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HANGZHOU ZHONGDA MOTOR CO.,LTD.

COMPANY PROFILE

Hangzhou zhongda motor co., LTD., founded in 1987, is a national high-tech enterprise specialized in the research, development, production and sales of motor and drive power supply of motion control, and has been committed to building a leading enterprise of micro-special motor of motion control in China.

The company is located in Yunqi town, Xihu district, hangzhou city, with an existing production site of 9,000 square meters, three production lines, one of which is automatic production line. It has a production scale of 80,000 sets of energy-saving servo motors annually. The company adopts GB/ T19001-2016 quality management system standard, which has passed China's energy-saving product certification and CE certification, and has obtained one national invention patent and six utility model patents.

The company's self-developed permanent magnet ac servo motor products have covered the whole series of 60, 80, 90, 110, 130, 180, 200 series, various stepper motor, permanent magnet synchronous motor and driver. Products are widely used in CNC machine tools, embroidery textile, laser processing, printing packaging, carving machinery, industrial robots, medical testing equipment and other automatic control areas. Looking to the future, the company will, as always, adhere to the "truth-seeking, pragmatic, innovative, integrity" of the corporate philosophy, with high-quality products, good reputation and excellent services to meet customer needs.



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60 Series

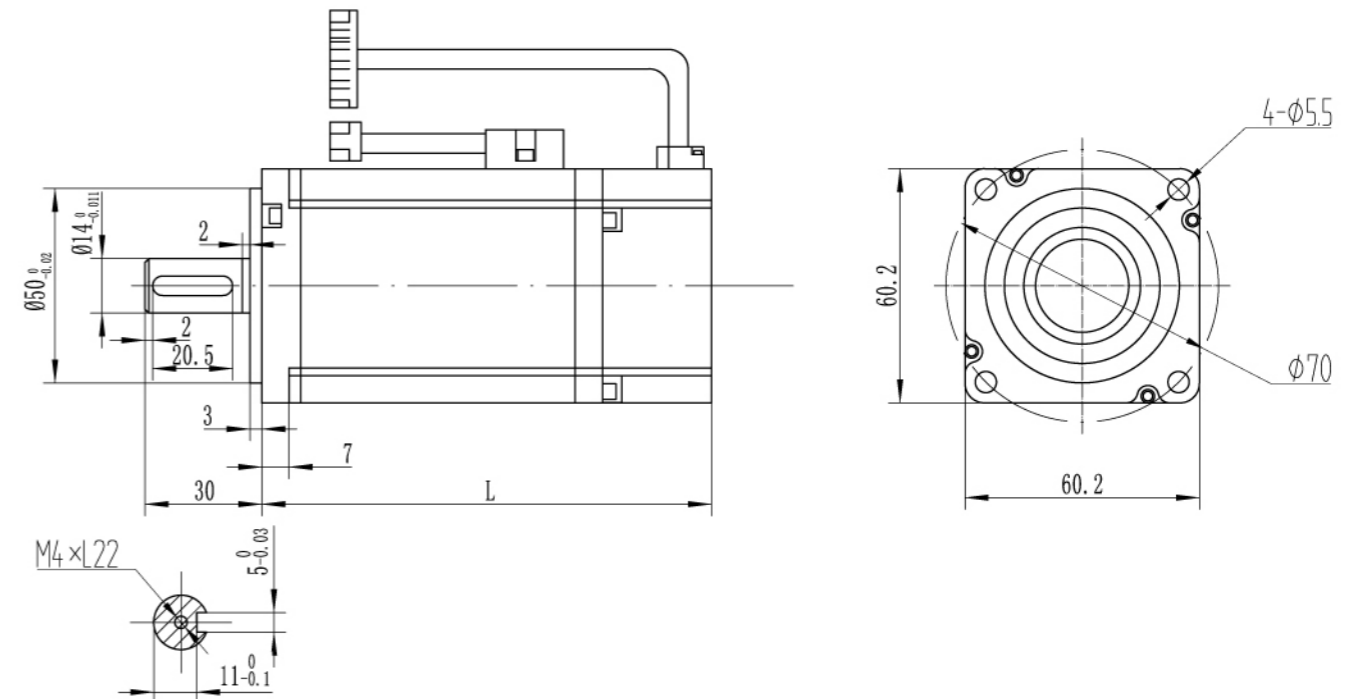
Motor model	60SFM-E00630	60SFM-E01330	60SFM-E01930
Rated power(KW)	0.2	0.4	0.6
Rated current(A)	1.8	2.6	3.1
Holding torque(N.M)	0.64	1.27	1.91
Rated speed(rpm)	3000	3000	3000
Rotor inertia(Kg·m ²)	0.264×10 ⁻⁴	0.407×10 ⁻⁴	0.526×10 ⁻⁴
Torque coefficient(N.M/A)	0.49	0.48	0.61
Voltage constant (V/1000r/min)	26	31	38
Line-Line Resistance(Ω)	7.1	3.8	3.7
Line-Line Inductance(mh)	36.5	19.2	26.4
Mechanical time-constant(ms)	4.7	5.05	7.1
Weight(Kg)	1.2	1.6	2.0
Input voltage(V)	AC220		
Encoder line number(PPR)	2500/5000/ 17bit/23bit		
Number of pole-pairs	4		
Insulation class	F		
Safety class	IP65		
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing		

