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Turn to Experts - HVAC&R

Shaded Pole Motor

Professional HVAC Fan &Motors Manufacturer

Ningbo Longwell Electric Technology CO, LTD
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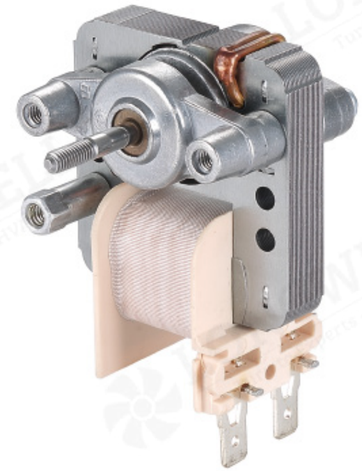
LWSPM48 Series

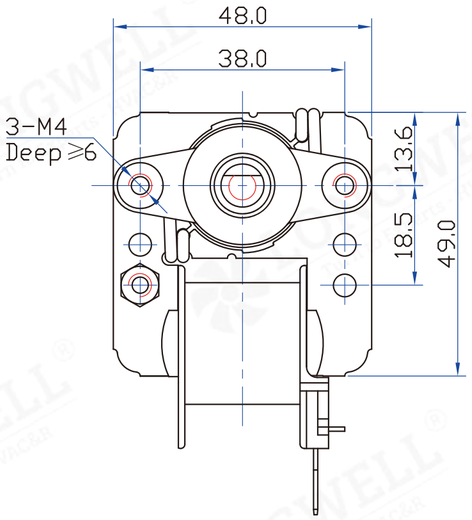


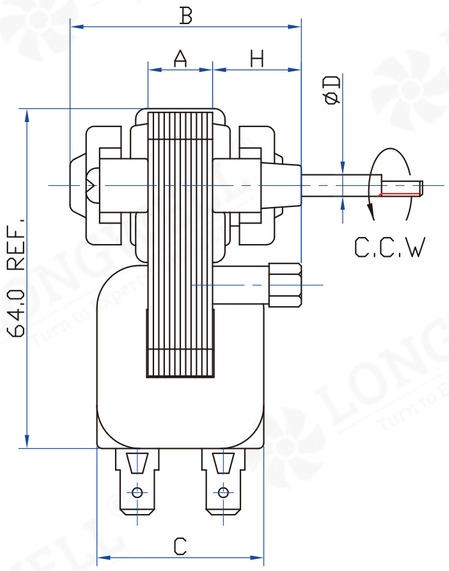
Product Characteristic

- Power Supply: 100-240V 50/60Hz
- Insulation Class: F/H
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+120℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

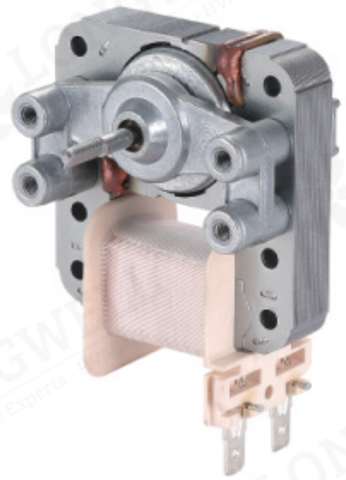
Technical Specifications

Product Drawing (mm)





LWSPM61 Series



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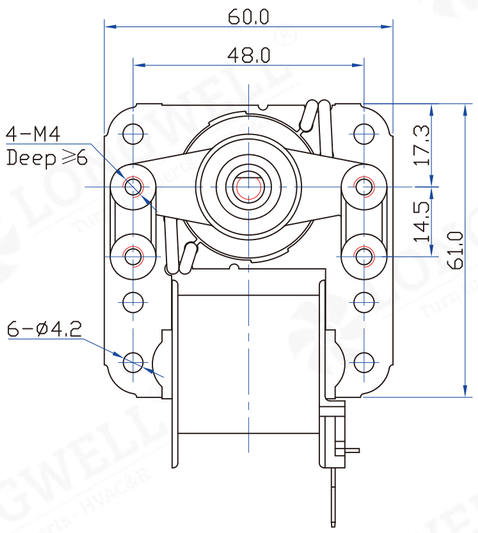
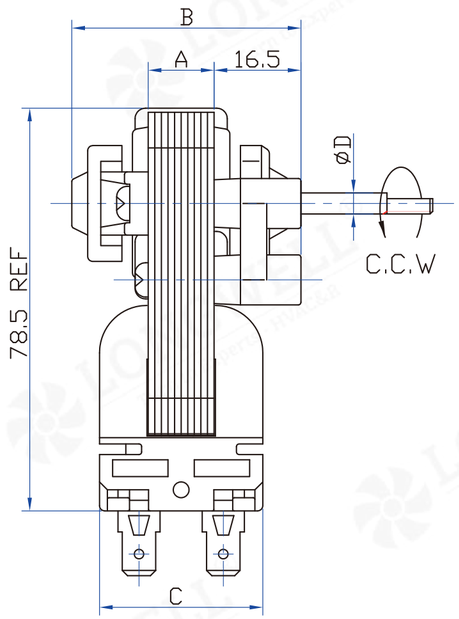
- Features: Low noise/No electromagnetic interference

Technical Specifications

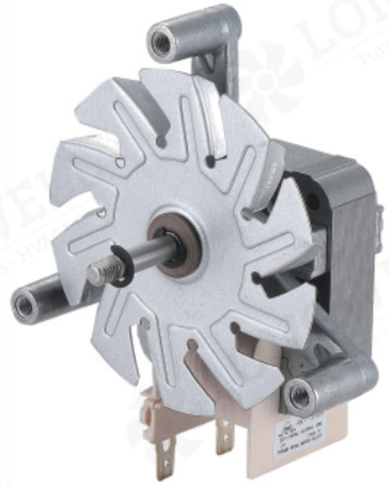
Model	A (mm)	B (mm)	C (mm)	D (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6110-01	10	37	30	3.17	80	18	2.7
LWSPM6112-01	12.5	39.5	31	4 4.5	120	25	4.2
LWSPM6113-01	13.5	40.5	34	4.6 5	160	28	4.8
LWSPM6115-01	15.5	42.5	36	5.5	220	30	5.4
LWSPM6116-01	16.5	43.5	38	6	260	35	7

Product Drawing (mm)





