



EC Motor Product Catalog

WOLONG
Power your future

ABOUT WOLONG

Wolong, founded in 1984 and headquartered in Shaoxing, Zhejiang Province, is a global leading industrial enterprise committed to providing safe, efficient, smart and green power drive system solutions with life-long supporting services to global users.

By utilizing cutting edge permanent magnet, nanotechnology and silicon carbide technologies, Wolong has built the China's first motor material demonstration platform, that satisfy the highest standards for power density and energy efficiency of motors and generators. With more than 30 years of development, the company has grown into one of the World's top three motor and drive manufacturers and sales enterprises. Wolong insists on technological innovation to lead the industrial reform, actively supports business digital transformation, continuously develops efficient drive system solutions and creates smart industry brain for the motor and drive life cycle management.

As part of its commitment to shaping the future with technology to make the world a better place, the company consistently upholds the concept of customer-centric, leading-edge technology that expands the scope of supports and builds its leadership in various industry segments. With the help of technology, Wolong promotes smarter ways of living and offers green drive control solutions for household appliances, kitchenware and garden appliances. The company also offers energy-efficient drive solutions to HVAC, Water supply, Elevators system to embed green buildings to create a convenient, comfortable, low-carbon living environment. Wolong empowers efficient drive technologies to Oil and Gas, Petrochemical, Metallurgy, Power, Paper and other industries as well as provides green power system solutions to a comprehensive electric transportation fields, including electric vehicles, ships and aircrafts. With adoption of power electronics and industrial Internet technologies, Wolong develops low-carbon and digital system solutions to create better values for customers in various industries. The company uses industrial automation to drive transformations and accumulated more than 3,900 automation solutions to help global users building the factory of the future. It also actively engaged in the green energy transformation and fully participating in Wind Power, Photovoltaic, Hydrogen Energy, Energy Storage and etc., to help customers optimize their energy structure and reduce carbon emissions.

Wolong's global footprint enables "regional manufacturing for regional support". The company has 39 factories throughout North America, Europe and Asia, 5 major R&D centres (Shanghai, Kyoto, Dusseldorf, Michigan, Telangana), and sales and service network all over the world. The company creates a safe, efficient and stable technology and supply chain systems that offer first class after-sales supports and services. Wolong owns 10 sub-brands, with strict quality system and pricing system, offers global customers with well-made customized products and services.

Wolong actively engages social responsibilities, upholds the guiding principle of "Honesty, Harmony, and Innovation", conducts business with integrity, pay attention to the needs of its customers and support employees' development. Wolong established a charitable foundation in order to actively engages in public welfare activities and give back to the community. Wolong actively responds to the national Dual Carbon strategy and contributes to the sustainable development of society with high efficiency, permanent magnet electrification drives and control for clean energy system.

Wolong, Power your future!

WOLONG GROUP

- ▼ 1984 Founded
- ▼ 5 R&D Center
- ▼ 18000 Employees
- ▼ 43 Billion RMB 2022 sales
- ▼ 35.8 Billion RMB Total assets
- ▼ 39 Global Manufacturing Facility



PRODUCT INTRODUCTION

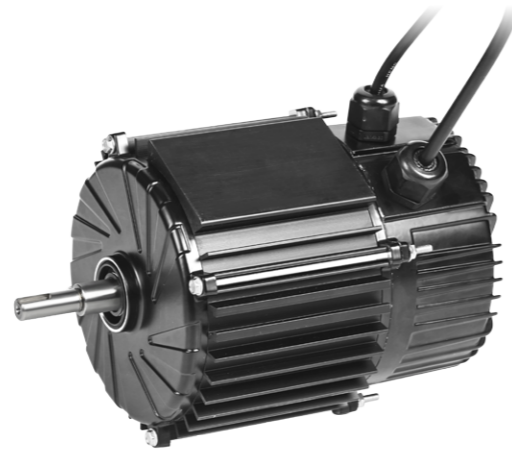
EC motor is a drive control integrated motor derived from the combination of efficient and advanced permanent magnet motor technology and variable frequency speed regulation technology, energy saving- high efficient, compact structure, convenient installation. Provide various control interfaces such as 0-10V and RS485 which is widely applied in HVAC, agriculture, industrial, commercial fans, buildings, and data centers ventilation systems.

