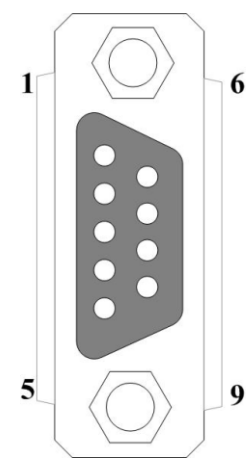


## 4 Encoder signal wiring

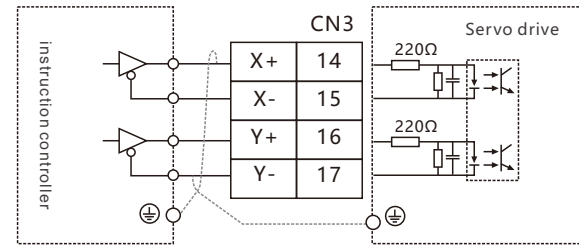


CN2 9P PIN DEFINITION (FEMALE HEADER)				
Pin No.	absolute value signal	resolver signal	Line saving photoelectric signal	Signal of BISS-C encoder
1	reserve	S1	A+	CLK+
2	reserve	S3	A-	CLK-
3	reserve	S2	B+	DATA+
4	reserve	S4	B-	DATA-
5	absolute encoder signal positive	R1	Z+	reserve
6	absolute encoder signal negative	R2	Z-	reserve
7	+5V	+5V	+5V	+5V
8	0V	0V	0V	0V
9	reserve	reserve	reserve	reserve
case	Shielding layer	Shielding layer	Shielding layer	Shielding layer

Remarks: VC economical servo only supports absolute encoder (resolver needs to be customized with our company), PN/EtherCAT bus servo only supports cable-saving optical encoder

## 5 Position command input wiring example

- The figure on the right describes the wiring method of the position command input (pins 14, 15, 16, and 17) in the CN3 port in detail.
- There are two options for the input signal type of the position command, which are 5V differential signal input and open-collector input. When the position command is differential input, the wiring is as shown on the right.



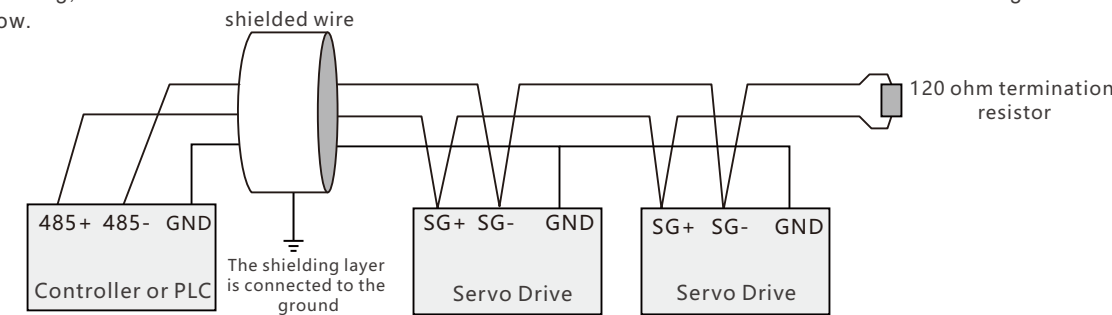
- When the position command is open-collector input, the wiring is as shown in the figure below.

<p>Open collector input, upper controller is NPN type (Japanese PLC such as Mitsubishi, Panasonic, Omron, etc.), using servo internal power supply.</p> <p>The wiring of Y+(16 feet) and Y-(17 feet) is similar to that of X+ and X-</p>	<p>Open collector input, upper controller is NPN type (Japanese PLC such as Mitsubishi, Panasonic, Omron, etc.), using external power supply.</p> <p>The above picture VCC=24V. The wiring of Y+(16 feet) and Y-(17 feet) is similar to that of X+ and X-</p>
<p>Open collector input, the upper controller is PNP type (European PLC such as Siemens), and uses the internal power supply of the servo.</p> <p>The wiring of Y+(16 feet) and Y-(17 feet) is similar to that of X+ and X-</p>	<p>Open collector input, the upper controller is PNP type (European PLC such as Siemens), and the external power supply prepared by the user is used.</p> <p>Figure VCC=24V. The wiring of Y+(16 feet) and Y-(17 feet) is similar to that of X+ and X-</p>