LWSPM61 Series



Product Characteristic

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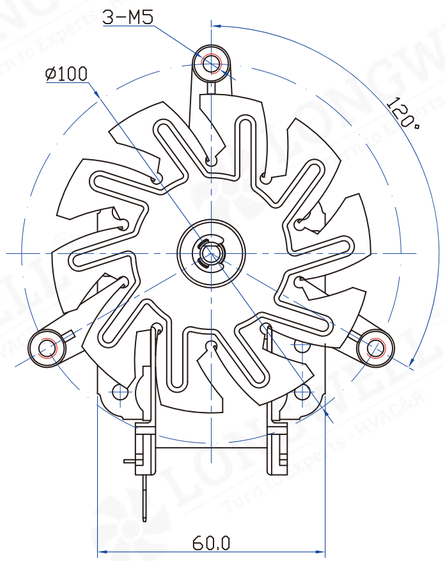
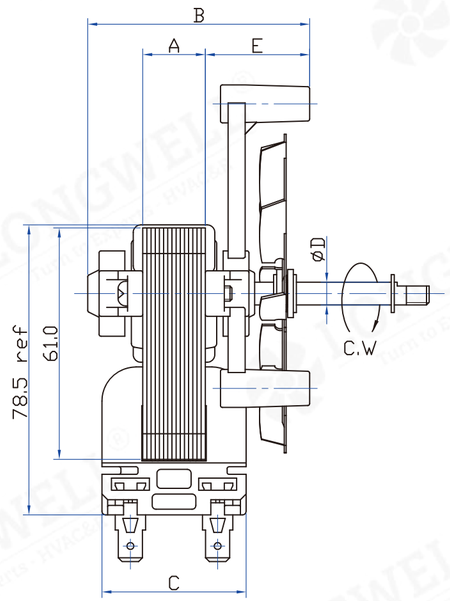
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6116-02	16.5	48.5/51 55.5/57.5	38	6	18.5 21 25.5 27.5	260	35	7
LWSPM6120-01	20.5	52.5/55 59.5/61.5	42			350	45	10.3
LWSPM6125-01	25.5	57.5/60 64.5/66.5	47			450	53	12.7
LWSPM6130-01	30.5	62.5/65 69.5/71.5	52			560	70	16.8
LWSPM6135-01	35	67/69.5 74/76	57			800	90	22.5
LWSPM6140-01	40.5	72.5/75 79.5/81.5	62			1000	106	26.5

Product Drawing (mm)





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LWSPM61 Series

Product Characteristic

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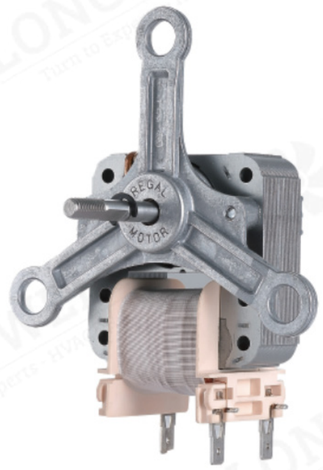
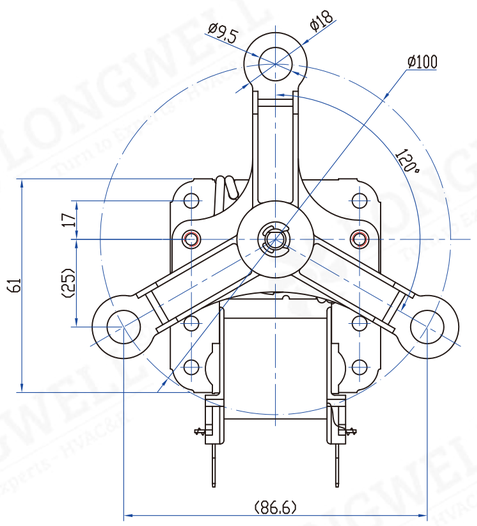
- Features: Low noise/No electromagnetic interference

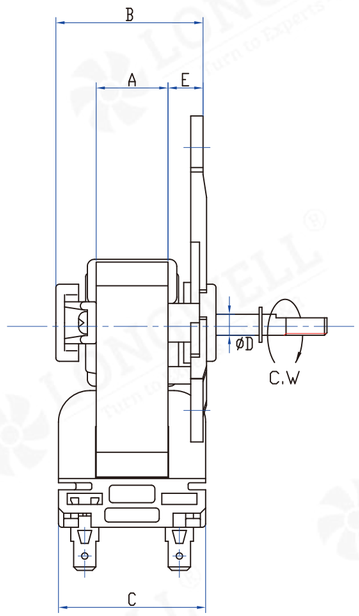


Technical Specifications

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6116-03	16.5	40	38	6	10	260	35	7
LWSPM6120-02	20.5	44	42			350	45	10.3
LWSPM6125-02	25.5	49	47			450	53	12.7
LWSPM6130-02	30.5	54	52			560	70	16.8
LWSPM6135-02	35	58.5	57			800	90	22.5
LWSPM6140-02	40.5	64	62			1000	106	26.5

Product Drawing (mm)





LWSPM61 Series

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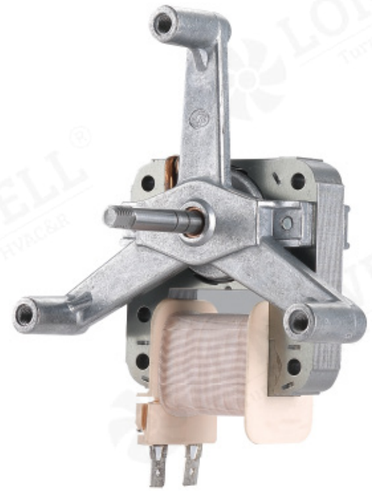
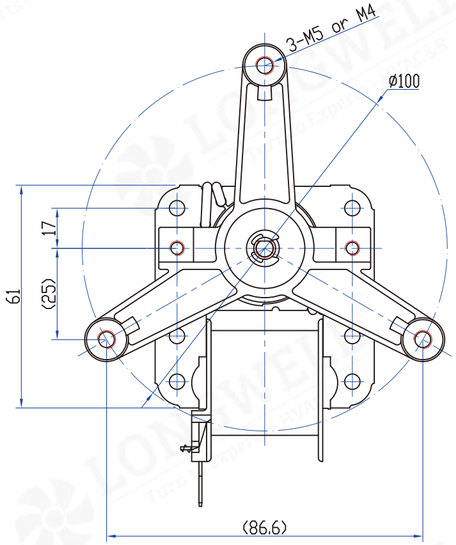
- Power Supply: 100-240V 50/60Hz
- Insulation Class: F/H
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+120℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

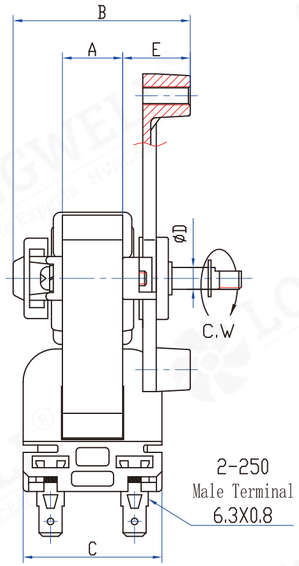


Technical Specifications

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6112-02	12.5	44.5/47 51.5/53.5	31	6	18.5 21 25.5 27.5	120	25	4.2
LWSPM6116-04	16.5	48.5/51 55.5/57.5	38			260	35	7
LWSPM6120-03	20.5	52.5/55 59.5/61.5	42			350	45	10.3
LWSPM6125-03	25.5	57.5/60 64.5/66.5	47			450	53	12.7
LWSPM6130-03	30.5	62.5/65 69.5/71.5	52			560	70	16.8
LWSPM6135-03	35	67/69.5 74/76	57			800	90	22.5

Product Drawing (mm)