Product Features

- 1: High efficiency, system energy efficiency level \geq IE4, motor energy efficiency level \geq IE5
- 2: IPM built-in rotor structure can effectively prevent demagnetization
- 3: Multiple communication methods such as RS485, 0-10V, PWM, etc. meet different customer requirement.
- 4: High protection level, up to IP66, meeting the C4-H anti-corrosion requirements;
- 5: Stepless speed regulation, capable of maintaining high efficiency throughout the entire speed range
- 6: Low cogging torque and torque fluctuations, achieving low noise and vibration
- 7: Complete protection functions, with multiple protection functions such as overvoltage, undervoltage, locked rotor, overheating, overcurrent, overload, etc
- 8: Integrated or separate drive and control, suitable for higher ambient temperatures
- 9: Digital products, smart cloud "i-motor" accessible", Implementing full lifecycle services.
- 10: EMC: Electromagnetic radiation interference according to EN61000-6-4, anti-interference ability according to EN61000-6-2, harmonics according to EN61000-3-2/3, protection level: I (CE; EN61800-5-1).
- 11: Capable of achieving constant speed, torque, and airflow control
- 12: Life commitment, RoHS requirements, communication protocol, special requirements (such as bearings)

EM42/42C SERIES MOTOR

Input voltage: 1Ph 230VAC、50/60Hz
 Output Power: 0.15kW~0.3kW
 Power Factor: ≥ 0.6
 Operation Temperature: -25°C~60°C (Some motors can operate at -40°C, but cold start within the range of -30°C to -40°C is not allowed)
 Rotation Methods: 0-10V、RS485
 Mounting Methods: B3、B30、B14
 Protection class: IP20、IP44、IP55、IP66
 Anticorrosive class: C3-H、C4-H
 Certificate: UL (Under certification)、CE (Under certification)、CCC

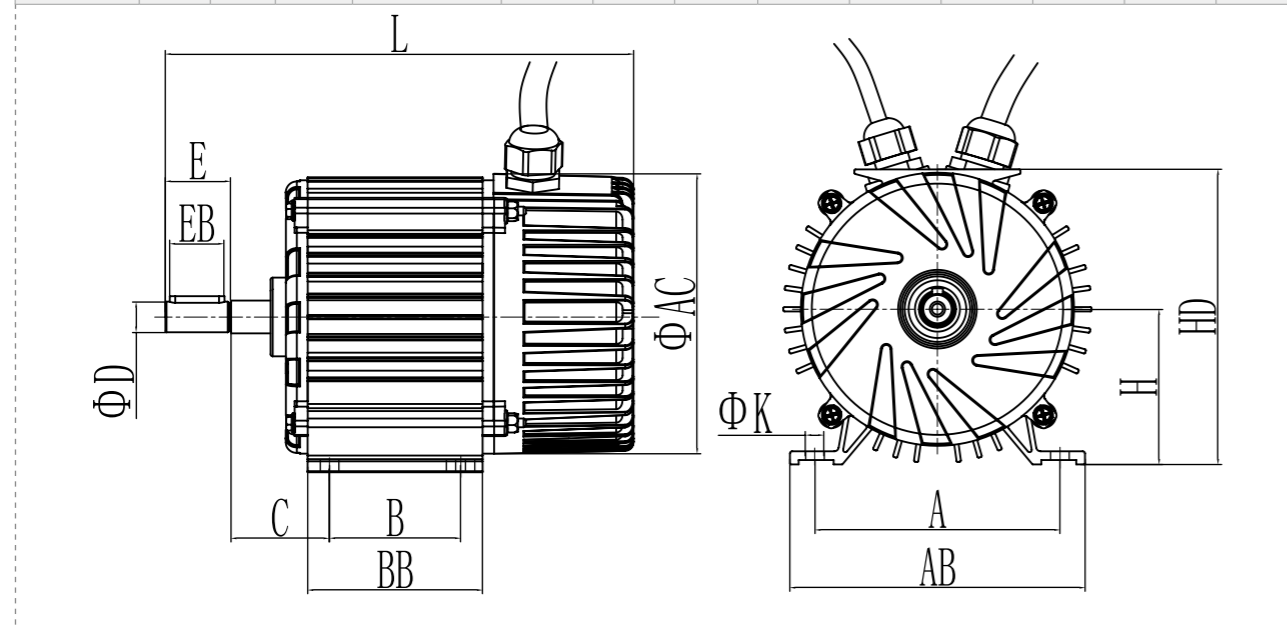


Technical parameter

Model	Voltage[V]	Frequency [Hz]	Rated Power[kW]	Recommended Rated Speed[r/min]	Speed Range	Rated Current[A]	Efficiency [%]
EM4210A15***	1~220-240	50/60	0.15	720/960/1000/1050/1200	200~1200	1.4	80%
EM4210A13***	1~220-240	50/60	0.25	720/960/1000/1050/1200	200~1200	2.1	81%
EM4210A12***	1~220-240	50/60	0.37	960/1000/1050/1200	200~1200	2.8	82%
EM4210B15***	1~220-240	50/60	0.15	1350/1500/1800/2200	200~2200	1.5	81%
EM4210B13***	1~220-240	50/60	0.25	1350/1500/1800/2200	200~2200	2.2	82%
EM4210B12***	1~220-240	50/60	0.3	1350/1500/1800/2200	200~2200	3	83%

