A&B®

Product Selection Manual

Focus on customer experience and help customers succeed

Wenzhou AB technology Co., Ltd

ISO9001 CQC CB CE RoHS

ABOUT US

Our company adheres to the business philosophy of "People-Oriented, Shared Success," integrating responsibility with value creation. We are committed to becoming a leader in the automation industry and achieving excellence.making outstanding contributions to "intelligent manufacturing in China

**Yueqing A&B Electric Co., Ltd., Founded in 2005 with the website is: www. abelec. com,specializes in electrical products, with a core focus on export, distributing globally. In the company strategically expanded into industrial automation by establishing its subsidiary: **Wenzhou A&B Technologies Co., Ltd. The website is :abtechup.com.

A&B Technologies concentrates on the R&D and manufacturing of core industrial control components like **PLC controllers** and **servo drives**. **Leveraging switches, relays, and power supplies produced by our parent company, alongside the advantages of Yueqing's electrical industry cluster, we integrate local supply chain resources to establish an integrated industrial control ecosystem. Through rigorous OEM partnerships, we maintain stringent quality control while building our **proprietary brand "A&B".

We provide global clients with:
* High-performance industrial control components
* Customized automation solutions
* Electrical control integration systems

Backed by a 50-member R&D team, 200+ production personnel, and an overseas service network, we guarantee technological leadership, lean manufacturing, and responsive global support.

Guided by our philosophy of "**Innovation-driven, Quality-focused, Customer-centric**", A&B is committed to becoming a trusted global provider of solutions and core components in industrial automation, driving the advancement of smart manufacturing.




Technical Strength&Application

With core expertise in motion control, industrial inspection, and fault diagnosis, we hold 100+ intellectual property rights. Our key products include:

- AC/DC Servo Drives
- Servo Motors
- PLC and HMI
- Industrial automation control products

All products are CE-certified and widely applied in

- Robotics/Manipulators
- Construction Machinery
- Printing & Packaging
- 3C Automation

R&D Team

Our multidisciplinary team collaborates with top universities (Hunan University, Central South University, Zhejiang University, etc.) to bridge industry-academia innovation. Expertise covers

- Smart Control
- Mechanical Engineering
- Computer Science
- Communication Engineering

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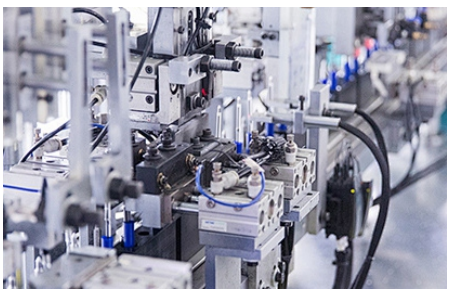



A&B
荣誉奖
安勤科技
Test Verification of Conformity
Certificate of Approval

DIRECTORY

High quality guarantes

After strict standard testing such as EMC testing, environmental reliability testing, and routine testing, it leaves the factory

Servo Drives

Over View

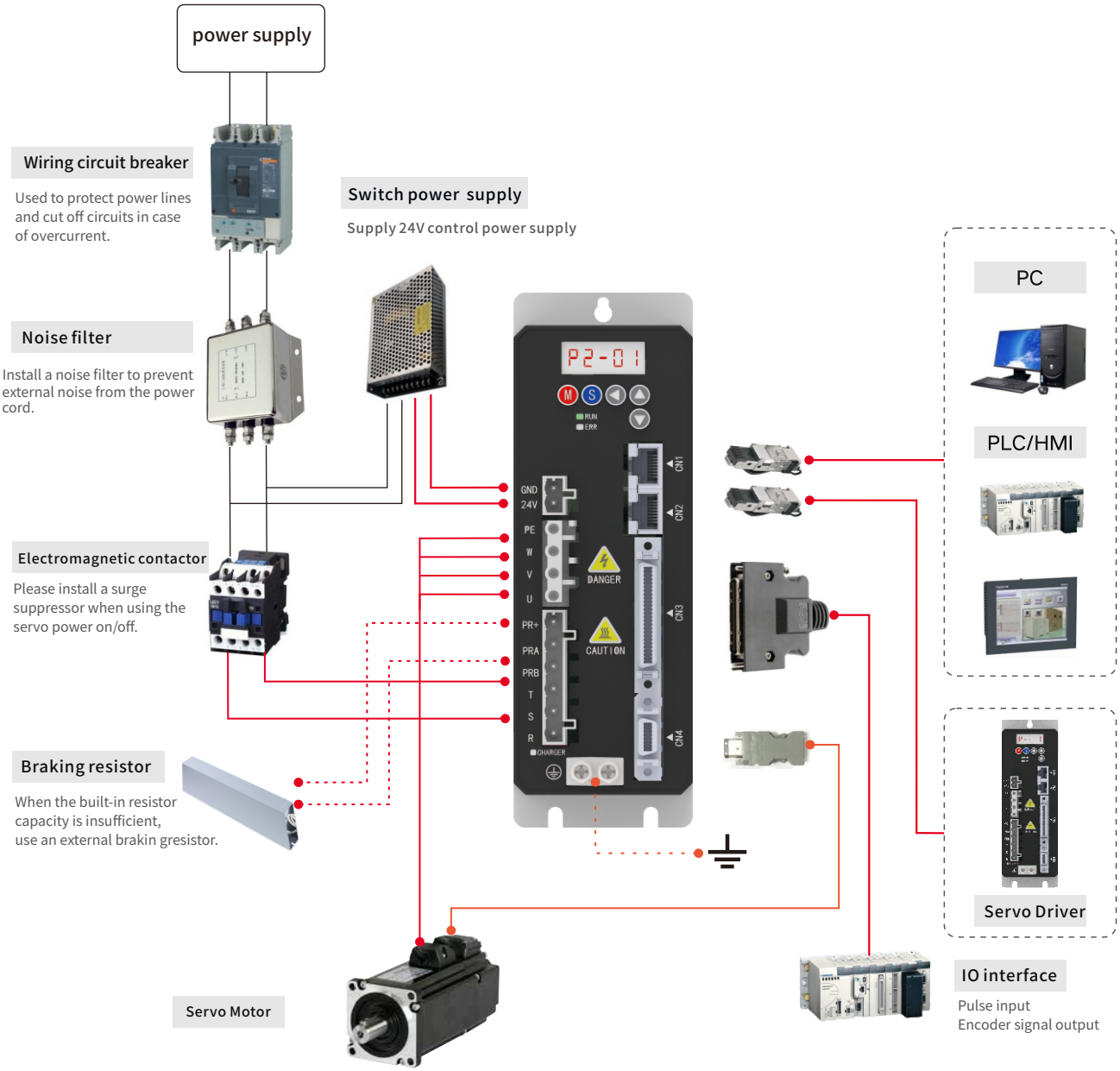
The ABS series servo drive adopts interationally advanced hardware architecture and redundant design scheme