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LWSPM48 Series

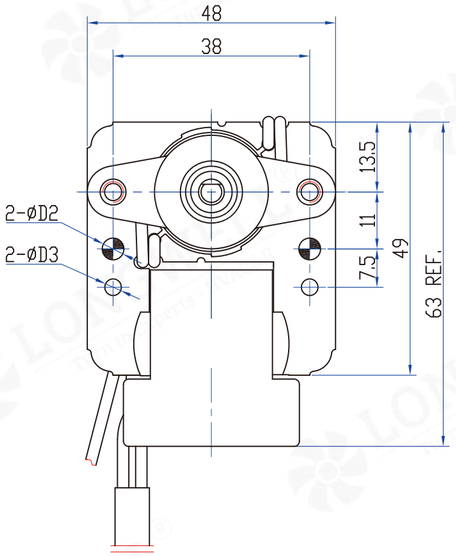
Product Characteristic

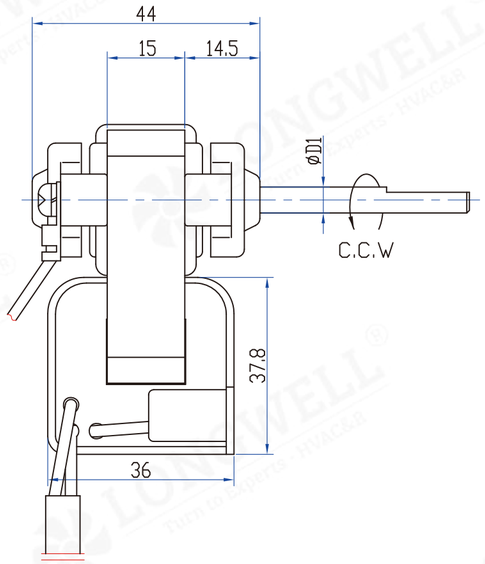
- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B/F
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	D1 (mm)	D2 (mm)	D3 (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM4815-02	4/5	3.2/4.2	3.2/4.2	120	20	3

Product Drawing (mm)





LWSPM61 Series

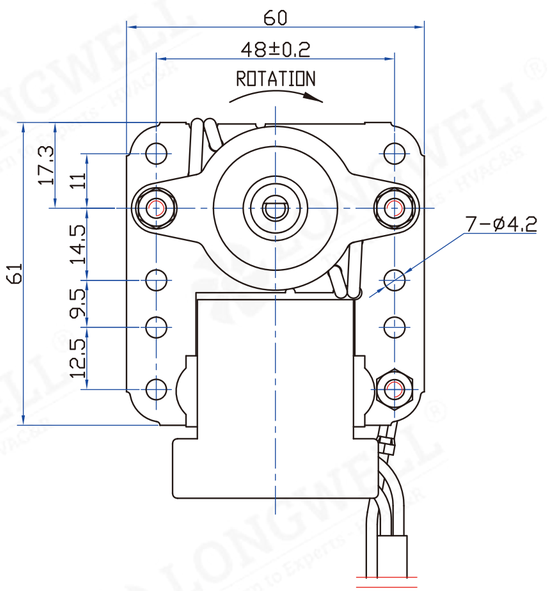
Product Characteristic

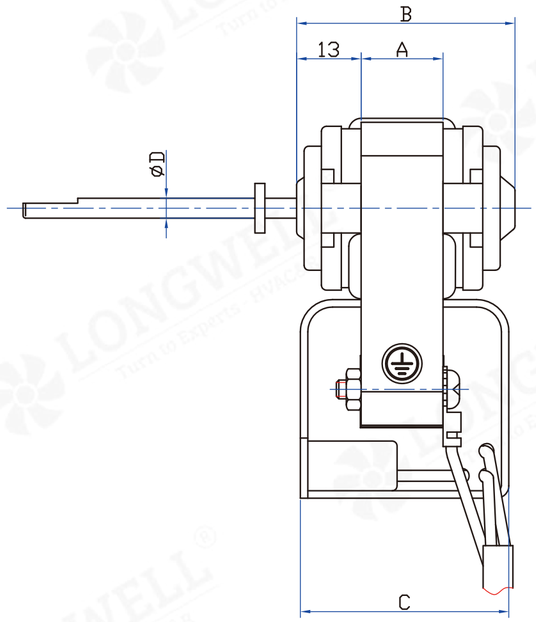
- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B/F
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	A (mm)	B (mm)	C (mm)	D (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6110-02	10	37.5	32	3.17 4	80	18	2.7
LWSPM6113-02	13.5	41	39	4.5	160	28	4.8
LWSPM6116-05	16.5	44	42	4.6 5	260	35	7

Product Drawing (mm)





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LWSPM61 Series

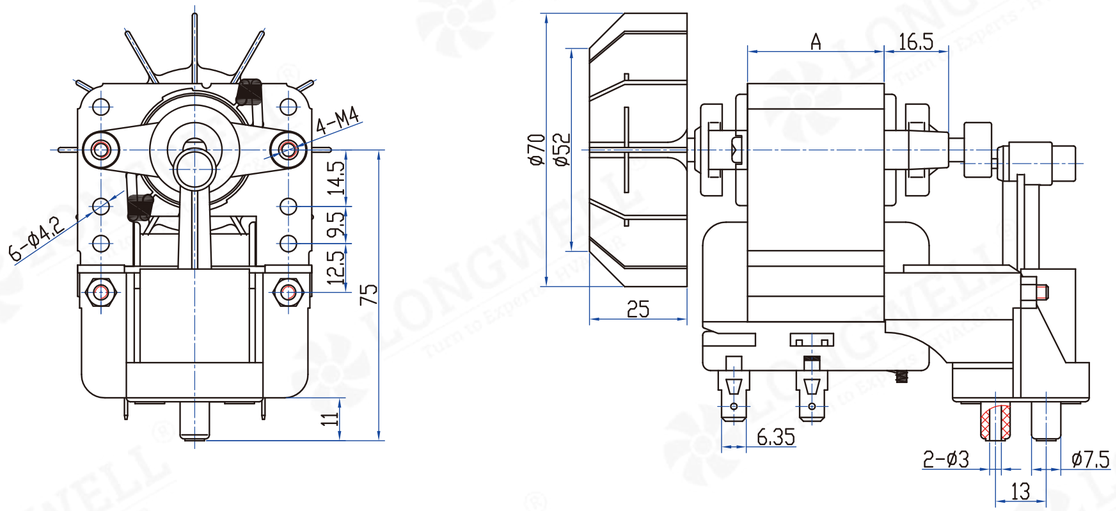
Product Characteristic

- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B/F
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	A (mm)	Voltage (V)	Frequency (Hz)	Max.Input Current (A)	Air Pressure (K Pa)	Charge Volume (m³/min)
LWSPM6125-04	25.5	230	50	0.68	80	0.27
LWSPM6130-04	30.5	230	50	0.73	80	0.3
LWSPM6135-04	35	230	50	0.9	100	0.3
LWSPM6140-03	40.5	230	50	1.05	110	0.36

Product Drawing (mm)



