



Keeping Industry Turning

EC Motor

Drive Controlled Integrated Motors

**BROOK
CROMPTON** 
Keeping Industry Turning

2435

WOLONG
Power your future

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Introduction

Specification

Brook Crompton Keeping Industry Turning

Brook Crompton, the original innovator in electric motor development, is a leading provider of energy efficient electric motors.

With over 120 years of technical & design expertise, UK-based Brook Crompton delivers consistently reliable electric motors to a global market.

Trusted to power limitless industrial activities across diverse market sectors, the robust design of Brook Crompton's electric motor drives fans, pumps, compressors, conveyors and more, ever second, of every day, of every year.

Renowned for their adaptability, Brook Crompton's extensive motor stock can be modified to suit the needs of different market sectors, with technical support from the company's knowledgeable team readily available to ensure the correct selection of motors for any application.

For bespoke situations and complete flexibility, Brook Crompton will design and manufacture to meet individual customer specifications.

Brook Crompton has a long-standing reputation for efficient customer service, supporting customers worldwide through its global network. Specialist Brook Crompton Motor Centres operate alongside approved product distributors throughout the UK, mainland Europe, Middle East, Canada, USA and Asia Pacific.

Shaping the future of electric motors, Brook Crompton is focused on the development of new products that improve energy efficiency, offer lower cost of ownership throughout the motor lifetime and reduce environment impact.

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, water pumps and data centre ventilation systems.

Product Features

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

Quality Assurance

Stringent quality procedures are observed from first design to finished product in accordance with the ISO 9001 documented quality systems.

All factories have been assessed to meet these requirements.



EM42/42C Series Motor

Specification

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Input Voltage:
1Ph 230VAC, 50/60Hz

Output Power:
0.15 - 0.3kW

Power Factor:
≥0.6

Operation Temperature:
-25°C to -60°C
(some motors can operate at -40°C,
but cold starts within the range of
-30°C to -40°C is not allowed.)