The key components are strictly screened and tested and the whole machine testing is strictly standardized. Eachprocess adopts high standards, and the stability, reliability and control accuracy of the product are at the forefronto the industry. lt has passed CE and other international safety certification, and has extensive compatibility. lt is a high-performance motion control product developed by Aicortech specifically for the fields of robots/manipulatorspackaging machinery, and 3C non-standard automation equipment. lt has rich interfaces, supports multiple communication methods and position encoders, and can be matched with Aicortech series servo motors and mainstream servo motors in the market through simple settings. it has outstanding usability, strong universality, and can also meet the customized needs of special application scenarios.

Compatible **Easy To Use** **Stability** **General** **Precise**

Open and flexible

Universal compatibility, supporting multiple fieldbus communication protocols and encoders

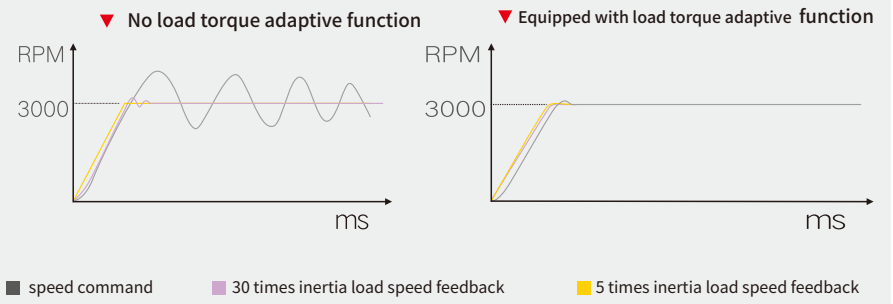


Excellent performance

High precision and fast response, automatic identification and adjustment of parameters to achieve better configuration

Load adaptive

Automatic identification of system parameters such as load inertia and damping, online adjustment of control parameters, and algorithms with strong adaptability, fast response, and high accuracy. The experiment shows that it still has good tracking characteristics at 30 times the inertia.



Shock absorption

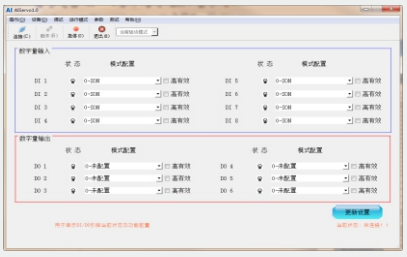
The position control algorithm combining hysteresis and variable parameters can reduce end effector vibration and improve positioning accuracy, especially suitable for high inertia systems, which can effectively suppress vibration near the target position.

Safe torque

Optional Safe Torque Function (STO).

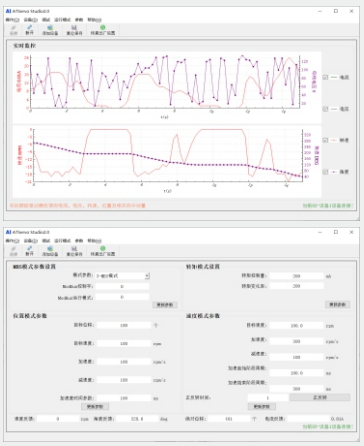
special aoftware

Equipped with dedicated upper computer software, it can set and regulate parameters on the PC end, and has online detection and analysis functions.



Self-diagnosis

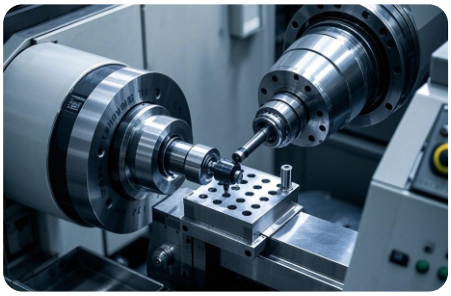
Online status monitoring and fault diagnosis, built-in self repair and early health warning functions.



Economical, practical, easy to operate, stable and reliable performance

▸Application scenarios

Widely used in equipment for packaging, printing, woodworking and other industries.



