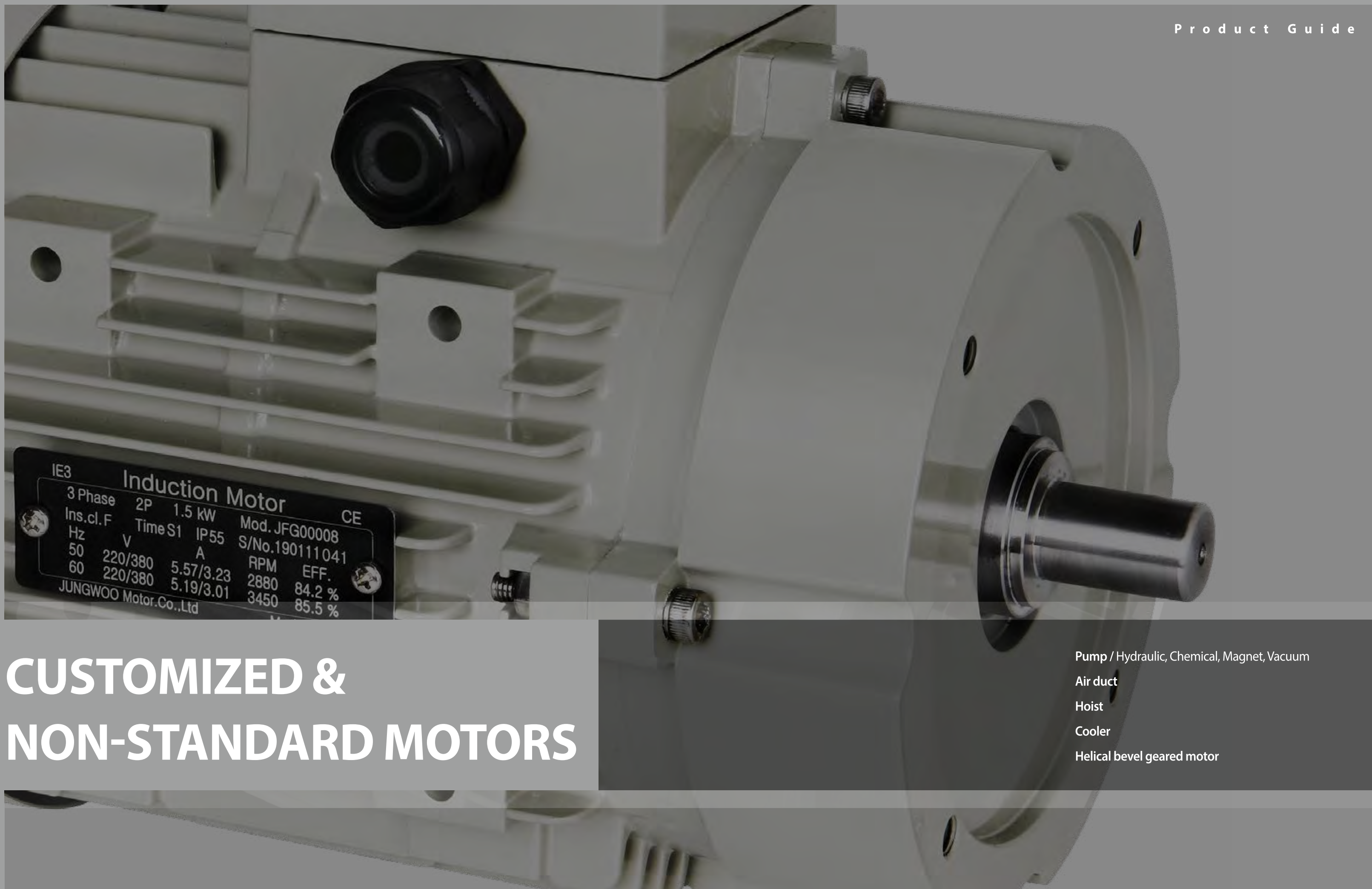
구분	주파수 (Hz)	전압 (V)	무부하 전류 (A)	정격전류 (A)	정격입력 (W)	정격출력 (W)	효율 (%)	역율 (%)	회전수 (rpm)	정동토크 (%)	기동토크 (%)	기동전류 (A)
0.4kW	50	220	1.47	1.9	525	400	76	72	1440	333	274	11.2
		380	0.85	1.1								6.5
	60	220	1.04	1.74	486	400	82.3	73.3	1730	280	210	10.4
		380	0.6	1								6
0.75kW	50	220	1.8	3.16	956	750	78.4	80	1410	287	289	19
		380	1.03	1.82								11
	60	220	1.24	3	954	750	78.6	84	1690	241	209	15.9
		380	0.72	1.72								9.2

