杰美康机电
JUST MOTION CONTROL

Vision: To become a leader in motion control products and personalized solutions

Mission: To continuously create for the benefit of customers, and benefit mankind.

Values: Customer-centric,open collaboration,innovation,and pursuit of excellent

2024 STEPPER CATALOG

SHENZHEN JUST MOTION CONTROL ELECTROMECHANICS CO.,LTD

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Company Development History

2007 — ◆ Company was formally established

2011 — ◆ High/Low-voltage stepper series had producted.

2014 — ◆ Launched AC servo system ◆ Had won the honor of national high-tech enterprise

2016 — ◆ Launched integrated stepper/servo motor

2018 — ◆ Launched CANopen,EtherCAT products ◆ Started the production of linear motors

2024 — ◆ JMC Controller launched on the market.

Honor and Qualification

JMC Stepper Overview :

By implementing latest design and advanced manufacturing technologies, JMC offers stepper motors from frame sizes Nema 8, 11, 14, 16, 17, 23, 24, 34, 42,44.

These stepper motors and drivers are made of premium quality materials. Compared with all stepper motors on the market.

Due to the implementation of highly automated manufacturing process and rigid quality assurance control, JMC DM series stepper motors are highly reliable in the internetional market.

JMC Motor Advantages :

◆ Higher torque in all speed ranges
◆ Higher precision,
◆ Lower heating,
◆ Lower vibration.

JMC Driver Advantages :

◆ Parameter self-tuning,motor self-adaptation
◆ Overcurrent/overvoltage/undervoltage protection
◆ Easy to set the current & subdivision codes

Application

PRODUCTS OVERVIEW

JMC Controller

TX-201

TA133

Stepper Series

Open loop pulse type

Open loop bus type

Closed loop pulse type

Closed loop bus type

Integrated stepper motor

Integrated screw stepper motor

Screw stepper motor

Servo Series

AC servo pulse type

AC servo motor bus type

Integrated servo motor

Srew AC servo motor

Dual axis driver

Integrated srew servo motor

Linear motor

DC Servo Series

DC servo pulse type

DC servo bus type

DC screw type

Stardard type

Gear box/Reducer Planetary/Right angle

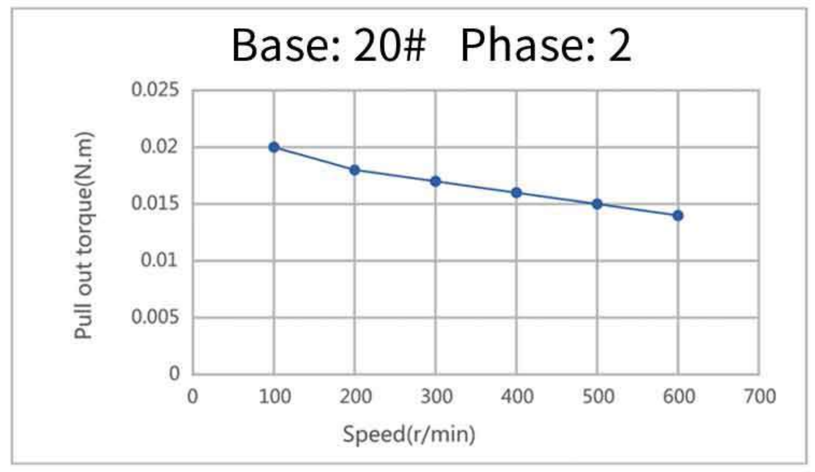
Direct-Drive motor

Hallow-shaft motor

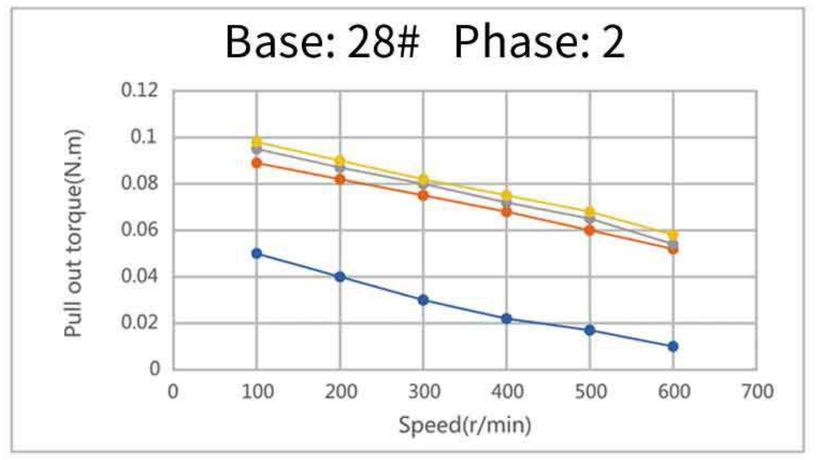
Electric batch

AC/DC power supply

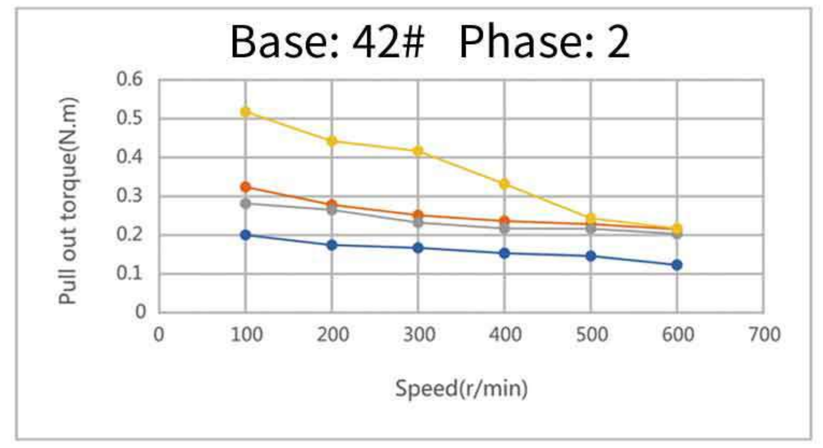
Motor Torque and Speed Graph



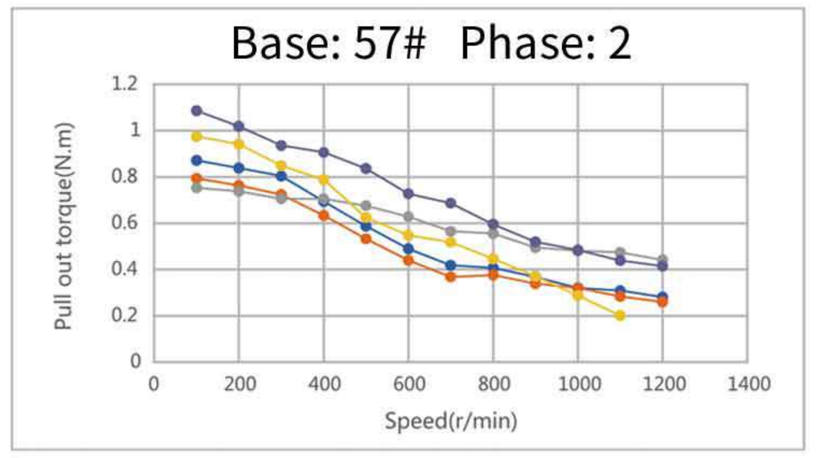
20J1840 - 404/2DM415   24VDC   0.4A   1600 subdivisions



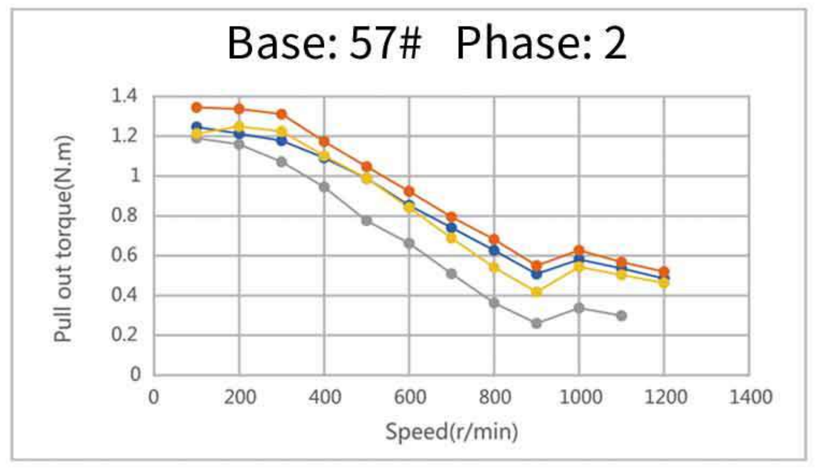
28J1834 - 408/2DM415   24VDC   0.8A   1600 subdivisions
28J1845 - 410/2DM415   24VDC   1.0A   1600 subdivisions
28J1851 - 407/2DM415   24VDC   0.7A   1600 subdivisions
28J1854 - 410/2DM415   24VDC   1.0A   1600 subdivisions