▸Performance characteristics

- Supports multiple communication methods such as Modbus, EtherCAT, CANopen, etc.
- Economical, practical, easy to operate, stable and reliable in performance.
- The speed band width reaches 3kHz, which can meet the vast majority of application scenarios.
- Positioning time within 3.5ms, positioning accuracy ± 1 pulse.
- The working temperature range is wide, which can reach -10 °C~+50 °C.
- Vibration and jitter suppression, automatic gain adjustment, and more stable operation.
- Load adaptive function, automatic recognition and adjustment of system parameters to achieve optimized configuration.

ABS10

Model Description

ABS10 — 04 A 01 E2 N

Customization

Mark	Type
N	Normal
C	Customized

Series

Mark
ABS10

Rated power

Mark	Type
02	0.2kW
04	0.4kW
07	0.75kW
10	1.0kW
15	1.5kW
22	2.2kW
30	3.0kW

Voltage class

Mark	Type
A	Single phase AC220V
B	Three phase AC220V
C	Three phase AC380V

Control mode

Mark	Type
01	Pulse specific type
02	Modbus+CANopen
03	EtherCAT
04	Codesys

Encoder

Mark	Type
E2	Optical Encoder 17bit
E3	Optical Encoder 23bit
M2	Magnetic Encoder 17bit

ABS10 Series

AC servo drive

AC servo drive models

ABS10 series AC servo drive					
Model	power（kW）	output current（A）	maximum output current（A）	Size	Input power supplyM(V)
ABS10-02A*	0.2	1.6	5.8	SIZE-A	Single phase Ac220
ABS10-04A*	0.4	2.8	10.1	SIZE-A	Single phase Ac220
ABS10-07A*	0.75	5.5	16.9	SIZE-B	Single phase Ac220
ABS10-10A*	1.0	7.6	23.0	SIZE-B	Single phase Ac220
ABS10-15A*	1.5	11.6	32.0	SIZE-E	Single phase Ac220
ABS10-15B*	1.5	11.6	32.0	SIZE-E	Three phase Ac220
ABS10-15C*	1.5	5.4	14.0	SIZE-F	Three phase Ac380
ABS10-22C*	2.2	8.4	20.0	SIZE-F	Three phase Ac380
ABS10-30C*	3.0	11.9	29.75	SIZE-E	Three phase Ac380

Note: Control mode, encoder feedback type, etc. in the model are replaced with "."*"
For more specific models, please refer to the model description and consult customer service.

Specification parameter table

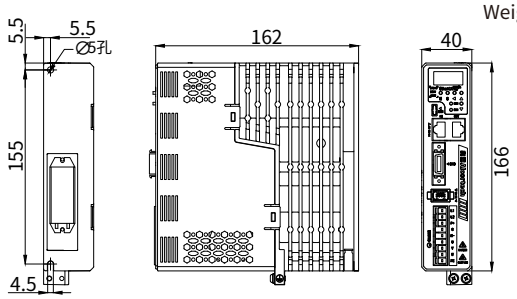
Project		Specification parameters
Power supply	Main circuit	Single phase AC220V ± 10%; Three phase 220V ± 10%
		Three phase 380V ± 10%
	Loop	Busbar power supply
	Cooling method	⩽0.4kW: natural cooling; >0.4kW: forced air cooling
Control mode		FOC
Mode		I/O communication,EtherCAT communication, Modbus communication
Braking resistor		SIZE-A/B type external; SIZE-Etype built-in (connected when capacity is insufficient)
Position control mode	Maximum input pulse frequency	Optocoupler input: 200KHz Differential input: 2MHz
	Pulse command mode	Pulse+direction; CW pulse+CCW pulse, Phase A+Phase B
	Command control mode	External pulse control/bus communication control
	Feedforward gain	Internal parameter setting
	Torque limit	Internal parameter setting
	Electronic gear ratio	N=1~32767, M=1~65535, N/M=0.02~5000
Speed control mode	Command control mode	Bus communication control/analog quantity
	Torque limit	Internal parameter setting
	Speed control range	1~6000rpm
	Acceleration and deceleration methods	Linear acceleration and deceleration or S-shaped acceleration and deceleration
Torque control mode	Command control mode	Internal instructions/analog quantities
	Speed limit	Internal parameter setting
	Torque control accuracy	±3%
Digital Input/Output	Encoder frequency division pulse output	A-phase, B-phase,Z-phase: differential output
		Frequency division pulse number: (16~32768) can be set arbitrarily
	Assignable input signal	Number of points:8(pulse train)Numberof points:7(Bus series)
		Servo enable/forward drive disable/reverse drive disable/bias count reset/zero speed clamp/alarm reset/origin input
		Near origin input/forward limit position/reverse limit position, etc
	Assignable input signal	Number of points:6 (pulse train)Number of points: 4 (Bus series)
		Alarm signal/positioning completed/speed reached/servo ready/zero speed detection/brake opening, etc
Protection function		Overcurrent/overvoltage/undervoltage/overlo ad/overheating/encoder error/speed deviation/position deviation/limit, etc
Auxiliary functions		JOG mode/alarm recording/origin setting, etc
Communication interface		Modbus-RTU/CANopen/EtherCAT
Encoder feedback type		Absolute value formula: 17bit/23bit (single or multiple cycles); Magnetic/Optical Encoding