* The specification is subject to change without notice in advance for the purpose of quality improvement.
* Please contact us for customized model.
* KOSHA : Korean Occupational Safety & Health Agency

Specification

구분	주파수 (Hz)	전압 (V)	무부하 전류 (A)	정격전류 (A)	정격입력 (W)	정격출력 (W)	효율 (%)	역율 (%)	회전수 (rpm)	정동토크 (%)	기동토크 (%)	기동전류 (A)
0.4kW	50	220	2.9	3.46	628	400	63.7	82.5	1450	228	266	19
	60	220	1	2.7	568	400	70.4	95.6	1750	308	322	18
0.75kW	50	220	3.1	4.95	1016	750	73.8	93	1440	330	285	32
	60	220	1.48	4.6	1000	750	75	99	1740	247	286	25.7

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* Please contact us for customized model.
* KOSHA : Korean Occupational Safety & Health Agency



CUSTOMIZED & NON-STANDARD MOTORS

Pump / Hydraulic, Chemical, Magnet, Vacuum
Air duct
Hoist
Cooler
Helical bevel geared motor

CUSTOMIZED &
NON-STANDARD

Customized &
Non-Standard Motors

CUSTOMIZED &
NON-STANDARD

Pump motor / Hydraulic



Pump motor / Chemical



Pump motor / Magnet



Air duct motor



Insulation B motor



Cooler motor



Helical bevel geared motor



Hoist motor



Efficiency Infomation

IEC Standard

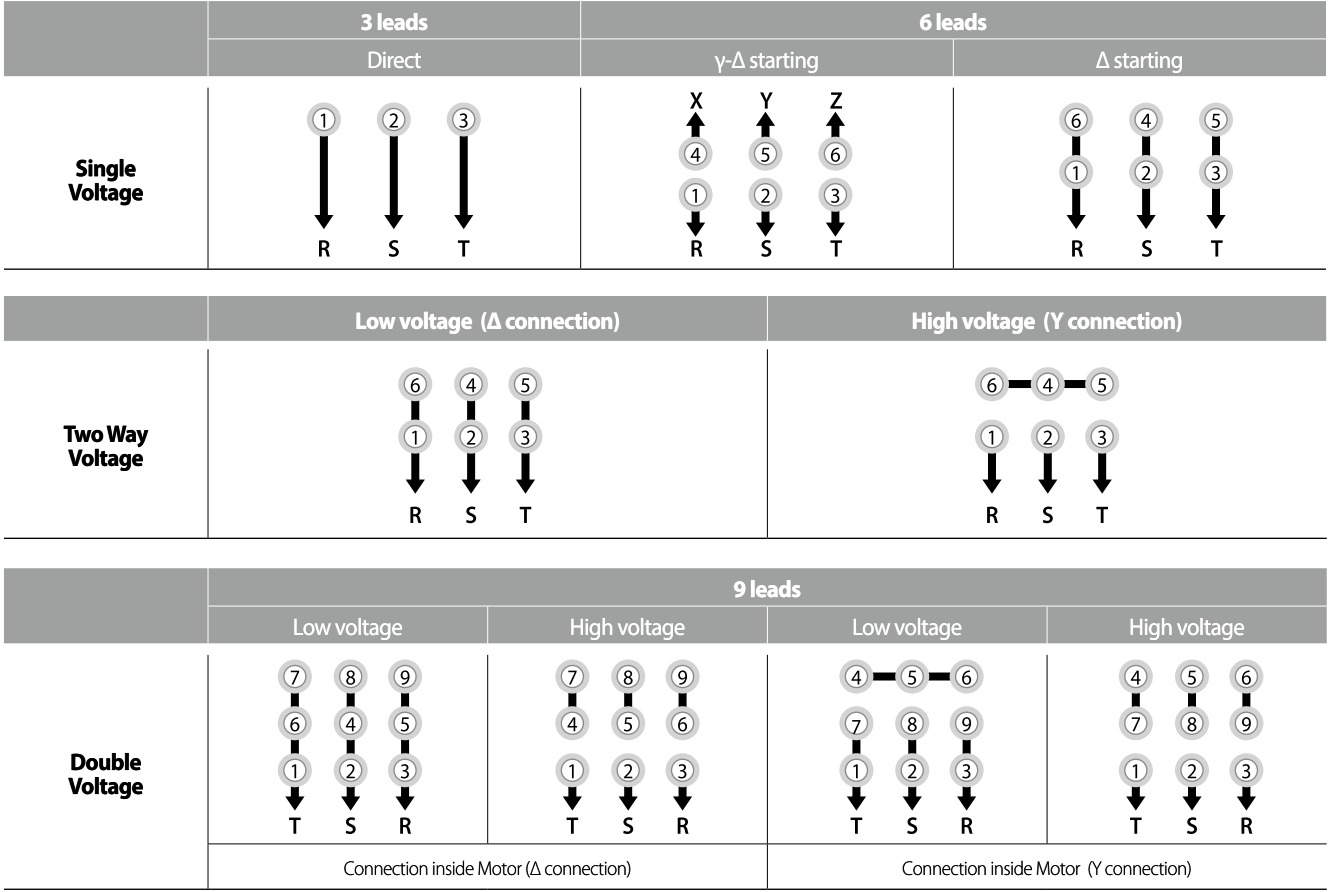
Table		IE1		IE2		IE3	
Pole (P)	Capacity (kW)	Standard Efficiency		Standard Efficiency		Standard Efficiency	
		50Hz	60Hz	50Hz	60Hz	50Hz	60Hz
2P	0.2	54.6	62	61.9	64	67.2	65.6
	0.4	64.9	70	70.4	72	74.6	73.4
	0.55	69	72	74.1	74	77.8	76.8
	0.75	72.1	74	77.4	75.5	80.7	77
	1.1	75	78.5	79.6	82.5	82.7	84
	1.5	77.2	81	81.3	84	84.2	85.5
	2.2	79.7	81.5	83.2	85.5	85.9	86.5