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE		
	Plug serial number			1			2			3			4		
Photoelectric encoder socket(2500/5000)	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1
Absolute encoder socket(17bit/23bit)	E-		E+		SD-		0V		SD+		5V		PE		
	2		3		4		5		6		7		1		

● Installation Dimension: unit=mm

Specifications	60SFM-E00630	60SFM-E01330	60SFM-E01930
L:Without broke(mm)	109	133	154
L:With broke(mm)	157	181	202





80 Series

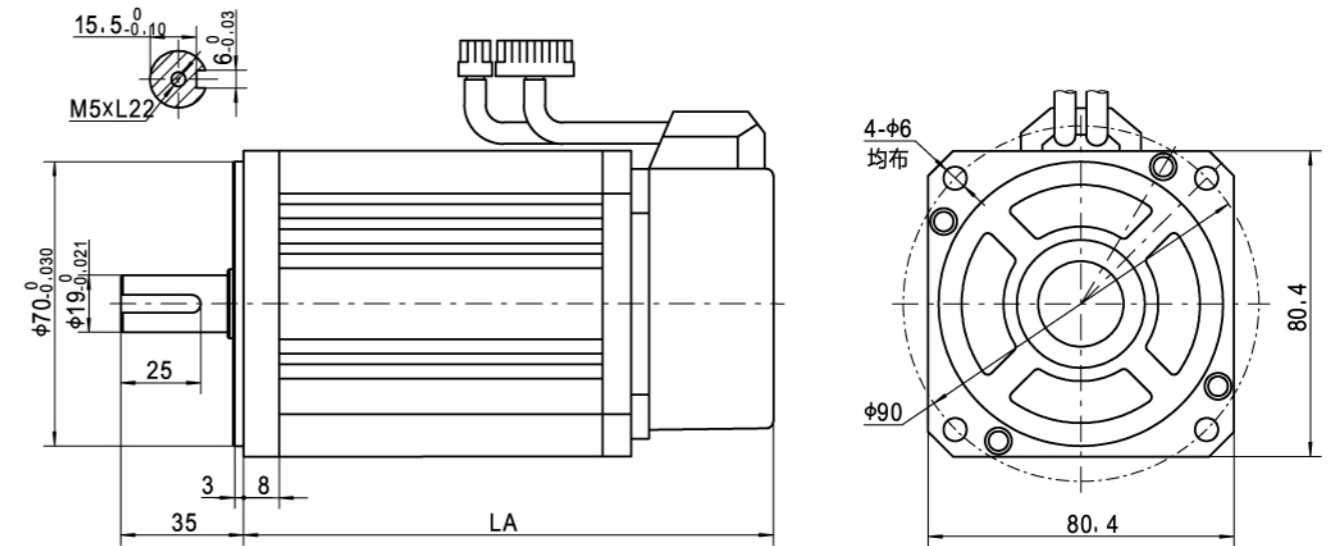
Motor model	80SFM-E01330	80SFM-E02430	80SFM-E03520	SFM-E03530	80SFM-E04025	80SFM-E04030
Rated power(KW)	0.4	0.75	0.73	1.1	1.0	1.2
Rated current(A)	2	3	3	4.0	4.4	4.5
Holding torque(N.M)	1.27	2.39	3.5	3.5	4	4
Rated speed(rpm)	3000	3000	2000	3000	2500	3000
Rotor inertia(Kg·m ²)	1.05×10 ⁻⁴	1.82×10 ⁻⁴	2.63×10 ⁻⁴	2.63×10 ⁻⁴	2.97×10 ⁻⁴	2.97×10 ⁻⁴
Torque coefficient(N.M/A)	0.64	0.8	1.17	0.78	0.9	0.88
Voltage constant(V/1000r/min)	40	50	71	65	54	48.5
Line-Line Resistance(Ω)	4.6	3.0	3.7	3.1	2.3	2.06
Line-Line Inductance(mh)	8.1	5.9	9.1	7.82	4.8	4.49
Machanical time-constant(ms)	1.76	1.96	2.45	2.52	2.09	2.18
Weight(Kg)	1.9	2.9	3.9	3.9	4.1	4.1
Input voltage(V)	AC220					
Encoder line number(PPR)	2500/5000/ 17bit/23bit					
Number of pole-pairs	4/5					
Insulation class	Class F					
Safety class	IP65					
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing					