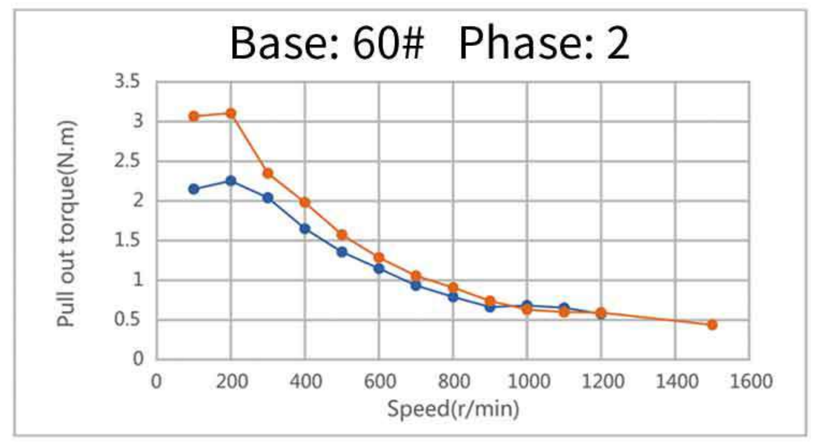
42J1848 - 810 string /2DM415 24VDC 0.7A 1600 subdivisions
42J1848 - 810 Parallel/2DM415 24VDC 1.5A 1600 subdivisions
42J1848 - 425/2DM415   24VDC   2.5A   1600 subdivisions
42J1860 - 417/2DM415   24VDC   1.7A   1600 subdivisions



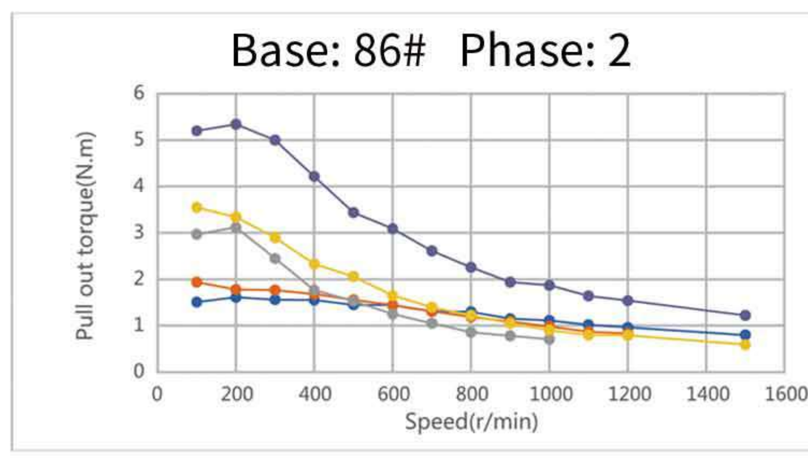
57J1841 - 420/2DM442   36VDC 4.2A   1600subdivisions
57J1854 - 828 string /2DM542 36VDC 2.0A   1600subdivisions
57J1854 - 828 Parallel/2DM542 36VDC 3.9A   1600subdivisions
57J1876 - 828 string /2DM542 36VDC 2·1A   1600subdivisions
57J1876 - 828 Parallel/2DM542 36VDC 3.0A   1600subdivisions



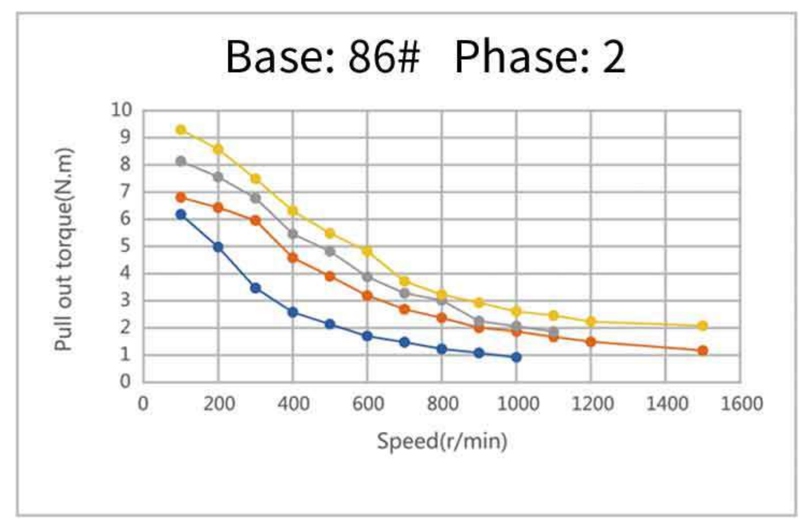
57J1876 - 447/2DM542   36VDC   4.2A   1600 subdivisions
57J1880 - 450/2DM542   36VDC   4.2A   1600 subdivisions
57J1880 - 830 string /2DM542   36VDC   2.1A   1600 subdivisions
57J1880 - 830 Parallel /2DM542   36VDC   2.0A   1600 subdivisions



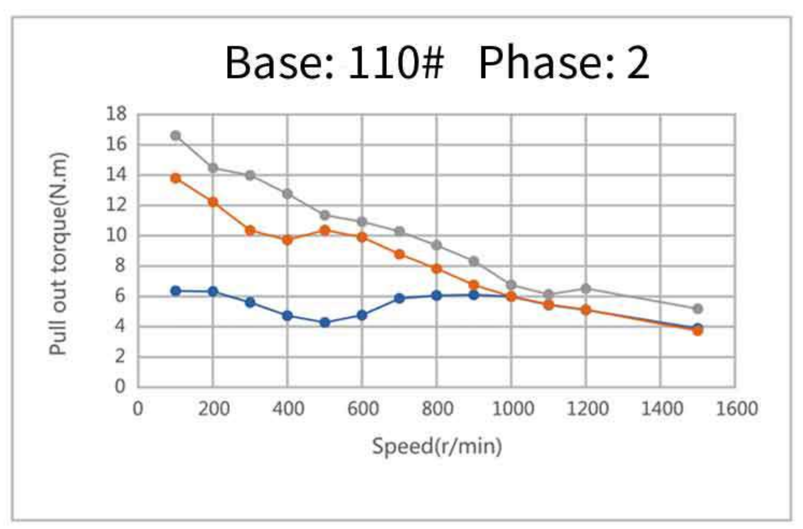
60J1887 - 440/2DM556   48VDC   4.0A   1600 subdivisions
60J18100 - 440/2DM556   48VDC   4.0A   1600 subdivisions



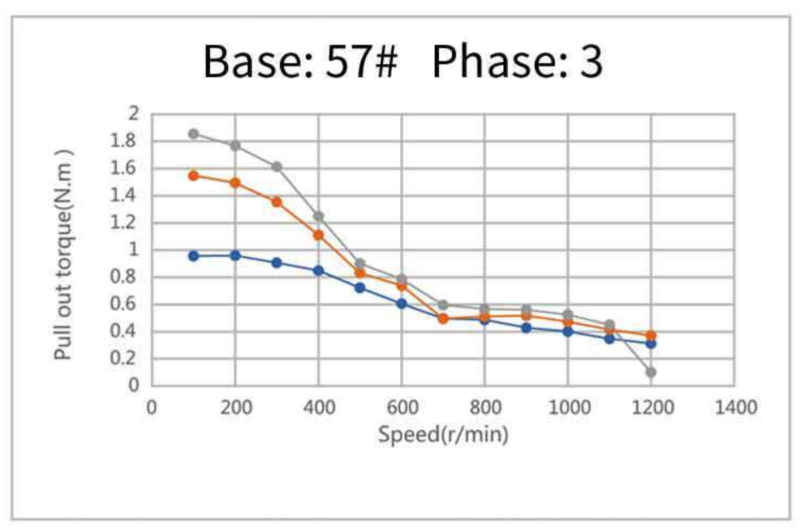
86J1865 - 828 string /2DM860 60VAC 3.9A 1600subdivisions
86J1865 - 828 Parallel /2DM860 60VAC 2.1A 1600subdivisions
86J1880 - 842 string /2DM860 60VAC 6.0A 1600subdivisions
86J1880 - 842 Parallel /2DM860 60VAC 3.0A 1600subdivisions
86J18101 - 450/2DM860   60VAC   5.0A 1600subdivisions



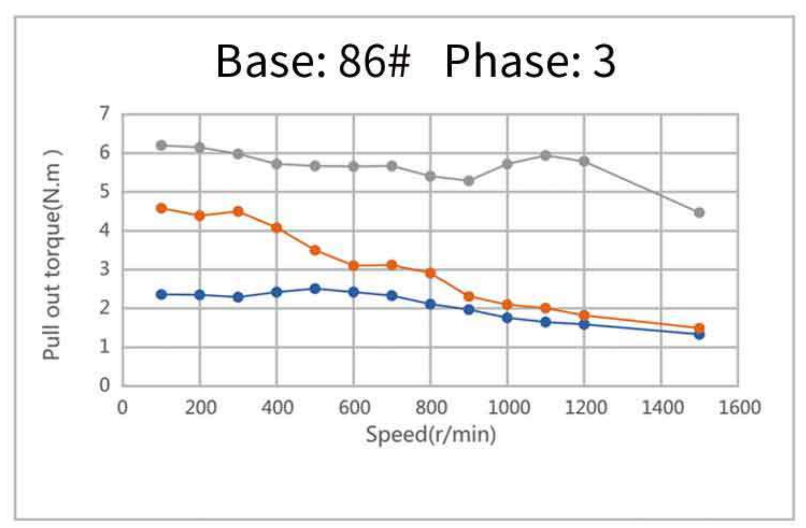
86J18118 - 842 string /2DM860 80VAC 3.0A 1600 subdivisions
86J18118 - 842 Parallel/2DM860 80VAC 6.0A 1600 subdivisions
86J18156 - 845 string /2DM860 80VAC 3.0A 1600 subdivisions
86J18156 - 845 Parallel/2DM860 80VAC 6.0A 1600 subdivisions



