

 Focus on industry, proficient in solution



2024 Version

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VECTOR SERVO

SHENZHEN VECTOR TECHNOLOGY CO.,LTD.

Focus on industry, proficient in solution

MORE FLEXIBLE
MORE ACCURATE



COMPANY PROFILE

Founded in 2004 

Focusing on industrial automation products with independent intellectual property rights, we are positioned to serve high-end equipment manufacturers and provide overall solutions for customers in market segments. To become the world's leading provider of industrial automation products and solutions. Independently developed products include servo drive, motion controller, human-machine interface, servo motor, etc., with a number of invention patents, utility model patents and software registration rights, is a national high-tech enterprise. Has its own product research and development center and production base, in the country has a number of offices and agents. Our core competitiveness is to achieve seamless integration of product r&d and product application, and provide professional and efficient system solutions for equipment.

Vector will continue to adhere to the business philosophy of "creating value for customers wholeheartedly", make deep efforts in the field of industrial automation, and create the beauty of motion control is our unremitting pursuit, determined to build a national brand with leading technology, efficient management, leading domestic and internationally renowned.

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PRODUCT INTRODUCTION

- Product series: economical, intelligent, dedicated, bus type, power level covers 100W-110KW, voltage level 220V, 380V, 440V
- Various encoder feedback signals: incremental/wire-saving photoelectric encoder, 17-bit/23-bit/24-bit absolute value photoelectric encoder, resolver, magnetic encoder, etc.
- Various communication protocols, Modbus/CANopen/EtherCAT/Profinet
- Speed loop bandwidth 3KHz, support high dynamic response
- With voltage feedforward control, torque feedforward control, speed feedforward control functions
- With command low-pass filter, median filter function
- Position command planning function, built-in T-shaped speed curve planning
- (3rd power) velocity curve planning
- Electronic gear ratio dynamic smooth switching function
- 35 kinds of standard return to zero function
- Supports shared DC bus
- Through CE certification

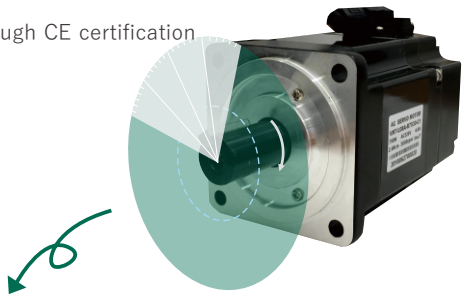
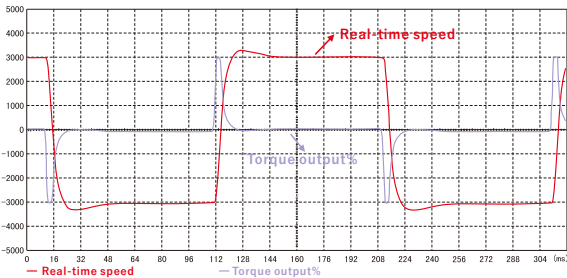
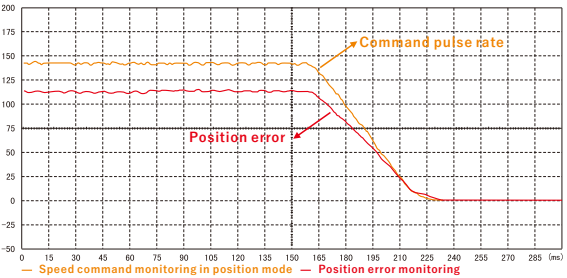
PRODUCT FEATURES

PRECISE POSITION

A 24-bit absolute encoder can be configured to improve the positioning accuracy and the stability of low-speed operation. Support multi-turn absolute value positioning mode, powered by battery, motor position will not be lost due to power failure.

HIGH-SPEED DYNAMIC RESPONSE

Speed loop bandwidth 3KHz
Position command adjustment time is less than 5ms
The speed rise time from -3000rpm to 3000rpm is 10ms

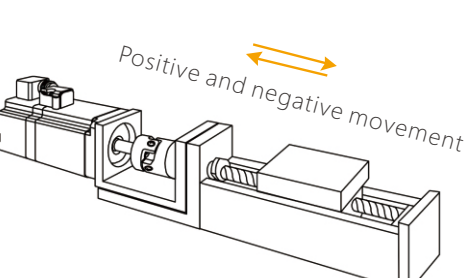


24bit (absolute value) /17bit (absolute value)

LOAD INERTIA IDENTIFICATION

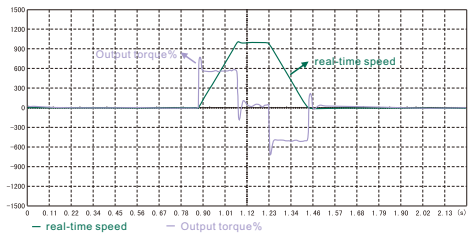
The servo has a load inertia identification function. By controlling the motor to perform several acceleration and deceleration rotations, the load inertia ratio can be automatically identified. According to the inertia ratio and the set rigidity level, the servo can automatically calculate the required gain.

- 01 USE FN007 TRIGGER INERTIA IDENTIFICATION
- 02 MOTOR FORWARD AND BACKWARD MOVEMENT
- 03 INERTIA LEARNING IS COMPLETED

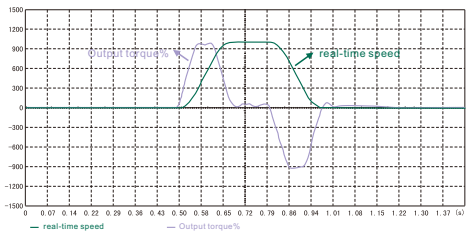


3-POWER VELOCITY CURVE PLANNING IN POSITION MODE

The traditional position planning algorithm adopts the trapezoidal speed curve planning algorithm, and the VC series servo internal position planning algorithm adopts the cubic speed curve algorithm. This standard algorithm can avoid the output of high-frequency torque, reduce the mechanical impact, and improve the processing efficiency.



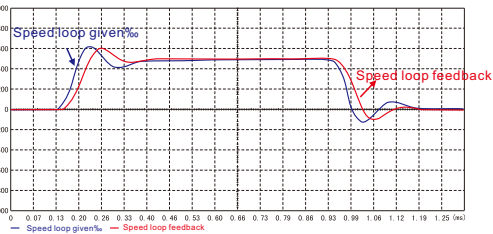
There is a shock in the output torque of the T-shaped speed curve



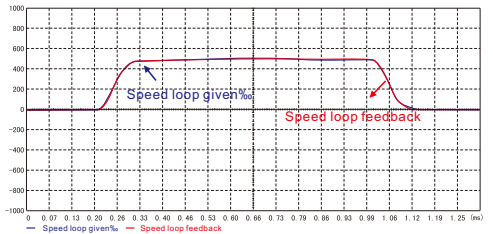
3th power speed curve without impact

TORQUE FEEDFORWARD CONTROL

Torque feedforward refers to the mathematical operation of the given speed command, combined with the load inertia, to obtain the torque that the motor needs to output, and directly set it to the torque loop, so that the actual speed of the motor can quickly keep up with the target speed. The torque feedforward coefficient is determined by the load inertia. The larger the load inertia, the larger the value. This value can be obtained by learning the habit.



Without torque feedforward, the speed following performance is poor

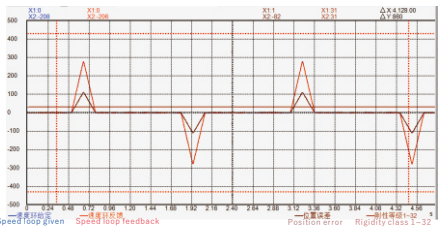


With the addition of torque feedforward, the speed following is very good

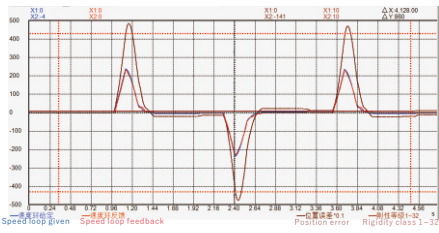
SIMPLE GAIN ADJUSTMENT FUNCTION

Servo parameter self-adjustment is realized by setting the rigidity level of the servo. When the rigidity level is set large, the servo rigidity is high and the response is fast. When the rigidity level is set, the servo rigidity is low and the response is slow.

A₀₁ The rigidity level is set to 31, the rigidity is high and the response is fast



B₀₂ The rigidity level is set to 10, the rigidity is low, and the response is slow



VIBRATION SUPPRESSION FUNCTION

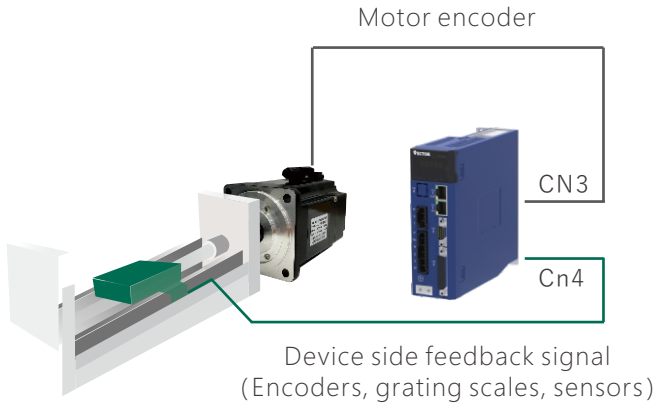
There are low-pass filter and notch filter inside, which can effectively suppress the low-frequency vibration generated at the moment of shutdown and the end-swing vibration of the long swing arm mechanism.

DYNAMIC BRAKING FUNCTION

The built-in dynamic braking function can prevent equipment or personnel damage caused by excessively high-speed

FULLY CLOSED-LOOP CONTROL

In the application of motor feeding, if there is relative sliding between the material and the motor, the displacement of the motor and the displacement of the actual material are inconsistent. Therefore, an external second encoder measures the displacement of the actual material, and the servo driver controls the motor speed according to the given position command and the position signal fed back by the second encoder, so that the given position command and the second encoder The position of the feedback is consistent, which effectively

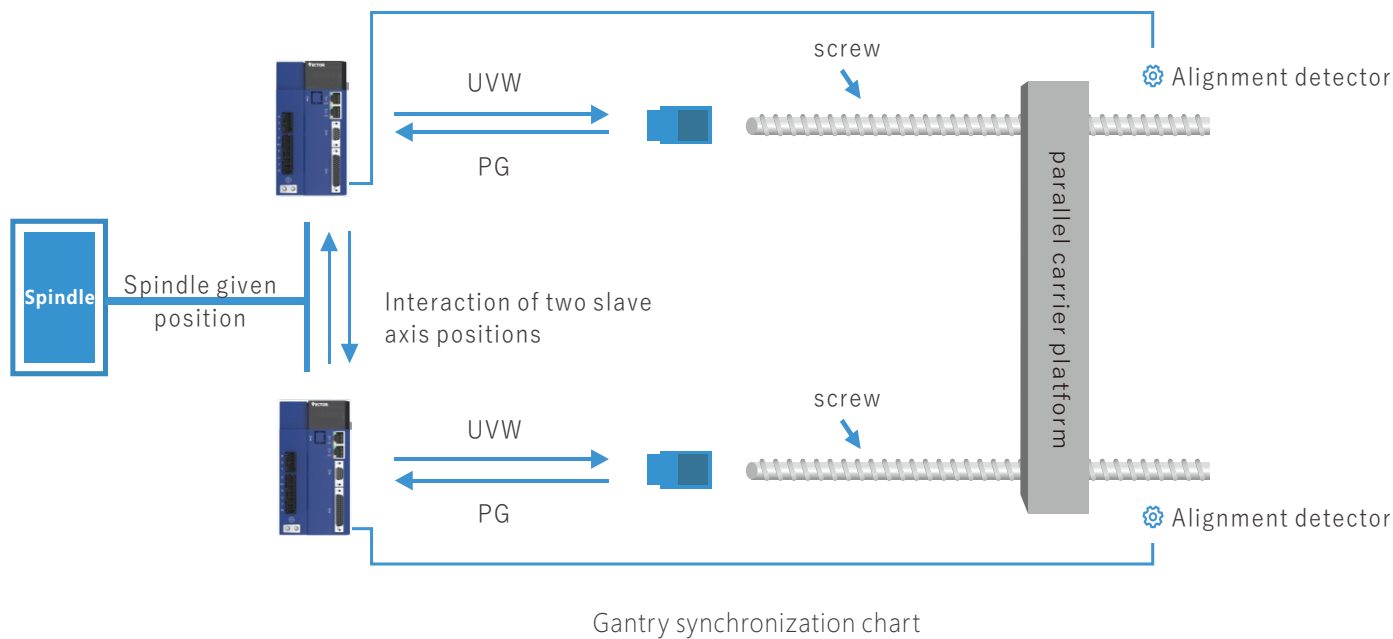


FLEXIBLE POSITION COMMAND OVERLAY FUNCTION

The position command can be set as the superposition of two pulses, that is, the sum of the pulse commands of the two pulses is tracked at the same time. It can also be set as the superposition of the pulse command and the internal planned position command, that is, the position command planned by the internal multi-segment position is superimposed on the