Project		Specification parameters
Protection grade		Ip20
environmental condition	Usage temperature	-10 °C~+50°c (When the ambient temperature is between 40 'C~50 'c, the average load rate should not exceed 80%)
	Humidity	Below 90% RH (no freezing or condensation allowed)
	Vibration &lmpact	Vibration below 4.9m/s²; Impact below 19.6m/s²
	Altitude	The highest usage altitude is 2000m. At an altitude of over 1000m, for every 100m increase, the power decreases by 1.5%
	Others	No static interference, strong magnetic field, strong electric field, no corrosive gases, flammable gases, oil stains, dust, etc

External dimensions

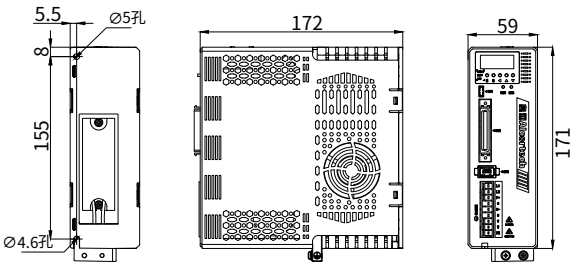
SIZE-A(Bus type)
Power range:0.1kW~0.4kW

Weight:0.82kg



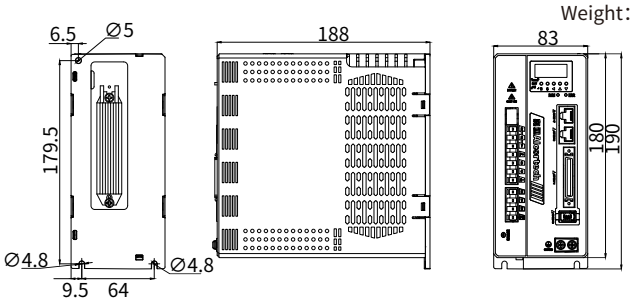
SIZE-B(mpulsive)
Power range:0.75kW~1kW

Weight:1.10kg



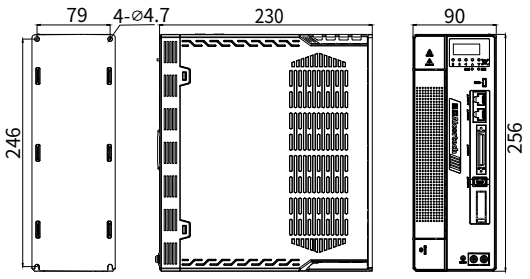
SIZE-E
Power range: 1.5kW~3kW

Weight:1.90kg



SIZE-F
Power range:4kW~7.5kW

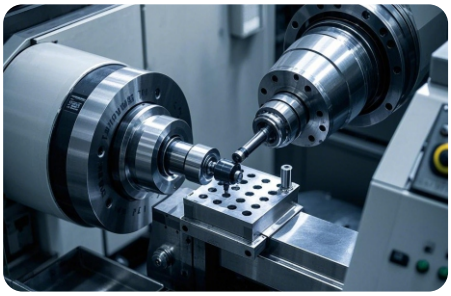
Weight:3.75kg



Economical, practical, easy to operate, stable and reliable performance

▸Application scenarios

Widely used in equipment for packaging, printing, woodworking and other industries.



▸Performance characteristics

- Supports multiple communication methods such as Modbus, EtherCAT, CANopen, etc.
- Power range: 0.1 kW - 3 kW..
- The speed band width reaches 3kHz, which can meet the vast majority of application scenarios.
- Positioning time within 3.5ms, positioning accuracy ± 1 pulse.
- The working temperature range is wide, which can reach -10 °C~+50 °C.
- Vibration and jitter suppression, automatic gain adjustment, and more stable operation.
- Load adaptive function, automatic recognition and adjustment of system parameters to achieve optimized configuration.

ABS12

Model Description

ABS12 — 04 A 01 E2 N

Customization

Mark	Type
N	Normal
C	Customized

Series

Mark
ABS12

Rated power

Mark	Type
02	0.2kW
04	0.4kW
07	0.75kW
10	1.0kW
15	1.5kW
22	2.2kW
30	3.0kW

Voltage class

Mark	Type
A	Single phase AC220V
B	Three phase AC220V
C	Three phase AC380V

Control mode

Mark	Type
01	Pulse specific type
02	Modbus+CANopen
03	EtherCAT
04	Codesys

Encoder

Mark	Type
E2	Optical Encoder 17bit
E3	Optical Encoder 23bit
M2	Magnetic Encoder 17bit

ABS12 Series

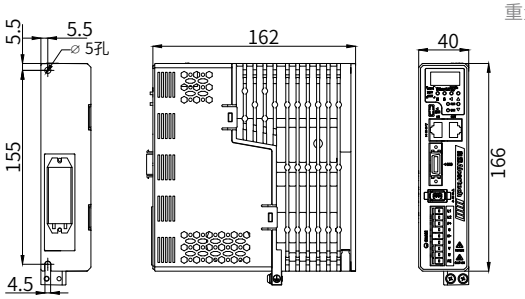
AC servo drive

注:型号中控制方式、编码器反馈类型等以“*”代替，
更多具体型号可参考型号说明以及咨询客服。

ABS12 series AC servo drive					
型号	Size	Power （kW）	Rated Current Output （A）	Maximum Current Output （A）	Input Current(V)
ATS12-02A*	SIZE-A	0.2	1.6	5.8	Single phase Ac220
ATS12-04A*	SIZE-A	0.4	2.8	10.1	Single phase AC220
ATS12-07A*	SIZE-B	0.75	5.5	16.9	Single phase AC220
ATS12-10A*	SIZE-B	1.0	7.6	23.0	Single phase AC220
ATS12-15A*	SIZE-B	1.5	11.6	32.0	Single phase AC220
ATS12-15B*	SIZE-E	1.5	11.6	32.0	Three phase AC220
ATS12-20B*	SIZE-F	2.0	18.0	45	Three phase AC220
ATS12-25B*	SIZE-F	2.5	22.0	55	Three phase AC220
ATS12-20C*	SIZE-E	2.0	8.4	20.0	Three phase Ac380
ATS12-30C*	SIZE-E	3.0	11.9	29.75	Three phase AC380