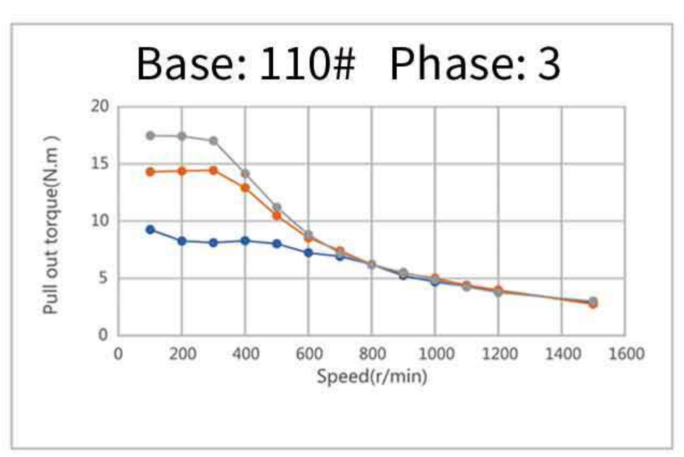
110J18115 - 460/2DM2280   220VAC 4.5A   1600subdivisions
110J18150 - 460/2DM2280   220VAC 6.0A   1600subdivisions
110J18165 - 460/2DM2280   220VAC 6.0A   1600subdivisions



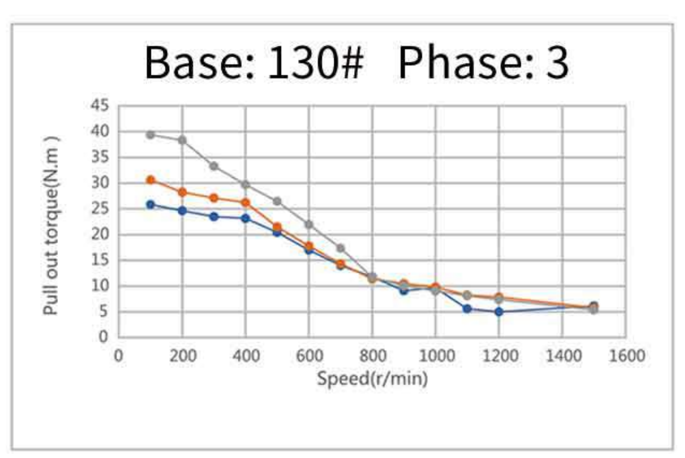
57J1256 - 650/3DM783   36VDC 5.25A   1600subdivisions
57J1276 - 658/3DM783   36VDC 6.0A   1600subdivisions
57J1285 - 658/3DM783   36VDC 6.0A   1600subdivisions



86J1270 - 650/3DM860   80VDC   5.8A   1600subdivisions
86J12106 - 650/3DM860   80VDC   5.8A   1600subdivisions
86J12126 - 650/3DM3422   220VDC 4.8A   2000subdivisions



110J12161 - 360/3DM2080   220VDC 6.3A   1600 subdivisions
110J12185 - 360/3DM2080   220VDC 6.3A   1600 subdivisions
110J12220 - 360/3DM2080   220VDC 6.3A   1600 subdivisions



130J12220 - 368/3DM2080   220VDC 7.2A   1600 subdivisions
130J12252 - 368/3DM2080   220VDC 7.2A   1600 subdivisions
130J12280 - 368/3DM3722   220VDC 7.0A   1600 subdivisions

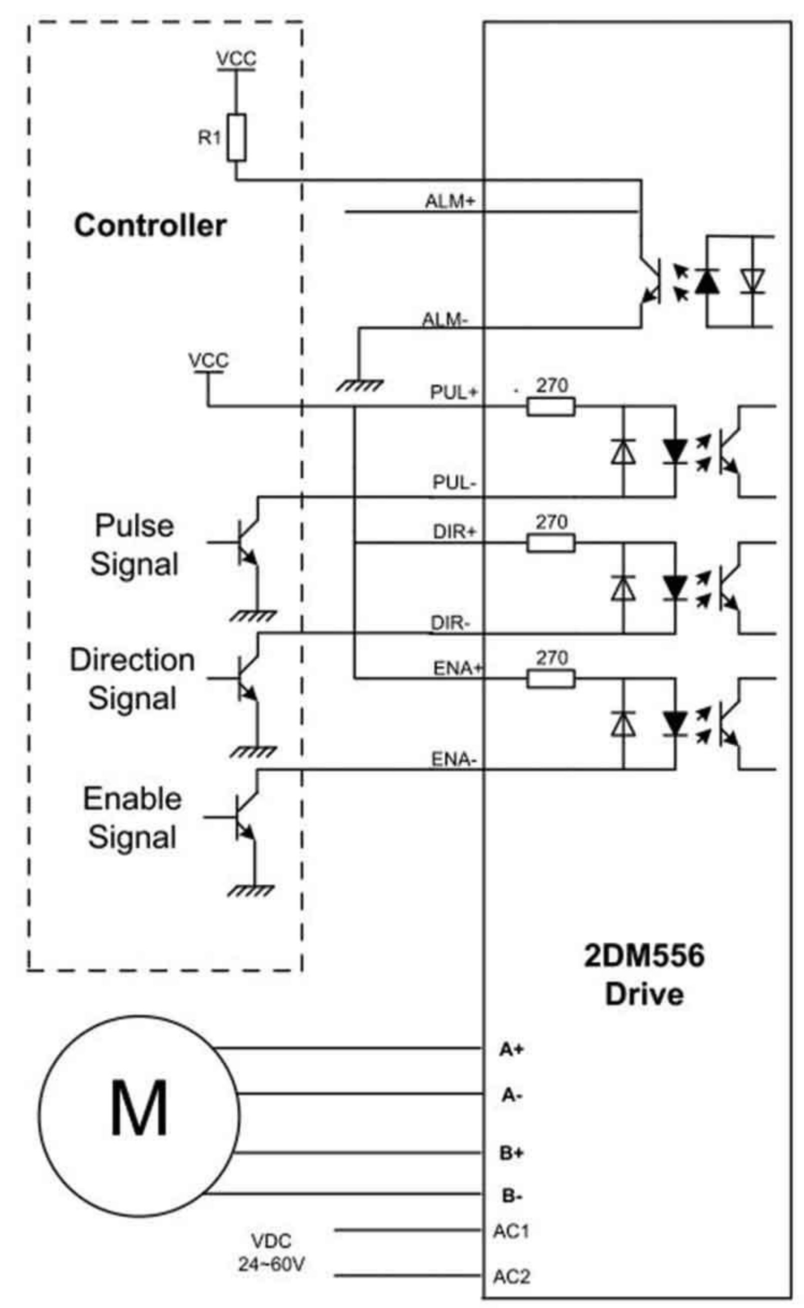
Key Features

- ◆ Parameter auto-setup and motor self-test
- ◆ Multi-Stepping inside,Small noise, low heating, smooth movemen
- ◆ Torque compensation in high speed
- ◆ Variable current control technology,High current efficiency
- ◆ Accelerate and decelerate control inside,
- ◆ Great improvement in smoothness
- ◆ of starting or stopping the motoSupport PUL/DIR and cw/ccw modes
- ◆ Storage the position of motor
- ◆ Optically isolated input and compatible with 5V or 24V
- ◆ Micro-step resolutions and Output current programmable
- ◆ Over current and over voltage protection

Introduction for Driver

JMC Stepper is newest digital stepper motor driver, using the latest 32-bit DSP control technology,with built-in micro technology, The driver greatly improvedstability and reduced noise under subdivision. it also can adjust the optimal operatioparameters automatically for different motors to maximize the performance of the motor.

wiring



Remark:* VCC is compatible with 5V or 24V;
R1(3~5K) must be connected to control signal terminal.