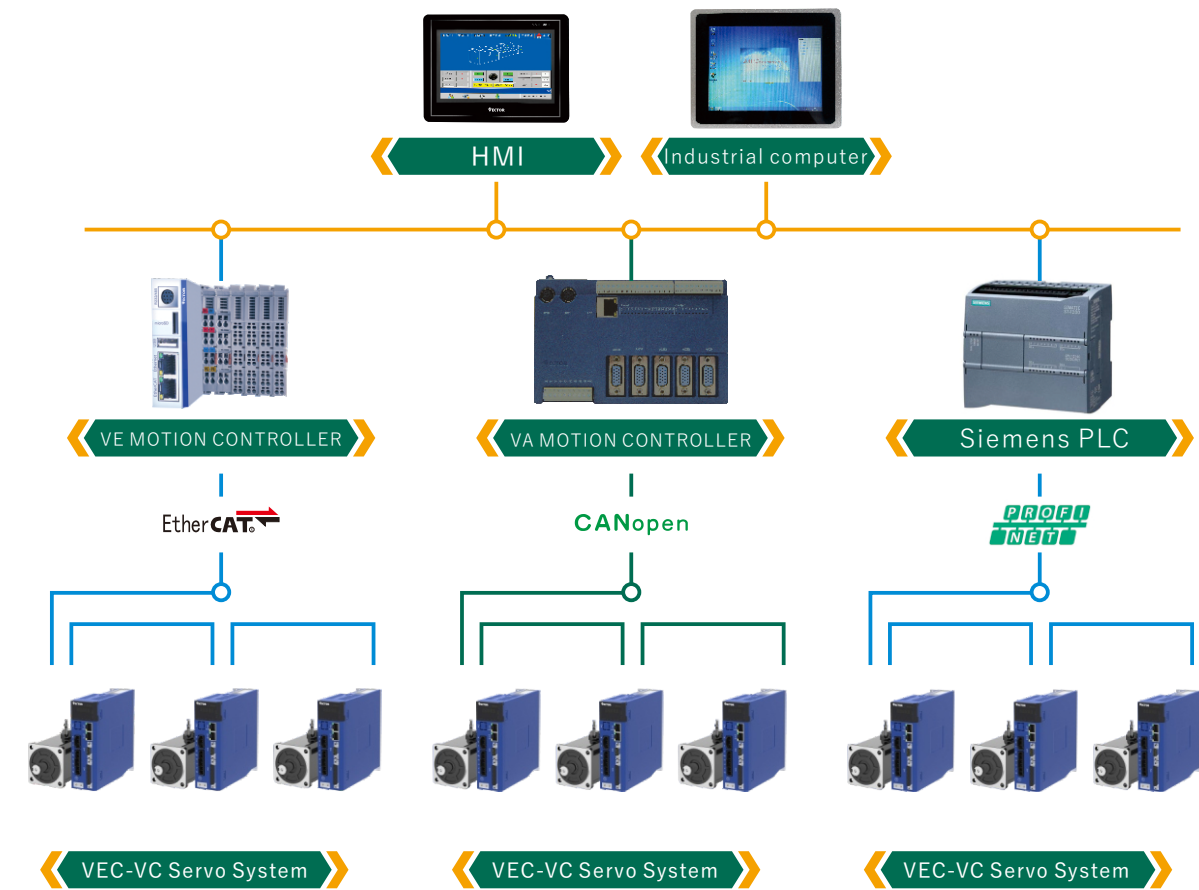
VC517 GANTRY SYNCHRONIZATION SERVO SYSTEM

Gantry synchronization can realize the function of dual-axis synchronously following the main shaft. At the same time, the master axis sends position commands to two slave axes that need to be synchronously aligned, and the two slave axes mutually couple their motor encoder positions to adjust their respective speeds to achieve the position synchronization of the two slave axes. When the position error is too large, the system shuts down and a warning is issued to avoid damage to materials and equipment.



Gantry synchronization chart

ETHERCAT, PROFINET, CANOPEN HIGH-SPEED BUS, REALIZE MULTI-AXIS SYNCHRONOUS CONTROL

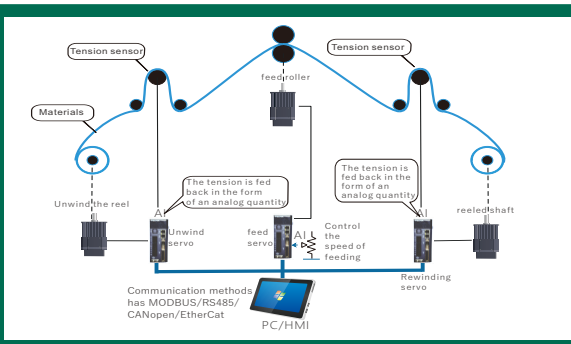


VC510 TENSION CONTROL SERVO SYSTEM



PRODUCT INTRODUCTION

VC510 tension control servo has built-in multiple tension control modes: including closed-loop speed mode, closed-loop torque mode, open-loop speed mode, and open-loop torque mode. Vekoda provides a full-servo tension control solution, with the VC510 dedicated tension control servo as the core, using different tension control modes for different machines, and integrating the tension controller into the servo driver. The tension control system consists of man-machine interface, special servo for tension control, and tension sensor. It can realize open-loop tension control of rewinding and unwinding, closed-loop tension control of rewinding and unwinding, and process tension control. Achieve high precision, high stability, maintenance-free energy-saving effects.



PRODUCT FEATURES

- 1 Smooth start, no jitter at low speed;
- 2 Wide range of winding and unwinding diameters, basically unlimited;
- 3 During acceleration and deceleration or emergency stop, the tension is stable, and the tension accuracy is controlled within 1%~5% of the sensor range
- 4 The coil diameter is calculated by the special algorithm of the servo, the system is simple and efficient, and the precision is high.
- 5 Servo products are maintenance-free and have a service life of 6-10 years. Support the film production machine to stop the roll ; Support one winding and one unwinding without spindle in the middle of the winding control.

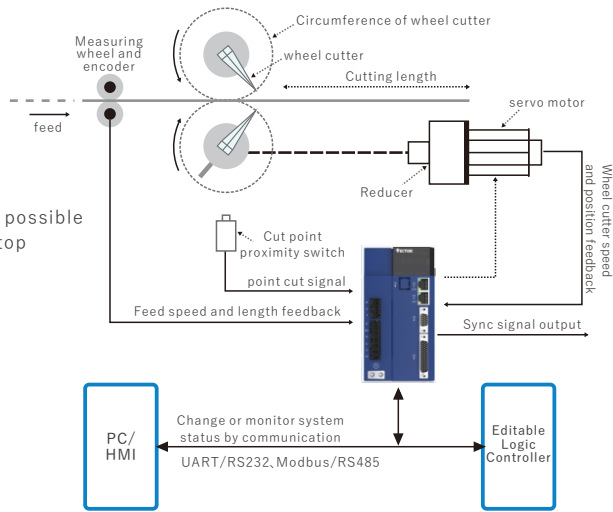
VC511 ROTARY CUTTING SERVO SYSTEM

PRODUCT INTRODUCTION

The VC511 Rotary cutting integrates the fifth power electronic cam algorithm, which can realize the master-slave follow-up function. The angle of the synchronization interval, the cutting length, the rotary cutting and other angles can be set, and the position and speed of the rotary cutting axis are automatically calculated, so as to achieve the effect of following the spindle position and precise processing. Applicable to various corrugated paper cross-cutting machines, horizontal and vertical packaging machines, register printing machines and other equipment;with chord/arc correction function, can be used for thicker material cutting equipment, such as steel plate rotary cutting system; can be used for cursor tracking , suitable for printing fixed-length, positioning and cutting.

PRODUCT FEATURES

- Use Mark-Window setting to enhance Mark recognition ability
- Automatically correct the cutting length of the printing point (Print Mark)
- automatically re-find the mark after the mark is lost
- The first knife teaching function, that is, the first knife can be cut to the color mark
- With four groups of order management functions, order switching can choose not to switch, cyclic switching, DI switching
- With simulation function, both dynamic simulation and static simulation are possible
- Automatically find the tangent point,Long material cutting can choose the stop angle of the cutter
- Interrupt event function, the slave axis detaches from the following master axis, and runs according to the speed and acceleration and deceleration time set by the user



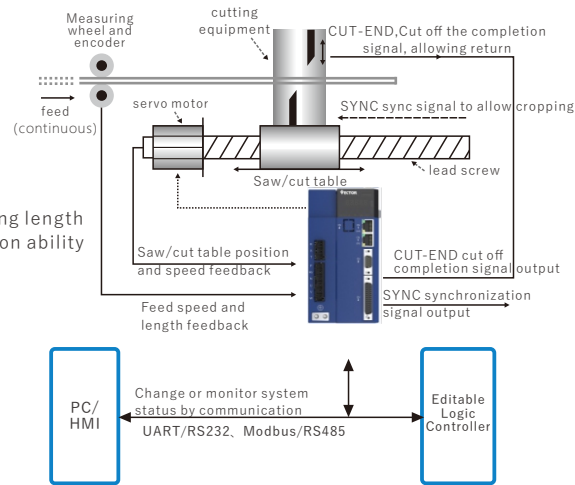
VC512 CHASING SHEAR SERVO SYSTEM

PRODUCT INTRODUCTION

VC512 chase shear servo contains automatic chase shear control function, along with the feed speed of the processed material, automatic control saw table forward speed, when reaching the set length, into the synchronization area can be cut signal, will be sawed after the cutting signal, saw table quickly return to the origin to prepare for the next cutting. Products are suitable for: all kinds of bar, pipe, extruded profile fixed length, filling/filling and other need to move with the workpiece special processing equipment.

PRODUCT FEATURES

- Automatically search the machine origin (absolute coordinate method)
- With forward and reverse jogging, the machine origin can be arbitrarily specified (relative coordinate method)
- S-curve acceleration function that automatically tracks the feeding speed of the main line and calculates the lead amount
- In the process of S-curve acceleration, torque compensation measures can also be made, which can quickly synchronize and reduce cutting errors
- Four-segment S curve (forward acceleration/deceleration, reverse acceleration/deceleration) can be set separately
- Recognize the printing cursor point (Print Mark) and automatically correct the cutting length
- Provides Mark-Window settings for printing punctuation to enhance Mark recognition ability
- Order management function, four groups of orders can be switched arbitrarily



VC513 INDEPENDENT DIE - CUTTING SERVO SYSTEM

PRODUCT INTRODUCTION

VC513 INDEPENDENT DIE-CUTTING DEDICATED SERVO INTERNAL TRACKING PULSE COMMAND AND PHASE ADJUSTMENT COMMAND, THE TWO PARTS OF THE COMMAND USE TWO DIFFERENT ELECTRONIC GEAR RATIOS. THE TRACKING OF PULSE COMMAND DOES NOT PRODUCE PHASE CHANGE, AND ANY POSITION COMMAND OTHER THAN THIS CAN ADJUST THE PHASE, INCLUDING JOG FIXED SPEED, JOG FIXED POSITION AND SO ON.