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE		
	Plug serial number			1			2			3			4		
Photoelectric encoder socket(2500/5000)	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1
Absolute encoder socket(17bit/23bit)	E-		E+		SD-		0V		SD+		5V		PE		
	2		3		4		5		6		7		1		

● Installation Dimension: unit=mm

Specifications	L:Without broke(mm)	L:With broke(mm)
80SFM-E01330	124	166
80SFM-E02430	151	193
80SFM-E03520	179	221
80SFM-E04025	191	233





90 Series

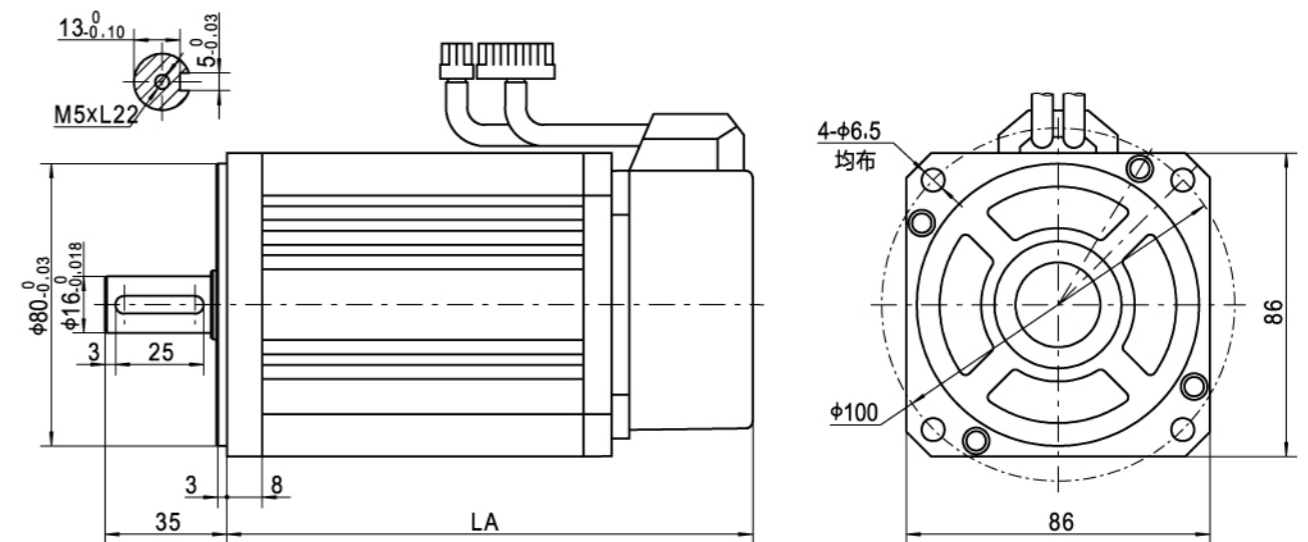
Motor model	90SFM-E02430	90SFM-E03520	90SFM-E04025
Rated power(KW)	0.75	0.73	1.0
Rated current(A)	3	3	4
Rated speed(rpm)	3000	2000	2500
Holding torque(N.M)	2.4	3.5	4
Rotor inertia(Kg-m ²)	2.45×10 ⁻⁴	3.4×10 ⁻⁴	3.7×10 ⁻⁴
Torque coefficient(N.M/A)	0.8	1.2	1.0
Voltage constant(V/1000r/min)	51	67	60
Line-Line Resistance(Ω)	3.2	3.9	2.5
Line-Line Inductance(mh)	6.76	8.6	5.3
Machanical time-constant(ms)	2.1	2.2	2.12
Weight(Kg)	3.1	3.9	4.2
Input voltage(V)	AC220		
Encoder line number(PPR)	2500/5000/ 17bit/23bit		
Number of pole-pairs	4/5		
Insulation class	Class F		
Safety class	IP65		
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing		