	3.0	81.5	84.5	84.6	87.5	87.1	88.5
	3.7	83.1	84.5	85.8	87.5	88.1	88.5
	4.0	83.1	84.5	85.8	87.5	88.1	88.5
	5.5	84.7	86	87	88.5	89.2	89.5
	7.5	86	87.5	88.1	89.5	90.1	90.2
	11	87.6	87.5	89.4	90.2	91.2	91
	15	88.7	88.5	90.3	90.2	91.9	91
	18.5	89.3	89.5	90.9	91	92.4	91.7
4P	0.2	58.5	66	65.9	68	71.1	69.5
	0.4	66.8	70	73.5	72	78	78.2
	0.55	70	74	77.1	75.5	80.8	81.1
	0.75	72.1	77	79.6	78	82.5	83.5
	1.1	75	79	81.4	84	84.1	86.5
	1.5	77.2	81.5	82.8	84	85.3	86.5
	2.2	79.7	83	84.3	87.5	86.7	89.5
	3.0	81.5	85	85.5	87.5	87.7	89.5
	3.7	83.1	85	86.6	87.5	88.6	89.5
	4.0	83.1	85	86.6	87.5	88.6	89.5
	5.5	84.7	87	87.7	89.5	89.6	91.7
	7.5	86	87.5	88.7	89.5	90.4	91.7
	11	87.6	88.5	89.8	91	91.4	92.4
	15	88.7	89.5	90.6	91	92.1	93
6P	0.2	47.6	52.5	58.2	55	65.4	67.5
	0.4	61.1	62	68.8	64	74.4	75.3
	0.55	65.8	66	73.1	68	77.2	81.7
	0.75	70	72	75.9	73	78.9	82.5
	1.1	72.9	75	78.1	85.5	81	87.5
	1.5	75.2	77	79.8	86.5	82.5	88.5
	2.2	77.7	78.5	81.8	87.5	84.3	89.5
	3.0	79.7	83.5	83.3	87.5	85.6	89.5
	3.7	81.4	83.5	84.6	87.5	86.8	89.5
	4.0	81.4	83.5	84.6	87.5	86.8	89.5
	5.5	83.1	85	86	89.5	88	91
	7.5	84.7	86	87.2	89.5	89.1	91
	11	86.4	89	88.7	90.2	90.3	91.7
8P	0.2	39.7	40	47.4	46	60.6	64
	0.4	50.9	57.5	57.2	58	70.1	72
	0.55	56.1	59.5	61.7	62	73	74
	0.75	61.2	64	66.2	66	75	75.5
	1.1	66.5	73.5	70.8	75.5	77.7	78.5
	1.5	70.2	77	74.1	82.5	79.7	84
	2.2	74.2	78	77.6	84	81.9	85.5
	3.0	77	80	80	85.5	83.5	86.5
	3.7	79.2	80	81.9	85.5	84.8	86.5
	4.0	79.2	80	81.9	85.5	84.8	86.5
	5.5	81.4	84	83.8	85.5	86.2	86.5
	7.5	83.1	85	85.3	88.5	87.3	89.5