PRODUCT FEATURES

- With internal zero return function: built-in 37 standard zero return modes. Return to zero can be performed according to the origin switch and position limit switch
- Fixed speed forward/reverse jog function: forward/reverse jog at a fixed speed
- Fixed position forward/reverse jog function: forward/reverse jog a set position
- Go to the specified phase: move to the specified phase
- Back to the previous phase: Movement to the previous phase. The previous phase refers to the phase that followed the movement of the spindle last time
- Automatic alignment function: connect two origin switches, the phase of the two origin switches can be adjusted to the set value automatically

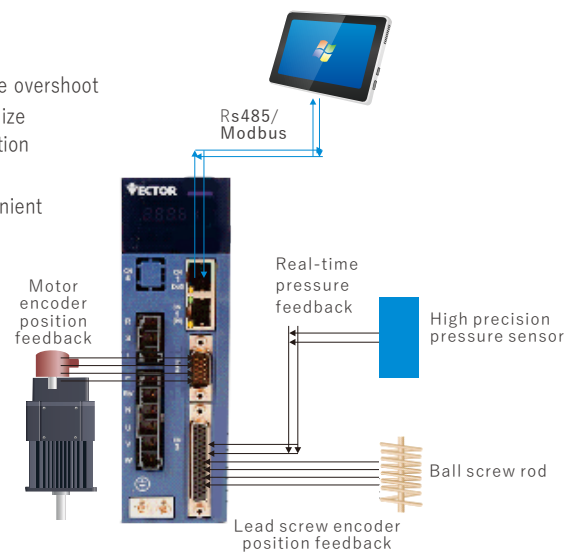
VC514 PRESSING SERVO SYSTEM

PRODUCT INTRODUCTION

VC514 is a pressing servo driver that integrates position closed-loop and pressure closed-loop systems. The pressure-specific servo driver system is mainly composed of industrial computer, driver, servo motor, pressure sensor, screw and so on. The driver or PLC is the logic control part of the press fitting, which can realize a variety of product pressing functions. The driver processes the position feedback signal and the pressure feedback signal in real time, and adopts the high response loop algorithm of the driver to quickly respond to the position or pressure. . The press-fitting process includes stages such as fast-forwarding, probing, press-fitting, stacking, and returning. Press-fit products are widely used, such as ultrasonic welding and bearing press-fit. Pressure detection, accessories installation, etc.

PRODUCT FEATURES

- High-precision position or pressure extrusion, position accuracy: 0.01mm/10um, pressure accuracy: $\pm 1\%$ range
- Internally integrated pressure closed-loop self-tuning algorithm, fast press-fitting without overshoot, solving the trouble of traditional press-fitting position or pressure overshoot
- The industrial computer can realize a variety of press-fitting functions, and can realize the display of real-time position and pressure curve, and a variety of quality inspection judgments can meet the requirements of various products.
- The PLC module has been omitted, the wiring is simple, and the operation is convenient



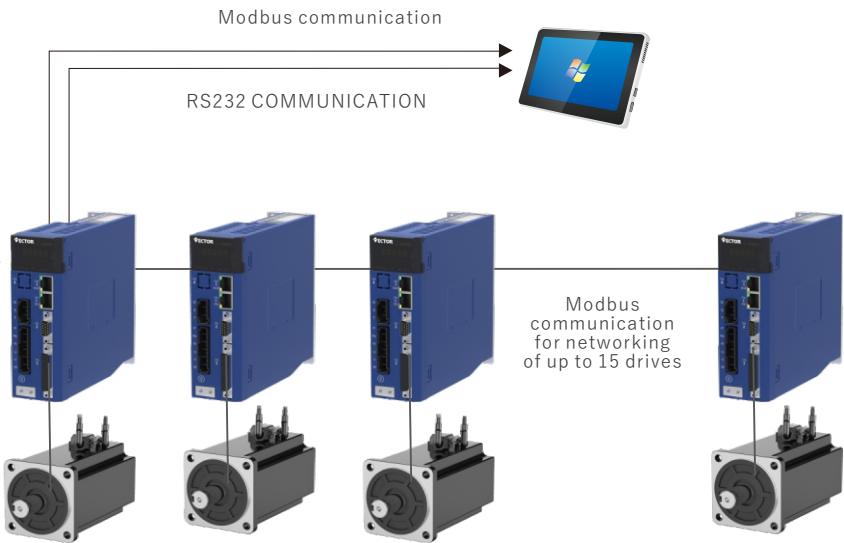
VC600 SERIES BUILT-IN PROGRAMMABLE PLC SERVO SYSTEM

PRODUCT INTRODUCTION

VC600 series driver is a servo drive system integrating PLC (programmable logic) and driver. The user can write the logic control program required by the application in the host computer software, and then download it to the VC600 drive master station, which can be controlled by a single axis, or can control multiple slave stations through the modbus network, realizing the function of logic and control integration. . The system is simple in programming, flexible in application, powerful in function (integrated with PLC function and driver function), and rich in interfaces, eliminating the need for traditional PLC and related wiring.

PRODUCT INTRODUCTION

- Integrated drive and control, easy to use and efficient
- Rich interfaces, DIO, AIAO, pulse input, pulse output, timer, counter, etc.
- Support RS232 communication, standard Modbus protocol, custom communication protocol
- Can support faster scan cycle 500us or 1ms
- Multi-axis control via modbus communication network



VC800 SERIES LINEAR MOTOR DRIVER

PRODUCT INTRODUCTION

VECTOR high-performance pulse-type linear motor servo driver incorporates the latest servo control technology to achieve high-precision control of linear motors.

PRODUCT INTRODUCTION

- Compatible with standard ABZ incremental encoder, optional HALLU HALLV HALLW.
- It can be configured to automatically phase-look after power-on. The mover phase can also be accurately obtained under the condition of load disturbance and one-way locked rotor.
- Simple motor matching, with automatic identification of stator winding parameters, automatic identification of mover mass, estimation of magnetic pole pitch, automatic setting of current loop bandwidth, and fast matching of linear motors with VECObserver software.
- Support dynamic braking function, which can make the motor brake quickly under abnormal conditions to prevent speeding.
- The maximum support 4MHz position command input, the AB pulse can reach 16MHz after 4 times of frequency.
- Support position correction function. After calibration, the magnetic encoder can achieve a maximum positioning accuracy of $\pm 1\mu\text{m}$.
- Quick response. The current loop control period is the fastest 80kHz, and the speed loop control period is the fastest 40kHz.



VC920 ELECTRIC VEHICLE DRIVE SOLUTIONS

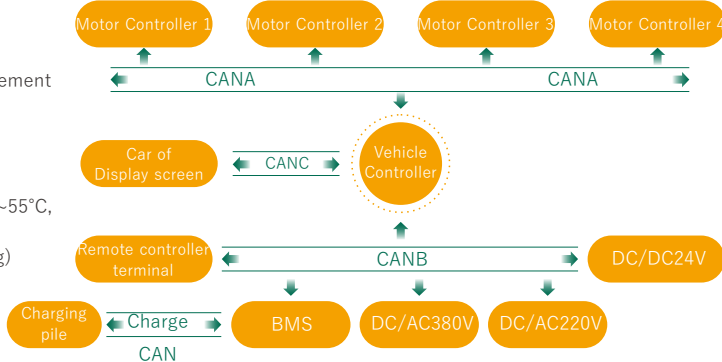
PRODUCT INTRODUCTION

The motor driver specially developed to meet the automotive industry standards is reliable, safe and efficient. It can be widely used in engineering vehicles, agricultural machinery and other equipment to realize intelligent control of vehicle movement.

PRODUCT FEATURES

- Adopt high-speed communication controller area network CAN2.0 communication, accept upper layer custom protocol
- The motor drive uses a highly reliable resolver as a feedback element
- The motor drive is controlled by MTPA to realize the efficient operation of the motor
- Cooling method: air cooling, water cooling
- Protection grade: IP20-IP65, can be customized as required
- Ambient temperature for use: working temperature range $-40^{\circ}\text{C}\sim 55^{\circ}\text{C}$, derating is required for higher temperature operation
- Operating environment humidity: below 90%RH (non-condensing)
- Altitude: below 2000m (please derate for use above 2000m)

This series accepts customized development projects



Linear motor special driver parameter selection table

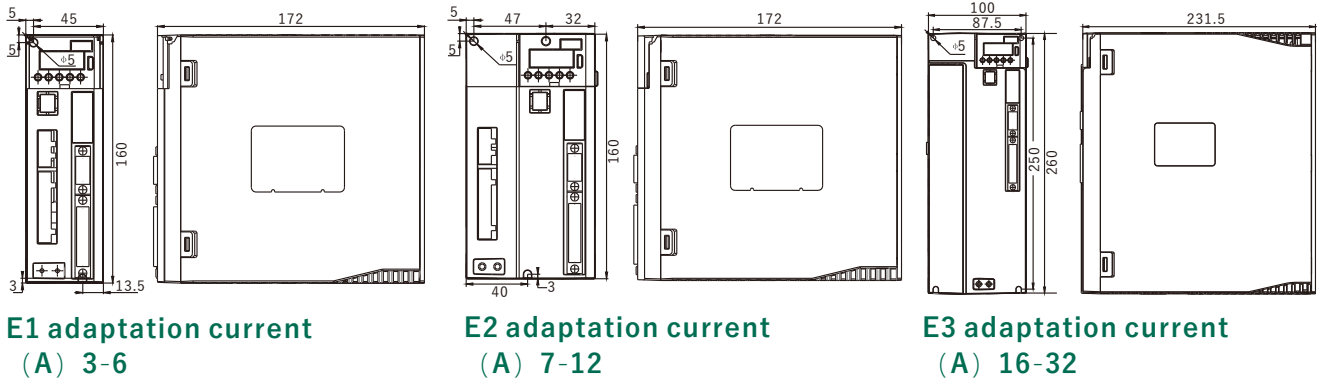
Drive model	Voltage (V)	Output rated current (A)	Maximum output current (A)
VEC-VC800-00323	220	3	9
VEC-VC800-00623		6	18
VEC-VC800-01223		12	36
VEC-VC800-00733	380	7	21
VEC-VC800-01233		12	36
VEC-VC800-01633		16	40
VEC-VC800-02033		20	50
VEC-VC800-02733		27	67.5
VEC-VC800-03233		32	70

TECHNICAL SPECIFICATION FOR VEC-VC DRIVER

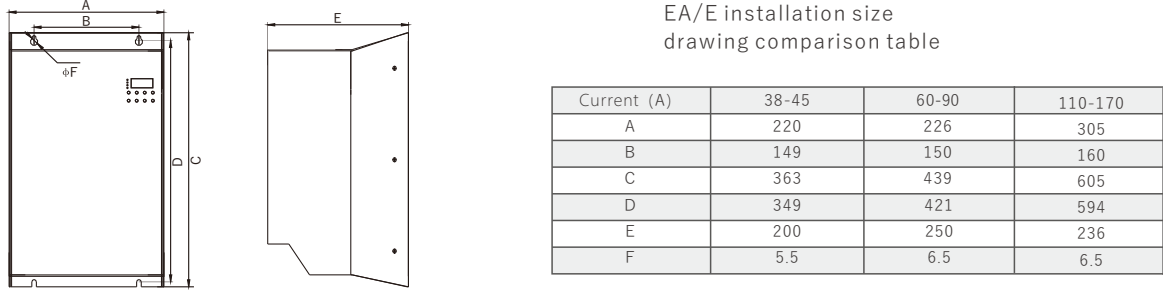
project		describe
Voltage	control mode	Single-phase/three-phase full-bridge rectification SVPWM drive Input voltage range 220V/380V±10%
Encoder	encoder feedback	Incremental optical encoding, line-saving optical encoding, resolver encoder, 23-bit multi-turn absolute value optical encoding,17-bit single-turn magnetic encoder, 17-bit multi-turn magnetic encoder, 24-bit multi-turn absolute value optical encoder
Pulse input	Pulse type	Differential input, open collector
	Frequency Range	High-speed differential signal: 0-4MHz, the pulse width is greater than 124ns Differential input: 0-500kHz, the pulse width is greater than 1us Open collector circuit: 0-300kHz, pulse width greater than 2.5us
	pulse mode	▶ pulse + direction ▶ AB pulse ▶ CW+CCW
DI/DO Interface Type		NPN/PNP
Communication method		Modbus/CANopen/EtherCAT/Profinet
fault response		Dynamic braking, decelerated parking, free parking
position mode	Instruction input mode	pulse command Internal location planning ▶ Plan according to target position, speed, acceleration and deceleration time ▶ Trapezoidal speed curve ▶ Fourth power velocity curve ▶ Absolute/relative command mode
	Instruction smoothing mode	low pass filter/median filter
	Electronic gear ratio	N/M;(M=1~2147483647,N=1~2147483647)
	Torque limitation	Internal torque limitation Analog torque limiting
	Feedforward compensation	Speed feedforward/torque feedforward
	Torque compensation	Fixed torque compensation/analog torque compensation/automatic torque compensation
speed control	Instruction input mode	Pulse frequency/analog input/internal speed planning
	speed control range	1~Maximum RPM
	bandwidth	3kHz
	Torque limitation	Internal torque limit/analog torque limit
Torque control	Instruction input mode	Internal torque given/analog control torque
	Torque compensation	Fixed torque compensation/analog torque compensation/automatic torque compensation
	speed limit	Internal Speed Limit/Analog Speed Limit
bus control	EntherCAT	CiA402 standard definition of periodic synchronous position mode, periodic synchronous speed mode, periodic synchronous torque mode, contour positionSet mode, contour speed mode, contour torque mode, zero return mode
	CANopen	Interpolation position mode, contour position mode, contour speed mode, contour torque mode, and zero return mode defined by CiA402 standard
	Profinet	Support IRT, RT communication Meet the application classes of AC1, AC3, AC4 defined by PROFIdrive Support message 1, message 3, Siemens message 102, Siemens message 111, Siemens message 105, Siemens auxiliary message 750
digital input	Up to 10 digital inputs, the function of each digital input can be assigned arbitrarily.	
digital output	Up to 6 digital outputs, the function of each digital output can be assigned arbitrarily.	
failsafe	Software overcurrent, hardware overcurrent, overvoltage, undervoltage, encoder fault, drive overheating, overspeed, excessive position error, motor overload, software limit, hardware limitposition, motor stall, motor overheating.	
Installation Environment Requirements	atmospheric pressure	86~106kPa
	ambient temperature	0~55℃
	Ambient humidity	0~90%RH
	Protection class	IP20
	vibration	0~4.9m/s^2