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE								
	Plug serial number			1			2			3			4								
Photoelectric encoder socket(2500/5000)	5V	0V	B+	Z-	U+	Z+	U-	A+	V+	W+	V-	A-	B-	W-	PE						
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1						
Absolute encoder socket(17bit/23bit)	PE			E-			E+			SD-			0V			SD+			5V		
	1			2			3			4			5			6			7		

● Installation Dimension: unit=mm

Specifications	L:Without broke(mm)	L:With broke(mm)
90SFM-E02430	150	192
90SFM-E03520	172	214
90SFM-E04025	182	224





110 Series

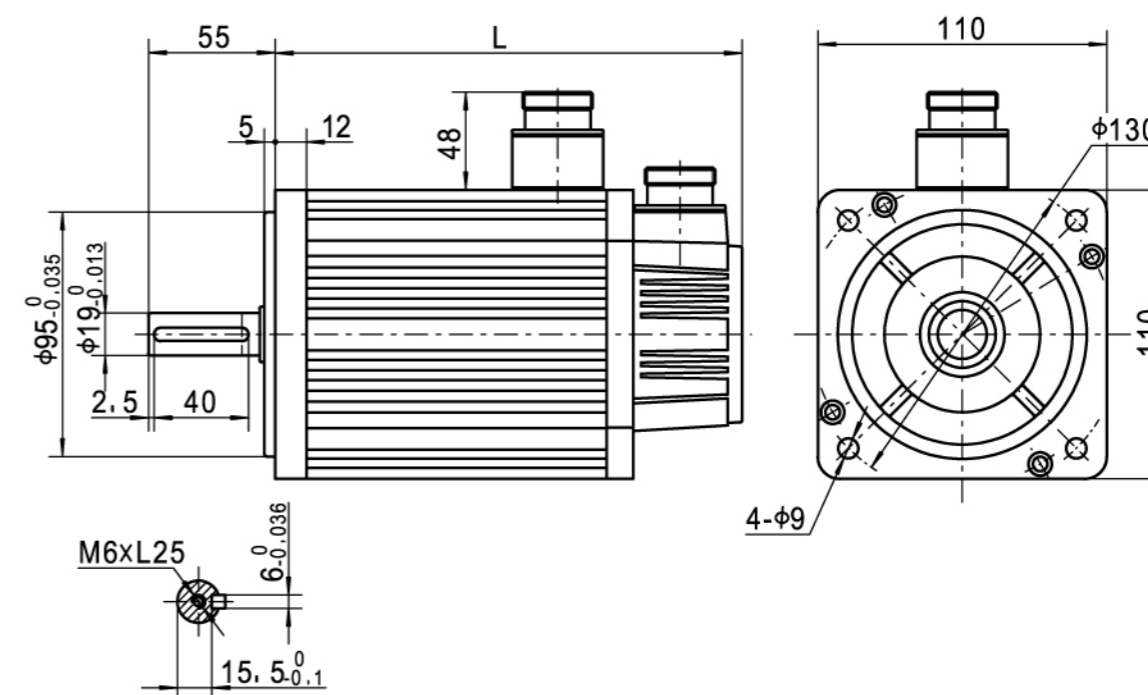
Motor model	110SFM-E 02030	110SFM-E 04020	110SFM-E 04030	110SFM-E 05030	110SFM-E 06020	110SFM-E 06030
Rated power(KW)	0.6	0.8	1.2	1.5	1.2	1.8
Rated current(A)	2.5	3.5	5.0	6.0	4.5	6.0
Rated speed(rpm)	3000	2000	3000	3000	2000	3000
Holding torque(N.M)	2	4	4	5	6	6
Rotor inertia(Kg·m ²)	0.31×10 ⁻³	0.54×10 ⁻³	0.54×10 ⁻³	0.63×10 ⁻³	0.76×10 ⁻³	0.76×10 ⁻³
Torque coefficient(N.M/A)	0.8	1.14	0.8	0.83	1.33	1.0
Voltage constant(V/1000r/min)	57	79	54	63	83	61
Line-Line Resistance(Ω)	3.6	2.5	1.05	1.03	1.46	0.78
Line-Line Inductance(mh)	8.32	7.4	3.4	3.43	4.9	2.68
Mechanical time-constant(ms)	2.3	2.96	3.24	3.33	3.35	3.45
Weight(Kg)	4.2	6	6	6.8	7.9	7.9
Input voltage(V)	AC220					
Encoder line number(PPR)	2500/5000/ 17bit/23bit					
Number of pole-pairs	4/5					
Insulation class	F					
Safety class	IP65					
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing					