LWSPM68 Series

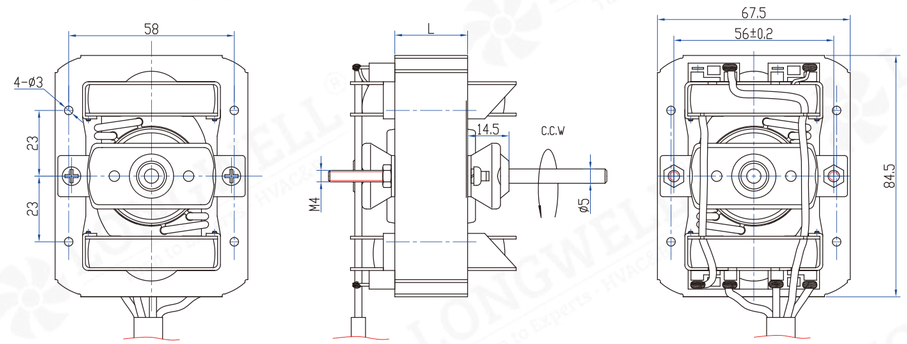
Product Characteristic

- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B/F
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	L (mm)	Voltage (V)	Frequency (Hz)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6818-01	18	230	50	60.3	90	13.25
LWSPM6820-01	20	230	50	68.66	100	14.79
LWSPM6822-01	22	230	50	86.3	106	17.94
LWSPM6825-01	25	230	50	94.1	109	21.67
LWSPM6827-01	27	230	50	103.6	119	23.86
LWSPM6828-01	28	230	50	112.9	123.9	26.01
LWSPM6830-01	30	230	50	128.7	131.5	29.65
LWSPM6833-01	33	230	50	144.4	140	33.25
LWSPM6835-01	35	230	50	155.4	148	35.8
LWSPM6838-01	38	230	50	164.5	151	37.89
LWSPM6840-01	40	230	50	170.8	156	39.33
LWSPM6845-01	45	230	50	181.8	163.8	41.86
LWSPM6850-01	50	230	50	192.3	172.9	44.28

Product Drawing (mm)



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LWSPM48 Series

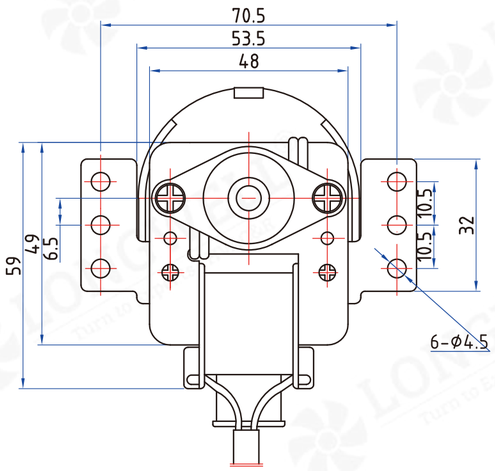
Product Characteristic

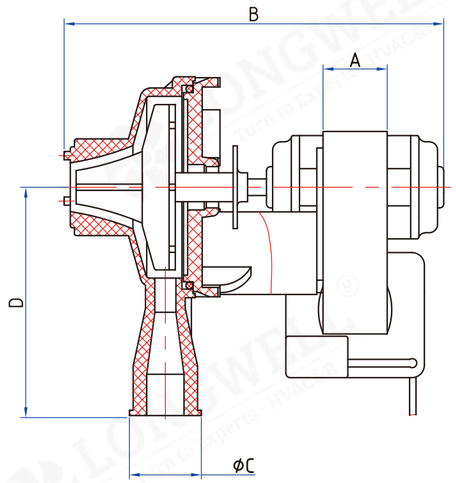
- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B/F
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	A (mm)	B (mm)	C (mm)	D (mm)	Limit Water Level (mm)	Maximum Lift (m)	Displacement (ml/min)
LWSPM4815-03	15	112	14	49	6	0.7	500
LWSPM4820-01	20	117	17	55	6	1.2	500

Product Drawing (mm)





LWSPM61 Series

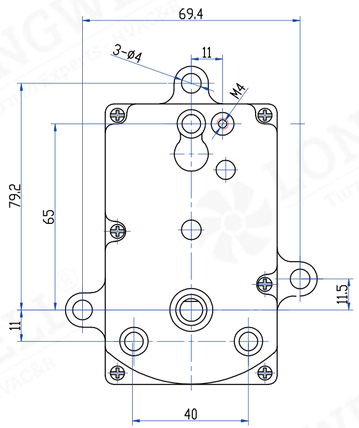
Product Characteristic

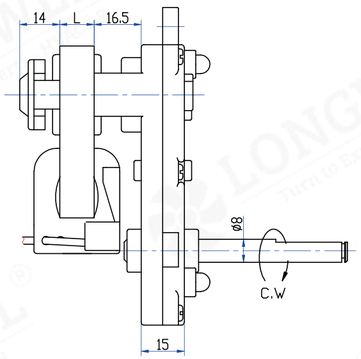
- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B/F/H
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -5℃-+100℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

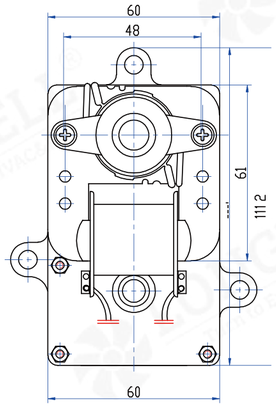
Technical Specifications

Model	L (mm)	Voltage (V)	Rted Speed (r/min)		Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6110-03	10	100-240	50Hz 50±5	60Hz 60±5	0.45	16	2.5
LWSPM6112-03	12.5				0.65	20	3.5
LWSPM6120-04	20.5				1.65	48	9.5
LWSPM6125-05	25.5				2.5	60	12.5
LWSPM6130-05	30.5				2.8	70	15.7

Product Drawing (mm)







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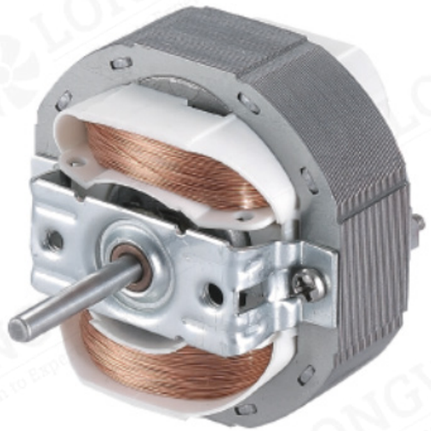
LWSPM58 Series