DRIVER MOUNTING DIMENSIONS

E INSTALLATION DIMENSION DIAGRAM (Unit:mm)



EA/E MOUNTING DIMENSION DRAWING (Unit:mm)



PRODUCT CONFIGURATION LIST

product	catena	Remark	CN2 encoder terminal	CN3 control terminal	Which encoder signals are received	Host computer control instructions	Dynamic Brake	Power range
VEC-VC100	VEC-VC100	Economical drive	9P DB	25P DB	C1A/C2A	pulse	none	3-12A
VEC-VC200	VEC-VC210	intelligent drive	15P DB	44P DB	A/B/S/M/N/C1A/C2A	pulse	Below 12A have	3-170A
	VEC-VC220	Rotary transformer feedback	9P DB	25P DB	X	pulse	Below 12A have	3-32A
VEC-VC300	VEC-VC310	CANopen bus type	15P DB	44P DB	A/B/S/M/N/C1A/C2A	CANopen	Below 12A have	3-170A
	VEC-VC321	EtherCAT bus type resolver feedback	9P DB	25P DB	X	Ether-CAT	Below 12A have	3-170A
	VEC-VC322	EtherCAT bus type	9P DB	25P DB	A/B/S/N	Ether-CAT	Below 12A have	3-170A
	VEC-VC330	Profinet bus type	9P DB	25P DB	A/B/S/N	PROFINET	Below 12A have	3-170A
VEC-VC500	VEC-VC510	closed loop tension	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
	VEC-VC511	wheel cut	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
	VEC-VC512	chase cut	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
	VEC-VC513	Independent die cutting	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
	VEC-VC514	Presses	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
	VEC-VC520	Open loop tension	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
VEC-VC600	VEC-VC600	Built-in PLC	15P DB	44P DB	A/B/S/M/N	pulse	Below 12A have	3-170A
VEC-VC800	VEC-VC800	Linear Motor Drive	15P DB	44P DB	Incremental ABZ	pulse	Below 12A have	3-32A
VEC-VC900	VEC-VC920	Electric vehicle drive	15P DB	44P DB	X	pulse	Below 12A have	210-470A

- M:2500 Line Incremental Optical Encoder
- N: 2500 lines of line-saving optical editing
- A:17-bit multi-turn absolute optical encoder
- B:23-bit multi-turn absolute optical encoder
- S:24-bit multi-turn absolute optical encoder
- X:Resolver encoder
- C1A:17-bit single-turn absolute magnetic encoder
- C2A:17-bit multi-turn absolute magnetic encoder

VC000-00323		VC000-00623		VC000-01223		VC000-01523		VC000-00733	
3A Three-phase 220V		6A Three-phase 220V		12A Three-phase 220V		15A Three-phase 220V		7A Three-phase 380V	
40MB-R1030A23□	60ME1-R2030A23□ 60ME1-R4030A23□ 60MB-R4030A23□ 80MBR7530A23□ 80MBR7520A23□	80ME1-R7530A23□ 80ME1-00130A23□	130MB-00120A23□ 110MB-1R2330A21□ 110MB-1R8330A21□ 130MB-00125A21□ 130MB-1R525A21□ 130MB-1R515A21□ 130ME1-R8515A23□	130ME1-1R315A23□ 130ME-1R520A23□ 130ME-00220A23□	130MB-00225A21□ 130MB-2R625A21□ 130MB-2R315A21□	130ME-00320A23□ 130ME1-1R815A23□	130ME-00120A33□ 130ME-1R520A33□ 130ME-00220A33□	130MB-1R525A33□ 130MB-1R515A33□ 130MB-00225A33□ 130MB-2R625A33□ 130MB-2R315A33□	

INTRODUCTION OF SOFTWARE INTERFACE

- Monitor the running curve of any parameter in real time
- Save and load run curve data
- Analyze run curve data
- Update all parameters of the drive
- Read all parameters of the drive
- Execute macro command function
- Inertia self-learning and gain self-adjustment functions
- Offline parameter editing function

The main interface includes: waveform property interface, sampling control interface, trigger mode, axis control



MODEL SPECIFICATION

TYPE DESCRIPTION OF SPINDLE SERVO MOTOR

1 8 5 M C - 1 R 6 C 3 3 E B - M *

1.Flange disc mounting hole size 2. Product series

Mark	Rated Power
1R6	1.6KW
003	3KW
015	15KW
037	37KW

4. Rated speed

Mark	Rated Revolution
A	750rpm
B	1000rpm
C	1500rpm

5. Voltage level

Mark	Voltage level
23	Three-phase 220V
33	Three-phase 380V
43	Three-phase 440V

6. Installation method

Mark	Installation Method
A	IMB5
D	IMB3
E	IMB35

8. Encoder type

Mark	Encoder Signal
M	incremental optical coding
N	Wire-saving optical knitting
X	Resolver encoder
B	23-bit multi-turn absolute optical encoder
C1A	17-bit single-turn absolute magnetic encoder
C2A	17-bit multi-turn absolute magnetic encoder
S	24-bit multi-turn absolute magnetic encoder
C	Incremental non-wire-saving magnetic knitting

7. Alarm brake and oil seal

Mark	holding brake
F	Without brake, with oil seal
B	Built-in holding brake has oil seal
A	No holding brake no oil seal
C	With holding brake, and without oil seal

9. Factory logo

Mark	Y	E
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TYPE DESCRIPTION OF PERMANENT MAGNET SERVO MOTOR

2 0 0 F M B - L 0 0 7 1 5 E 3 3 F 1 - M *

1. Square flange side length (mm)

2. Cooling method

Mark	cooling method
F	air cooling
default value	natural cold

3. Product series

Mark	ME	MB	ME1	MD	MH
------	----	----	-----	----	----

4. Moment of inertia

Mark	moment of inertia
L	low inertia
M	medium inertia
H	high Inertia

5. Rated power

Mark	rated power
R40	0.4KW
1R5	1.5KW
003	3KW
7R5	7.5KW
020	20KW

6. Rated speed

Mark	rated revolution
10	1000rpm
15	1500rpm
20	2000rpm
25	2500rpm
30	3000rpm

7. Installation method

Mark	Installation method
A	IMB5
D	IMB3
E	IMB35

8. Voltage level

Mark	Voltage level
23	Three-phase 220V
33	Three-phase 380V
43	Three-phase 440V

9.Alarm brake and oil seal

Mark	holding brake
F	Without brake, with oil seal
B	Built-in holding brake has oil seal
A	No holding brake no oil seal
C	With holding brake, and without oil seal

10. Shaft connection method

Mark	Specifications
default value	Keyed threaded hole
1	Optical axis

11. Encoder Type

Mark	Encoder Signal
M	incremental optical coding
N	Wire-saving optical knitting
X	Resolver encoder
B	23-bit multi-turn absolute optical encoder
C1A	17-bit single-turn absolute magnetic encoder
C2A	17-bit multi-turn absolute magnetic encoder
S	24-bit multi-turn absolute magnetic encoder

12. Factory logo

Mark	M	LA	Z	D	U
	C	N			

DRIVER MODEL DESCRIPTION

V E C - V C 1 0 0 - 0 0 3 2 3 - E

1. VEC Brand

2. Product series

Mark	Current A
VC100	Economic models
VC200	Intelligent
VC300	Bus Topology
VC500	Dedicated
VC600	Built-in PLC
VC800	Linear Motor Drive
VC900	Customized

3. Rated current

Mark	Current A
003	3A
006	6A
007	7A

Mark	Current A
012	12A
016	16A
020	20A
027	27A
032	32A
038	38A
045	45A
060	60A
075	75A
090	90A
110	110A
150	150A

4. Voltage level

Mark	Voltage level
23	Three-phase 220V
33	Three-phase 380V
43	Three-phase 440V

5. Structure type

Mark	Structure type
E	3-32A/110-150A
EA	38-90A

ENCODER LINE MODEL DESCRIPTION

E C M - 0 3 M 1 6 - M 8 0 - R 0 - N

1. Encoder line

2. Structure type

3. Encoder type

Mark	Encoder signal
M	incremental optical coding
N	Wire-saving optical knitting
X	Resolver encoder
B	23-bit multi-turn absolute optical encoder
C1A	17-bit single-turn absolute magnetic encoder
C2A	17-bit multi-turn absolute magnetic encoder
S	24-bit multi-turn absolute magnetic encoder

4. Line length

Mark	line length
03M	03M
05M	05M
08M	08M
10M	10M

5. Number of wire cores

Mark	wire core
4	4-core
8	8-core
16	16-core

6. Adapter motor encoder plug (with J absolute value)

Mark	
M80	M80
Z130	M180
Z180	L200
Y265	A210
M60	U80

7. Flexible cable material

Mark	Flexible cable
R0	5 million times
R1	10 million times
R2	15 million times

8. No battery

Mark	battery mode
N	no battery
default	with battery

POWER LINE MODEL DESCRIPTION

P - R 5 0 0 3 M - M 8 0 - N - R 0

1. Power line

2. Cable wire diameter

Mark	Cable wire diameter
R75	0.75mm ²
001	1.0mm ²
1R5	1.5mm ²
2R5	2.5mm ²
004	4.0mm ²

3. Line length

Mark	line length
03M	03M
05M	05M

6. Adapter motor encoder plug (with J absolute value)

U80	Z180	Y265
M80	M130	M180

5. Drive power terminal

Mark	Drive power terminal
N	Tubular Pre-Insulated Terminals
Y	Y type terminal

6. Flexible cable material

Mark	Flexible cable
R0	5 million times
R1	10 million times
R2	15 million times
default	Common international cable

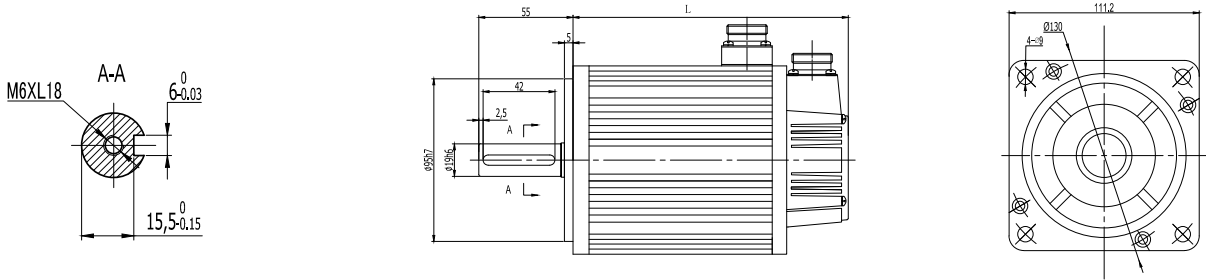
MB series permanent magnet servo motor parameters and dimensions