P1 Pin Assignment

Signal	Name	Remark
PLS+	Pulse signal+	Compatible with 5v or 24v
PLS-	Pulse signal-	Compatible with 5v or 24v
DIR+	Direction control signal+	Compatible with 5v or 24v
DIR-	Direction control signal-	Compatible with 5v or 24v
ENA+	Enable signal+	Compatible with 5v or 24v
ENA-	Enable signal-	Compatible with 5v or 24v
ALM+	Alarm output positive	Open collector output
ALM-	Alarm output negative	Open collector output

JMC Stepper System

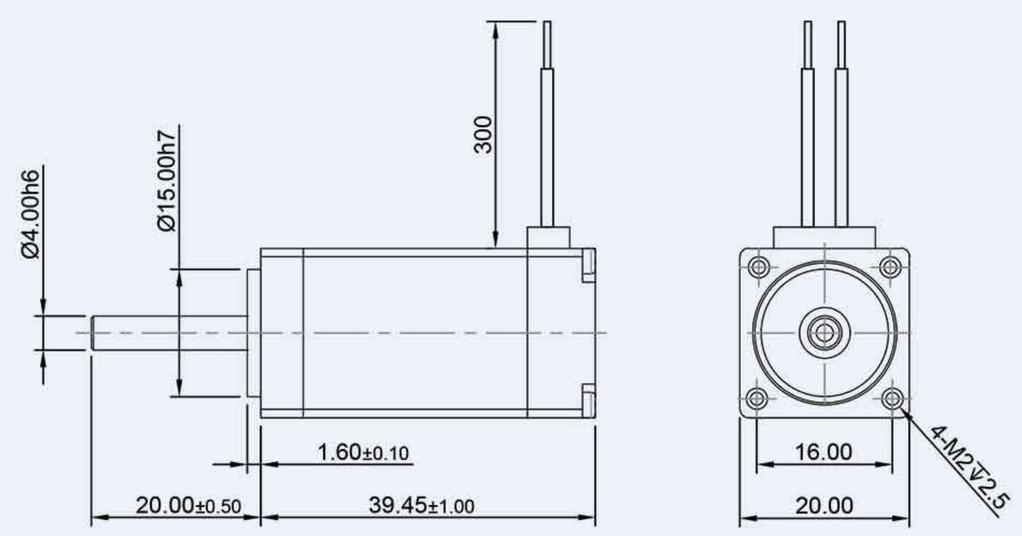
Motor Parts

86 J 18 118 - 8 40
① ② ③ ④ ⑤ ⑥

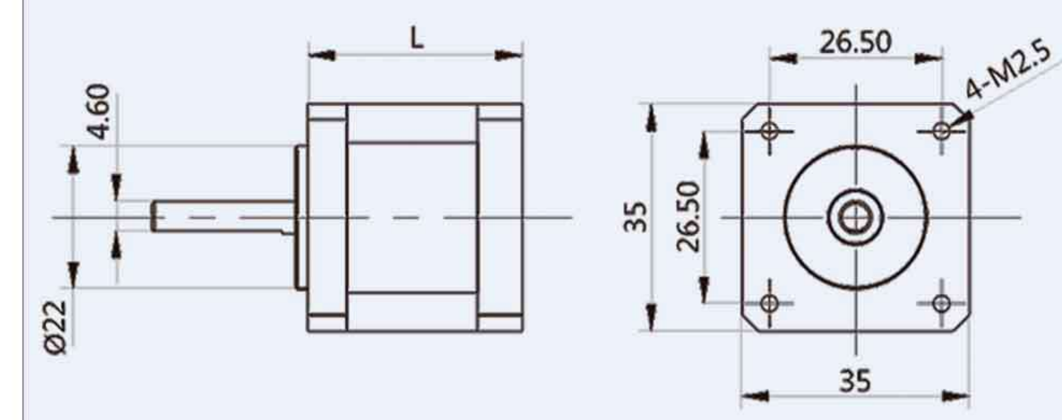
① 86： Frame size (mm)；	② J: Product series model;	③ 18：1.8° two-phase; 12：1.2° three-phase；
④ 118: Length of the motor body is 118mm；	⑤ 8: Motor leads is 8 pcs；	⑥ 40： Motor current is 40/10=4A

#20/28/35/39/42mm (Nema:8/12/14/16/17) Two-Phase motor

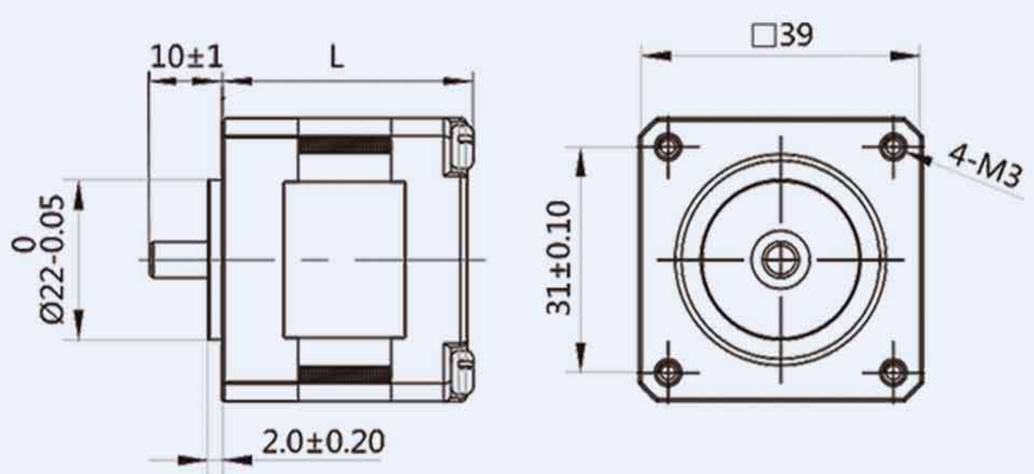
Model	Step angle (deg)	Holding torque(N·m)	Rated current (A)	Phase resistance (ohms)	Phase inductance (mH)	Rotor inertia (g·cm²)	Insulation class	Number of leads	Weight (kg)	Length (mm)	Matching driver
20J1840-404-Y	1.8	0.035	0.5	1.7	0.32	27	F	4	0.045	39	2DM415
28J1830-407-Y	1.8	0.06	0.8	2.5	4.2	8	B	4	0.14	30	2DM415
35J1834-407	1.8	0.11	0.8	2.5	4.8	14	B	4	0.18	34	2DM415
39J1834-403	1.8	0.13	0.3	4.0	2.5	20	B	4	0.18	34	2DM415
39J1834-406	1.8	0.22	0.6	1.6	1.2	20	B	4	0.18	34	2DM415
39J1844-403	1.8	0.29	0.3	4.0	10.0	40	B	4	0.25	44	2DM415
42J1825-404	1.8	0.35	0.4	2.1	1.3	20	B	4	0.15	25	2DM415
42J1834-408	1.8	0.38	0.8	2.1	3.2	54	B	4	0.30	34	2DM415
42J1840-408	1.8	0.40	0.8	7.5	8.1	57	B	4	0.32	40	2DM415
42J1848-810	1.8	0.48	1.0	4.6	4.0	82	B	8	0.35	48	2DM415
42J1848-425	1.8	0.48	2.5	1.25	2.5	82	B	4	0.35	48	2DM420
42J1860-417	1.8	0.70	0.7	3.0	6.2	117	B	4	0.50	60	2DM420