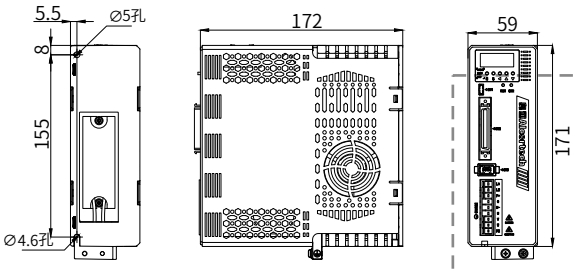
▶ SIZE-A(Bus type)
Power range:0.1kW~0.4kW

重量:0.82kg



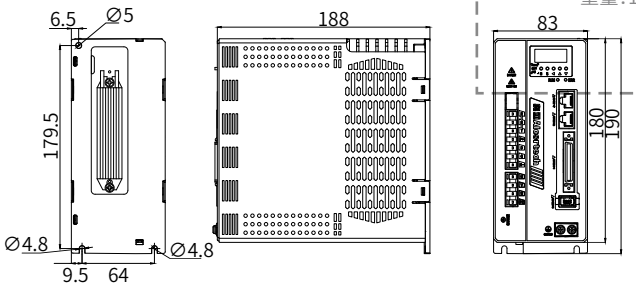
▶ SIZE-B(mpulsive)
Power range:0.75kW~1kW

重量:1.10kg



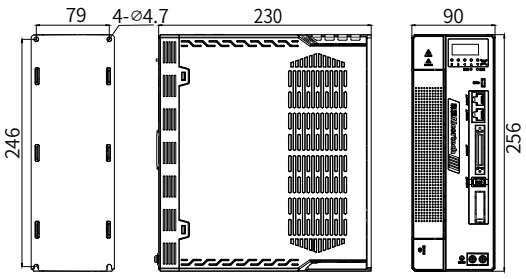
▶ SIZE-E
Power range: 1.5kW~3kW

重量:1.90kg



▶ SIZE-F
Power range:4kW~7.5kW

重量:3.75kg



ABS12 Series

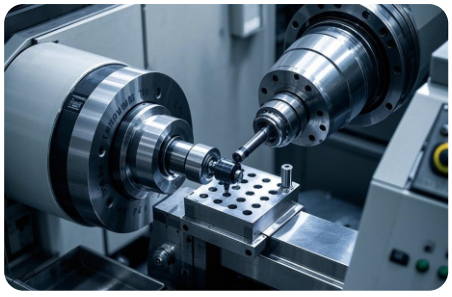
AC servo drive

Project		Specification parameters
电源	Primary circuit	Model SIZE-A/B: Single-phase AC 220V ±10%, 50/60Hz
		Model SIZE-E: Voltage selectable based on motor compatibility, options include: Single phase AC220V±10%，50/60Hz； Three phase AC220V±10%，50/60Hz； Three phase AC380V±10%，50/60Hz； Note: AC220V and AC380V are not interchangeable!
		Model SIZE-F: The voltage level can be selected as follows based on the compatible motor: Three phase AC220V±10%，50/60Hz；Three phase AC380V±10%，50/60Hz; Note: AC220V and AC380V are not interchangeable!
	Control circuit	Model SIZE-A/B/E: Powered via busbar Model SIZE-F: Classified according to main circuit power supply voltage as follows: Single phase AC220V±10%，50/60Hz； Single phase AC380V±10%，50/60Hz; Note: AC220V and AC380V are not interchangeable!
	Cooling method	Standard Version:≤0.4kW: Natural cooling
Control method		Field-Oriented Control (FOC)
Operating Mode		I/OCommunication、EtherCATCommunication、ModbusCommunication
Braking Resistor		Model SIZE-E/F: Built-in braking resistor (external resistor can be connected when capacity is insufficient)
Position controlmode	Maximuminputpulsefrequency	Optocoupler input: 200KHz Differential input:2MHz
	Pulse command mode	Pulse+direction; CW pulse + CCW pulse, Phase A+Phase B
	Command control mode	External pulse control/bus communi cation control
	Feedforward gain	Internal parameter setting
	Torque limit	Internal parameter setting
	Electronic gear ratio	N=1~32767，M=1~65535，N/M=0.02~5000
Speed controlmod	Command control mode	Bus communication control/analog quantity
	Feedforward gain	Internal parameter setting
	Torque limit	1~6000rpm
	Electronic gear ratio	Linear acceleration and deceleration or S-shaped acceleration and deceleration
Torque controlmode	Command control mode	Internal instructions/analog quantities
	Speed limit	Internal parameter setting
	Torque control accuracy	±3%
Digital Input/Output	Encoder frequency division pulse output	A-phase, B-phase, Z-phase: differential output
		Frequency division pulse number:(16~32768)can be set arbitrarily
	Assignable input signal	Number of points:8(pulsetrain)Numberof points:7(Bus series)
		Servo enable/forward drivedisable/reversedrivedisable/biascountreset/zerospeedclamp/alarmreset/origininput
		Nearorigininput/forwardlimitposition/reverselimitposition,etc
	Assignable input signal	Numberofpoints:6(pulsetrain)Numberofpoints:4(Busseries)
		Alarm signal/positioning completed/speed reached/servoready/zero speed detection/brake opening,etc
Protection function		Overcurrent/overvoltage/undervoltage/overload/overheating/encodererror/speeddeviation/positiondeviation/limit,etc
Auxiliary functions		JOG mode/alarm recording/origin setting, etc
Communication interface		Modbus-RTU/EtherCAT
Encoder feedback type		Absolute value fo rmula: 17bit/23bit(single or multiple cycles); Magnetic/Optical Encoding
Protection grade		IP20
environmental condition	Usage temperature	-10°C~+50°c(When the ambient temperature is between 40°C~50°C, the average load rate should not exceed80%)
	Humidity	Below 90% RH(no freezing or condensation allowed)
	Vibration &lmpact	Vibration below4.9m/s^2;Impact below 19.6m/s^2
	Altitude	The highest usage altitude is 2000m.At an altitude of over1000m,forevery100m increase, thepower decreases by1.5%
	Others	No static interference, strong magnetic field, strong electric field, no corrosive gases, flammable gases,oil stains, dust, etc