External dimension

Frame Size	A	B	C	D	E	H	K	L	AB	AC	BB	EB	HD
42	112	90	45	12.7/15/17/20	/	71	8.5	244	135	102.5	110	/	135



EM56/56C SERIES MOTOR

Input voltage: 3Ph 380~480VAC 50/60Hz
 Output Power: 1.1 ~ 2.2kW
 Power Factor: ≥ 0.9
 Operation Temperature: -25°C~55°C (Some motors can operate at -40°C, but cold start within the range of -30°C to -40°C is not allowed)
 Rotation Methods: 0-10V、RS485 etc
 Mounting Methods: B3、B30、B14
 Protection class: IP55、IP66
 Anticorrosive class: C3-H、C4-H
 Certificate: UL (Under certification)、CE (Under certification)

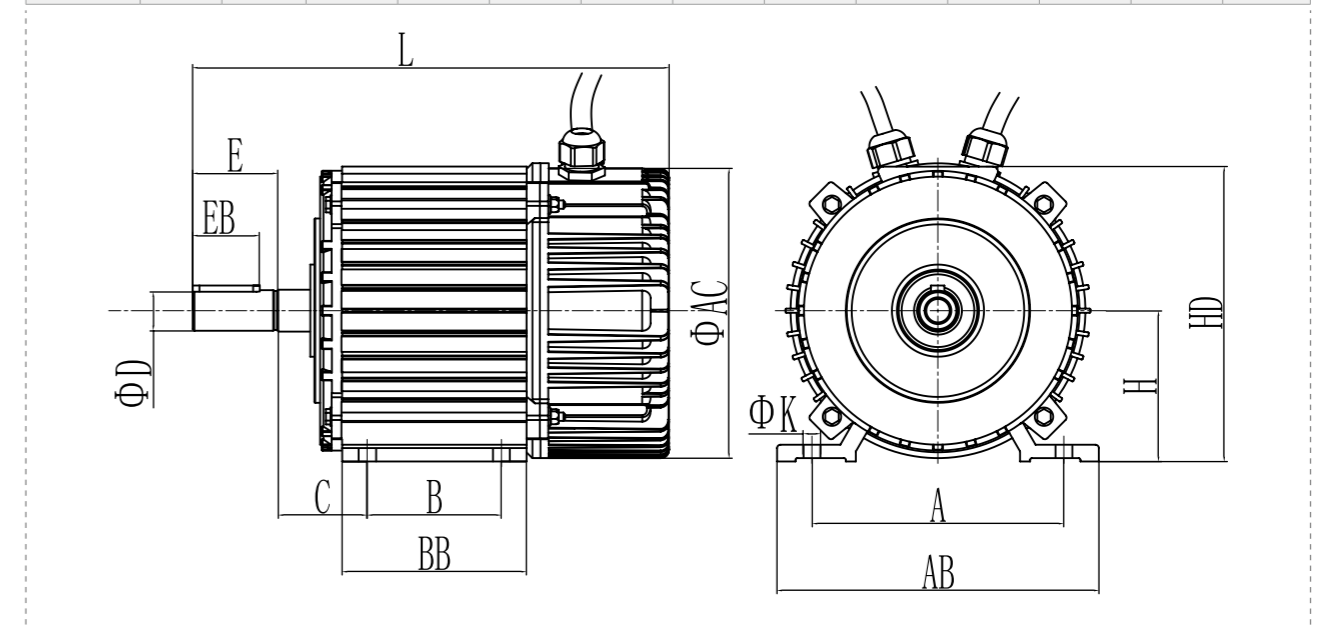


Technical parameter

Model	Voltage[V]	Frequency [Hz]	Rated Power[kW]	Recommended Rated Speed[r/min]	Speed Range	Rated Current[A]	Efficiency [%]
EM5610A32***	3~380-480V	50/60	1.1	720/960/1000/1050/1200	200~1200	2.4	86%
EM5610A21***	3~380-480V	50/60	1.5	720/960/1000/1050/1200	200~1200	3.2	87%
EM5610A31***	3~380-480V	50/60	2.2	960/1000/1050/1200	200~1200	4.5	88%
EM5610B32***	3~380-480V	50/60	1.1	1350/1500/1800/2200	200~2200	2.4	88%
EM5610B21***	3~380-480V	50/60	1.5	1350/1500/1800/2200	200~2200	3.2	89%
EM5610B31***	3~380-480V	50/60	2.2	1350/1500/1800/2200	200~2200	4.5	90%