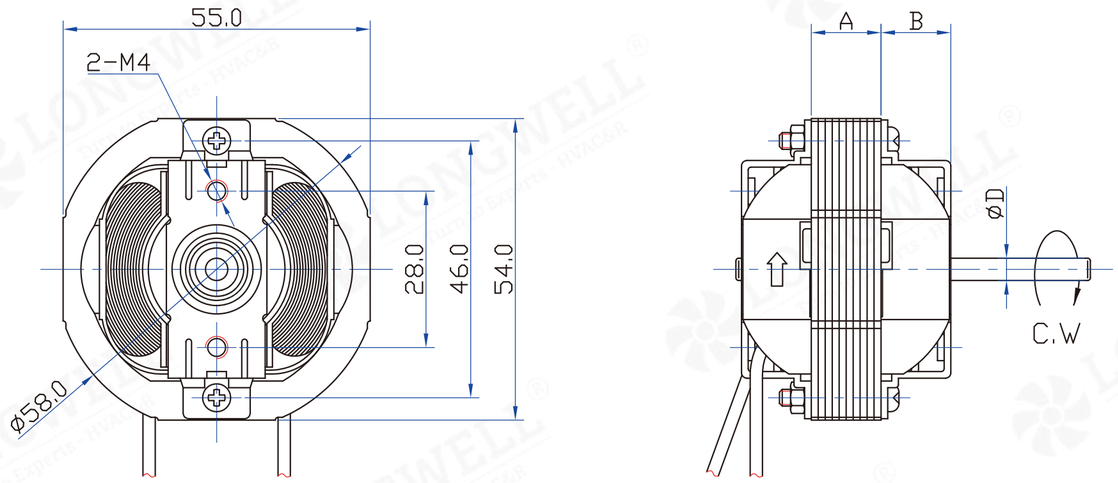
Product Characteristic

- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

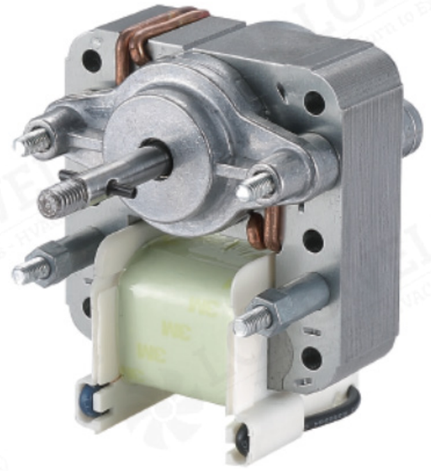
Technical Specifications

Model	A (mm)	B (mm)	D (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM5810-01	10.5	12.5 13.5	4 5 6	80	15	2
LWSPM5812-01	12.5			120	20	3
LWSPM5816-01	16.5			180	28	4.5
LWSPM5820-01	20.5			250	40	6.3
LWSPM5825-01	25.5			320	53	8
LWSPM5830-01	30.5			400	65	10.5
LWSPM5835-01	35.5			480	75	12.5

Product Drawing (mm)



LWSPM61 Series



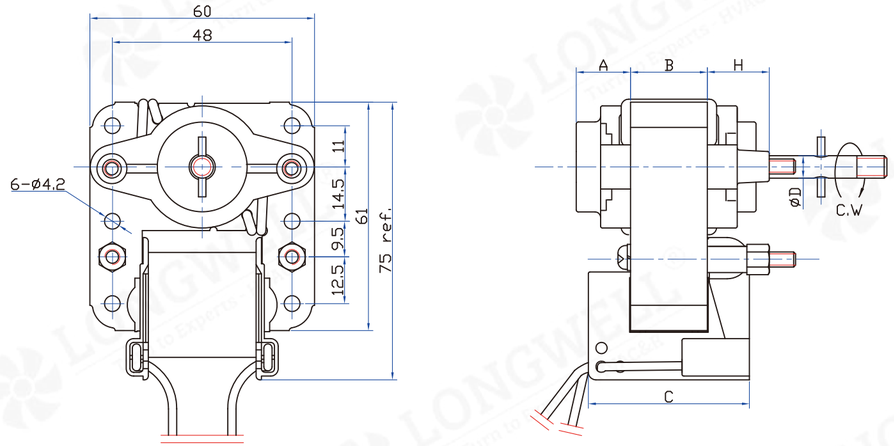
Product Characteristic

- Power Supply: 100-240V 50/60Hz
- Insulation Class: A/E/B
- Bearing: Oil bearing/Rolling bearing
- Operation Environment Condition: -15℃-+80℃
- Shaft Diameter: Φ3.17 Φ4.0 Φ4.5 Φ4.6 Φ5.0 Φ5.5 Φ6.0
- Features: Low noise/No electromagnetic interference

Technical Specifications

Model	A (mm)	B (mm)	C (mm)	H (mm)	D (mm)	Max.Torque (g.cm)	Max.Input Power (W)	Max.Output Power (W)
LWSPM6110-04	13.5 15	10	29	13.5 16.5	3.17 4 4.5 4.6 5 5.5 6	80	18	2.7
LWSPM6112-04		12.5	33			120	25	4.2
LWSPM6113-03		13.5	34			160	28	4.8
LWSPM6115-02		15.5	38			220	30	5.4
LWSPM6116-06		16.5	39			260	35	7
LWSPM6120-05		20.5	43			350	45	10.3
LWSPM6125-06		25.5	48			450	53	12.7
LWSPM6130-06		30.5	53			560	70	16.8
LWSPM6135-05		35	58			800	90	22.5
LWSPM6140-04		40.5	63			1000	106	26.5

Product Drawing (mm)



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LWSPM84 Series

Product Characteristic

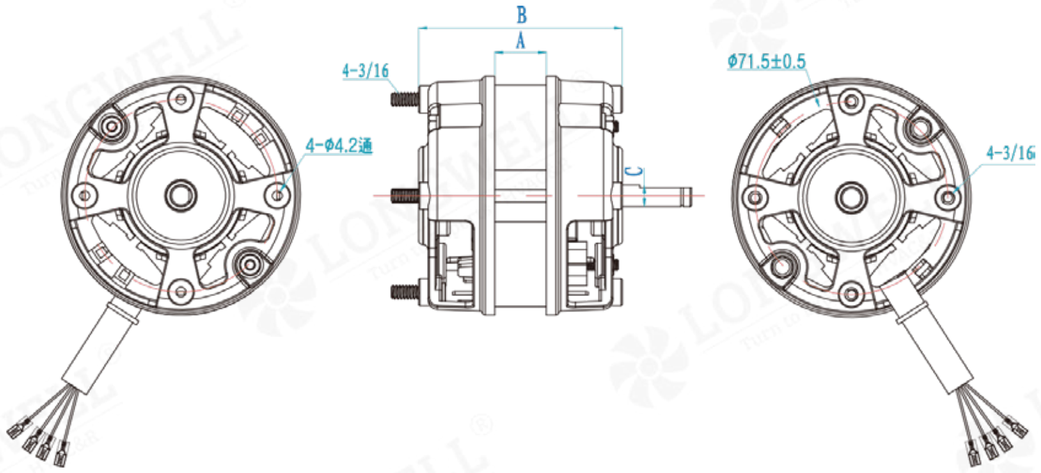
- Stator Lamination Thickness: A=16～23mm
- Applied Voltage: 100～240VAC
- Frequency: 50/60Hz
- Application: Cooker Hood