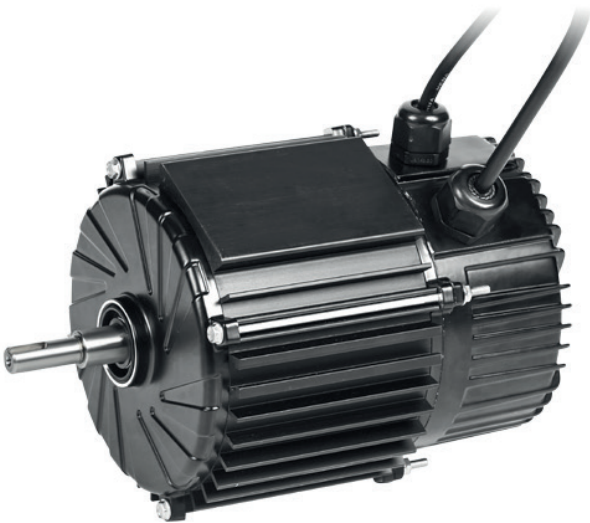
Rotation Methods:
0-10V, RS485

Mounting Methods:
B3, B30

Protection Class:
IP20, IP44, IP55, IP66

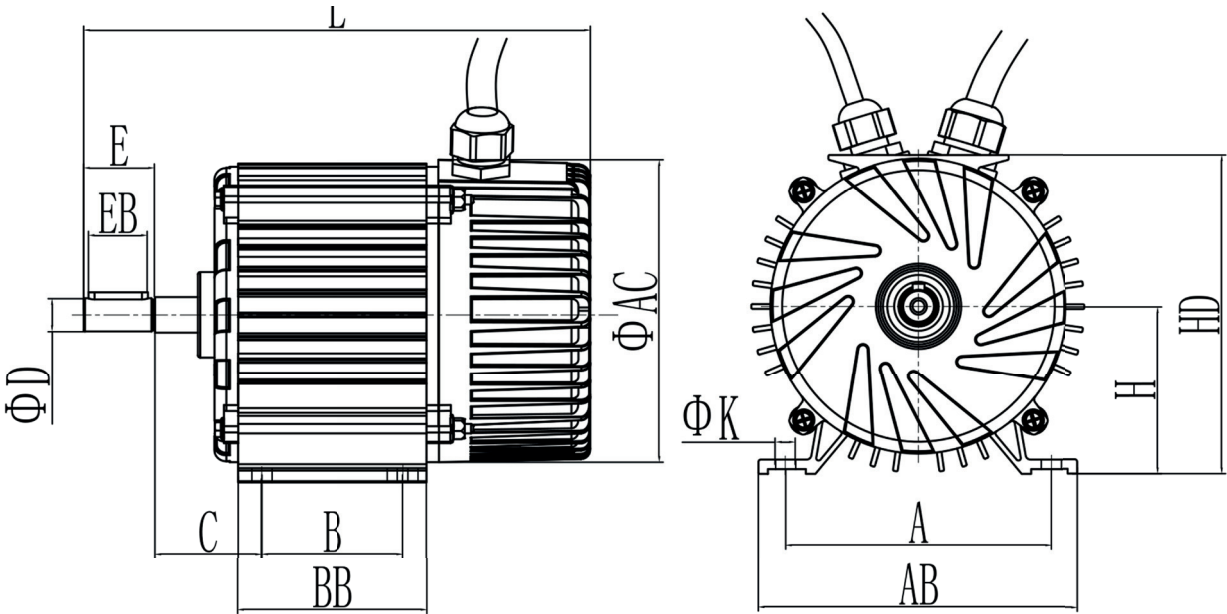
Anticorrosive Class:
C3-H, C4-H

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 (%)						
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	200-1800	1.5	81%						
EM4210B13***	1-220-240	50/60	0.25	1350/1500/1800	200-1800	2.2	82%						
EM4210B12***	1-220-240	50/60	0.3	1350/1500/1800	200-1800	3	83%						

External Dimensions													
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

Specification

Input Voltage:

3pH 380-480VAC 50/60Hz

Mounting Methods:

B3, B30, B14

Output Power:

1.1 - 2.2kW

Protection Class:

IP55, IP66

Power Factor:

≥0.9

Anticorrosive Class:

C3-H, C4-H

Operation Temperature:

-25°C to -55°C

(some motors can operate at -40°C,
but cold starts within the range of
-30°C to -40°C is not allowed.)

Certificate:

UL (under certification)
CE (under certification)

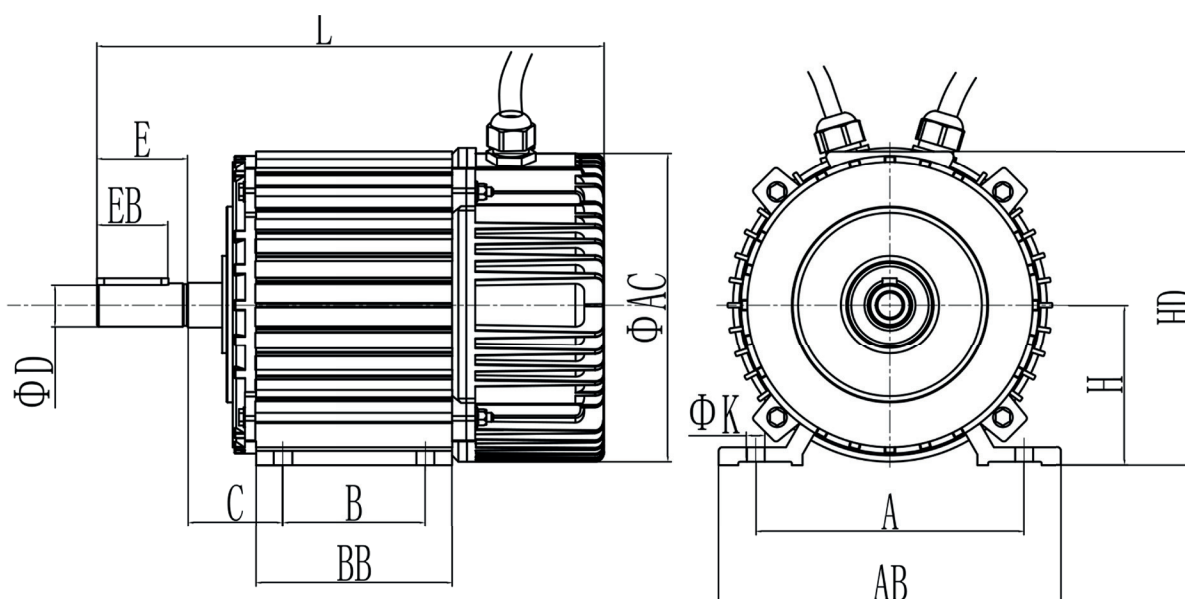


Technical Parameter

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	200-1800	2.4	88%
EM5610B21***	3-380-480V	50/60	1.5	1350/1500/1800/2200	200-1800	3.2	89%
EM5610B31***	3-380-480V	50/60	2.2	1350/1500/1800/2200	200-1800	4.5	90%