External dimension

Frame Size	A	B	C	D	E	H	K	L	AB	AC	BB	EB	HD
56	140	100	/	20/24	/	90/100	11	/	180	138.5	130	/	141



EM48/48H SERIES MOTOR

Input voltage: 1Ph 115, 230, 460VAC, 3Ph 380~480VAC 50/60Hz

Output Power: 1/4~1HP, max 1kW

Power Factor: ≥ 0.7

Operation Temperature: -20°C ~55°C (Some motors can operate at -40°C, but cold start within the range of -30°C to -40°C is not allowed)

Rotation Methods: 0-10V, RS485, PWM, Multiple control methods such as five speed and serial port

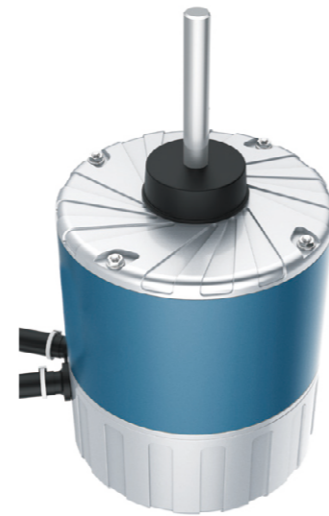
Product Type: Indoor outdoor, special anti-corrosion, split type, double output shaft