Technical Specifications

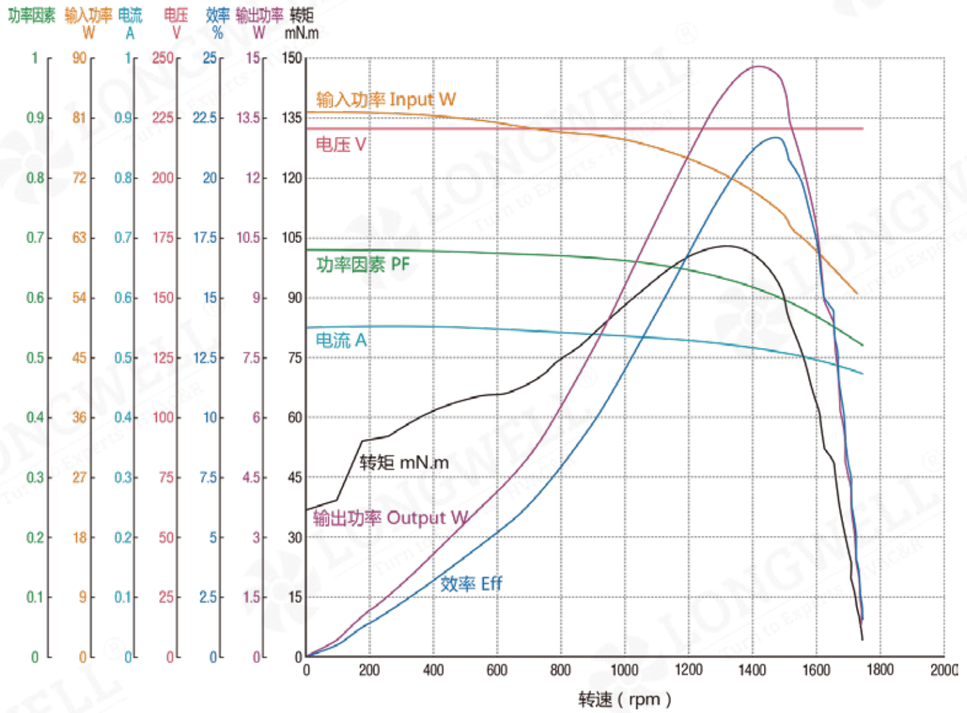
Model	Dim.A	Dim.B	Dim.C	Voltage (V)	Frequency (Hz)	Max.Torque (mN.m)	Max.Input Power (W)	Max.Output Power (W)
LWSPM8420-01	20	73	Φ8	100-127/220-240	50/60	100	65	15

Performance Parameter *(Take stack 20mm as an example)*

	Voltage (V)	Current (A)	Input Power (W)	Torque (mN.m)	Speed (rpm)	Output Power (W)	Eff (%)	PF	Frequency (Hz)
No-Load	219.47	0.472	53.792	4.696	1745.5	0.858	1.6	0.519	60
Max Eff	219.47	0.507	66.701	92.571	1487.23	14.417	21.61	0.599	60
Max Output Power	219.47	0.511	68.433	97.989	1435.65	14.732	21.53	0.61	60
Max Torque	219.47	0.521	71.991	102.363	1321.6	14.167	19.68	0.63	60



Curve Chart



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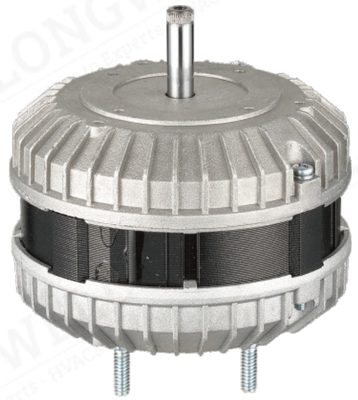
LWSPM96 Series



Product Characteristic

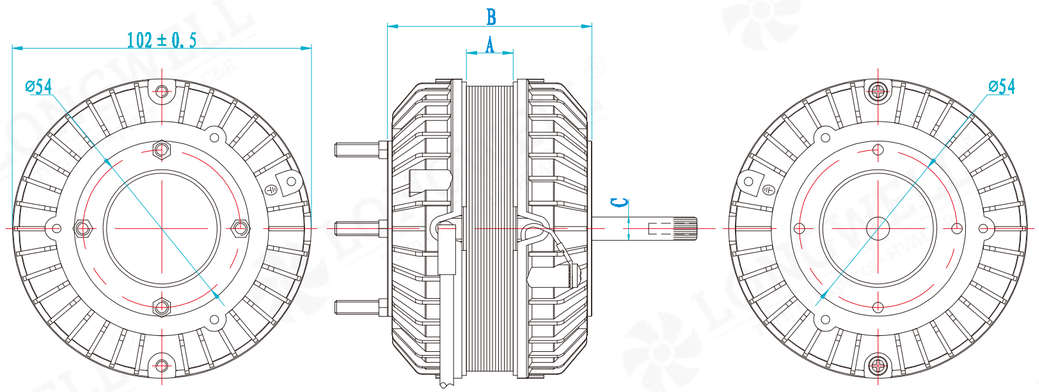
- Stator Lamination Thickness: A=19～39mm
- Applied Voltage: 100～240VAC
- Frequency: 50/60Hz
- Application: Exhaust Fan

Technical Specifications

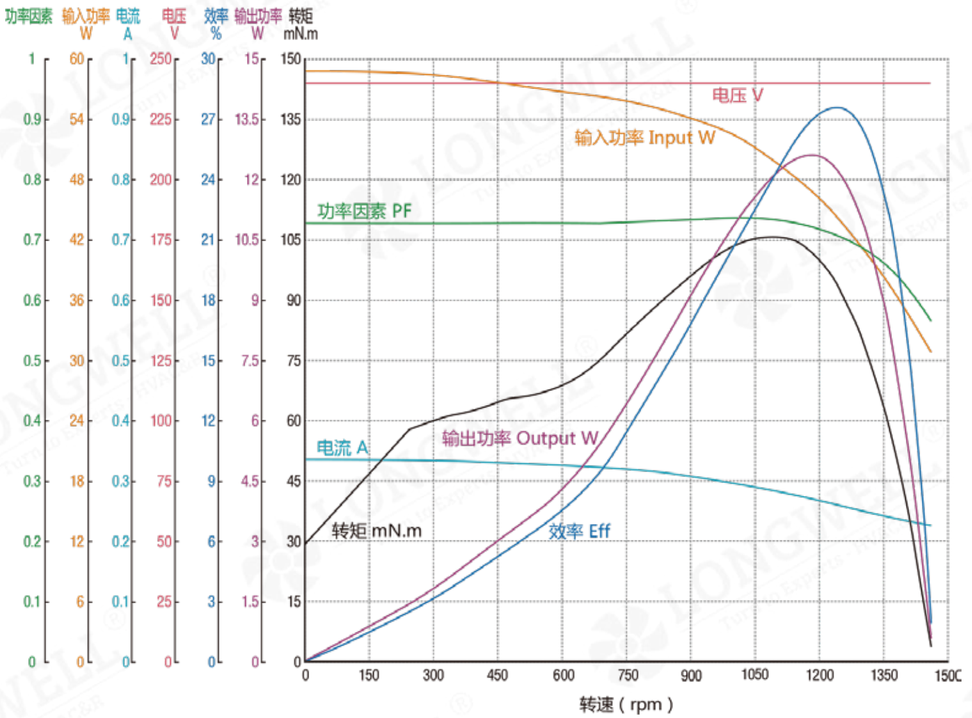
Model	Dim.A	Dim.B	Dim.C	Voltage (V)	Frequency (Hz)	Max.Torque (mN.m)	Max.Input Power (W)	Max.Output Power (W)
LWSPM9619-01	19	70	Φ8	100-127/220-240	50/60	105	60	13

Performance Parameter *(Take stack 19mm as an example)*

	Voltage (V)	Current (A)	Input Power (W)	Torque (mN.m)	Speed (rpm)	Output Power (W)	Eff (%)	PF	Frequency (Hz)
No-Load	239.54	0.23	30.949	4.57	1461.63	0.699	2.26	0.562	50
Max Eff	239.54	0.264	44.749	95.763	1231.64	12.351	27.6	0.708	50
Max Output Power	239.54	0.272	46.913	102.167	1181.1	12.636	26.94	0.719	50
Max Torque	239.54	0.285	49.891	105.335	1095.3	12.082	24.22	0.73	50