## 6 Communication signal wiring

Location and function	Terminal shape	Explanation																											
CN1 : RS485 communication interface		<table border="1"> <thead> <tr> <th>PIN</th> <th>Define</th> <th>Explanation</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>CANH</td> <td>High signal of CAN bus</td> </tr> <tr> <td>2</td> <td>CANL</td> <td>Low signal of CAN bus</td> </tr> <tr> <td>3</td> <td>GND</td> <td>Power Ground</td> </tr> <tr> <td>4</td> <td>SG+</td> <td>RS485 Signal of Positive</td> </tr> <tr> <td>5</td> <td>SG-</td> <td>RS485 Signal of Negative</td> </tr> <tr> <td>6</td> <td>NC</td> <td>Dangling</td> </tr> <tr> <td>7</td> <td>NC</td> <td>Dangling</td> </tr> <tr> <td>8</td> <td>GND</td> <td>Power Ground</td> </tr> </tbody> </table>	PIN	Define	Explanation	1	CANH	High signal of CAN bus	2	CANL	Low signal of CAN bus	3	GND	Power Ground	4	SG+	RS485 Signal of Positive	5	SG-	RS485 Signal of Negative	6	NC	Dangling	7	NC	Dangling	8	GND	Power Ground
		PIN	Define	Explanation																									
		1	CANH	High signal of CAN bus																									
		2	CANL	Low signal of CAN bus																									
		3	GND	Power Ground																									
		4	SG+	RS485 Signal of Positive																									
		5	SG-	RS485 Signal of Negative																									
		6	NC	Dangling																									
7	NC	Dangling																											
8	GND	Power Ground																											
<p>Remark: The definition of CN1 of Profinet/EtherCAT bus servo is the definition of standard RJ45 interface.</p>																													

- Note (1) When multiple drives are used in parallel with RS485 bus, please add a 120Ω terminal resistance between the SG+ and SG- terminals of the most remote drive
- Note (2) When multiple drivers are used in parallel with CAN bus, please add a 120Ω terminating resistor between the CANH and CANL terminals of the farthest driver
- Note (3) The general-purpose servo uses RS-485 signal communication, and the CANopen bus type servo uses CAN signal communication.
- Note (4) When wiring, connect the GND terminal of the host device and the GND terminal of the servo driver together .As shown below.



Location and function	Terminal shape	Explanation	wiring	
Cn5 RS232 communication port		It is used for computer monitoring servo drive.		
		Pin No.	Define	Explanation
		1	GND	Power Ground
		2	NC	Dangling
		3	TXD	Servo RS232 send
4	RXD	Servo RS232 receive		
5	NC	Dangling		

## 7 Anti-interference wiring

In order to reduce electromagnetic interference, it is recommended to use shielded cables for motor lines, and to install noise filters on the RST end of the driver.

# Vc Series Server Driver

## Wiring Instructions 2.0



SHENZHEN WEIKEDA TECHNOLOGY CO.,LTD.