Mounting Methods: B3, B30, Belly bands, Front shield stud

Protection class: IP20, IP44, IP55, IP66

Anticorrosive class: C3-H, C4-H

Certificate: UL, CE, CCC

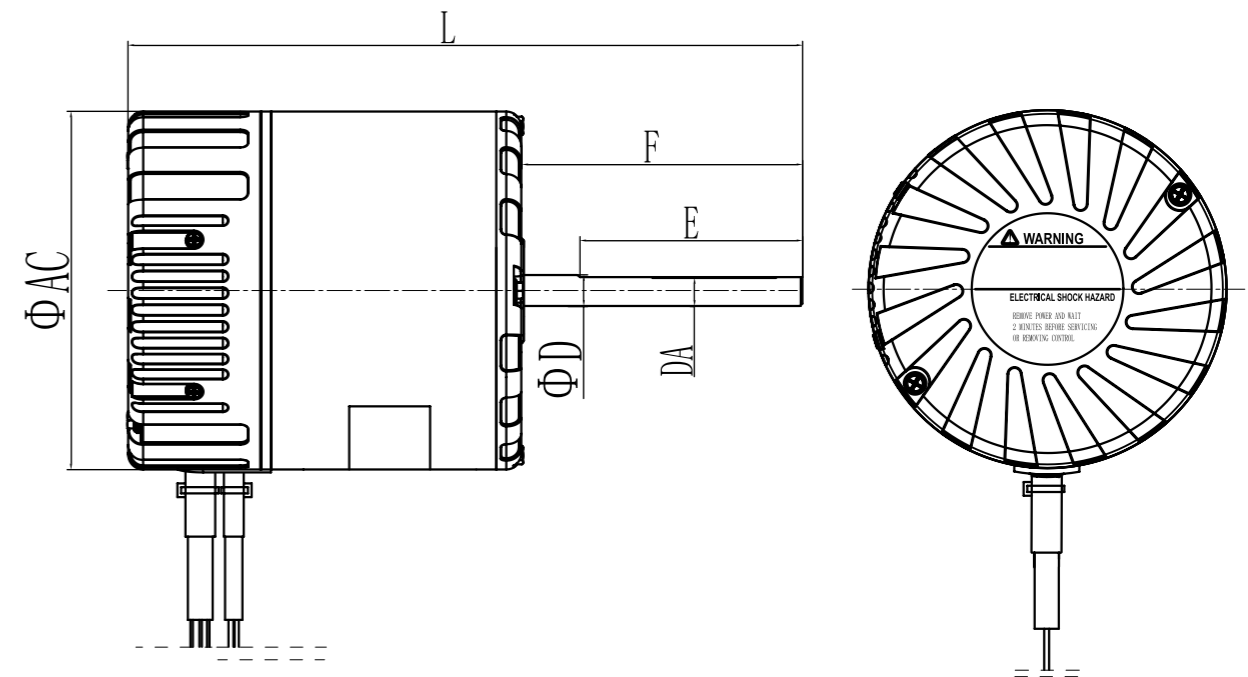


Single-Phase specification							
Model	Voltage[V]	Frequency [Hz]	Rated Power [HP]	Recommended Rated Speed [r/min]	Speed Range	Rated Current [A]	Efficiency [%]
EM4810B14***	1~115/230	50/60	1/4	720/960/1000/1050/1200	200~1200	3.1/1.8	81%
EM4810B12***	1~115/230	50/60	1/3	720/960/1000/1050/1200	200~1200	3.6/2.4	82%
EM4810B12***	1~115/230	50/60	1/2	720/960/1000/1050/1200	200~1200	5.9/3.3	82%
EM4810A34***	1~115/230	50/60	3/4	720/960/1000/1050/1200	200~1200	8/4.68	83%
EM4810A11***	1~115/230	50/60	1	960/1000/1050/1200	200~1200	9.5/5.8	84%
EM4810D14***	1~115/230	50/60	1/4	1350/1500/1800	200~1800	3.7/1.7	82%
EM4810D12***	1~115/230	50/60	1/3	1350/1500/1800	200~1800	4/2.2	83%
EM4810D12***	1~115/230	50/60	1/2	1350/1500/1800	200~1800	5.9/3.2	83%
EM4810C34***	1~115/230	50/60	3/4	1350/1500/1800	200~1800	8.4/4.5	85%
EM4810C11***	1~115/230	50/60	1	1350/1500/1800	200~1800	10.7/5.9	86%
EM4810E14***	1~460~480	50/60	1/4	1000/1050/1200/1500/1800	120~1800	0.85	83%
EM4810E12***	1~460~480	50/60	1/3	1000/1050/1200/1500/1800	120~1800	1.6	86%
EM4810E12***	1~460~480	50/60	1/2	1000/1050/1200/1500/1800	120~1800	1.6	86%
EM4810E34***	1~460~480	50/60	3/4	1000/1050/1200/1500/1800	120~1800	2.25	87%
EM4810E11***	1~460~480	50/60	1	1000/1050/1200/1500/1800	120~1800	3	88%

EM48/48H SERIES MOTOR

Three-Phase specification							
Model	Voltage[V]	Frequency [Hz]	Rated Power [HP]	Recommended Rated Speed [r/min]	Speed Range	Rated Current [A]	Efficiency [%]
EM4810F14***	3~380~480	50/60	1/4	1000/1050/1200/1500/1800	120~1800	0.52~0.45	84%
EM4810F12***	3~380~480	50/60	1/3	1000/1050/1200/1500/1800	120~1800	0.95~0.84	87%
EM4810F12***	3~380~480	50/60	1/2	1000/1050/1200/1500/1800	120~1800	0.95~0.84	87%
EM4810F34***	3~380~480	50/60	3/4	1000/1050/1200/1500/1800	120~1800	1.33~1.16	88%
EM4810F11***	3~380~480	50/60	1	1000/1050/1200/1500/1800	120~1800	1.77~1.52	89%