Curve Chart



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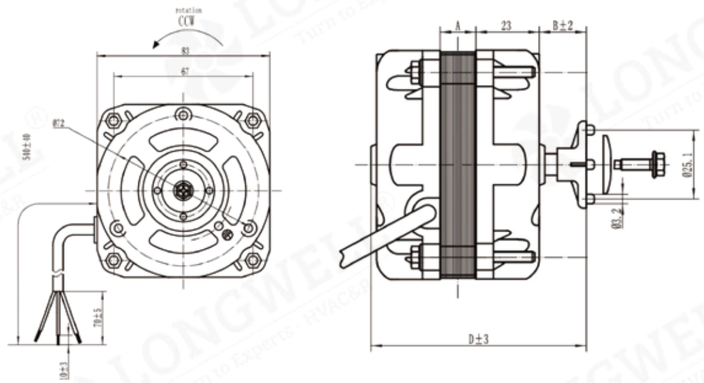
Shaded Pole Motor

Product Characteristic

- Type: AC Shaded Pole Motor
- Bearing Type: Ball bearing/Sleeve Bearing
- Operation Temperature:-30 ℃~+60 ℃
- Insulation Class : B/F/H
- Certification : UL/CE/CCC/TUV



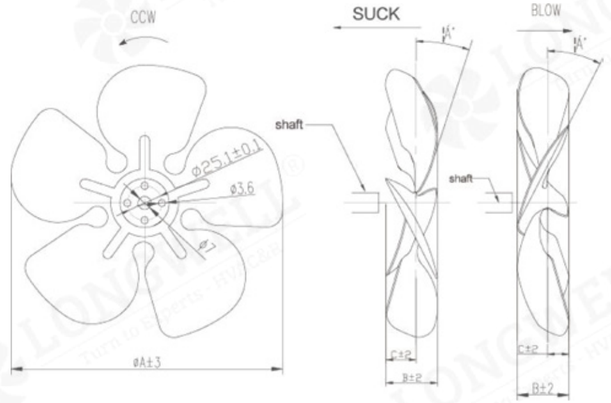
Parameter Table

Model	Voltage (V)	Frequency (Hz)	Input Power (w)	Output Power (w)	Current (A)	Speed (RPM)	Fan Blade (mm)	Weight (kg)	A (mm)	B (mm)	D (mm)
YZ5-13-00	220-240	50/60	33	5	0.21	1300	φ200	0.8	13	17	76
YZ5-13-00	110-120	60	33	5	0.55	1550	φ200	0.8	13	17	76
YZ7-20-00	220-240	50/60	38	7	0.23	1300	φ230	1.1	19	17	83
YZ10-20-00	220-240	50/60	40	10	0.25	1300	φ230	1.1	19	17	83
YZ10-20-00	110-120	60	40	10	0.8	1550	φ230	1.1	19	17	83
YZ16-25-00	220-240	50/60	70	16	0.45	1300	φ250	1.4	25	23	94
YZ16-25-00	110-120	60	70	16	1.01	1550	φ250	1.4	25	23	94
YZ18-30-00	220-240	50/60	73	18	0.5	1300	φ250	1.5	30	24	100
YZ18-30-00	110-120	60	75	18	1.1	1550	φ250	1.5	30	24	100
YZ25-40-00	220-240	50/60	95	25	0.7	1300	φ300	1.8	40	25	111
YZ25-40-00	110-120	60	100	25	1.4	1550	φ300	1.8	40	25	111
YZ34-45-00	220-240	50/60	120	34	0.85	1300	φ300	2	45	29	120
YZ34-45-00	110-120	60	110	34	1.5	1550	φ300	2	45	29	120

Fan Blades

Product Characteristic

- Type: AC Shaded Pole Motor
- Blade Material : Aluminum alloy/Plastic



Installation dimension sheet

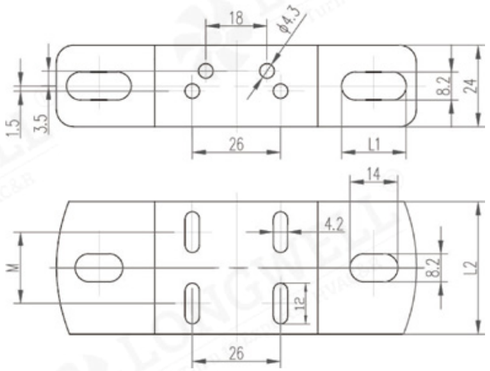
Model	Angle	19°		22°		25°		28°		31°		34°		δ
	A	B	C	B	C	B	C	B	C	B	C	B	C	
¢154	154	24	13	27	14	31	16	34	17	37	19	40	21	0.8±0.03
¢172	170	25	13	28	15	31	16	35	18	40	20	42	21	0.8±0.03
¢200	198	27	14	30	16	33	17	37	19	41	21	44	23	0.8±0.03
¢230	230	31	15	33	16	37	19	41	21	43	22	45	23	0.8±0.03
¢250	248	31	15	34	17	37	19	40	21	43	22	45	23	0.8±0.03
¢254	254	32	15	35	17	38	19	41	21	44	22	47	23	0.8±0.03
¢300	298	31	16	35	17	41	22	44	23	48	25	52	27	1±0.03

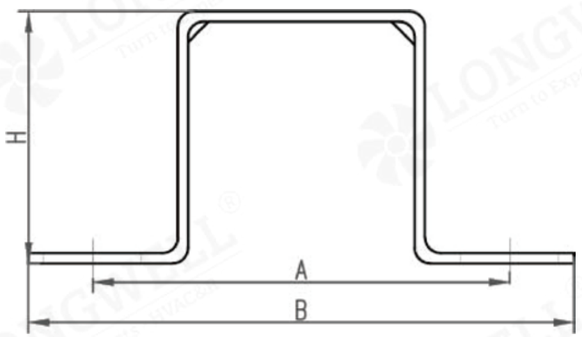
Model(a°)	YZF5-13		YZF7-20		YZF10-20		YZF16-25		YZF18-30		YZF25-40		YZF34-45	
¢154	28	31	/	/	/	/	/	/	/	/	/	/	/	/
¢172	28	31	/	/	/	/	/	/	/	/	/	/	/	/
¢200	28	/	28	31	28	31	31	/	/	/	/	/	/	/
¢230	/	/	28	/	28	/	/	/	/	/	/	/	/	/
¢250	/	/	/	/	/	/	22	28	/	28	31	/	/	/
¢254	/	/	/	/	/	/	/	28	28	31	31	/	/	/
¢300	/	/	/	/	/	/	/	/	/	22	22	25	25	28

Fan Bracket

Product Characteristic

- Material: Iron
- Website: https://www.longwellfans.com
- Email:sales@zjlongwell.com





Installation dimension sheet

Model	H	A	B	L1	L2	M
H55	55	81	106	13	/	/
H62	64	81	106	13	/	/
H72	72	81	106	13	/	/
H84	84	81	106	20	/	/
H90	90	81	106	20	/	/
H109-1	109	81	106	14	/	/
H109-2	109	78	100	14	39	21
H109-3	109	78	100	14	49	31