KS Standard

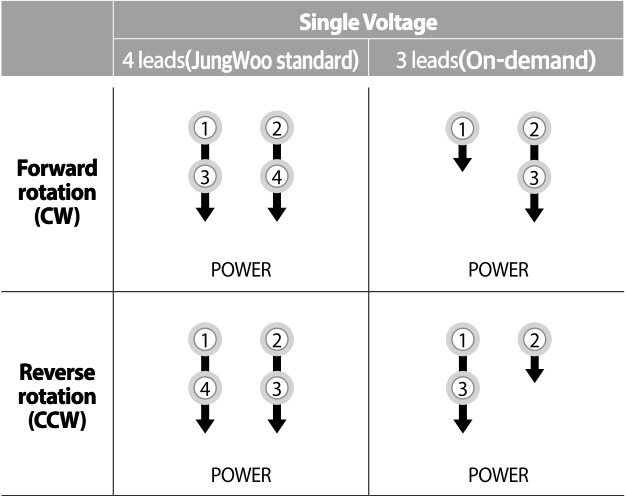
Table		IE1	IE2	IE3
Pole (P)	Capacity (kW)	60Hz	60Hz	60Hz
2P	0.2	56	74.5	-
	0.4	64	75	-
	0.75	70	75.5	77
	1.1	70	75.5	-
	1.5	76	84	85.5
	2.2	79.5	85.5	86.5
	3.7	82.5	87.5	88.5
	5.5	84.5	88.5	89.5
	7.5	85.5	89.5	90.2
	11	86.5	90.2	91
	15	88	90.2	91
	18.5	88	91	91.7
4P	0.2	58	74.7	-
	0.4	65	79.3	-
	0.75	71.5	82.5	83.5
	1.1	71.5	82.5	-
	1.5	78	84	86.5
	2.2	81	87.5	89.5
	3.7	83	87.5	89.5
	5.5	85	89.5	91.7
	7.5	86	89.5	91.7
	11	87	91	92.4
	15	88	91	93
6P	0.4	64	78	-
	0.75	70	80	82.5
	1.1	70	80	-
	1.5	76.5	86.5	88.5
	2.2	79.5	87.5	89.5
	3.7	82.5	87.5	89.5
	5.5	84.5	89.5	91
	7.5	85.5	89.5	91
	11	86.5	90.2	91.7
8P	0.4	64	74	-
	0.75	70	74	75.5
	1.1	70	74	-
	1.5	73	82.5	84
	2.2	75	84	85.5
	3.7	78	85.5	86.5
	5.5	80	85.5	86.5
	7.5	81	88.5	89.5

Connection Diagram

Three Phase



Single Phase



New terminal of JungWoo Motor (Simple type)



* Applies up to 90L frame (2 pole 2.2KW, 4 pole 1.5KW).

Technical data of motor

Classification of protection method (IEC & KS classifications)

Classification Class	First number	Second number	General name
	Type of protection on the human body and solid foreign objects	Type of protection from the infiltration of water	
IP22	Structure that allows the finger not to touch the rotating or conducting part of the device	Structure that is not harmfully influenced by the water drops falling within the range of 15° from vertical line	Protection type of DRIP PROOF Spinning
IP23	Structure that prevents the infiltration of the solid foreign object bigger than 12mm	Structure that is not harmfully influenced by the water drops falling in the range of 60° from vertical line	Protection type of DRIP PROOF Spinning
IP44	Structure that allows the things thicker than 1mm, such as tools and wires, not to touch the rotating or conducting part in the device. Structure that prevents the infiltration of the solid foreign objects whose diameter is bigger than 1mm. However, drainage and ventilation holes could be the structure of mark 2.	Structure that is not influenced by the water drops falling from any direction	Totally-enclosed
IP54	Structure that allows any objects not to touch the rotating or conducting part of the device	Structure that is not influenced by the water drops falling from any direction	Weather Proof
IP55	Structure that positively prevents the infiltration of dusts, and does not influence normal operation even if it is infiltrated	Structure that is not harmfully influenced even if the water is sprayed from any direction	Hose Proof