External Dimensions

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



EM56-Plus Series Motor

Specification

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Input Voltage:
3Ph 380-480VAC, 50/60Hz

Output Power:
1.1kW - 2.2kW

Power Factor:
≥0.9

Operation Temperature:
-25°C to -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

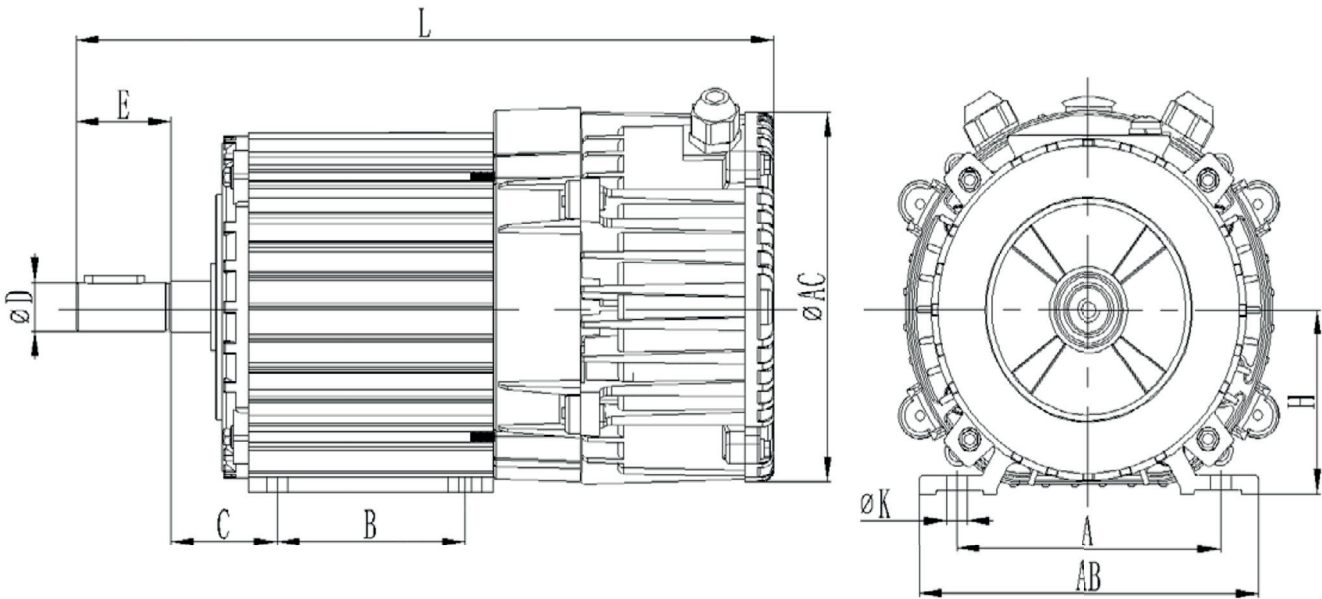
Cooling Method:
IC411

Certificate:
UL (under certification)
CE (under certification)



Technical Parameter						
Model	Voltage (V)	Frequency (Hz)	Rated Power (kW)	Speed Range	Rated Current (A)	Efficiency (%)
EM5608*32***	3-380-480V	50/60	1.1kW	200-3000/3600/4500	2.1	87.6
EM5608*21***	3-380-480V	50/60	1.5kW	200-3000/3600/4500	2.8	88.4
EM5608*31***	3-380-480V	50/60	2.2kW	200-3000/3600/4500	4.2	89
EM5608*41***	3-380-480V	50/60	3.0kW	200-3000/3600/4500	5.6	89.6