External dimension						
Frame Size	D	E	F	L	AC	DA
48	12.7/15/17/20	/	/	/	143	/



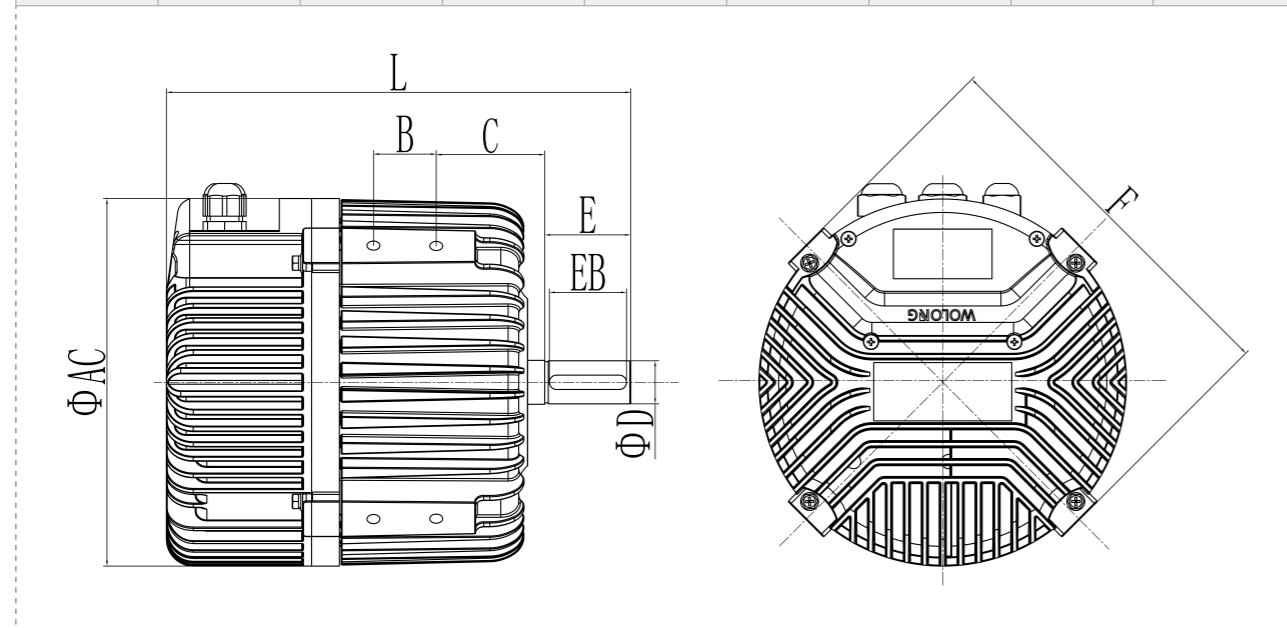
EC112 SERIES MOTOR

Input voltage: 3Ph 380~480VAC 50/60Hz
 Output Power: 1.1 ~ 1.8kW
 Power Factor: ≥ 0.9
 Operation Temperature: -25°C ~55°C (Some motors can operate at -40°C, but cold start within the range of -30°C to -40°C is not allowed)
 Rotation Methods: 0-10V, RS485 etc
 Mounting Methods: B30
 Protection class: IP55、IP66
 Anticorrosive class: C3-H、C4-H
 Certificate: UL、CE



Technical parameter								
Model	Voltage[V]	Frequency [Hz]	Rated Power [kW]	Recommended Rated Speed [r/min]	Speed Range	Rated Current[A]	Efficiency[%]	
EM11210A32***	3~380-480V	50/60	1.1	720/960/1000/1200	200~1200	2.1~1.8	87%	
EM11210A21***	3~380-480V	50/60	1.5	960/1000/1200	200~1200	3.0~2.4	88%	
EM11210B32***	3~380-480V	50/60	1.1	1300/1450/1500/1800/2200	200~2200	2.1~1.8	88%	
EM11210B21***	3~380-480V	50/60	1.5	1300/1450/1500/1800/2200	200~2200	3.0~2.4	90%	
EM11210B21***	3~380-480V	50/60	1.8	1300/1450/1500/1800/2200	200~2200	3.5~2.8	91%	

External dimension								
Frame Size	B	C	D	E	F	L	AC	EB
112	35	60.5	24	/	216	259	205	/