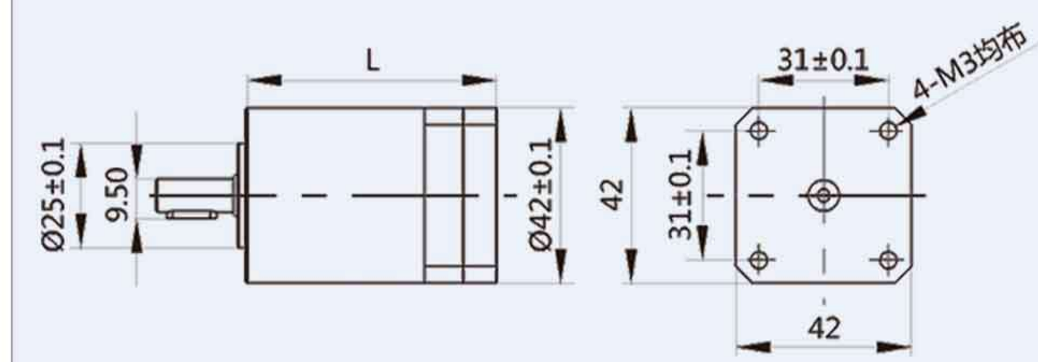
☐ 20 Series Motor Dimensions



☐ 35 Series Motor Dimensions



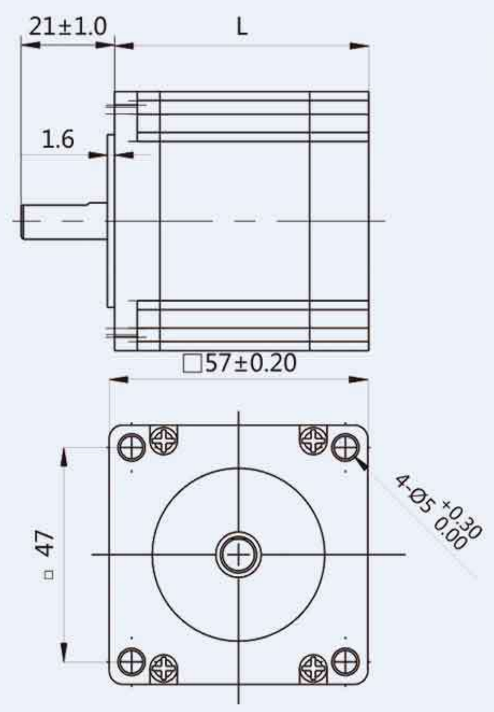
☐ 39 Series Motor Dimensions



☐ 42 Series Motor Dimensions

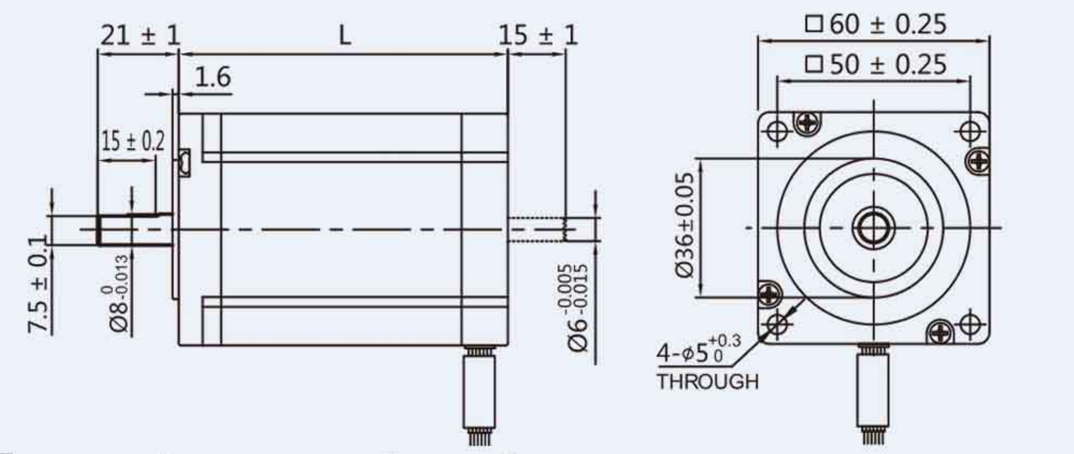
#57/60mm (Nema:23/24) Two-Phase motor

Model	Step angle (deg)	Holding torque(N·m)	Rated current (A)	Phase resistance (ohms)	Phase inductance (mH)	Rotor inertia (g·cm²)	Insulation class	Number of leads	Weight (kg)	Length (mm)	Matching driver
57J1841-420	1.8	0.75	2.0	1.3	3.2	157	B	4	0.4	43	2DM442
57J1854-828	1.8	0.85	2.8	0.95	1.2	280	B	8	0.6	56	2DM442
57J1856-440	1.8	1.2	4.0	0.43	1.35	280	B	4	0.6	56	2DM442
57J1876-828	1.8	1.6	2.8	0.95	1.85	460	B	8	1.0	78	2DM556
57J1876-447	1.8	2.0	4.7	0.37	1.75	480	B	4	1.05	76	2DM556
57J1880-450	1.8	2.2	5.0	0.4	1.8	520	B	4	1.15	80	2DM556
57J1880-830	1.8	2.0	3.0	0.95	1.8	480	B	8	1.1	80	2DM556
57J18100-440	1.8	2.8	4.0	0.95	3.4	700	B	4	1.45	100	2DM556
57J18112-435	1.8	3.0	3.5	0.65	2.0	780	B	4	1.7	112	2DM556
60J1887-440	1.8	3.3	4.0	0.7	2.5	900	B	4	1.4	85	2DM556
60J18100-440	1.8	3.3	4.0	0.8	3.0	950	B	4	1.7	100	2DM556



57 Series Motor Dimensions

Model	Shaft diameter D (mm)	Key(mm)
57J1841-420	Φ6.35	Flat 0.8×15
57J1854-828	Φ6.35	Flat 0.8×15
57J1856-440	Φ6.35	Flat 0.5×15
57J1876-828	Φ6.35	Flat 0.5×15
57J1876-447	Φ8.00	Flat 0.5×15
57J1880-450	Φ8.00	Flat 0.5×15
57J1880-830	Φ8.00	Flat 0.5×15
57J18100-440	Φ8.00	Flat 0.5×15
57J18112-435	Φ10.00	Flat 0.5×15



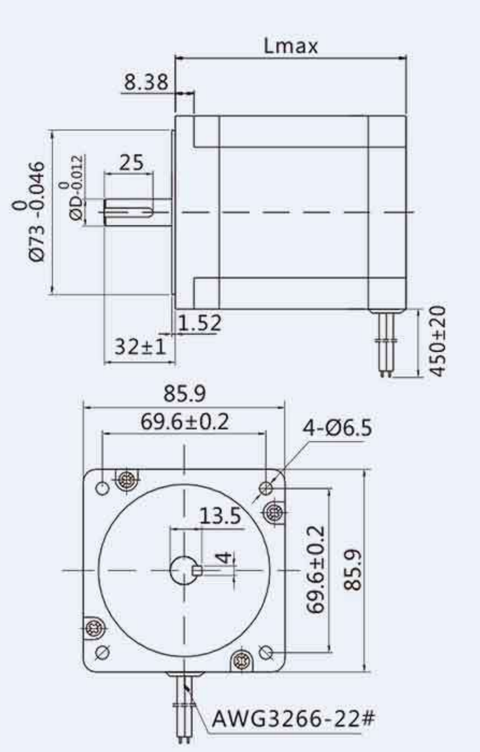
60 Series Motor Dimensions

Model	Shaft diameter D (mm)	Key(mm)
60J1887-440	Φ8.00	Flat 0.8×15
60J18100-440	Φ10.00	Flat 0.8×15

Note: Standard shaft motors are in stock, and non-standard shafts can be customized according to customer requirements.

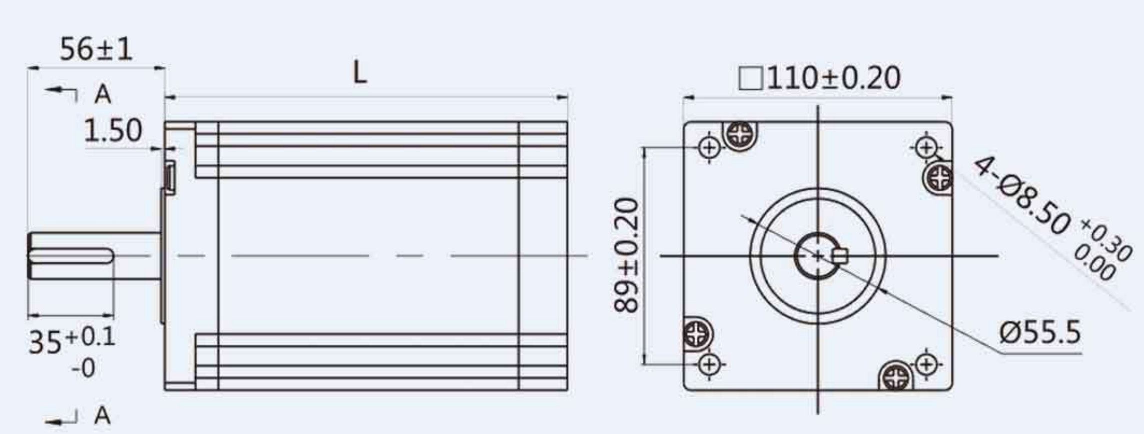
#86/110mm (Nema:34/43) Two-Phase motor

Model	Step angle (deg)	Holding torque(N·m)	Rated current (A)	Phase resistance (ohms)	Phase inductance (mH)	Rotor inertia (g·cm²)	Insulation class	Number of leads	Weight (kg)	Length (mm)	Matching driver
86J1865-828	1.8	3.5	2.8	0.24	1.7	950	B	8	2	65	2DM860
86J1880-842	1.8	4.5	4.2	0.58	4.0	1400	B	8	2.3	80	2DM860
86J1880-460	1.8	4.5	6.0	0.29	4.0	1400	B	4	2.3	80	2DM860
86J18101-450	1.8	6.0	5.0	0.58	4.2	2300	B	4	3.25	101	2DM860
86J18118-842	1.8	8.5	4.2	0.56	3.0	2700	B	8	3.8	118	2DM860
86J18118-460	1.8	8.5	6.0	0.28	3.0	2700	B	4	3.8	118	2DM860
86J18156-845	1.8	12	4.5	0.82	5.2	4000	B	8	5.4	156	2DM860
86J18156-460	1.8	12	6.0	0.41	5.2	4000	B	4	5.4	156	2DM860
110J18115-460	1.8	12	6.0	0.47	7.0	6000	B	4	5.8	115	2DM2280
110J18150-460	1.8	20	6.0	0.9	16	11000	B	4	8.4	150	2DM2280
110J18165-460	1.8	24	6.0	0.8	14	12500	B	4	9.5	165	2DM2280