External Dimensions										
Frame Size	A	B	C	D	E	H	K	L	AB	AC
56	140	100	56	20/24	50	90/100	11	370	180	180



EM48/48H Series Motor

Specification

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 to -55°C

[some motors can operate at -40°C, but cold starts 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

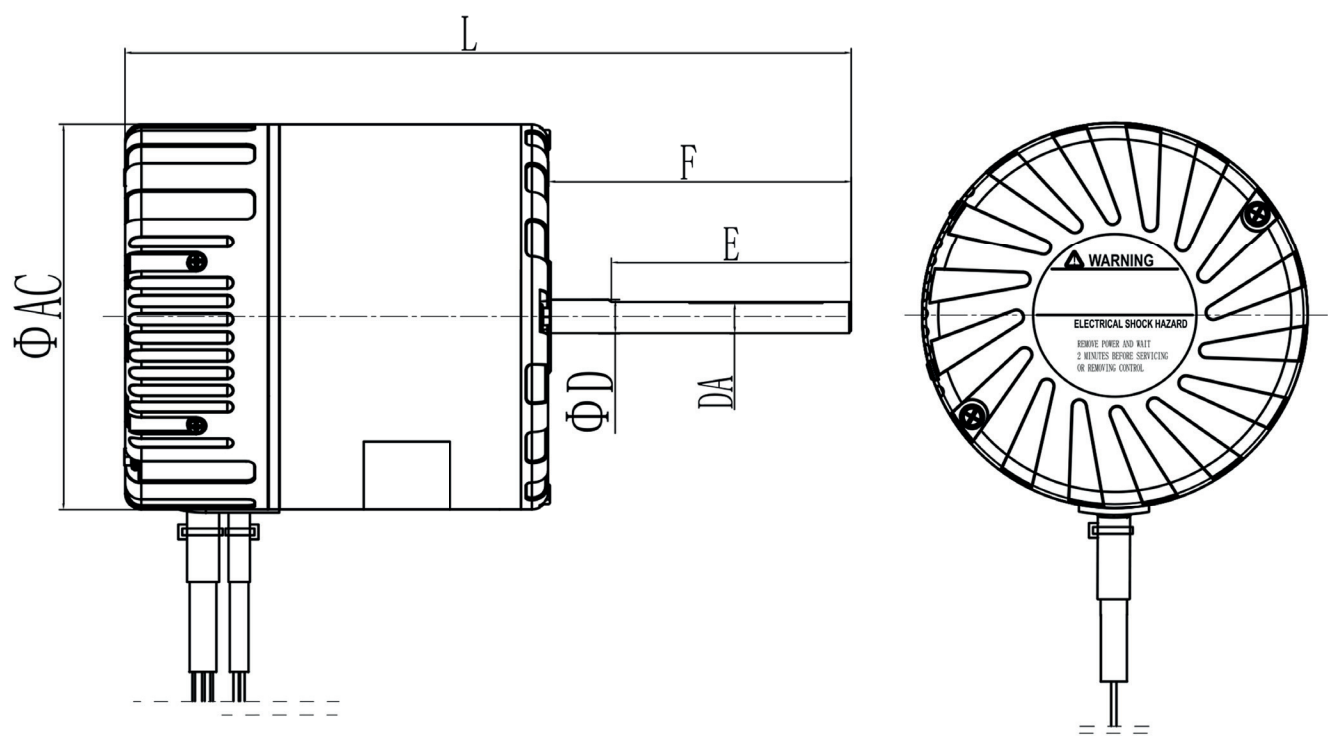
Model	Voltage (V)	Frequency (Hz)	Rated Power (kW)	Recommended Rated Speed (r/min)	Speed Range	Rated Current (A)	Efficiency (%)
EM4810B14***	1-115/230	50/60	1/4	720/960/1000/1050/1200	200-1200	3.1/1.8	81%
EM4810B12***	1-115/230	50/60	1/3	720/960/1000/1050/1200	200-1200	3.6/2.4	82%
EM4810B12***	1-115/230	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	8/4.7	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

Specification

Three-Phase Specification							
Model	Voltage (V)	Frequency (Hz)	Rated Power (kW)	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 Dimensions						
Frame Size	D	E	F	L	AC	DA
48	12.7/15/17/20	/	/	/	143	/