MOTOR MODEL(A23□-□M)	110MB-1R230	110MB-1R830	130MB-00125	130MB-1R525	130MB-1R515	130MB-00225	130MB-2R625	130MB-2R315
RATED POWER (KW)	1.2	1.8	1	1.5	1.5	2	2.6	2.3
RATED VOLTAGE (V)	220	220	220	220	220	220	220	220
RATED CURRENT (A)	5	6	4	6	6	7.5	10	9.5
MAX CURRENT (A)	15	18	12	18	15	21	25	19
RATED SPEED (rpm)	3000	3000	2500	2500	1500	2500	2500	1500
MAX SPEED (rpm)	3500	3500	2800	3000	1800	3000	2800	1800
RATED TORQUE (N.m)	4	6	4	6	10	7.7	10	15
INSTANTANEOUS TORQUE (N.m)	12	18	12	18	25	22	25	30
ROTOR INERTIA (band brake) [(Kg.m²)X10 ⁻⁴]	5.4 (5.85)	7.6 (8.05)	8.5 (8.95)	12.6 (13.05)	19.4 (20.88)	15.3 (15.75)	19.4 (20.88)	27.7 (29.18)
TORQUE COEFFICIENT (N.m/A)	0.8	1	1	1	1.67	1.03	1	1.58
ELECTRICAL TIME CONSTANT (ms)	3	3.2	2.32	3.26	2.91	2.91	3.36	4.05
WEIGHT(band brake) Kg	6 (8.1)	7.9 (10)	6.2 (8.2)	7.4 (9.4)	10.2 (13.4)	8.3 (10.3)	9.8 (13)	12.6 (15.8)
PROTECTION /COOLING MODE	IP65/natural cooling							

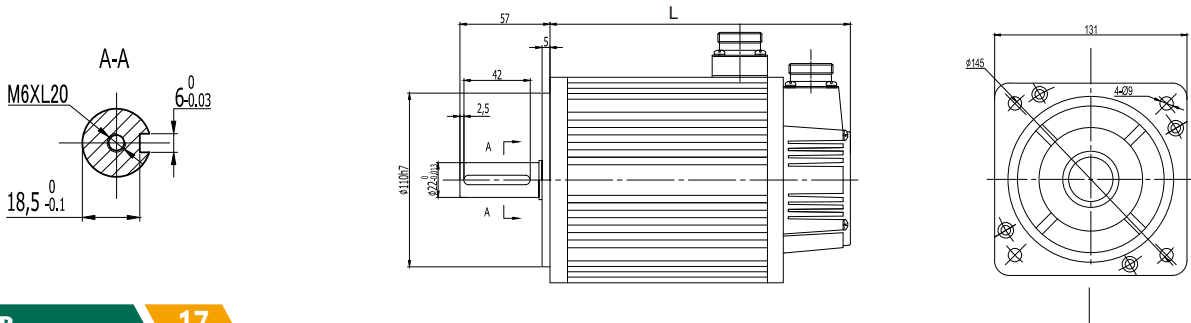
ADAPT DRIVE MODEL	VC□□□-00623	VC□□□-00623	VC□□□-00623	VC□□□-00623	VC□□□-00623	VC□□□-01223	VC□□□-01223	VC□□□-01223
RATED CURRENT (A)	6	6	6	6	6	12	12	12
DIMENSIONS (See page 12)	E1	E1	E1	E1	E1	E2	E2	E2

MOTOR SIZE	110MB		130MB					
	1R230	1R830	00125	1R525	1R515	00225	2R625	2R315
L (mm)	189	219	166	179	213	192	209	241
L(band-type brakemm)	263	293	223	236	294	249	290	322

110MB INSTALLATION DIMENSION DIAGRAM



130MB INSTALLATION DIMENSION DIAGRAM



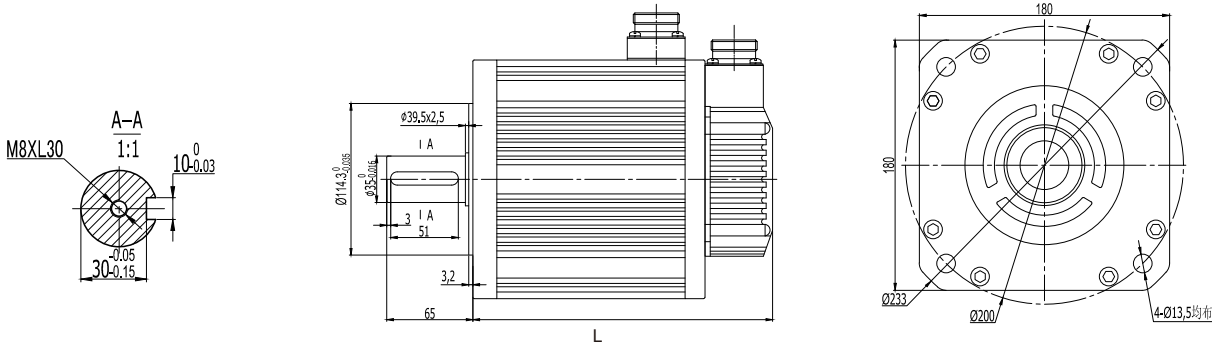
MB series permanent magnet servo motor parameters and dimensions

MOTOR MODEL(A33□-□M)	130MB-1R525	130MB-1R515	130MB-00225	130MB-2R625	130MB-2R315	130MB-3R825	180MB-00315	180MB-4R520	180MB-4R315	180MB-5R515	180MB-7R515
RATED POWER (KW)	1.5	1.5	2	2.6	2.3	3.8	3	4.5	4.3	5.5	7.5
RATED VOLTAGE (V)	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT (A)	3.7	3.5	4.5	5.9	5.9	7.4	7.5	9.5	10	12	20
MAX CURRENT (A)	11	8.7	12.8	14.7	11.8	14.8	18.5	22.5	24.8	24	40
RATED SPEED (rpm)	2500	1500	2500	2500	1500	2500	1500	2000	1500	1500	1500
MAX SPEED (rpm)	3000	2000	3000	3000	1800	2800	2000	2500	2000	2000	2000
RATED TORQUE (N.m)	6	10	7.7	10	15	15	19	21.5	27	35	48
INSTANTANEOUS TORQUE (N.m)	18	25	22	25	30	30	47	53	67	70	96
ROTOR INERTIA (band brake) [(Kg.m²)X10 ⁻⁴]	12.6 (13.05)	19.4 (20.88)	15.3 (15.75)	19.4 (20.88)	27.7 (29.18)	27.7 (29.18)	70 (71.48)	79.6 (81.08)	96.4 (97.88)	122.5 (123.98)	167.2 (168.68)
TORQUE COEFFICIENT (N.m/A)	1.54	1.96	1.64	1.69	2.53	2.03	2.5	2.26	2.7	2.9	2.4
ELECTRICAL TIME CONSTANT (ms)	2.48	3.51	2.84	3.12	12.57	3.9	5.93	5.6	6	6.45	7.8
WEIGHT(band brake)(Kg)	7.4 (9.4)	10.2 (13.4)	8.3 (10.3)	9.8 (13)	12.6 (15.8)	11.7 (14.9)	20.5 (25)	22.2 (26.7)	25.5 (30)	30.5 (35)	40 (45)
PROTECTION/COOLING MODE	IP65/natural cooling										

ADAPT DRIVE MODEL	VC□□□-00733	VC□□□-00733	VC□□□-00733	VC□□□-00733	VC□□□-00733	VC□□□-01233	VC□□□-01233	VC□□□-01233	VC□□□-01233	VC□□□-01233	VC□□□-02033
RATED CURRENT (A)	7	7	7	7	7	12	12	12	12	12	20
DIMENSIONS (See page 12)	E2	E2	E2	E2	E2	E2	E2	E2	E2	E2	E3

MOTOR SIZE	130MB						180MB				
	1R525	1R515	00225	2R625	2R315	3R825	00315	4R520	4R315	5R515	7R515
L (mm)	179	213	192	209	241	232	232	243	262	292	346
L (band-type brakemm)	236	294	249	290	322	304	304	315	334	364	418

180MB INSTALLATION DIMENSION DIAGRAM



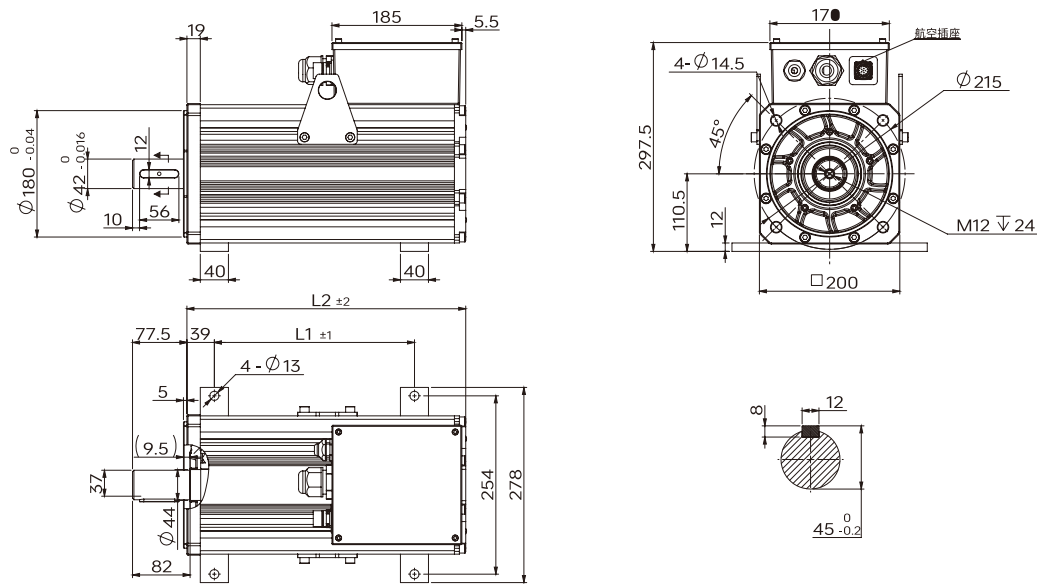
MB1 series permanent magnet servo motor
parameters and dimensions

MOTOR MODEL(A33□-□R)	200MB1-00615	200MB1-00820	200MB1-00915	200MB1-01120	200MB1-01115	200MB1-01420	200MB1-01315	200MB1-01720	200MB1-01515	200MB1-02020	200MB1-01715	200MB1-02320	200MB1-01915	200MB1-02620
RATED POWER (KW)	6.3	8.4	8.5	11.3	10.7	14.2	12.7	17.1	14.9	19.9	17.21	22.8	19.2	25.5
RATED VOLTAGE (V)	380	380	380	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT (A)	11.1	14.8	14.9	19.9	20.1	25.7	22.3	32.6	27.6	36	30	40.1	36	44.8
MAX CURRENT (A)	22.2	29.6	29.8	39.8	40.2	51.4	44.6	65.2	55.2	72	60	80.2	72	89.6
RATED SPEED (rpm)	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000
MAX SPEED (rpm)	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800
RATED TORQUE(N·m)	40	40	54	54	68	68	81	81	95	95	109	109	122	122
INSTANTANEOUS TORQUE (N·m)	72	72	97.2	97.2	122.4	122.4	145.8	145.8	171	171	196.2	196.2	219.6	219.6
ROTOR INERTIA(with a holding brake)[(Kg·m²)X10-4]	81	81	105	105	129	129	153	153	177	177	201	201	225	225
TORQUE COEFFICIENT (N·m/A)	2.7	2.7	3.62	2.71	3.38	2.65	3.63	2.48	3.44	2.64	2.72	2.72	3.39	2.72
ELECTRICAL TIME CONSTANT (ms)	5.45	5.45	6.33	6.3	6.9	6.79	7.35	7.57	7.85	7.76	8.07	8.26	8.21	8.05
WEIGHT(Kg)	37	37	43	43	49	49	55	55	61	61	68	68	74	74
PROTECTION/COOLING MODE	IP54/natural cooling													