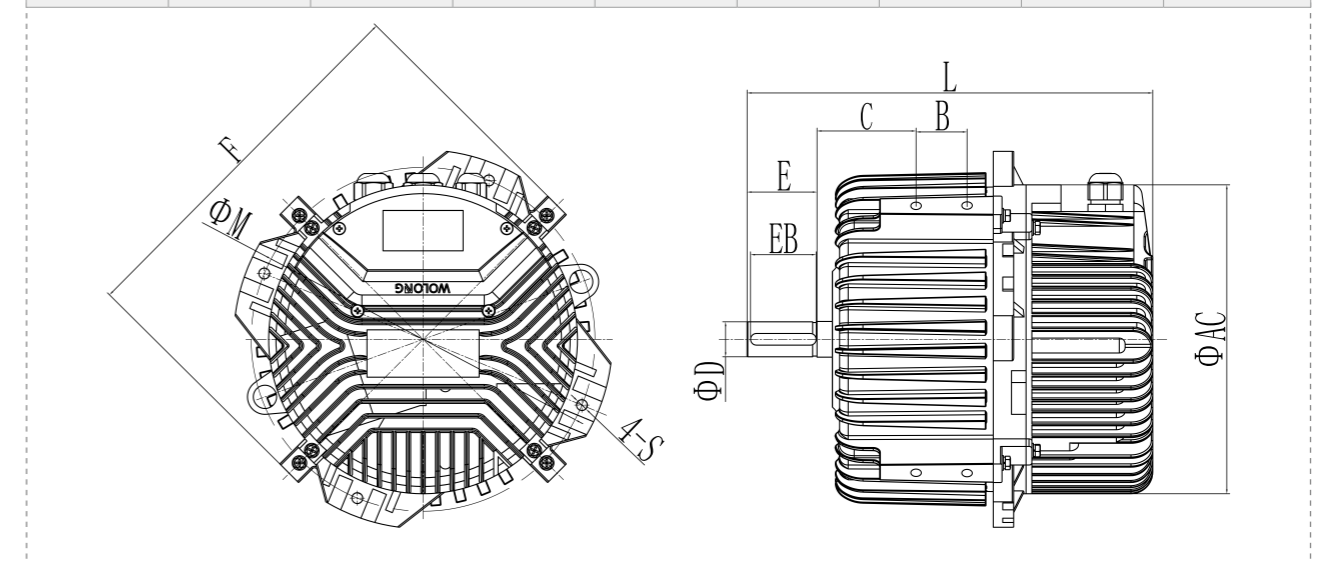
EC132 SERIES MOTOR

Input voltage: 3Ph 380~480VAC 50/60Hz
 Output Power: 1.5 ~ 3kW
 Power Factor: ≥ 0.9
 Operation Temperature: -25°C ~55°C (Some motors can operate at -40°C, but cold start within the range of -30°C to -40°C is not allowed)
 Rotation Methods: 0-10V, RS485 etc
 Mounting Methods: B30
 Protection class: IP55、IP66
 Anticorrosive class: C3-H、C4-H
 Certificate: UL、CE



Technical parameter								
Model	Voltage[V]	Frequency [Hz]	Rated Power [kW]	Recommended Rated Speed [r/min]	Speed Range	Rated Current [A]	Efficiency [%]	
EM13210A31***	3~380-480V	50/60	1.5	720/960/1000/1200	200~1200	3.0~2.4	89%	
EM13210A31***	3~380-480V	50/60	1.8	720/960/1000/1200	200~1200	3.5~2.9	89%	
EM13210A31***	3~380-480V	50/60	2.2	720/960/1000/1200	200~1200	4.3~3.5	90%	
EM13210A72***	3~380-480V	50/60	2.6	960/1000/1200	200~1200	5.0~4.0	90%	
EM13210A41***	3~380-480V	50/60	3.0	960/1000/1200	200~1200	5.8~4.5	90%	
EM13210B31***	3~380-480V	50/60	1.5	1300/1450/1500/1800	200~1800	3.0~2.4	90%	
EM13210B31***	3~380-480V	50/60	1.8	1300/1450/1500/1800	200~1800	3.5~2.9	90%	
EM13210B31***	3~380-480V	50/60	2.2	1300/1450/1500/1800	200~1800	4.3~3.5	91%	
EM13210B72***	3~380-480V	50/60	2.6	1300/1450/1500/1800	200~1800	5.0~4.0	91%	
EM13210B41***	3~380-480V	50/60	3.0	1300/1450/1500/1800	200~1800	5.8~4.5	91%	

External dimension								
Frame Size	B	C	D	E	F	L	AC	EB
132	35	68	24/28	/	260	278.5	212	/



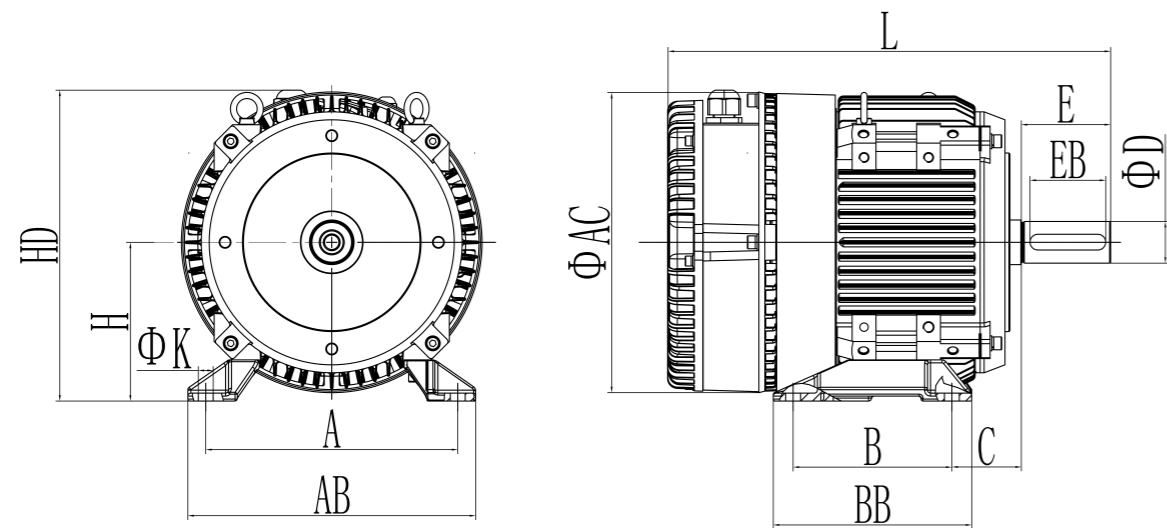
EC160 SERIES MOTOR

Input voltage: 3Ph 380~480VAC 50/60Hz
 Output Power: 3 ~ 7.5kW
 Power Factor: ≥ 0.9
 Operation Temperature: -25°C ~55°C (Some motors can operate at -40°C , but cold start within the range of -30°C to -40°C is not allowed)
 Rotation Methods: 0-10V, RS485 etc
 Mounting Methods: B3, B30, B14
 Protection class: IP55, IP66
 Anticorrosive class: C3-H, C4-H
 Certificate: UL (Under certification) 、 CE (Under certification)