EC112 Series Motor

Specification

Input Voltage:

3Ph 380-480VAC 50/60Hz

Mounting Methods:

B30

Output Power:

1.1 - 1.8kW

Protection Class:

IP55, IP66

Power Factor:

≥0.9

Anticorrosive Class:

C3-H, C4-H

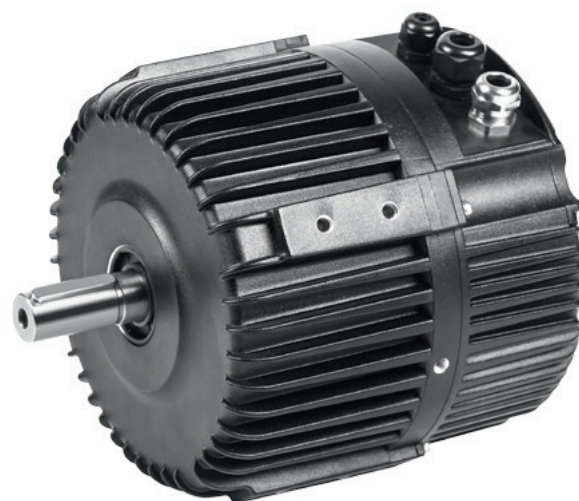
Operation Temperature:

-25°C to -55°C

[some motors can operate at -40°C,
but cold starts within the range of
-30°C to -40°C is not allowed.]

Certificate:

UL, CE

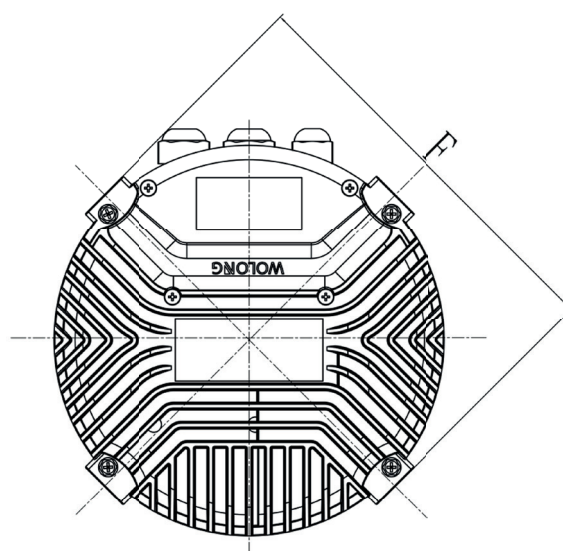
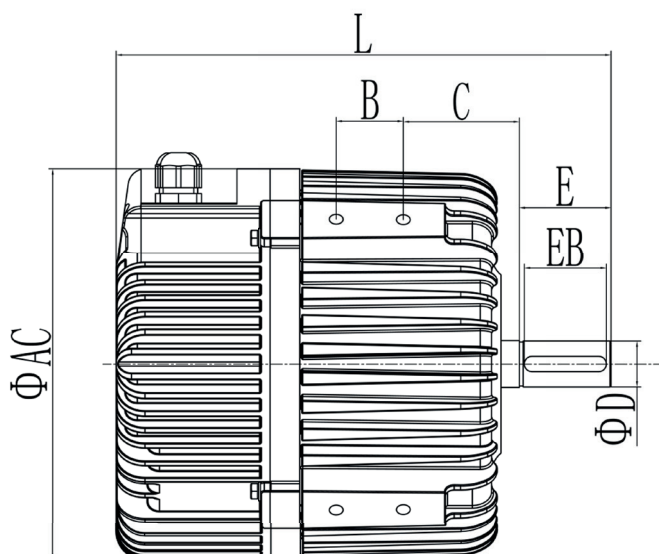


Technical Parameter

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 Dimensions

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



EC132 Series Motor

Specification

11

Input Voltage:
3Ph 380-480VAC 50/60Hz

Output Power:
1.5 - 3.0kW

Power Factor:
≥0.9

Operation Temperature:
-25°C to -55°C
(some motors can operate at -40°C,
but cold starts 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