ADAPT DRIVE MODEL	VC□□□01633*	VC□□□-01633	VC□□□-01633	VC□□□-02733	VC□□□-02733	VC□□□-02733	VC□□□-02733	VC□□□-03833	VC□□□-03233	VC□□□-03833	VC□□□-03233	VC□□□-04533	VC□□□-03833	VC□□□-04533
RATED CURRENT(A)	16	16	16	27	27	27	27	38	32	38	32	45	38	45
Dimensions (see page 12 for details)	E3	E3	E3	E3	E3	E3	E3	E	E3	E	E3	E	E	E

MOTOR SIZE	200MB1													
	00615	00820	00915	01120	01115	01420	01315	01720	01515	02020	01715	02320	01915	02620
L1 (mm)	189	189	221	221	253	253	285	285	317	317	349	349	381	381
L2 (mm)	295	295	329	329	363	363	397	397	431	431	465	465	499	499

200 MB1 INSTALLATION DIMENSION DIAGRAM



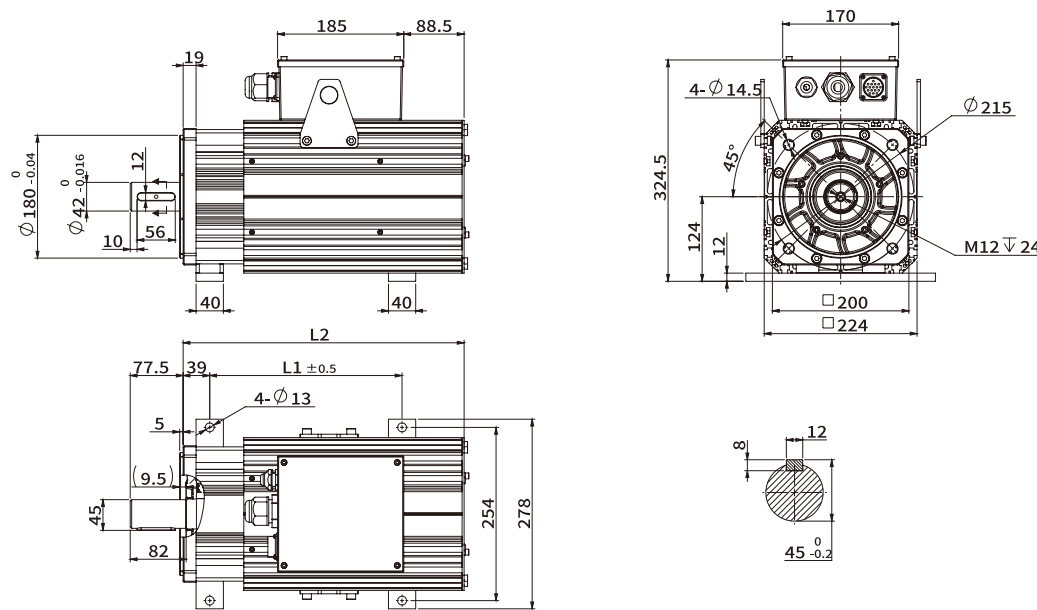
MB1 series permanent magnet servo motor
parameters and dimensions

MOTOR MODEL(A33□-□R)	200FMB1-6R615	200FMB1-8R820	200FMB1-9R915	200FMB1-01320	200FMB1-01315	200FMB1-01820	200FMB1-01715	200FMB1-02220	200FMB1-02015	200FMB1-02620	200FMB1-02315	200FMB1-02615	200FMB1-03015	200FMB1-04020
RATED POWER (KW)	6.6	8.8	9.9	13.2	13.2	17.5	16.5	22	19.8	26.4	23.1	26.4	29.7	39.6
RATED VOLTAGE (V)	380	380	380	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT (A)	11.6	15.5	17.4	23.2	23.2	30.9	30.9	39.8	34.8	50.6	42.8	46.4	55.7	69.6
MAX CURRENT (A)	23.2	31	34.8	46.4	46.4	61.8	61.8	79.6	69.6	101.2	85.6	92.8	111.4	139.2
RATED SPEED (rpm)	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000	1500	1500	1500	2000
MAX SPEED (rpm)	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800	2100	2100	2100	2800
RATED TORQUE(N·m)	42	42	63	63	84	84	105	105	126	126	147	168	189	189
INSTANTANEOUS TORQUE (N·m)	75.6	75.6	113.4	113.4	151.2	151.2	189	189	226.8	226.8	264.6	302.4	340.2	340.2
ROTOR INERTIA(with a holding brake)[(Kg·m²)X10-4]	59	59	81	81	105	105	129	129	153	153	177	201	225	225
TORQUE COEFFICIENT (N·m/A)	3.62	2.71	3.62	2.72	3.62	2.72	3.4	2.64	3.62	2.49	3.43	3.62	3.39	2.72
ELECTRICAL TIME CONSTANT (ms)	4.46	4.38	5.45	5.45	6.33	6.3	6.9	6.79	7.35	7.57	7.85	8.07	8.21	8.05
WEIGHT(Kg)	39	39	44	44	51	51	58	58	64	64	71	78	84	84
PROTECTION/COOLING MODE	IP54/air-cooled													

ADAPT DRIVE MODEL	VC□□□-01633	VC□□□-01633	VC□□□-02033	VC□□□-02733	VC□□□-02733	VC□□□-03233	VC□□□-03233	VC□□□-04533	VC□□□-03833	VC□□□-06033	VC□□□-06033	VC□□□-06033	VC□□□-06033	VC□□□-07533
RATED CURRENT(A)	16	16	20	27	27	32	32	45	38	60	60	60	60	75
Dimensions (see page 12 for details)	E3	E3	E3	E3	E3	E3	E3	E	E	E	E	E	E	E

MOTOR SIZE	200FMB1													
	6R615	8R820	9R915	01320	01315	01820	01715	02220	02015	02620	02315	02615	03015	04020
L1 (mm)	250	250	250	250	282	282	314	314	346	346	378	410	442	442
L2 (mm)	378	378	378	378	412	412	446	446	480	480	514	548	582	582

200 FMB1 INSTALLATION DIMENSION DIAGRAM



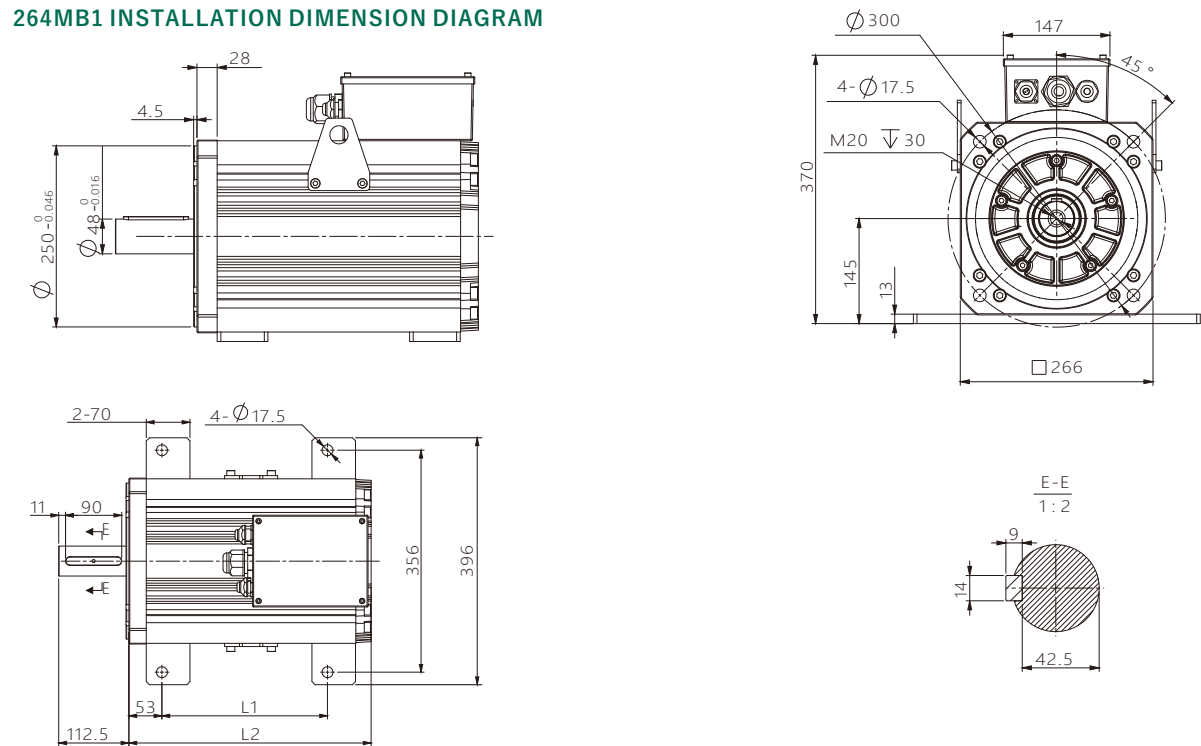
MB1 series permanent magnet servo motor
parameters and dimensions

MOTOR MODEL(A33□-□R)	264MB1-02215	264MB1-02920	264MB1-02715	264MB1-03620	264MB1-03315	264MB1-04420	264MB1-03815	264MB1-05120	264MB1-04415	264MB1-05820	264MB1-04915	264MB1-06520
RATED POWER (KW)	21.8	29.1	27.2	36.2	32.7	43.6	38.2	50.9	43.7	58.2	49	65.3
RATED VOLTAGE (V)	380	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT (A)	41.2	53.7	53.5	66.8	63.1	82.5	71.6	97.6	82.7	107.4	97.4	119
MAX CURRENT (A)	86.52	112.77	112.35	140.28	132.51	173.25	150.36	204.96	173.67	225.54	204.54	249.9
RATED SPEED (rpm)	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000
MAXIMUM SPEED (rpm)	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800
RATED TORQUE (N.m)	139	139	173	173	208	208	243	243	278	278	312	312
INSTANTANEOUS TORQUE (N.m)	250.2	250.2	311.4	311.4	374.4	374.4	437.4	437.4	500.4	500.4	561.6	561.6
ROTOR INERTIA[(Kg.m²)X10 ⁻⁴]	577	577	711	711	846	846	982	982	1117	1117	1252	1252
TORQUE COEFFICIENT (N.m/A)	3.37	2.59	3.23	2.59	3.3	2.52	3.39	2.49	3.36	2.59	3.2	2.62
ELECTRICAL TIME CONSTANT (ms)	12.68	12.58	14.06	13.81	15.34	15.31	16.02	16.21	17.23	17.12	17.82	17.6
WEIGHT(Kg)	84	84	97	97	109	109	122	122	141	141	153	153
PROTECTION/COOLING MODE	IP54/natural cooling											

ADAPT DRIVE MODEL	VC□□□-04533	VC□□□-06033	VC□□□-06033	VC□□□-07533	VC□□□-07533	VC□□□-09033	VC□□□-07533	VC□□□-11033	VC□□□-09033	VC□□□-11033	VC□□□-11033	VC□□□-15033	VC□□□-11033	VC□□□-15033
RATED CURRENT (A)	45	60	60	75	75	90	75	110	90	110	110	150	110	150
Dimensions (see page 12 for details)	E	E	E	E	E	E	E	E	E	E	E	E	E	E

MOTOR SIZE	264MB1											
	02215	02920	02715	03620	03315	04420	03815	05120	04415	05820	04915	06520
L1 (mm)	222	222	259.5	259.5	297	297	334.5	334.5	372	372	409.5	409.5
L2 (mm)	344.5	344.5	382	382	419.5	419.5	457	457	494.5	494.5	532	532