86 Series Motor Dimensions

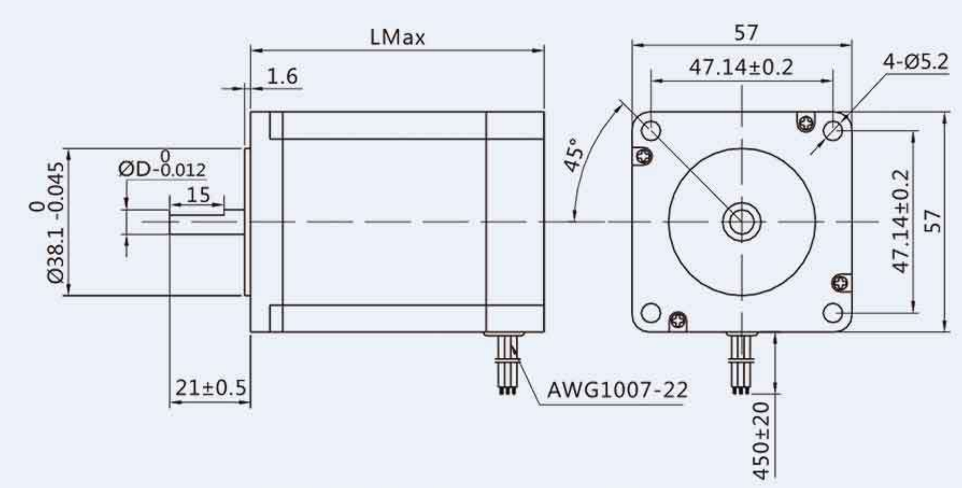
Model	Shaft diameter D (mm)	Key(mm)
86J1865-828	Φ9.525	Flat 0.8×25
86J1880-842	Φ12.7	Flat 1.0×25
86J1880-460	Φ12.7	Flat 1.0×25
86J18101-450	Φ12.7	Flat key 5.0×25
86J18118-842	Φ12.7	Flat key 5.0×25
86J18118-460	Φ12.7	Flat key 5.0×25
86J18156-845	Φ15.875	Flat key 5.0×25
86J18156-460	Φ15.875	Flat key 5.0×25



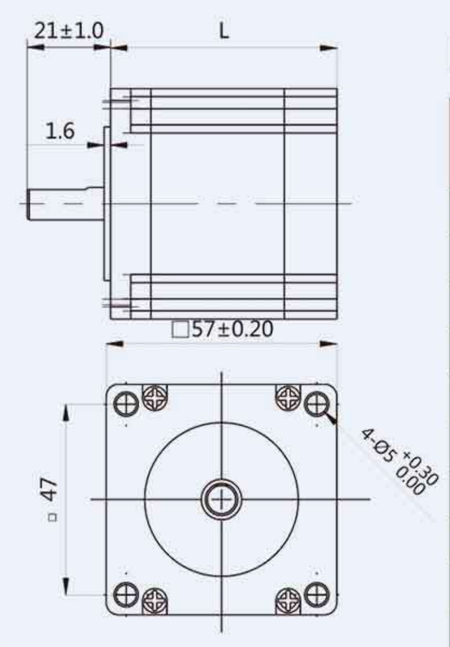
110 Series Motor Dimensions

#57/86 mm (Nema:23 /34) Three-Phase motor

Model	Step angle (deg)	Holding torque(N·m)	Rated current (A)	Phase resistance (ohms)	Phase inductance (mH)	Rotor inertia (g·cm²)	Insulation class	Number of leads	Weight (kg)	Length (mm)	Matching driver
57J1250-635	1.2	0.8	3.5	0.77	1.8	280	B	6	0.75	56	3DM783
57J1256-650	1.2	0.9	5.0	1.2	2.3	280	B	6	0.8	56	3DM783
57J1276-658	1.2	1.5	5.8	0.86	2.0	480	B	6	1.1	79	3DM783
57J1285-658	1.2	1.8	5.8	0.69	2.0	550	B	6	1.2	85	3DM783
86J1270-650	1.2	2.2	5.0	0.96	2.4	1100	B	6	1.7	70	3DM860
86J12103-650	1.2	4.5	5.0	1.4	4.5	2340	B	6	2.85	103	3DM860
86J12103-650	1.2	4.5	2.0	6.5	21	2340	B	6	2.85	103	3DM860
86J12126-623	1.2	6.78	2.3	9.0	39	3500	B	6	4.0	126	3DM3422
86J12126-650	1.2	6.78	5.0	1.8	8	3500	B	6	4.0	126	3DM3422
86J12156-328	1.2	7.8	2.8	5.0	32	4000	B	6	5.0	156	3DM3422



57 Series Motor Dimensions



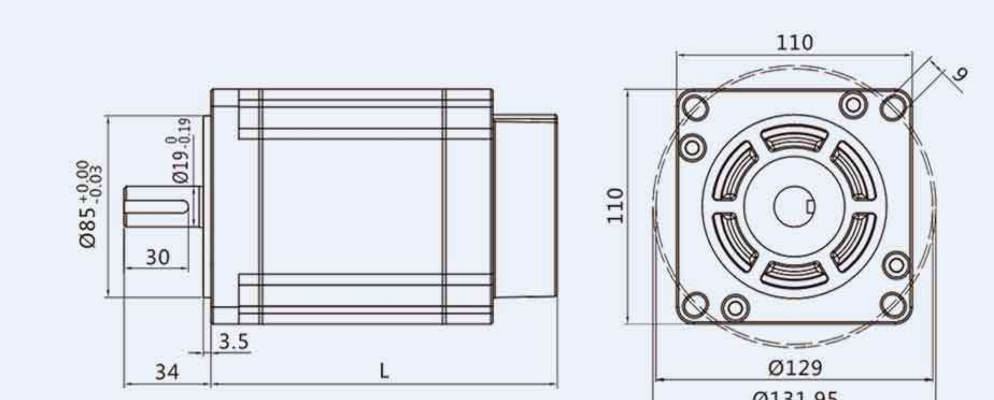
86 Series Motor Dimensions

Model	Shaft diameter D (mm)	Key(mm)
57J1250-635	Φ6.35	Flat 0.8×15
57J1256-650	Φ6.35	Flat 0.8×15
57J1276-658	Φ8.00	Flat 0.5×15
57J1285-658	Φ8.00	Flat 0.5×15
86J1270-650	Φ12.00	Flat 1.0×25
86J12103-650	Φ12.00	Flat 1.0×25
86J12103-650	Φ12.00	Flat key 4.0×20
86J12126-623	Φ14.00	Flat key 4.0×20
86J12126-650	Φ14.00	Double flat 1.0×25
86J12156-328	Φ14.00	Flat key 5.0×25

#110/130mm (Nema:44/52) Three-Phase Motor

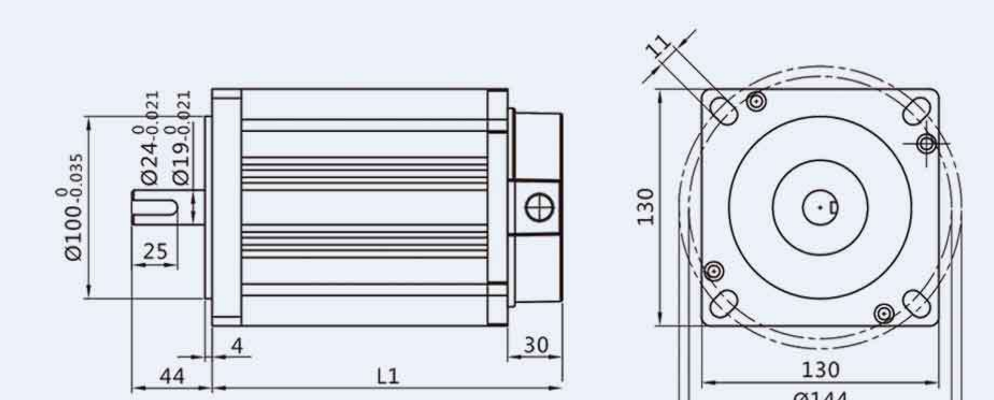
Model	Step angle (deg)	Holding torque(N·m)	Rated current (A)	Phase resistance (ohms)	Phase inductance (mH)	Rotor inertia (g·cm²)	Insulation class	Number of leads	Weight (kg)	Length (mm)	Matching driver
110J12161-360	1.2	12	6.0	0.76	11.5	11900	B	3	7.1	161	3DM2080
110J12185-360	1.2	16	6.0	1.28	19	14800	B	3	8.8	185	3DM2080
110J12220-360	1.2	20	6.0	1.24	22	19600	B	3	11	220	3DM2080
130J12188-368	1.2	24	6.8	0.96	16.2	26870	B	3	14	188	3DM2080
130J12220-368	1.2	28	6.8	1.1	19	33970	B	3	17	220	3DM2080
130J12252-368	1.2	35	6.8	1.4	24	41400	B	3	19	252	3DM3722
130J12280-368	1.2	50	6.8	1.5	18.3	47300	B	3	20.5	280	3DM3722

Note: We can adjust the motor winding and mechanical installation dimensions according to customer requirements.