### Dongguan R&D Building▶

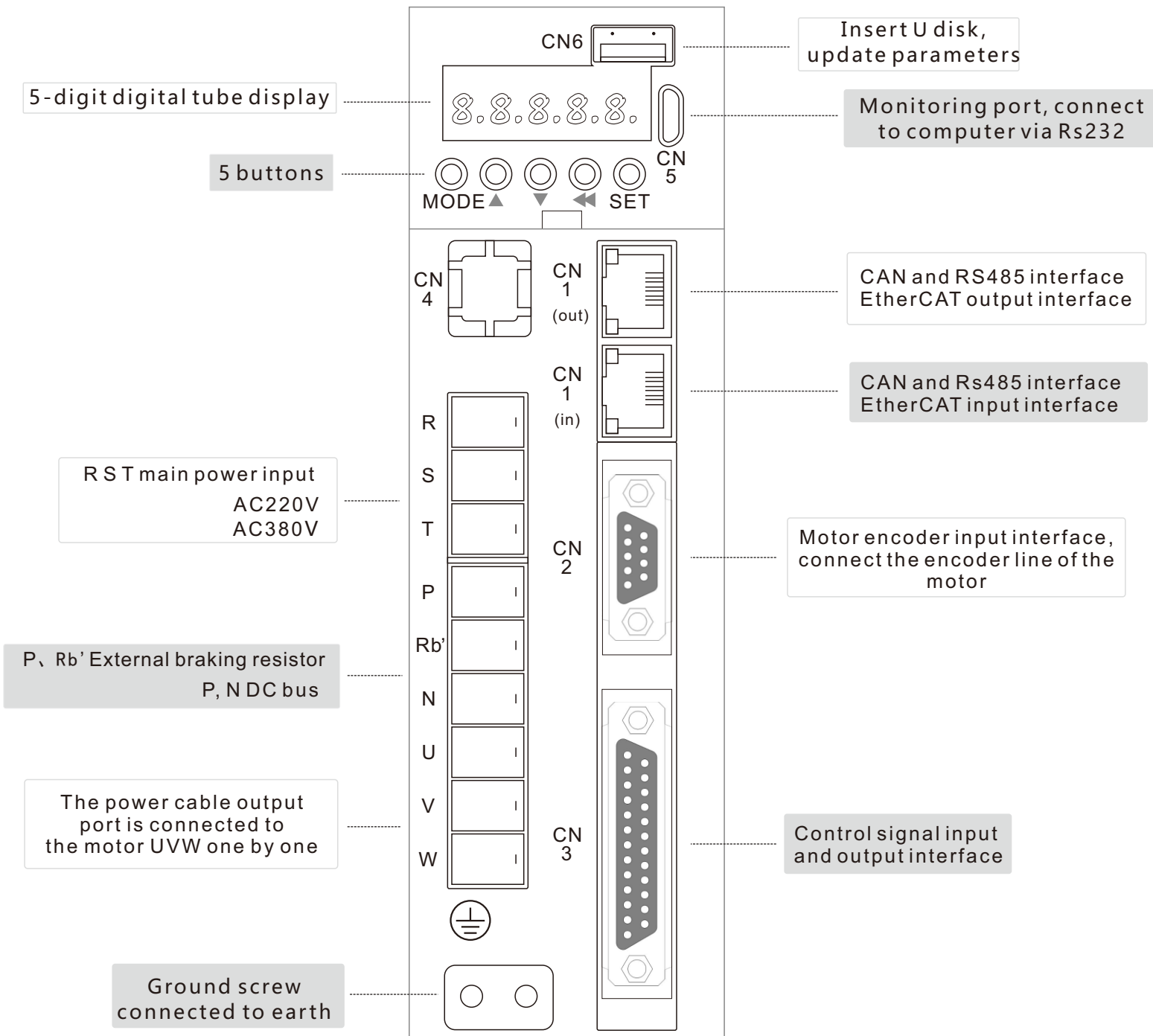
Building 12, CIMC Zhigu, No. 1 Nanshan Road, Songshan Lake High-tech Industrial Development Zone, Dongguan City, Guangdong Province  
phone number : 0769-22235716

### Shenzhen Office▶

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E-mail: [weike@szvector.com](mailto:weike@szvector.com)

# 1 Drive overview

Scan the QR code on the cover to view the electronic manual



# 2 Nameplate Description

## 2.1 Drive nameplate

### VEC - VC100 - 003 23 - E

1 VEC Brands	2 Product Series	3 Rated current	4 Voltage level	5 structure type
mark Current A	mark Current A	mark Current A	mark Voltage level	mark structure type
VC100 Economy	003 3A	045 45A	23 Three-phase 220V	E 3-32A/110-150A
VC200 Smart	006 6A	060 60A	33 Three-phase 380V	EA 38-90A
VC300 Bus	007 7A	075 75A	43 Three-phase 440V	
VC500 dedicated	012 12A	090 90A		
VC600 Built-in PLC	016 16A	110 110A		
Vc800 Linear Motor Drive	020 20A	150 150A		
VC900 non-standard custom	027 27A			
	032 32A			
	038 38A			