Enhance adaptability to wide temperature environments and have wider applications

▸ Application scenarios

Widely used in industries such as healthcare, textiles, new energy, and service robots.



▸ Performance characteristics

- Supports mulriple bus communication methods such as Modbus, CANopen, EtherCAT, etc.
- Supports 2500 line incremental, 17/23 bit absolute encoder, and rotary transformer.
- More redundancy and protection settings can be applied to extreme working conditions.
- The speed band width reaches 3kHz, which can meet the application requirements of ultra fast response frequency.
- Positioning time within 2ms, positioning accuracy± 1 pulse.
- The working temperature range is wider, reaching-20 °C~+55°C.
- Vibration and jitter suppression, wider automatic gain adjustment range, and more stable operation.
- Load adaptive function, automatic identification and adjustment of parameters to achieve more optimized configuration.

ABS20

Model Description

ABS20 — 02 A 03 E1 N

Series

Mark
ABS20

Rated power

Mark	Type
02	0.2kW
04	0.4kW
07	0.75kW
10	1.0kW
15	1.5kW
⋮	⋮
110	11kW
150	15kW
220	22kW

Voltage class

Mark	Type
A	Single phase AC220V
B	Three phase AC220V
C	Three phaseAC380V

Control mode

Mark	Type
01	Pulse specific type
02	Modbus+CANopen
03	EtherCAT

Encoder

Mark	Type
E1	Optical 2500 line incremental type
E2	Optical Encoder 17bit
E3	Optical Encoder 23bit
M1	Magnetic 2500 line incremental type
M2	Magnetic Encoder 17bit
R0	Rotating Transformer

Customization

Mark	Type
N	Normal
C	Customized

ABS20 Series

AC servo drive

AC servo drive models

ABS20 series AC servo drive					
Model	power（kW）	output current （A）	maximum output current（A）	Size	Input power supply(V)
ABS20-02*	0.2	1.6	5.0	SIZE-A	AC220
ABS20-04*	0.4	2.6	7.9	SIZE-A	AC220
ABS20-07*	0.75	5.1	15.5	SIZE-A	AC220
ABS20-10*	1.0	7.0	21.0	SIZE-C	AC220
ABS20-15*	1.5	8.3	25.1	SIZE-C	AC220
ABS20-22*	2.2	7.5	18.8	SIZE-E	AC380
ABS20-30*	3.0	10.0	24.0	SIZE-E	AC380
ABS20-55*	5.5	16.0	38.0	SIZE-E	AC380
ABS20-75*	7.5	25.0	60.0	SIZE-E	AC380
ABS20-110*	11.0	25.5	60.5	SIZE-G	AC380
ABS20-150*	15.0	35	82.5	SIZE-G	AC380
ABS20-220*	22.0	50	115	SIZE-G	AC380

Note: Voltage, control mode, encoder feedback type, etc. in the model are replaced with"*". For more specific models, please refer to the model description, selection table, and consult customer service

Specification parameter table

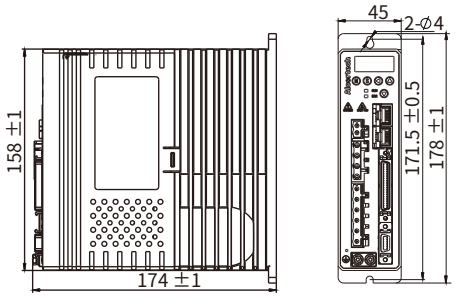
Project		Specification parameters
Power supply	Main circuit	Single phase AC220V ± 10%; Three phase 220V ± 10%
		Three phase 380V ± 10%
	Loop	Busbar power supply
	Cooling method	⩽750kW: natural cooling; >750kW: forced air cooling
Control mode		FOC
Mode		I/O communication
Braking resistor		Built-in (connected when capacity is insufficient)
Position control mode	Maximum input pulse frequency	Optocoupler input: 500KHz Differential input: 4MHz
	Pulse command mode	Pulse+direction; CW pulse+CCW pulse, Phase A+Phase B
	Command control mode	External pulse control/bus communication control
	Feedforward gain	Internal parameter setting
	Torque limit	Internal parameter setting
	Electronic gear ratio	N=1~32767, M=1~65535, N/M=0.02~5000
Speed control mode	Command control mode	Bus communication control/analog quantity
	Torque limit	Internal parameter setting
	Speed control range	1~6000rpm
	Acceleration and deceleration methods	Linear acceleration and deceleration or S-shaped acceleration and deceleration
Torque control mode	Command control mode	Internal instructions
	Speed limit	Internal parameter setting
	Torque control accuracy	±2%
Digital Input/Output	Encoder frequency division pulse output	A-phase, B-phase,Z-phase: differential output
		Frequency division pulse number: (16~32768) can be set arbitrarily
	Assignable input signal	Number of points: 6
		Servo enable/forward drive disable/reverse drive disable/bias count reset/zero speed clamp/alarm reset/origin input
		Near origin input/forward limit position/reverse limit position, etc
	Assignable input signal	Numberof points: 6
		Alarm signal/positioning completed/speed reached/servo ready/zero speed detection/brake opening, etc
Protection function		Overcurrent/overvoltage/undervoltage/overload/overheating/encoder error/speed deviation/position deviation/limit,etc
Auxiliary functions		JOG mode/alarm recording/origin setting, etc
Communication interface		Modbus-RTU / CANopen / EtherCAT
Encoder feedback type		Absolute value formula: 17bit/23bit (single or multiple turns)/rotary transformer/user specified