Technical parameter							
Model	Voltage[V]	Frequency [Hz]	Rated Power [kW]	Recommended Rated Speed [r/min]	Speed Range	Rated Current[A]	Efficiency[%]
EM16010A112***	3~380-480V	50/60	4	720/960/1000/1050/1200	200~1200	8	90%
EM16010A071***	3~380-480V	50/60	5.5	720/960/1000/1050/1200	200~1200	11	91%
EM16010A101***	3~380-480V	50/60	7.5	960/1000/1050/1200	200~1200	15	91.6%
EM16010B112***	3~380-480V	50/60	4	1350/1500/1800/2200	200~2200	8	91.3%
EM16010B071***	3~380-480V	50/60	5.5	1350/1500/1800/2200	200~2200	11	92%
EM16010B101***	3~380-480V	50/60	7.5	1350/1500/1800/2200	200~2200	15	92.7%

External dimension													
Frame Size	A	B	C	D	E	H	K	L	AB	AC	BB	EB	HD
160T	254	160	70	42	/	160	15	452	304	303	200	/	313



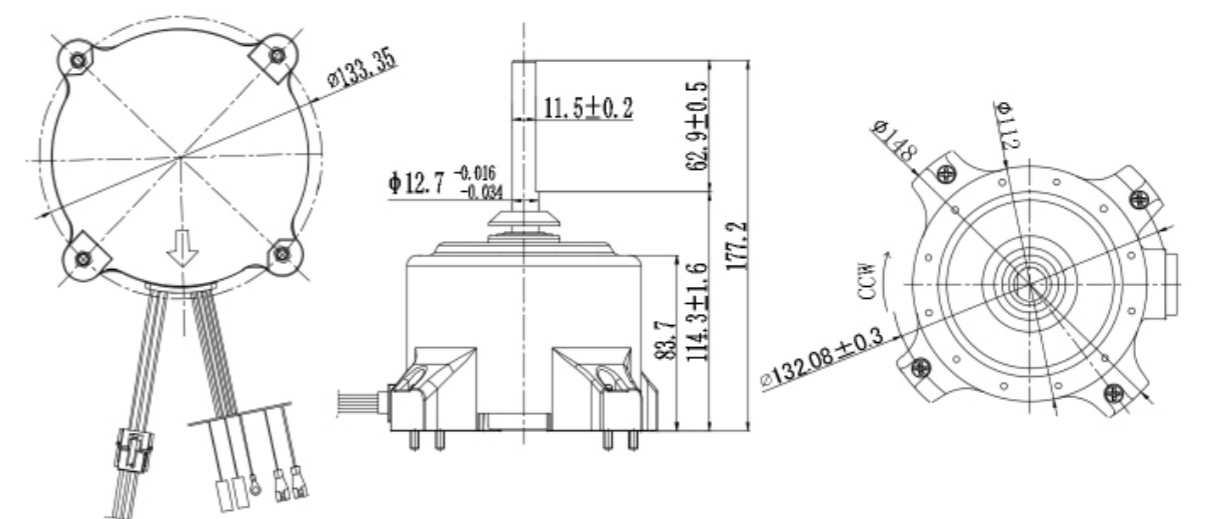
CUSTOMIZED MOTOR CASES-EM42

Input voltage: 1Ph 230VAC、 50/60Hz
 Output Power: 0.25kW
 Power Factor: ≥ 0.7
 Operation Temperature: -20°C ~60°C (Some motors can operate at -40°C , but cold start within the range of -30°C to -40°C is not allowed)
 Rotation Methods: PWM
 Product Type: Split type
 Mounting Methods: Split lifting structure
 Protection class: IP44
 Anticorrosive class: C3-H
 Certificate: UL、 CE、 CCC



Technical parameter							
Model	Voltage[V]	Frequency [Hz]	Rated Power [kW]	Recommended Rated Speed[r/min]	Speed Range	Rated Current [A]	Efficiency[%]
ZWB**10** Series	220-240	50/60	0.25	960/1000/1050 /1160/1200	200~1200	2.1	81%

External dimension



※The motor shaft diameter, shaft length, and lead length can be customized



Wechat official account



Catalog

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