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE								
	Plug serial number			2			3			4			1								
Photoelectric encoder socket(2500/5000)	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE						
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1						
Absolute encoder socket(17bit/23bit)	PE			E-			E+			SD-			0V			SD+			5V		
	1			2			3			4			5			6			7		

● Installation Dimension: unit=mm

Holding torque(N.M)	2	4	5	6
L:Without broke(mm)	159	189	204	219
L:With broke(mm)	224	254	269	284





130 Series(220V)

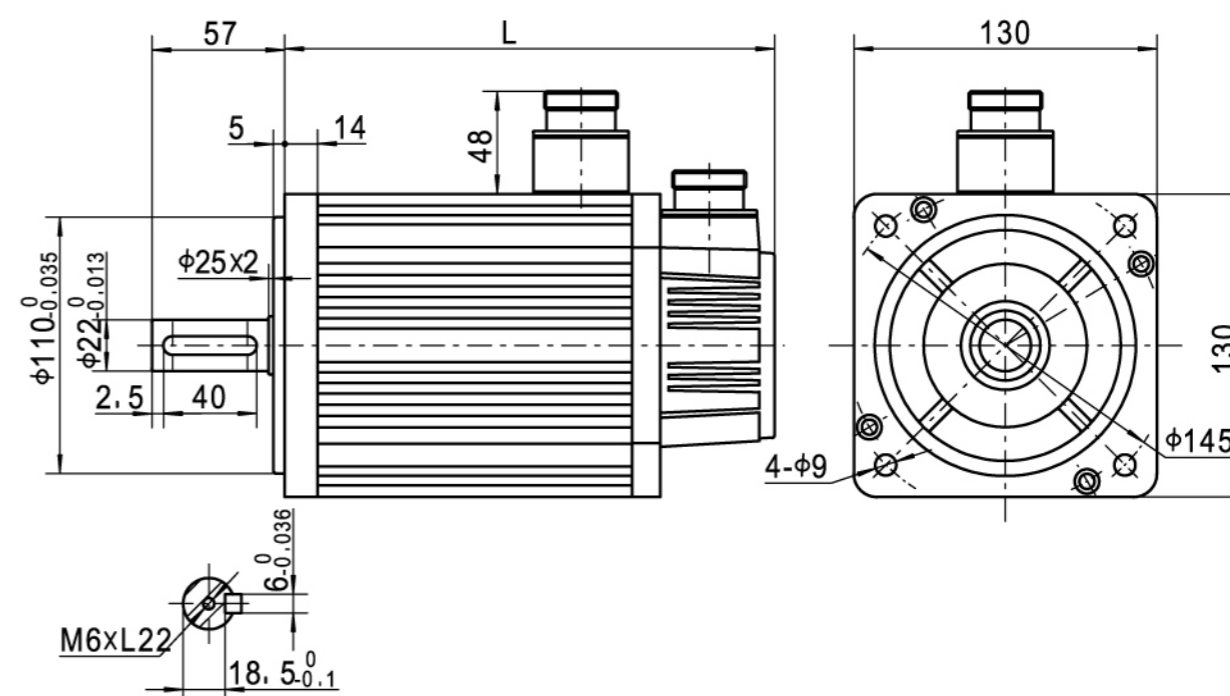
Motor model	130SFM-E04025	130SFM-E05025	130SFM-E06025	130SFM-E07725	130SFM-E10010	130SFM-E10015	130SFM-E10025	130SFM-E15015	130SFM-E15025
Rated power(KW)	1.0	1.3	1.5	2.0	1.0	1.5	2.6	2.3	3.8
Rated current(A)	4.0	5.0	6.0	7.5	4.5	6.0	10	9.5	13.5
Holding torque(N.M)	4	5	6	7.7	10	10	10	15	15
Rated speed(rpm)	2500	2500	2500	2500	1000	1500	2500	1500	2500
Rotor inertia(Kg·m ²)	0.85×10 ⁻³	1.06×10 ⁻³	1.26×10 ⁻³	1.53×10 ⁻³	1.94×10 ⁻³	1.94×10 ⁻³	1.94×10 ⁻³	2.77×10 ⁻³	2.77×10 ⁻³
Torque coefficient (N.M/A)	1.0	1.0	1.0	1.03	2.2	1.67	1.0	1.58	0.49
Voltage constant (V/1000r/min)	73	67	65	66	134	103	69	114	70
Mechanical time-constant(ms)	2.24	3.54	3.08	2.91	3.6	3.58	4.04	4.04	4.48
Line-Line Resistance(Ω)	2.9	1.83	1.28	1.01	2.84	1.5	0.75	1.1	0.49
Line-Line Inductance(mh)	6.81	6.42	3.95	2.94	10.23	5.37	3.03	4.45	2.2
Input voltage(V)	AC220								
Encoder line number(PPR)	2500/5000/ 17bit/23bit								
Number of pole-pairs	4/5								
Insulation class	F								
Safety class	IP65								
The operating of Environmental Conditions	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing								