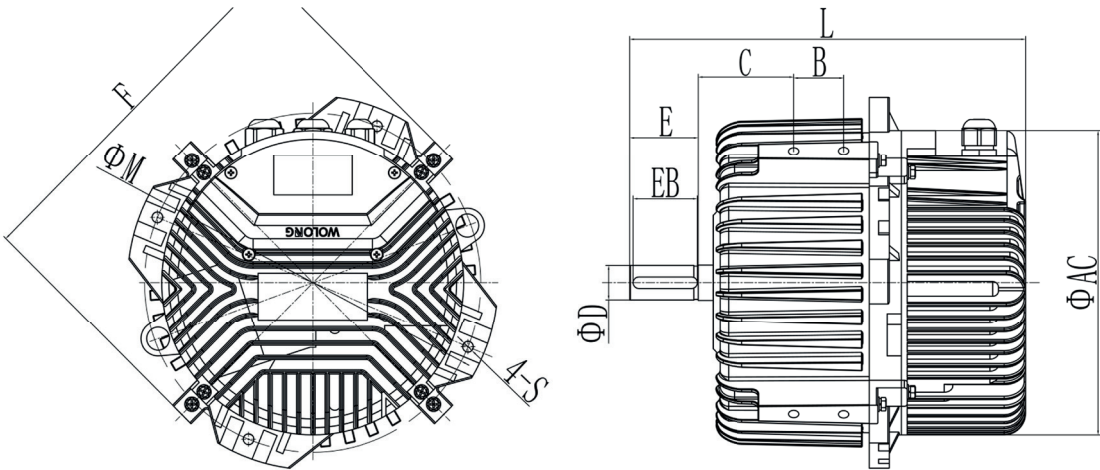
Anticorrosive Class:
C3-H, C4-H

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



EC132 - Plus Series Motor

Specification

Input Voltage:

3Ph 380-480VAC 50/60Hz

Output Power:

4 - 7.5kW

Power Factor:

≥0.9

Operation Temperature:

-25°C to -55°C

(some motors can operate at -40°C, but cold starts within the range of -30°C to -40°C is not allowed.)

Rotation Methods:

0-10V, RS485, etc

Mounting Methods:

B3, B5, B30, B14

Protection Class:

IP55, IP66

Anticorrosive Class:

C3-H, C4-H

Cooling Method:

IC411

Certificate:

UL (under certification)

CE (under certification)

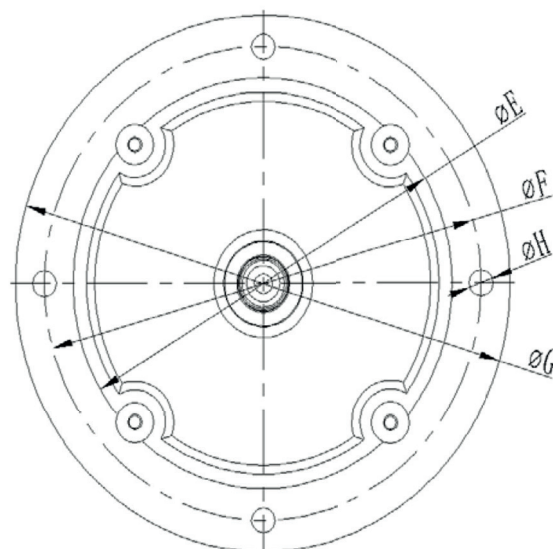
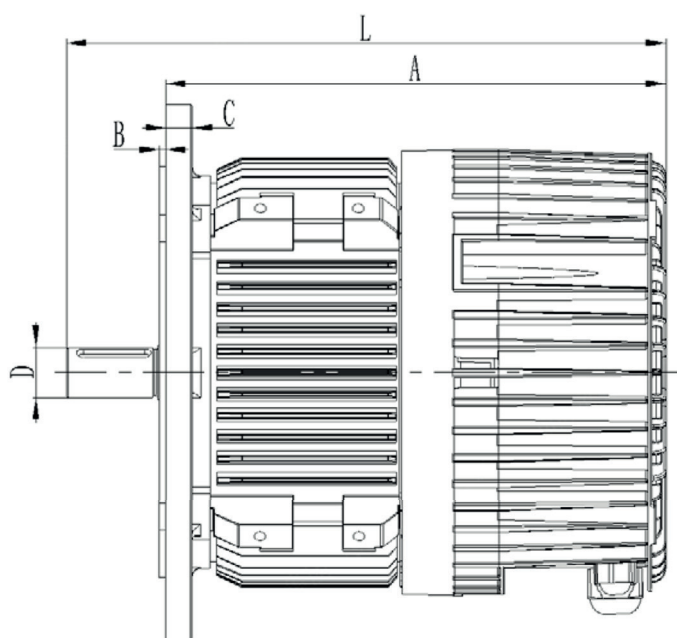