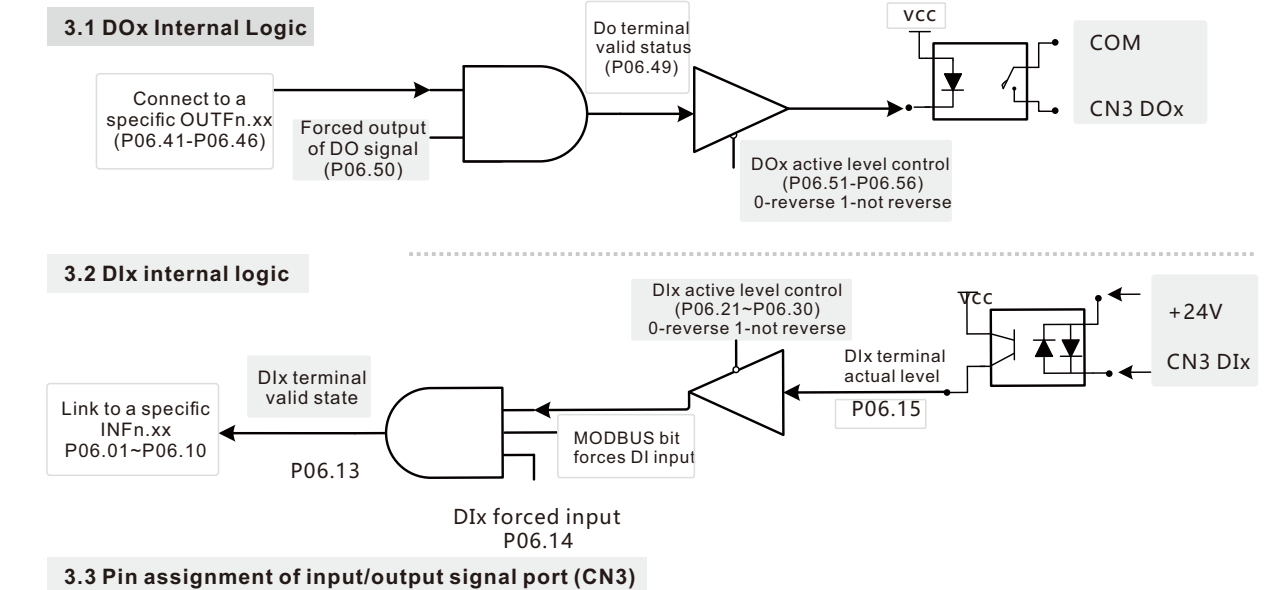
## 2.2 Motor nameplate

### 200 F MB - L 007 15 E 33 F 1 - M F2 \*

200	Square flange side length dimension(mm)	mark	Specification
F	cooling method	F	air-cooled natural cold
MB	Product Series	ME/MB/ME1/MD/MH	
L	Moment of inertia	L	low inertia
		M	medium inertia
		H	high inertia
007	rated power	mark	Specification
		R40	0.4KW
		1R5	1.5KW
		003	3.0KW
		7R5	7.5KW
		020	20.0KW
15	Rated speed	mark	Rated speed
		10	1000rpm
		15	1500rpm
		20	2000rpm
		25	2500rpm
		30	3000rpm
E	Installation method	mark	Specification
		A	IMB5
		D	IMB3
		E	IMB35
*	Factory logo		M/LA/Z/D/U/C/N

# 3 Input/Output Signal Wiring

Remarks: 1. External DC24V power supply is required to COM and +24V  
2. VC economical DDO only supports NPN type



## 3.3 Pin assignment of input/output signal port (CN3)

Profinet bus type CN3 25P pin definition			Economy CN3 25P pin definition (including CAN bus)		
Pin No.	Define	Explanation	Pin No.	Define	Explanation
11, 12	+24V	External DC24V power supply, for DI, DO work	10, 11	+24V	External DC24V power supply, for DI, DO work
9, 17	COM		9	COM	
3	DO1C	Programmable digital input	3	DO1	Programmable digital input
2	DO2C		2	DO2	
1	DO3C		1	DO3	
14	DO3E		8	DI1	
15	DO2E	Programmable digital output	7	DI2	Programmable digital input
16	DO1E		6	DI3	
8	DI1		5	DI4	
7	DI2	Programmable digital output	14	X+	position command input
6	DI3		15	X-	
5	DI4	Reset	16	Y+	
4	RST	Built-in analog ground	17	Y-	Reset
24	AGND	Analog input	4	RST	Reset
25	AI1	Analog input	24	AGND	Built-in analog ground
13	AI2		25	AI1	Analog input
10	SW-DI	NPN/PNP jumpers for DI	13	AI2 (DI5)	Default analog input (can be customized as digital DI5 input)
20	OA+	Select encoder signal frequency division output or second encoder input through parameter P03.78	12	XYPH	XY input pull-up resistor
21	OA-		20	OA+	Select encoder signal frequency division output or second encoder input through parameter P03.78
22	OB+		21	OA-	
23	OB-		22	OB+	
18	+5V	Built-in +5V power supply	23	OB-	
19	0V	Connect to the ground wire of the driver	18	+5V	Built-in +5V power supply
case	Shielding layer		19	0V	Built-in +5V power supply