The inner size of the key on the motor shaft: 6×6×30

110 Series Motor Dimensions



The inner size of the key on the motor shaft: 8×8×30

130 Series Motor Dimensions

Driver Parts

2 DM 5 56

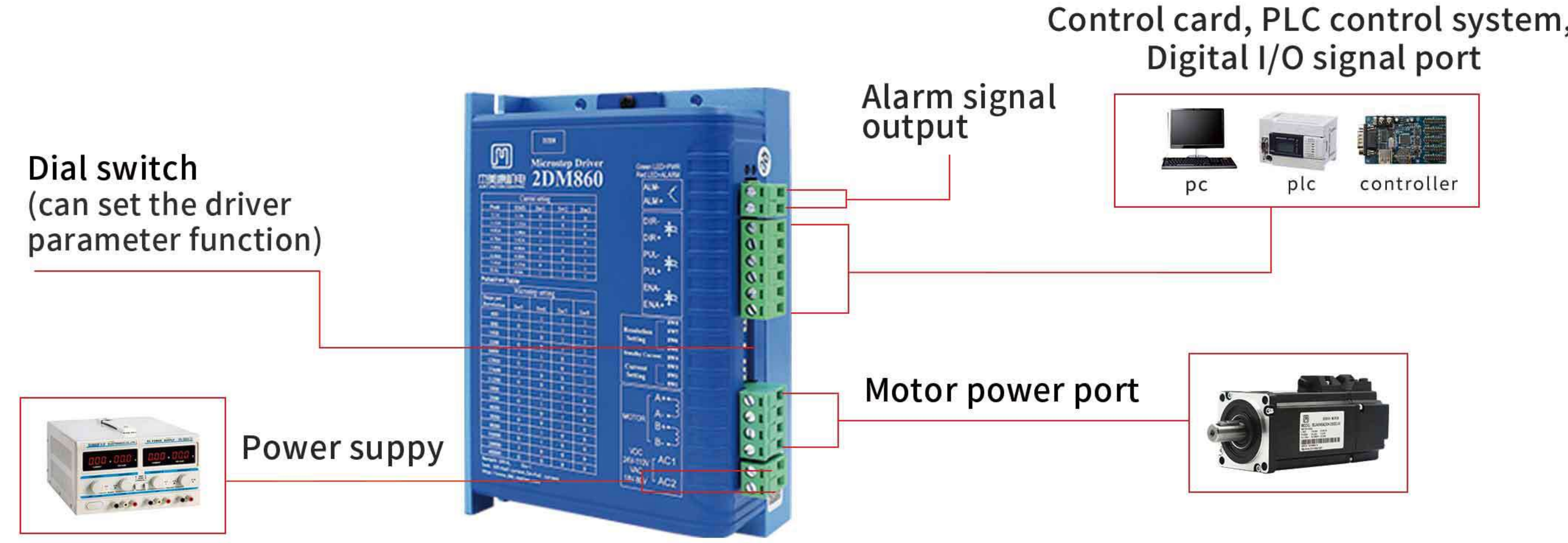
① ② ③ ④

① 2 : 2 Phases; 3 - 3 phases;	② DM: Digital open loop series
③ 5: 5X10=50V Value X 10, Power supply voltage blow 9 is DC; Above 10 is AC;	④ 56: 56/10=5.6A current(mm) =value / 10;

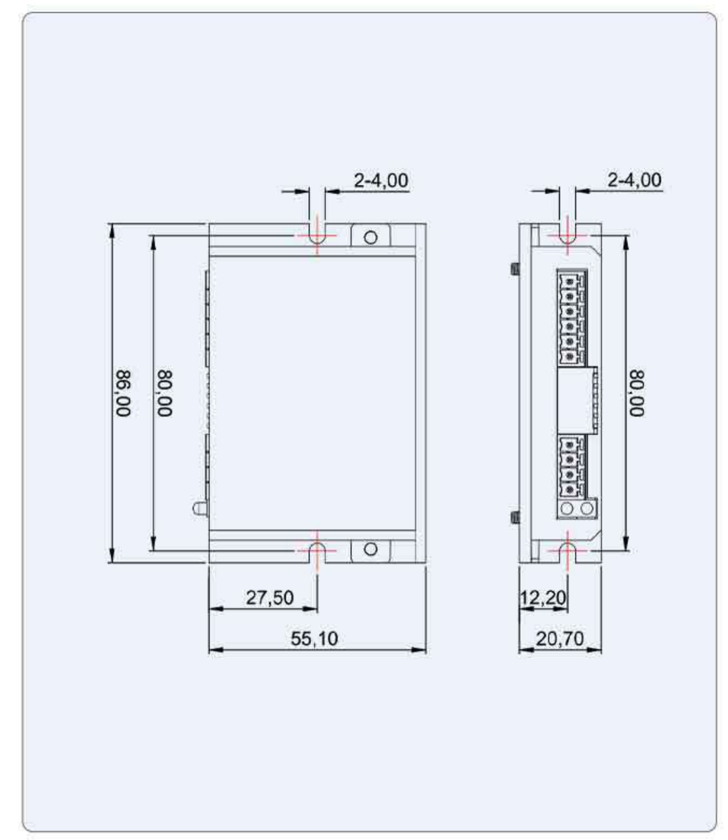
Quick selection list

Phase	Model	Current	Voltage	Microstep	Motor	Weight(KG)	Pulse mode	Signal voltage
2 Phase	2DM415	0.21-1.50A	DC(18-36V)	1-128	20,28,35,39,42	0.1	Single pulse	5V
	2DM420	0.9-3.0A	DC(18-36V)	1-128,5-125	42,57	0.15	Single pulse	5V
	2DM442	1.0-4.2A	DC(24-36V)	1-128,5-125	42,57	0.2	Single/Double pulse	5-24V
	2DM542	1.0-4.2A	DC(24-48V)	1-128,5-125	57,86	0.27	Single/Double pulse	5-24V
	2DM556	1.4-5.6A	DC(24-60V)	1-128,5-125	57,86	0.27	Single/Double pulse	5-24V
	2DM860	2.1-8.4A	DC(24-110V) AC(18-80V)	2-256,5-200	57,86,110	0.6	Single/Double pulse	5-24V
	2DM860H	2.1-8.4A	DC(24-110V) AC(18-80V)	2-256,5-200	57,86,110	0.6	Single/Double pulse	5-24V
	2DM2260	1.3-5.6A	AC(80-220V)	1-64,2.5-50	86,110	1.5	Single/Double pulse	5-24V
	2DM2280	2.2-8.2A	AC(80-220V)	2-158,5-125	110,130	1.5	Single/Double pulse	5-24V
3 Phase	3DM783	1.8-8.3A	DC(24-60V)	2-256,5-200	57,86	0.6	Single/Double pulse	5-24V
	3DM860	2.0-8.3A	DC(24-80V) AC(18-60V)	1-64,2.5-50	57,86	0.55	Single/Double pulse	5-24V
	3DM860H	2.0-8.3A	AC(24-110V) AC(18-80V)	1-64,2.5-50	57,86	0.55	Single/Double pulse	5-24V
	3DM2060H	1.3-5.6A	AC(80-220V)	1-64,2.5-50	86,110	1.5	Single/Double pulse	5-24V
	3DM2080	2.0-8.0A	AC(80-220V)	2-128,2.5-50	86,110,130	1.5	Single/Double pulse	5-24V
	3DM3422	1.2-4.8A	AC(80-230V)	2-300	86,110	1.5	Single/Double pulse	5-24V
	3DM3722	1.2-7.0A	AC(80-230V)	2-300	110,130	1.5	Single/Double pulse	5-24V