● Wiring definition

Motor winding plug	Winding lead wire			U			V			W			PE			
	Plug serial number			2			3			4			1			
Photoelectric encoder socket(2500/5000)	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	
Absolute encoder socket(17bit/23bit)	PE			E-			E+			SD-			SD+			5V
	1			2			3			4			5			6

● Installation Dimension: unit=mm

Holding torque(N.m)	4	5	6	7.7	10			15		
					1000rpm	1500rpm	2500rpm	1500rpm	2500rpm	
L:Without broke(mm)	166	171	179	192	213			209	241	231
L:With broke(mm)	226	231	239	252	276			272	304	294





130 Series(380V)

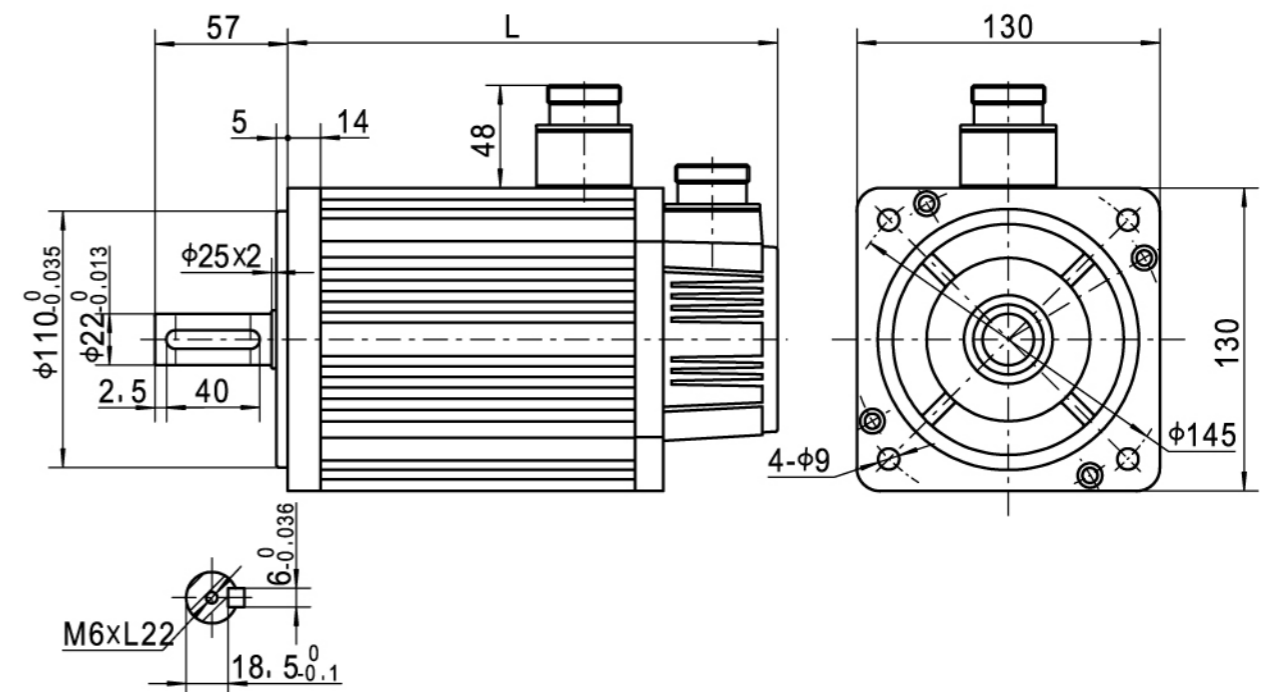
Motor model	130SFM-E10010	130SFM-E10015	130SFM-E10025	130SFM-E15015	130SFM-E15025
Rated power(KW)	1.0	1.5	2.6	2.3	3.8
Rated current(A)	2.5	3.5	6.0	5.0	8.8
Holding torque(N.M)	10	10	10	15	15
Rated speed(rpm)	1000	1500	2500	1500	2500
Rotor inertia(Kg·m ²)	1.94×10 ⁻³	1.94×10 ⁻³	1.94×10 ⁻³	2.77×10 ⁻³	2.77×10 ⁻³
Voltage constant (V/1000r/min)	244	177	113	188	110
Torque coefficient(N.M/A)	4	2.85	1.66	3	1.7
Line-Line Resistance(Ω)	4.4	3.80	1.5	2.3	1.36
Line-Line Inductance(mh)	18.7	13.2	6.2	12.3	5.86
Machanical time-constant(ms)	4.25	3.4	4.1	5.3	4.5
Weight(Kg)	10.1	12.1	9.1	12.5	14.5
Input voltage(V)	AC380				
Encoder line number(PPR)	2500/5000/ 17bit/23bit				
Number of pole-pairs	4/5				
Insulation class	F				
Safety class	IP65				
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing				