Starting Method & Characteristics

Starting method	Starting torque	Starting current	Terminal voltage
Full-voltage starting	TS=100%	IS=100%	TS=100%
Y-Δ starting Reactor starting a=35% tap a=50% tap	TSx1/3 TSx(1-a/100) ² TSx0.42 TSx0.25	ISx1/3 TSx(1-a/100) ² ISx0.65 ISx0.5	57.70% 35% 50%
Autotransformer starting a=80% tap a=65% tap	ISxa ² ISx0.64 ISx0.42	ISxa ² ISx0.64 ISx0.42	80% 65%

Conversion Table of Acceptance Output

Refrigerant temperature	Acceptance output against standard rating	Altitude (Based on sea level)	Acceptance output against standard rating
Under 30°C	107%	Under 1,000mm	100%
30°C ~ 40°C	100%	Over 1,000m~1,500m	97%
Over 40°C ~ 45°C	96%	Over 1,500m~2,000m	94%
Over 45°C ~ 50°C	92%	Over 2,000m~2,500m	90%
Over 50°C ~ 55°C	87%	Over 2,500m~3,000m	86%
Over 55°C ~ 60°C	82%	Over 3,000m~3,500m	82%
		Over 3,500m~4,000m	77%

Technical data of motor

Installation

(Install the motor allowing its intake and exhaust ports for cooling to be away from the wall or other obstacles by more than 20cm)

1. Select protection type or totally-enclosed type considering the surrounding condition
2. Install in a dry and well-ventilated place
3. Use big mounting bolt as long as it fits in to the hole of motor base
4. Motor with standard ball bearing can be installed in any angle

Starting & Operation

1. Operate with no load to check the connection and rotating direction. Normal motors are operated without any problem with 10% of voltage regulation and 5% of frequency variation rates, however, the conditions may not be the same.
2. When full load starting (100% of load when starting), it may not operate if using y-Δ switch, reactor and starting compensator as the starting torque decreases.
3. When operating the continuously usable motor, the operational current should be smaller than the indicated one in the name plate, and you should check the load and motor if the current value is high.

Check in-operation

1. Operate the motor with no load to check the connection and rotating direction. If the rotating direction is reverse, connect them by changing two lines out of three.
2. Check if the loaded current is below the one in the name plate, and inspect the motor and load if there is an over-current
3. Measure the rotating speed of the motor, and compare it with the one in the name plate
4. Check the temperature, and verify if there is any abnormality.

Check before operation

1. Visual inspection checking if there is a damaged part while transporting
2. Check if the shaft turns freely by turning it with hands
3. Check if the supplied power (voltage, frequency, constant) is the same as the one in the name plate
4. Check if the motor is well fixed
5. In case of line-starting, you should allow the bearings not to be shocked by positioning the shaft and the center of driven object’s shaft in line.
6. Connection
 - Check if the voltage, constant, frequency and type of supplied power are the same as the ones indicated in the name plate and connect the lines. Make sure that the power system is connected through safety switch and overload protection device. To change the rotating direction, change 2 random lines and connect.
 - As the connection is different depending on the types such as 3 leads for line-starting, 6 leads for y-Δ starting and 9 leads for 2 voltage, connect it according to the connection diagram in the plate.

Weight Table

Unit: kg													
Phase	Terminal	Type	0.2kW	0.4kW	0.75kW	1.5kW	2.2kW	3.7kW	5.5kW	7.5kW	11kW	15kW	18.5kW
Three phase	2P	B3	4.9	6.7	9.6	14.5	16.5	24.9	39.0	50.2	75	133	153
		B5	4.9	6.7	9.6	14.7	16.6	24.5	37.7	49.8	71	128	148
	4P	B3	4.9	7.2	11.5	18.2	26.7	32.8	53.0	66.2	123	143	-
		B5	4.9	7.3	11.6	18.2	26.8	32.6	53.4	62.8	118	138	-

Phase	Terminal	Type	0.2kW	0.4kW	0.75kW	1.5kW	2.2kW
Single phase	2P	B3	5.5	7.3	10.4	15.3	17.8
		B5	5.5	7.3	10.6	15.5	18.0
	4P	B3	6.7	10.5	14.9	17.9	26.6
		B5	6.8	10.7	15.1	18.0	26.7

* Remark: 3 phase is based on E3



Receipt

1. Check if there are abnormalities as soon as receiving the product as there may be a possible damage caused while transporting.
2. In addition, check if the size, type, capacity, voltage, frequency and serial number indicated in the name plate are the same as that of the order sheet, and also check the basic things such as damaged and deformed part of the motor. If there is abnormality or problem, contact the company's office or agency where you purchased the product.