264MB1 INSTALLATION DIMENSION DIAGRAM



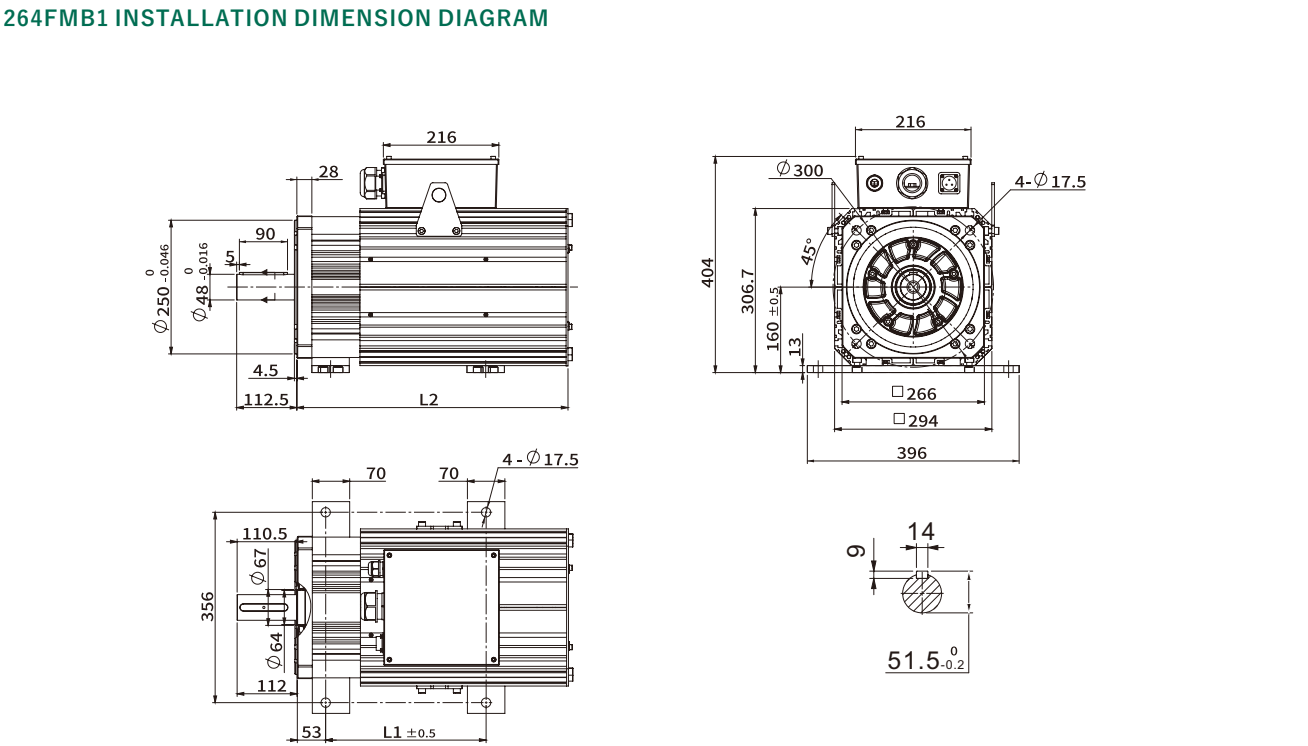
MB1 series permanent magnet servo motor
parameters and dimensions

MOTOR MODEL(A33□-□R)	264FMB1-03415	264FMB1-04520	264FMB1-04215	264FMB1-05620	264FMB1-05015	264FMB1-06720	264FMB1-05915	264FMB1-07820	264FMB1-06715	264FMB1-09020	264FMB1-07615
RATED POWER (KW)	33.6	44.8	42	56	50.4	67.2	58.8	78.4	67.2	89.6	75.6
RATED VOLTAGE (V)	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT (A)	63.6	82.7	82.7	103.3	97.2	127.2	110.2	150.3	127.2	165.3	150.3
MAX CURRENT (A)	133.6	173.7	173.7	216.9	204.1	267.1	231.4	315.6	267.1	347.1	315.6
RATED SPEED (rpm)	1500	2000	1500	2000	1500	2000	1500	2000	1500	2000	1500
MAXIMUM SPEED (rpm)	2100	2800	2100	2800	2100	2800	2100	2800	2100	2800	2100
RATED TORQUE (N.m)	214	214	267.5	267.5	321	321	374.5	374.5	428	428	481.5
INSTANTANEOUS TORQUE (N.m)	385.2	385.2	481.5	481.5	557.8	557.8	674.1	674.1	770.4	770.4	866.7
ROTOR INERTIA[(Kg.m²)X10 ⁻⁴]	577	577	711	711	846	846	982	982	1117	1117	1252
TORQUE COEFFICIENT (N.m/A)	3.36	2.59	3.23	2.59	3.3	2.52	3.4	2.49	3.36	2.59	3.2
ELECTRICAL TIME CONSTANT (ms)	12.68	12.58	14.06	13.81	15.34	15.31	16.02	16.21	17.23	17.12	17.82
WEIGHT(Kg)	97	97	111	111	125	125	138	138	158	158	172
PROTECTION/COOLING MODE	IP54/air-cooled										

ADAPT DRIVE MODEL	VC□□□-07533	VC□□□-09033	VC□□□-09033	VC□□□-11033	VC□□□-11033	VC□□□-15033	VC□□□-15033	VC□□□-17033	VC□□□-15033	VC□□□-21033	VC□□□-17033
RATED CURRENT (A)	75	90	90	110	110	150	150	170	150	210	170
Dimensions (see page 12 for details)	E	E	E	E	E	E	E	E	E	E	E

MOTOR SIZE	264FMB1										
	03415	04520	04215	05620	05015	06720	05915	07820	06715	09020	07615
L1 (mm)	262	262	300	300	338	338	376	376	414	414	452
L2 (mm)	469.5	469.5	507	507	544.5	544.5	582	582	619.5	619.5	657

264FMB1 INSTALLATION DIMENSION DIAGRAM



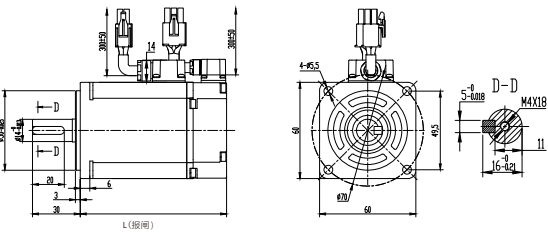
ME series permanent magnet servo motor parameters and dimensions

MOTOR MODEL(A33□-□R)	60ME1-R2030	60ME1-R4030	80ME1-R7530	80ME1-R7520	80ME1-00130	130ME-R8515	130ME-1R315	130ME-1R815	130ME-00120	130ME1-1R520	130ME-00220	130ME-00320
RATED POWER (KW)	0.2	0.4	0.75	0.75	1	0.85	1.3	1.8	1	1.5	2	3
RATED VOLTAGE (V)	220	220	220	220	220	220	220	220	220	220	220	220
RATED CURRENT (A)	1.7	2.5	4.4	3.2	5.8	6	9	12	6	8.5	10	16
MAX CURRENT (A)	5.1	7.5	13.2	9.6	17.4	18	27	36	18	25.5	30	48
RATED SPEED (rpm)	3000	3000	3000	2000	3000	1500	1500	1500	2000	2000	2000	2000
MAXIMUM SPEED (rpm)	6000	6000	6000	4000	6000	3000	3000	3000	3000	3000	3000	2500
RATED TORQUE (N.m)	0.64	1.27	2.39	3.5	3.3	5.39	8.34	11.5	4.77	7.16	9.55	14.32
INSTANTANEOUS TORQUE (N.m)	1.92	3.81	7.17	10.5	9.9	17	24.9	28.7	17	24.6	30	43
ROTOR INERTIA[(Kg.m²)X10 ⁻⁴]	0.28 (0.41)	0.52 (0.67)	1.48 (1.98)	2.27 (2.77)	2.27 (2.77)	7.2 (8.7)	10.3 (11.8)	12.7 (14.2)	7.2 (8.7)	10.3 (11.8)	12.7 (14.2)	19.7 (21.2)
TORQUE COEFFICIENT (N.m/A)	0.38	0.51	0.54	1.09	0.57	0.95	0.91	0.94	0.95	0.91	0.94	0.89
ELECTRICAL TIME CONSTANT (ms)	2.4	2.09	4.26	4.07	4.1	6.72	8.83	9.36	6.72	8.83	9.36	14.44
WEIGHT (Kg)	0.82 (0.88)	1.06 (1.12)	2.1 (2.5)	2.64 (3)	2.64 (3)	4.8 (6.4)	6.2 (7.9)	7.3 (9)	4.8 (6.4)	6.2 (7.9)	7.3 (9)	10.7 (12.2)
PROTECTION/COOLING MODE	IP65/natural cooling											

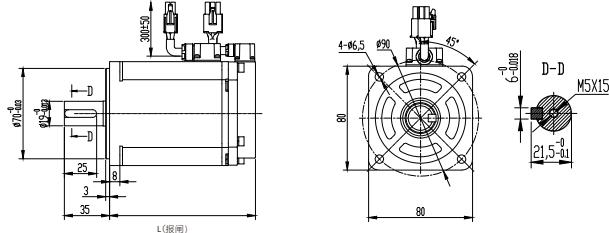
ADAPT DRIVE MODEL	VC□□□-00323	VC□□□-00323	VC□□□-00623	VC□□□-00623	VC□□□-00623	VC□□□-00623	VC□□□-01223	VC□□□-01223	VC□□□-00623	VC□□□-01223	VC□□□-01223	VC□□□-01523
RATED CURRENT (A)	3	3	6	6	6	6	12	12	6	12	12	15
Dimensions (see page 12 for details)	E1	E1	E1	E1	E1	E1	E2	E2	E1	E2	E2	E2

MOTOR SIZE	60ME1		80ME1			130ME1						
	R2030	R4030	R7530	R7520	00130	R8515	1R315	1R815	00120	1R520	00220	00320
L1 (mm)	75	92	100	113	113	137	145.5	170	137	145.5	170	219.5
L2 (mm)	105	122	134	147	147	171	179.5	204	171	179.5	204	253.5

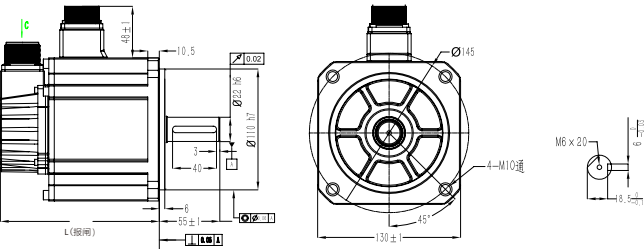
60 ME1 INSTALLATION DIMENSION DIAGRAM



80 ME1 INSTALLATION DIMENSION DIAGRAM



130 ME1 INSTALLATION DIMENSION DIAGRAM



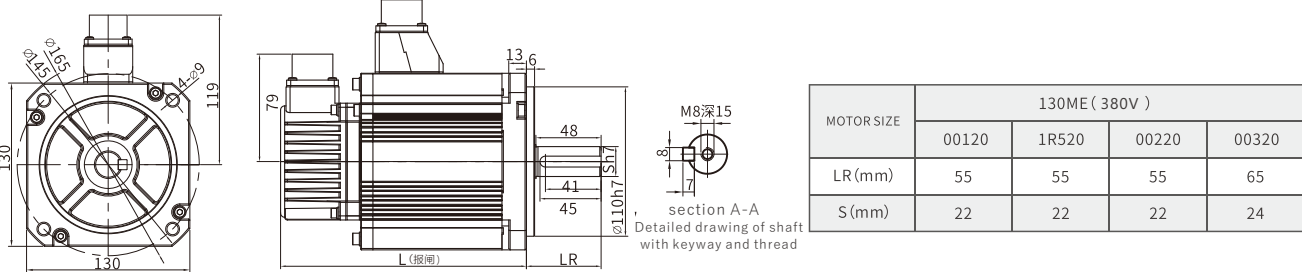
ME series permanent magnet servo motor parameters and dimensions

MOTOR MODEL(A33□-□R)	130ME-00120	130ME-1R520	130ME-00220	130ME-00320	180ME-2R915	180ME-4R415	180ME-5R515	180ME-7R515
RATED POWER (KW)	1.0	1.5	2.0	3.0	2.9	4.4	5.5	7.5
RATED VOLTAGE (V)	380	380	380	380	380	380	380	380
RATED CURRENT (A)	2.8	4.8	5.9	9.6	11.2	16.7	19.5	24
MAX CURRENT (A)	8.8	17	19.2	29	34	50.5	59.0	62
RATED SPEED (rpm)	2000	2000	2000	2000	1500	1500	1500	1500
MAXIMUM SPEED (rpm)	3000	3000	3000	3000	3000	3000	3000	3000
RATED TORQUE (N.m)	4.77	7.16	9.55	14.3	18.4	28.4	35	48
INSTANTANEOUS TORQUE (N.m)	14.3	26.2	28.7	42.9	55.2	85.2	105	105
ROTOR INERTIA[(Kg.m²)X10 ⁻⁴]	4.6 (6.6)	6.7 (8.7)	8.7 (10.7)	15.1 (17.1)	36 (45)	55 (66)	67.5 (78.5)	70 (81)
TORQUE COEFFICIENT (N.m/A)	1.7	1.5	1.6	1.5	1.65	1.7	1.8	1.9
ELECTRICAL TIME CONSTANT (ms)	10	10	10	12	22	15	18	22
WEIGHT (Kg)	6.48 (6.64)	8.19 (8.35)	8.65 (8.81)	13.19 (13.35)	15.8 (20.6)	22.91 (27.71)	26.07 (30.87)	27.6 (32.4)
PROTECTION/COOLING MODE	IP65/air-cooled							