Technical Parameter

Model	Voltage (V)	Frequency (Hz)	Rated Power (kW)	Recommended Rated Speed (r/min)	Rated Current (A)	Efficiency (%)
EM13208*51***	3-380-480V	50/60	4.0kW	200-300/3600/4500	8	90.6
EM13208*71***	3-380-480V	50/60	5.5kW	200-3000/3600/4500	10.7	91.2
EM13208*X0***	3-380-480V	50/60	7.5kW	200-3000/3600/4500	14.3	91.8

External Dimensions

Frame Size	A	B	C	D	E	F	G	H	L
112	303	4	16	28/38	230	265	300	14.5	363



EC160 Series Motor

Specification

13

Input Voltage:
3Ph 380-480VAC 50/60Hz

Output Power:
3 - 7.5kW

Power Factor:
≥0.9

Operation Temperature:
-25°C to -55°C
(some motors can operate at -40°C,
but cold starts 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

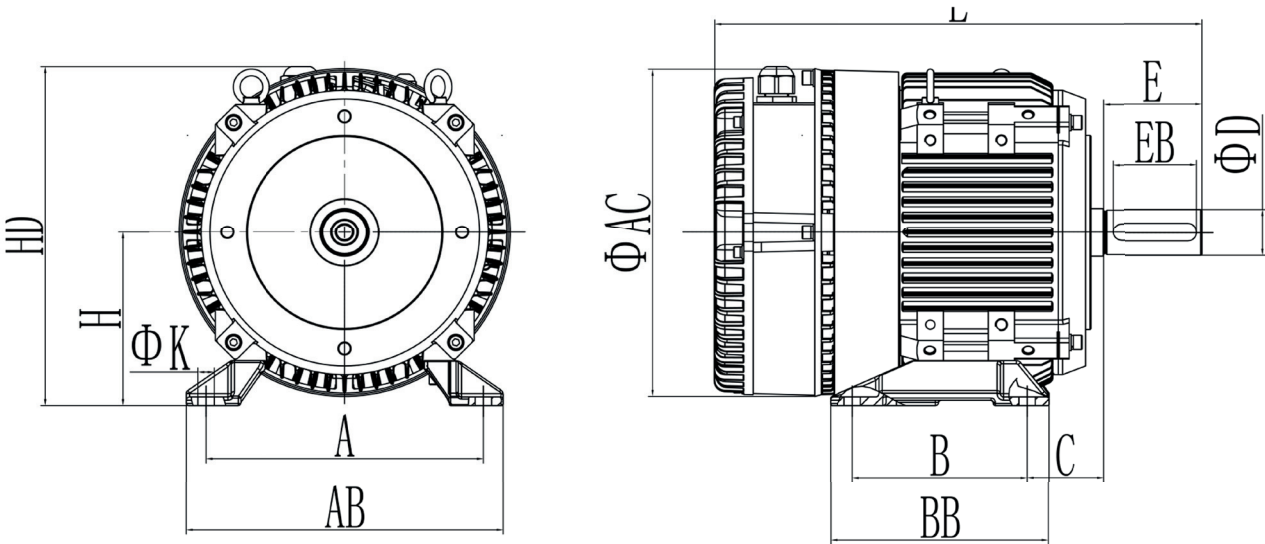
Anticorrosive Class:
C3-H, C4-H

Cooling Method:
IC411

Certificate:
UL
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 Dimensions															
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		



Customised Motor Cases - EM42

Specification

Input Voltage:

1Ph 280VAC 50/60Hz

Output Power:

0.25kW

Power Factor: ≥ 0.7 **Operation Temperature:** -20°C to -60°C

(some motors can operate at -40°C ,
but cold starts within the range of
 -30°C to -40°C is not allowed.)