Project		Specification parameters
Protection grade		Ip20
environmental condition	Usage temperature	-20 °C~+55 °C (When the ambient temperature is between 40 °C~50 °C, the average load rate should not exceed 80%)
	Humidity	Below 90% RH (no freezing or condensation allowed)
	Vibration &Impact	Vibration below 4.9m/s^2; Impact below 19.6m/s^2
	Altitude	The highest usage altitude is 2000m. At an altitude of over 1000m, for every 100m increase, the power decreases by 1.5%
	Others	No static interference, strong magnetic field, strong electric field, no corrosive gases, flammable gases, oil stains, dust, etc

External dimensions

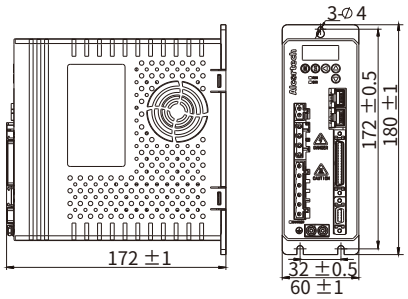
SIZE-A
Power range: 0.2kW~0.75kW

Weight:1.04kg



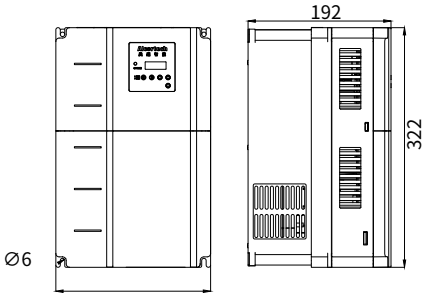
SIZE-C
Power range:1kW~1.5kW

Weight:1.22kg



SIZE-G
Power range:11kW~22kW

Weight:5.95kg



Note: For the appearance of SIZE-E and SIZE-F models with power ranging from 2kW to 7.5kW, please refer to the dimension drawings of the ABS10 series.

ABS60 Series

DC servo drive

Master core algorithms, be open and flexible, and support customization

► Performance characteristics

- Fully digital circuit products.
- Covering a wide range of power.
- Covering a wide voltage input range.
- Support the networked operation of multiple servo drives
- Enhance environment adaptability, up to -20 °C~+55 °C
- Structural optimization design, compact layout.
- We can provide customized services according to user needs to meet special occasions and more complex functional requirements.
- Integrate multiple control strategies and provide versatile upper computer software

► Application scenarios

Widely used in industries such as warehousing and logistics, security gates, and construction vehicles.

ABS60

Model Description

ABS60 — 05 D 03 E1 N

- ABS60 — Series
- 05 — Rated power
- D — Voltage class
- 03 — Controlmode
- E1 — Encoder
- N — Customization

Mark	Type
N	Normal
C	Customized

Mark	Type
ABS60	

Mark	Type
05	5A
15	15A
25	25A
40	40A
50	50A
60	60A

Mark	Type
D	DC12V
E	DC24V
G	DC36V
F	DC48V

Mark	Type
01	Pulsespecifictype
02	Modbus+CANopen
03	EtherCAT

Mark	Type
E1	Optical 2500 lineincremental type
E2	Optical Encoder 17bit
E3	Optical Encoder 23bit
M2	Magnetic Encoder 17bit
R0	Rotating Transformer

ABS60 Series

DC servo drive

DC servo drive models

ABS60 series DC servo drive					
Model	Input voltage (V)	output current (A)	maximum output current(A)	Size	Communication method
ABS60-05*	12V/24V/36V/48V	5	15	SIZE-A	485/CAN/ETHERCAT
ABS60-15*	24V/36V/48V	15	45	SIZE-B	485/CAN/ETHERCAT
ABS60-25*	24V/36V/48V	25	60	SIZE-B	485/CAN/ETHERCAT
ABS60-40*	24V/36V/48V	40	100	SIZE-C	485/CAN/ETHERCAT
ABS60-50*	24V/36V/48V	50	120	SIZE-C	485/CAN/ETHERCAT
ABS60-50*	24V/36V/48V	50	120	SIZE-D	485/CAN/ETHERCAT

Note: Voltage, control mode, encoder feedback type, etc. in the model are replaced with "*".
For more specific models, please refer to the model description, selection table, and consult customer service.