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE								
	Plug serial number			2			3			4			1								
Photoelectric encoder socket(2500/5000)	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE						
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1						
Absolute encoder socket(17bit/23bit)	PE			E-			E+			SD-			0V			SD+			5V		
	1			2			3			4			5			6			7		

● Installation Dimension: unit=mm

Holding torque(N.m)	4	5	6	7.7	10			15		
					1000rpm	1500rpm	2500rpm	1500rpm	2500rpm	
L:Without broke(mm)	166	171	179	192	213			209	241	231
L:With broke(mm)	226	231	239	252	276			272	304	294





180 Series(220V)

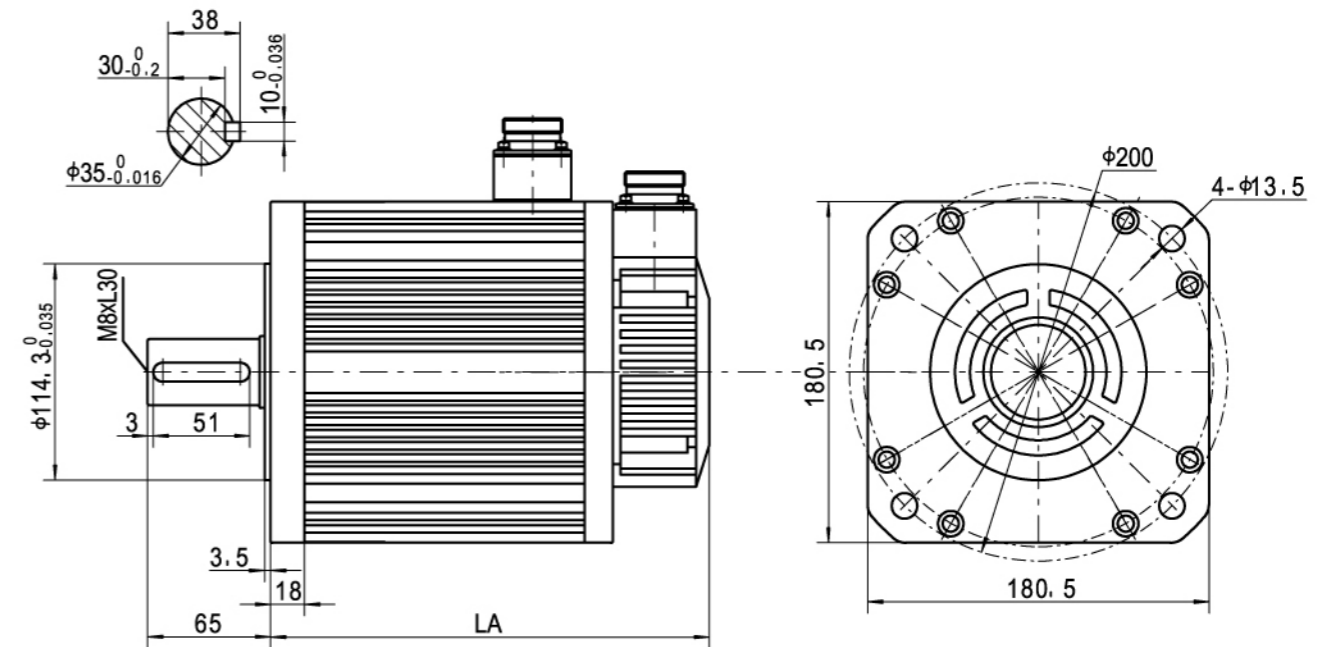
Motor model	180SFM-E19015	180SFM-E21520	180SFM-E27015	180SFM-E35010	180SFM-E35015	180SFM-E48015
Rated power(KW)	3.0	4.5	4.3	3.7	5.5	7.5
Rated current(A)	12	14	16	16	24	32
Holding torque(N.M)	19	21.5	27	35	35	48
Rated speed(rpm)	1500	2000	1500	1000	1500	1500
Rotor inertia(Kg·m ²)	7.0×10 ⁻³	7.96×10 ⁻³	9.64×10 ⁻³	12.25×10 ⁻³	12.25×10 ⁻³	16.72×10 ⁻³
Voltage constant (V/1000r/min)	97	84	103	134	90	94
Torque coefficient (N.M/A)	1.58	1.34	1.69	2.2	1.45	1.5
Line-Line Resistance (Ω)	0.42	0.31	0.32	0.38	0.28	0.11
Line-Line Inductance (mh)	2.42	1.93	1.74	3.28	1.0	0.77
Machanical time-constant (ms)	6.05	6.22	6.2	10.58	7.14	7
Weight(Kg)	20.5	21.5	25.5	30.5	30.5	40
Input voltage(V)	AC220					
Encoder line number(PPR)	2500/5000/ 17bit/23bit					
Number of pole-pairs	4					
Insulation class	F					
Safety class	IP65					
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing					