Rotation Methods:

PWM

Mounting Methods:

Split lifting structure

Protection Class:

IP44

Anticorrosive Class:

C3-H

Product Type:

Split type

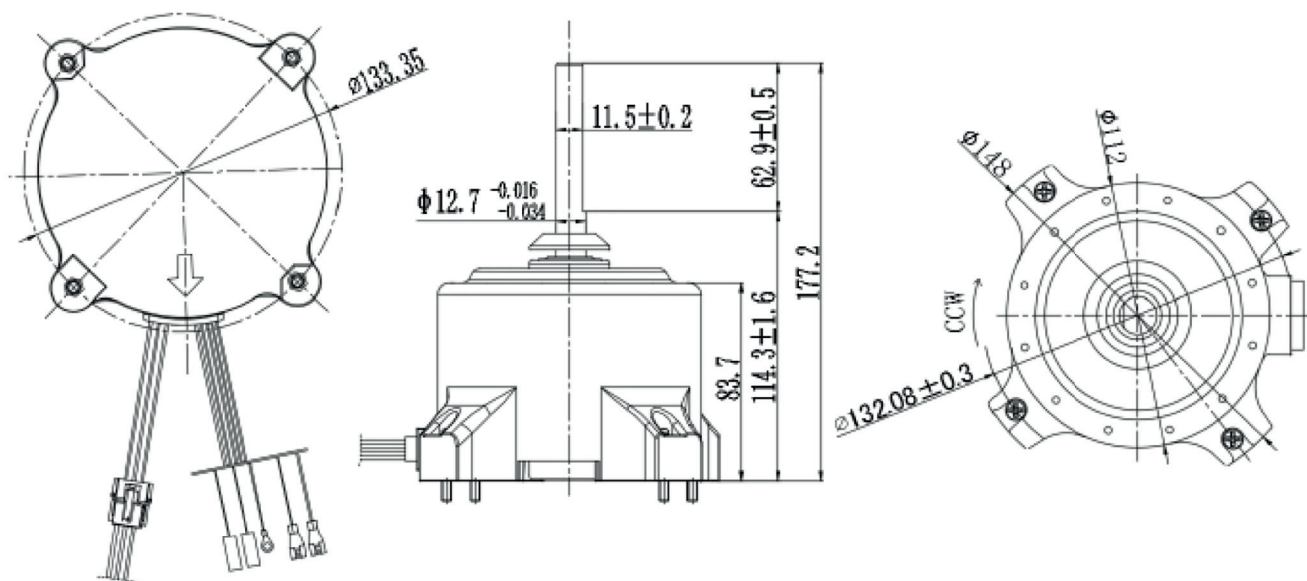
Certificate:

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**	220-240	50/60	0.25	960/1000/1050/1160/1200	200-1200	2.1	81%



*The motor shaft diameter, shaft length and lead length can be customised.

Europe

Brook Crompton UK Ltd

St Thomas' Road Huddersfield
West Yorkshire HD1 3LJ UK
T: +44 (0) 1484 557200
F: +44 (0) 1484 557201
E: sales@brookcrompton.com
www.brookcrompton.com

Brook Crompton UK LTD - Sede secondaria in Italia

Via De Chirico, 9/11
42124 - Reggio Emilia (RE)
T: +39 0522 345055
E: italy@brookcrompton.com
www.brookcrompton.com

Asia

Brook Crompton Asia Pacific Pte Ltd

19 Keppel Road #08-01, Jit Poh Building
Singapore 089058
T: +65 6227 0308
F: +65 6227 0605
E: marketing@brookcrompton-ap.com
www.brookcrompton.com

Brook Crompton Australia Pty Ltd

5/220 New Cleveland Road,
Tingalpa, Queensland
Australia
T: +61 (0) 721 117 280
E: salesau@brookcrompton.com
www.brookcrompton.com

Americas

Brook Crompton Inc

1100 E. 222nd Street
Euclid, Ohio 44117, USA
T: +1 800 668 6779
T: +1 - 800 463 8917
E: sales@brookcromptonna.com
www.brookcromptonna.com

Brook Crompton Ltd

264 Attwell Drive
Toronto, Ontario, M9W 5B2, Canada
T: + 416 675 3844 (Toronto)
T: +1 888 668 9843 (Quebec)
E: sales@brookcromptonna.com
www.brookcromptonna.com

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