Specification parameter table

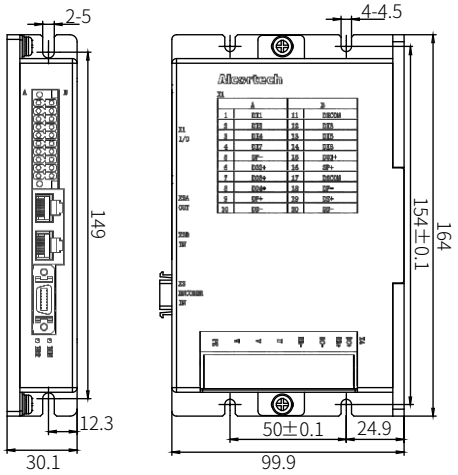
Project		Specification parameters
Input power supply voltage		12V / 24V / 36V / 48V
Output current		5A/15A/25A/40A/50A/60A
Control mode		FOC
Mode		I/O communication
Braking resistor		External
Position controlmode	Maximum input pulse frequency	Optocoupler input:200KHz Differential input:4MHz
	Pulse command mode	Pulse+direction; CW pulse+CCW pulse; Phase A+P hase B
	Command control mode	External pulse control/bus communication control
	Feedforward gain	Internal parameter setting
	Torque limit	Internal parameter setting
	Electronic gear ratio	N=1~32767，M=1~65535，N/M=0.02~5000
Speed controlmode	Command control mode	Bus communication control/analog quantity
	Torque limit	Internal parameter setting
	Speed control range	1~3000 rpm
	Acceleration and deceleration methods	Linear acceleration and deceleration or S-shaped acceleration and deceleration
Torque controlmode	Command control mode	Internal instructions
	Speed limit	Internal parameter setting
	Torque control accuracy	±3%
Digital Input/Output	Assignable input signal	Number of points:7
		Servo enable/forward drive disable/reverse drive disable/bias count reset/zero speed clamp/alarm reset/origin input
		forward limit position/reverselimit position, etc
	Assignable output signal	Number of points: 4
		Alarm signal/positioning completed/speed reached/servo ready/zero speed detection/brake opening, etc
Protection function		Overcurrent / overvoltage / undervoltage / overload / overheating / encoder error / speed deviation / position deviation / limit, etc
Auxiliary functions		JOG mode / alarm recording / origin setting, etc
Communication interface		Modbus-RTU / CANopen / EtherCAT
Encoder feedback type		Absolute value formula: 17bit / 23bit (single or multiple turns)
		Incremental: 2500 lines
		Rotary transformer
		User specified
Protection grade		Ip20
environmental condition	Usage temperature	-20°C~+55°C (When the ambient temperature is between 40°C~50°C, the average load rate should not exceed 80%)
	Humidity	Below 90% RH (no freezing or condensation allowed)
	Vibration & Impact	Vibration below 4.9m/s^2; Impact below 19.6m/s^2
	Altitude	The highest usage altitude is 2000m. At an altitude of over 1000m, for every 100m increase, the power decreases by 1.5%
	Others	No static interference, strong magnetic field, strong electric field, no corrosive gases, flammable gases, oil stains, dust, etc

External dimensions

SIZE-B

Current range:15A-25A

Weight:0.52kg

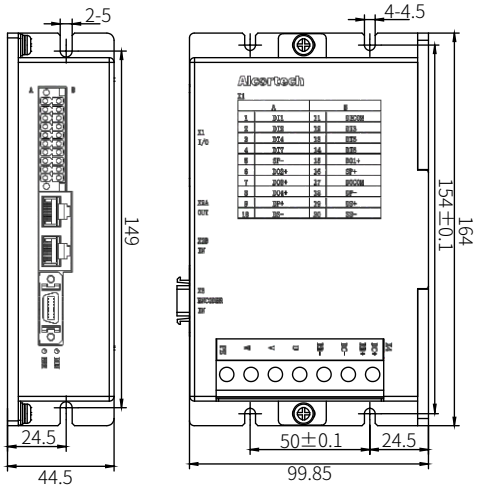


SIZE-C

Current range:40A~50A

*Need to provide heat dissipation conditions

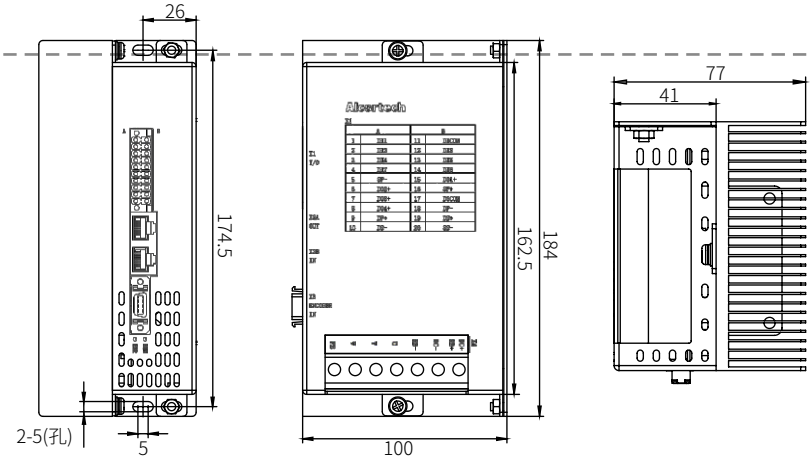
Weight:0.65kg



SIZE-D

Current range :50A~60A

Weight:1.24kg



Protecting the environment is everyone's responsibility

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