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE								
	Plug serial number			2			3			4			1								
Photoelectric encoder socket(2500/5000)	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE						
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1						
Absolute encoder socket(17bit/23bit)	PE			E-			E+			SD-			0V			SD+			5V		
	1			2			3			4			5			6			7		

● Installation Dimension: unit=mm

Holding torque(N.m)	19	21.5	27	35	48
L:Without broke(mm)	232	243	262	292	346
L:With broke(mm)	304	315	334	364	418





180 Series(380V)

Motor model	180SFM-E17015	180SFM-E19015	180SFM-E21520	180SFM-E27015	180SFM-E35010	180SFM-E35015	180SFM-E48015
Rated power(KW)	2.5	3.0	4.5	4.3	3.7	5.5	7.5
Rated current(A)	6.5	7.5	9.5	10	10	12	20
Holding torque(N.M)	17	19	21.5	27	35	35	48
Rated speed(rpm)	1500	1500	2000	1500	1000	1500	1500
Rotor inertia(Kg·m ²)	6.5×10 ⁻³	7.0×10 ⁻³	7.96×10 ⁻³	9.64×10 ⁻³	12.25×10 ⁻³	12.25×10 ⁻³	16.72×10 ⁻³
Voltage constant (V/1000r/min)	194	165	140	172	223	179	159
Torque coefficient (N.M/A)	2.6	2.5	2.26	2.7	3.5	2.9	2.4
Line-Line Resistance (Ω)	1.87	1.17	0.88	0.87	1.17	0.69	0.36
Line-Line Inductance (mh)	10.5	7.3	4	5.5	9.1	4.3	2.3
Machanical time-constant (ms)	5.3	6.5	5.6	6.3	9.7	6.2	6.3
Weight(Kg)	19.5	20.5	21.6	25.5	30.5	30.5	40
Input voltage(V)	AC380						
Encoder line number(PPR)	2500/5000/ 17/23bit						
Number of pole-pairs	4						
Insulation class	F						
Safety class	IP65						
The operating of Environmental Conditiongs	Temperature:-20℃~+40℃ Humidity Below90%RH No dewing						

● Wiring definition

Motor winding plue	Winding lead wire			U			V			W			PE			
	Plug serial number			2			3			4			1			
Photoelectric encoder socket(2500/5000)	5V	0V	A+	B+	Z+	A-	B-	Z-	U+	V+	W+	U-	V-	W-	PE	
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	1	
Absolute encoder socket(17bit/23bit)	PE			E-			E+			SD-			SD+			5V
	1			2			3			4			5			6

● Installation Dimension: unit=mm

Holding torque(N.m)	17	19	21.5	27	35	48
L:Without broke(mm)	226	232	243	262	292	346
L:With broke(mm)	298	304	315	334	364	418