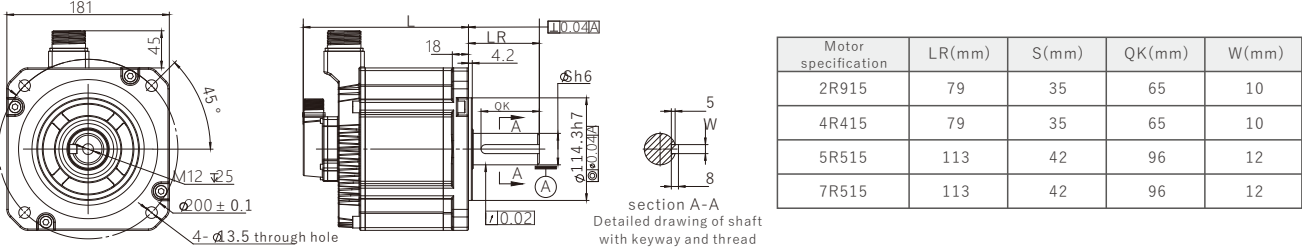
ADAPT DRIVE MODEL	VC□□□-00733	VC□□□-00733	VC□□□-00733	VC□□□-01233	VC□□□-01233	VC□□□-02033	VC□□□-02033	VC□□□-02733
RATED CURRENT (A)	7	7	7	12	12	20	20	27
Dimensions (see page 12 for details)	E2	E2	E2	E2	E2	E3	E3	E3

MOTOR SIZE	130ME				180ME			
	00120	1R520	00220	00320	2R915	4R415	5R515	7R515
L1 (mm)	211.5	229	246.5	309.5	277.5	309.5	364.5	371.5
L2 (mm)	240.5	258.5	276.5	339.5	335	367	422	429

130 ME INSTALLATION DIMENSION DIAGRAM



180 ME INSTALLATION DIMENSION DIAGRAM



MOTOR SIZE	130ME (380V)			
	00120	1R520	00220	00320
LR (mm)	55	55	55	65
S (mm)	22	22	22	24

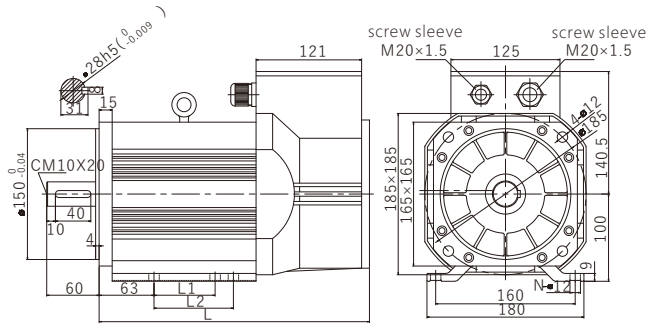
Motor specification	LR (mm)	S (mm)	QK (mm)	W (mm)
2R915	79	35	65	10
4R415	79	35	65	10
5R515	113	42	96	12
7R515	113	42	96	12

MC series spindle servo motor parameters and dimensions

MOTOR MODEL(A33E-*Y)	185MC-1R5C	185MC-2R2C	185MC-3R7C	215MC-5R5C	215MC-7R5C	265MC-011C	265MC-015C	265MC-018C	265MC-022C	265MC-030C	350MC-037C	350MC-045C	350MC-055C	350MC-075C
RATED POWER(KW)	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	30	37	45	55	75
RATED VOLTAGE(V)	380	380	380	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT(A)	3.8	5.1	8.2	11.4	15.3	22.2	29.1	35.7	42	56.5	68.5	84.1	103.6	139.8
RATED SPEED(rpm)	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
MAXIMUM SPEED(rpm)	6000	6000	6000	6000	6000	6000	4500	4500	6000	6000	3600	3600	3600	3600
RATED TORQUE(N·m)	9.6	14	23.6	35	48	70	96	118	140	191	236	287	350	478
30-MINUTE RATED TORQUE(N·m)	14	23.6	35	48	70	95.5	118	140	166	236	287	350	478	573
ROTOR INERTIA(with a holding brake)[(Kg.m²)X10 ⁻⁴]	58	77	101	169	236	605	791	954	1117	1676	3724	4469	5362	6405
FRAME NUMBER	165S	165M	165N	200M	200L	265S	265M	265L	265H	265F	360M	360L	360H	360E
WEIGHT(Kg)	20	23	25	40	50	60	110	120	130	180	320	360	400	480

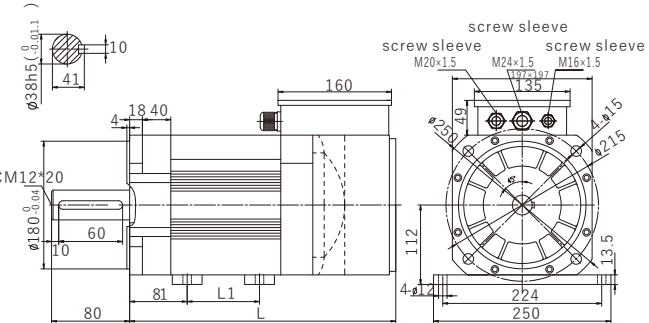
ADAPT DRIVE MODEL	VC□□□-00733	VC□□□-00733	VC□□□-01233	VC□□□-01233	VC□□□-01633	VC□□□-02733	VC□□□-03233	VC□□□-03833	VC□□□-04533	VC□□□-06033	VC□□□-07533	VC□□□-09033	VC□□□-11033	VC□□□-15033
RATED CURRENT(A)	7	7	12	12	16	27	32	38	45	60	75	90	110	150
Dimensions (see page 12 for details)	E2	E2	E2	E2	E3	E3	E3	EA	EA	EA	EA	EA	EA	EA

185 MC INSTALLATION DIMENSION DIAGRAM



Box No.	L	L1	L2	N
165S	310	70	/	4
165M	335	95	112	6
165N	365	140	159	6
165L	385	140	159	6
165H	445	200	219	6

215 MC INSTALLATION DIMENSION DIAGRAM



Box No.	L	L1
200S	375	109
200M	405	139
200L	455	189
200H	505	239

FILTER SELECTION TABLE (FOR REFERENCE ONLY)

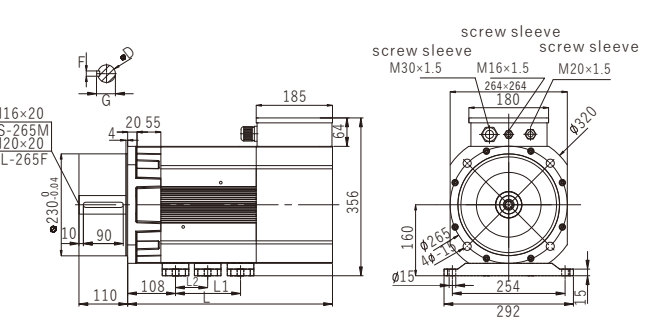
current	5A	10A	20A	30A	50A	70A	90A	120A
Filter model	YX84G2-5A-S Rd1806054	YX84G3-10A-S Rd1806053	YX84G3-20A-S Rd1806052	YX84G5-30A-S Rd1806051	YX84G4-50A-S Rd1806050	YX84G6-70A-S Rd1806049	YX84G6-90A-S Rd1806048	YX84G6D-120A-S Rd1703010

MC series spindle servo motor parameters and dimensions

MOTOR MODEL(A33E-*Y)	265MC-7R5A	265MC-011A	265MC-015A	350MC-018A	350MC-022A	350MC-030A	350MC-037A	215MC-004B	215MC-5R5B	215MC-7R5B	265MC-011B	265MC-015B	265MC-018B	265MC-022B	350MC-030B	350MC-037B	350MC-050B
RATED POWER(KW)	7.5	11	15	18	22	30	37	4	5.5	7.5	11	15	18.5	22	30	37	50
RATED VOLTAGE(V)	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380
RATED CURRENT(A)	15.3	22.1	29.9	35.9	43.7	61	72.5	8.6	11.8	16.5	22.1	29.6	36.3	42.8	57.9	70.3	98.1
RATED SPEED(rpm)	750	750	750	750	750	750	750	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
MAXIMUM SPEED(rpm)	2250	2250	2250	1800	1800	1800	1800	4000	4000	4000	3000	3000	3000	4000	2500	2500	2500
RATED TORQUE(N·m)	96	140	191	236	280	382	471	38	52.5	71.6	105	143	177	210	287	353	478
30-MINUTE RATED TORQUE(N·m)	115	166	236	280	331	471	573	52.5	71.6	105	124	177	210	248	353	430	716
ROTOR INERTIA(with a holding brake)[(Kg.m²)X10 ⁻⁴]	791	1117	1676	3724	4469	5362	6405	169	236	303	791	1117	1350	1676	4469	5362	6405
FRAME NUMBER	265M	265H	265F	360M	360L	360H	360E	200M	200L	200H	265M	265H	265E	265F	360L	360H	360E
WEIGHT(Kg)	110	130	180	320	360	400	480	40	50	60	110	130	150	180	360	400	480

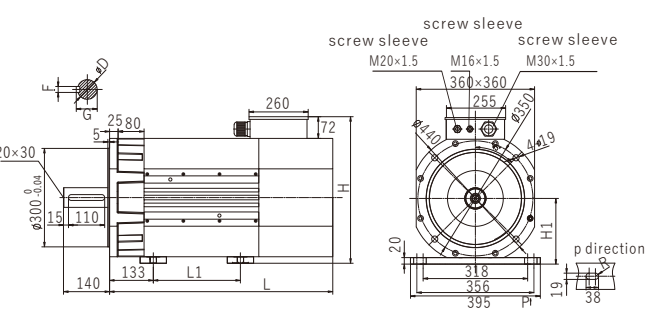
ADAPT DRIVE MODEL	VC□□□-01633	VC□□□-02733	VC□□□-03233	VC□□□-03833	VC□□□-04533	VC□□□-06033	VC□□□-07533	VC□□□-01233	VC□□□-01233	VC□□□-02033	VC□□□-02733	VC□□□-03233	VC□□□-03833	VC□□□-04533	VC□□□-06033	VC□□□-07533	VC□□□-11033
RATED CURRENT(A)	16	27	32	38	45	60	75	12	12	20	27	32	38	45	60	75	110
Dimensions (see page 12 for details)	E3	E3	E3	EA	EA	EA	E2	E2	E2	E3	E3	E3	EA	EA	EA	EA	EA

265 MC INSTALLATION DIMENSION DIAGRAM



Box No.	L	L1	L2	D	F	G
265S	482	133	/	42h5(0/-0.011)	12	45
265M	510	173	/	42h5(0/-0.011)	12	45
265L	545	208	/	42h5(0/-0.013)	16	59
265H	580	243	/	55h5(0/-0.013)	16	59
265E	630	293	/	55h5(0/-0.013)	16	59
265F	700	363	174	55h5(0/-0.013)	16	59

350 MC INSTALLATION DIMENSION DIAGRAM



Box No.	L	L1	H	H1	D	F	G
360S	713	265	452	200	55h5(0/-0.013)	16	59
360M	763	315	477	225	55h5(0/-0.013)	16	59
360L	813	365	477	225	60h5(0/-0.013)	18	64
360H	873	425	477	225	60h5(0/-0.013)	18	64
360E	943	495	477	225	60h5(0/-0.013)	18	64

BRAKE RESISTANCE SELECTION TABLE (FOR REFERENCE ONLY)

Current (A)	3	6	12	12	12	16	20	27	32	38	45	60	75	90	110	150
Voltage (V)	220	220	220	380	380	380	380	380	380	380	380	380	380	380	380	380
Resistance (Ω)	180	100	35	80	50	40	40	25	20	20	15	10	10	7	5	4
Resistor Power (W)	200	250	780	1200	1500	2400	3200	3200	4500	5500	6600	9000	11000	13000	16000	21000