Transportation

When pulling up the motor, use the pulling device (loop) if it is available.

- **Danger** Do not walk under the place where the motor is hanged by transportation equipment (crane, hoist). It may cause death or fatal wound due to falling. In addition, do not lift while the motor and loader are connected.
- **Warning** When pulling up the product using pulling loops of the crane or hoist, make it tight using wires or ropes and check the state on every side if it is tightly fixed. If it is not checked, it may cause serious injury due to falling.

Storage

Store the motor in a dry, clean and well ventilated place where there is no vibration and less temperature change. If storing for longer than 1 month, manage it as follows.

- Anticorrosive coating is applied when the product is delivered for preventing rusts, however, check it periodically as it may be corroded depending on the condition of storing place.
- Operate the motor periodically to prevent rust on the bearings. (More than 5 minutes, once per month)
- Manage the insulating state by measuring insulation resistance periodically. (Check more than once per three month using 500V insulation resistance tester: Reference value = rated voltage/higher than 1000+1[MΩ])
- If storing the motor for more than 3 months in the humid place which may be infiltrated by moisture and foreign objects, seal the whole motor with water-proof cover after inserting a desiccant.

Installation

Conditions of installing place

1. Use the product in the place of which the surrounding temperature is -15°C~40°C, humidity is below 80% and altitude above sea level is lower than 1000m. If it has to be used in the place of which the altitude above sea level is higher than 1000m, surrounding temperature is below - 15°C or over 40°C, and humidity is over 80%, use the proper motor by consulting with the design department of our company.
 2. Use the product in a well-ventilated place where there is less dust or moisture and it is easy to check the motor.
 3. Avoid the place where there is moisture and oil, or external vibration is directly delivered.
 4. In case of installing the product outdoors, be sure to use the motor for outdoors. As the normal motor is for indoor use, it cannot be used in outdoors.
 5. Especially, avoid using the product in a place with salinity such as near the ocean.
- **Danger** In the explosion district (inflammable and explosive gas and dust), use the motor suitable to the explosion-proof standard. Using standard motor may cause fatal human or material damage due to explosion or fire.
 - **Caution** Install the motor allowing its intake and exhaust ports for cooling to be away from the wall or other obstacles by more than 20cm. It may cause danger of electric shock, fire or burning as the motor is overheated.

Foundation & Installation

1. If installing on a concrete floor, make the foundation higher than the floor for easy drainage, and make sure that the 4 corners of the base could be supported safely by the foundation. Level the product using shims if needed.
 2. If installing on an additional base, make it sturdy as it may cause vibration by dynamic load while operating
 3. Check the rotating direction before connecting the spindle with utilization equipment.
- **Danger** When the installation is completed, earth the product before connecting power, according to the related regulations.

Connection to utilization equipment

1.Direct connection

- Refer to the picture below for connecting method and degree of coupling ring.

Size measurement position	H1 (Measuring 4 spots)	V2 (Measuring 4 spots)	V1
Rigid Coupling	3/100mm and less	3/100mm and less	1/100mm
Flexible Coupling	4/100mm and less	5/100mm and less	Based on the standard of coupling ring



- Make the axis center of the motor and that of connecting utilization equipment lined up straight.
- When attaching a coupling ring to the spindle of the motor, apply lubricants or oil, and insert it while pressurizing with a tool like wooden hammer so that it should not be damaged by shock. If there is interference when fitting the spindle of the motor, be sure to use shrinkage fitting.

2.Belt-type connection

- First, maintain the axes of the motor and utilization equipment paralleled, and make the center of pulleys of both side matched so that they can make a right angle with the axis as shown in the picture below. If the centers of connecting pulleys are not matched, it may cause a breakdown of the motor as excessive force is imposed to the spindle and bearings.
- When connecting a pulley to the spindle of the motor, apply lubricants or oil to make it fully lubricated, and insert it by pressurizing while lightly tapping with a tool like wooden hammer so that it should not be damaged by shock. If there is interference when fitting the spindle of the motor, be sure to use shrinkage fitting.
- Select and apply the pulley and V-belt according to the standard specifications prescribed in KSC4202, and as the tension of belt and diameter of pulley influence the life of bearing and the strength of spindle, it is recommended to use a standard V-belt according to the regulations of KSM6535 and KSM6593.
- Connect the pulley as shown in the picture below.