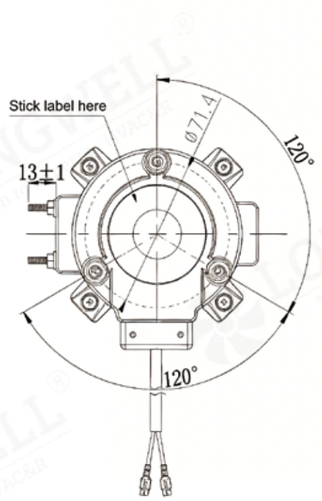
BMC Encapsulated Shaded Pole Motor

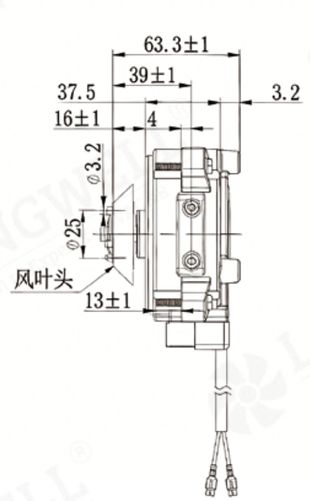
Product Characteristic

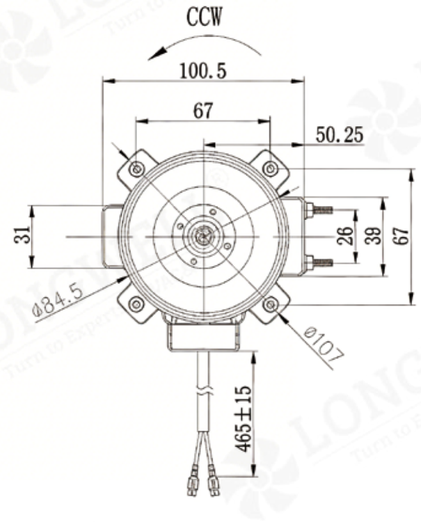
- Material: BMC Material
- Mode of Operation: S1
- Insulation Class: F
- Type of Protection: IP54
- Environmental Temperature: -30℃~+50℃

Technical Specifications

Model	Voltage (V)	Frequency (Hz)	Output Power (W)	Fan Blade Model	Speed (r/min)	Capacitor (uF)	Air Volume (m^3/h)	Weight (kg)
LWYSS4-5-01	220-240	50/60	5	L200/34°	1300/1500	1.2	500	0.68
LWYSS4-10-01	220-240	50/60	10	L250/28°	1300/1500	1.5	850	0.75
LWYSS4-16-01	220-240	50/60	16	L300/22°	1300/1500	1.8	1000	0.83







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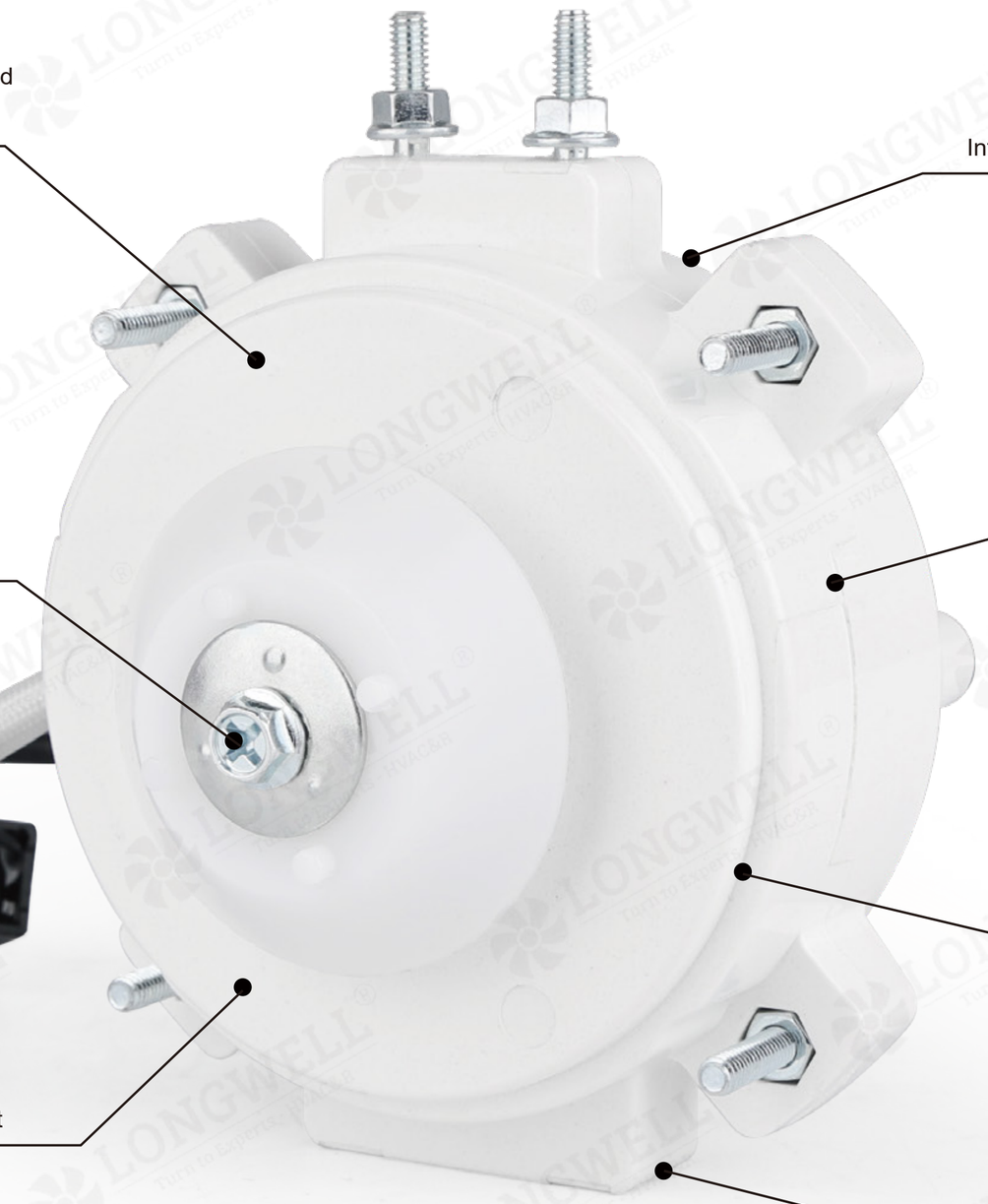
Fully compatible with older models and offers broader applicability

Height is reduced by more than 1 cm, and weight is reduced by more than 10%

1.Ball Bearing
2.The air gap between the stator and rotor is only 0.15mm

Noise reduction of 15%



Integrated Structure

1.Moisture-proof
2.Dust-proof
3.Vibration Reduction

BMC Material

1.High Strength, Rigidity & Corrosion Resistance
2.High-Temperature Resistance: Heat Deflection Temperature up to 200–250°C; long-term service temperature 150–180°C.
3.Dimensional Stability
4.Ignition Point: 800°C rated
5.Electrical Insulation

IP54

1.Prevents the ingress of harmful dust
2.Protection against harmful effects due to water splashing from any direction

Lightweight

Material densities:
BMC: 1.8 g/cm³
Aluminum: 2.7 g/cm³
Steel: 7.9 g/cm³
BMC is 30% lighter than the same volume of aluminum, and 76% lighter than the same volume of stainless steel

Enhanced Insulation

Requires one power ground wire