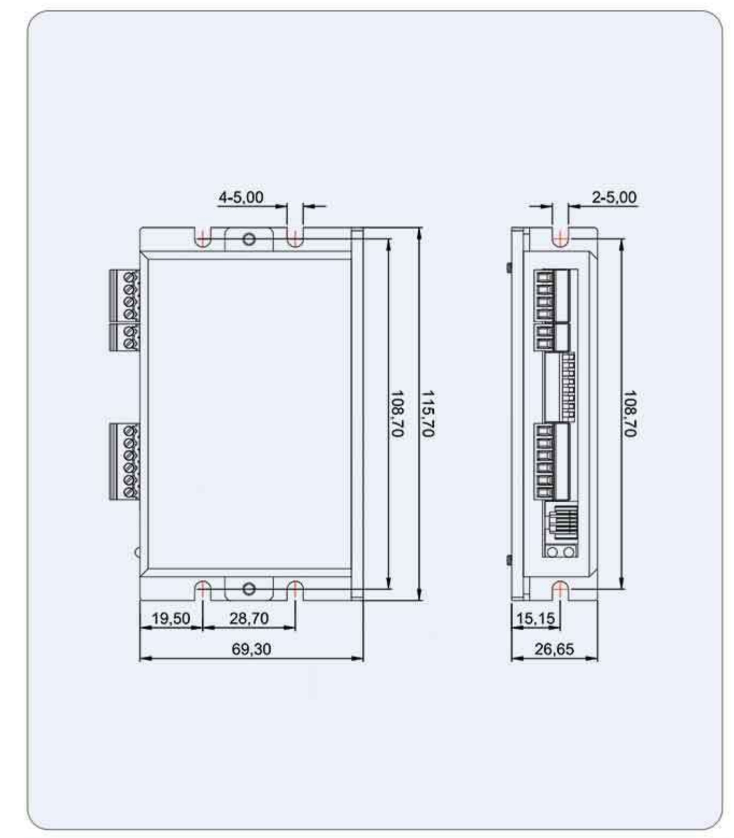
Driver interface



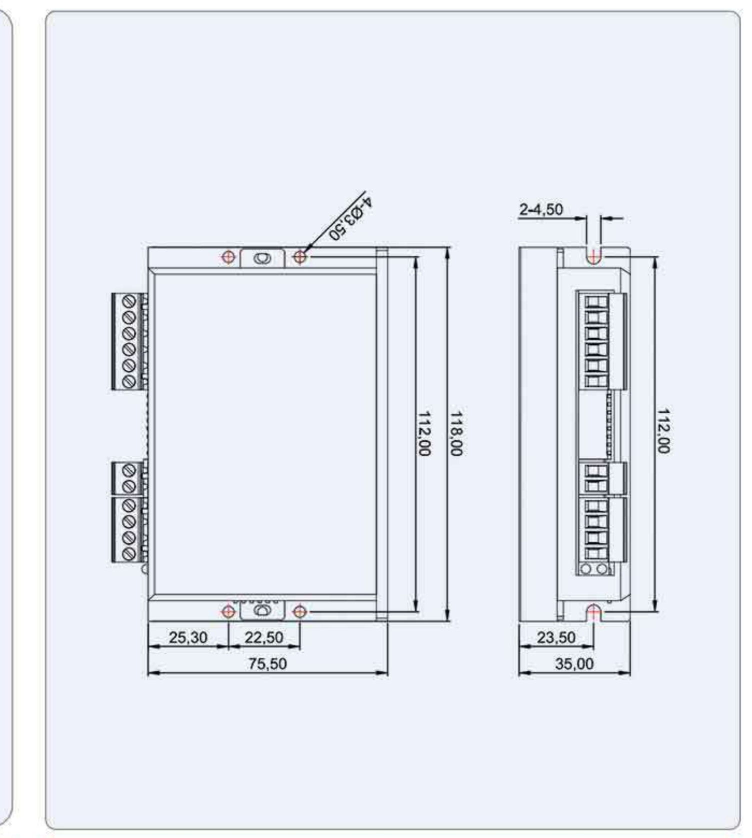
Mounting Size(Unit: mm)



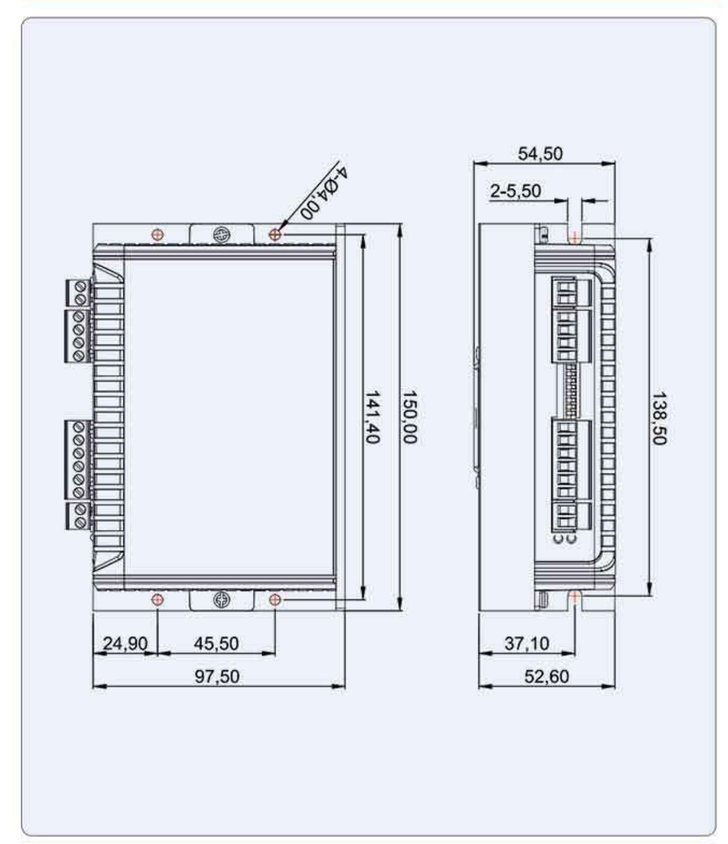
2DM415



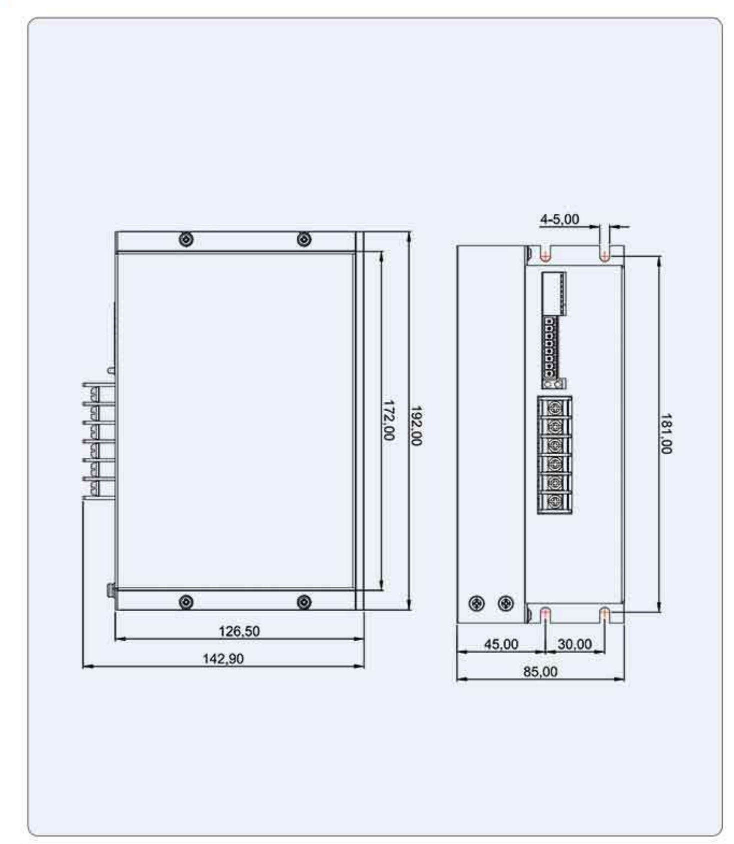
2DM442



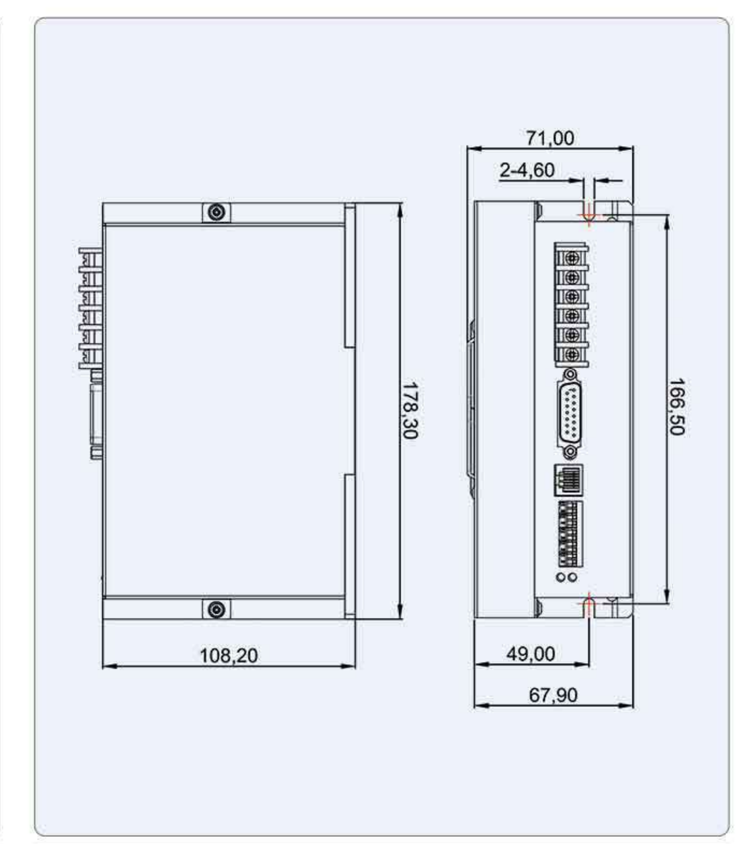
2DM542/2DM556
3DM783



2DM860/2DM860H
3DM860/3DM860H



2DM2280/3DM2080



3DM3422

Motor Pictures


20J1840-404


28J1830-407


35J1834-407


39J1844-405


42J1840-408


57J1276-658


60J18100-440-8(F)


86J1270-650(F)


86J18118-460


110J12161-360


110J18115-460(Z)


130J12280-368

Driver Pictures


2DM420


2DM442


2DM542-N


2DM556


2DM860


2DM2260


2DM2280


3DM783


3DM860


3DM2060H


3DM2080


3DM3422