VECTOR-S100 DC Variable Frequency Motor Roller Driver Three Braking Modes Acceleration And Deceleration Range 0.39~3.9s

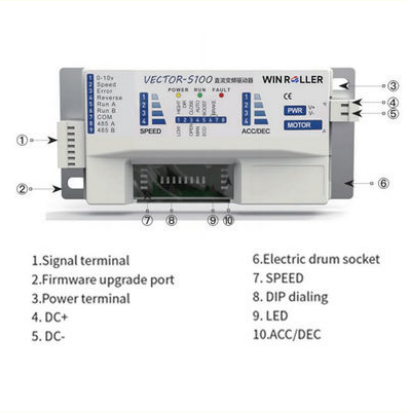
Our Product Introduction

Basic Information

- Place of Origin: China Jiangsu
- Brand Name: Winroller
- Certification: CE, SGS
- Model Number: Winroller VECTOR-S100 DC Variable Frequency Motor Roller Driver
- Minimum Order Quantity: 1
- Price: Contact Us
- Packaging Details: Wooden case
- Delivery Time: 7-15 word days
- Payment Terms: L/C, T/T
- Supply Ability: 1000000/year

Product Specification

- Product Name: VECTOR-S100 DC Variable Frequency Motor Roller Driver
- Rated Power Input: DC24V / 48V
- Allowable Voltage Range: 19~30V
- Rated Current: 4.2A
- Starting Current: 16.5A
- Braking Mode: Elecrtonic Brake,Free Brake,Servo Brake
- Color: White
- Acceleration And Deceleration: From 0.25 To 2S
- Highlight: **Variable Frequency Motor Roller Driver**, **DC24V Motor Roller Driver**, **DC24V roller drive motor**



Product Description

VECTOR-S100 DC Variable Frequency Motor Roller Driver Three Braking Modes Acceleration And Deceleration Range 0.39~3.9s

Noun parsing of VECTOR-S100 DC Variable Frequency Motor Roller Driver

Brushless DC motor
The motor consists of a permanent magnet rotor and a stator wound with coils. This type of motor has the advantages of simple structure, high reliability, good stability, high efficiency, and strong adaptability, so it has been widely used.

Hall sensor
Since the brushless motor eliminates the carbon brush, the motor itself cannot run and needs to rely on an external driver to run. The Hall sensor is a device installed inside the motor to feedback position signals to the driver.

LED
Light-emitting diodes are used to indicate the status of the drive system.

PNP/NPN
The logic level of the effective control signal: NPN means low level is effective, that is, it is effective when connected to DC-; PNP means high level is effective, that is, it is effective when connected to DC+.

PLC
Industrial programmable logic controller.

Speed open/closed loop
Speed open loop, the drum speed decreases as the load increases;
Speed closed loop, when the load is within the rated torque of the drum, the drum speed does not change with the load.

ECO and BOOST
The electric C-type controller supports the electric roller ECO (energy saving) and BOOST (high torque) modes.

Vector frequency conversion
Field-oriented control is currently the best choice for efficiently controlling brushless DC motors.

Feature of VECTOR-S100 DC Variable Frequency Motor Roller Driver

*Three braking modes:Electronic brake, Free brake,Servo brake
*PNP and NPN adaptive:Give customers more options for control
*Acceleration and deceleration:Wide adjustment range, can achieve the time from 0.25 to 2S,16 accurate adjustment.
*3 speed gear:Convenient for customers to switch fast between acceleration and deceleration.
*Fail-safe restart:After the fault is rectified, the system automatically restarts within a certain period of time

Comparison of VECTOR-S100 DC Variable Frequency Motor Roller Driver

Controller comparison

Comparative item / Controller type		VECTOR-S100	VECTOR-K100	HB-100
Electrical specification	Rated power	DC24V/48V	DC20V~65V	DC19V-60V
Speed parameter	Speed adjustable range/rpm	600 ~ 6900	1000~6900	600~6900
	Acceleration and deceleration range/s	0.39 ~ 3.9	0.3~4	0.3~4
Electrical connection mode	Number of driving rollers	1	2	4
	PNP	✓ (internal jumper)	✓ (Customer free choice)	✓ (Customer free choice)
	NPN	✓ (internal jumper)	✓ (Customer free choice)	✓ (Customer free choice)
Open-closed loop	Open loop	✓	×	×
	Colsed loop	✓	✓ (Default closed loop)	✓ (Default closed loop)
Control mode	External analog	✓ (0-10V)	×	Profinet Ethernet CC-Link Modbus TCP
	IO	✓	✓	
	Multi-speed	3 speed	7speed	
	RS485	✓	✓	
Brake mode	Electronic Brake	✓	×	✓
	Free brake	✓	✓	✓
	Servo brake	✓	✓	✓
Fault output	ERROR-N	×	wrong 0V, true +24V/48V	Computer control self-adaption
	ERROR-P	×	wrong +24V/48V, true 0V	
	ERROR	PNP connection, true 13V, wrong 2V NPN connection, true 13V, wrong 2V	×	

Layout of VECTOR-S100 DC Variable Frequency Motor Roller Driver

Driver card layout

1.Signal terminal
2.Firmware upgrade port
3.Power terminal
4. DC+
5. DC-
6.Electric drum socket
7. SPEED
8. DIP dialing
9. LED
10.ACC/DEC

Layout of VECTOR-S100 DC Variable Frequency Motor Roller Driver

Power terminal	DC power input
Signal terminal	Control signal input and error signal output, some functions are used in conjunction with DIP dialing
DIP dialing	Function dialing
LED	Power and status lights
Electric drum socket	Special electric roller nine-pin square head socket
Firmware upgrade port	Firmware upgrade socket
SPEED	Speed selection
ACC/DEC	Acceleration/deceleration time setting

Driver Card External Interface

Plug-in I/O connector

Cables can be easily accessed using small terminal release clips

Press down

0~10V analog speed regulation	External 0~10V analog voltage input speed adjustment
SPEED	Speed pulse feedback; PNP and NPN optional (controller internal jumper)
ERROR	Error signal output; PNP and NPN optional (controller internal jumper)
REVERSE	The drum motor runs in the opposite direction to the default direction
RUN A/B	The effective level is based on the COM port status/specific functions.
COM	Please connect 0V when inputting and outputting PNP signal; Please connect 24V when inputting and outputting NPN signals.
485A/B	485 communication interface

Run A and Run B

Run A	Run B	Describe
ON	OFF	Drum motor runs at 100% fixed set speed
ON	ON	Drum motor runs at 75% fixed set speed
OFF	ON	Drum motor runs at 50% fixed set speed
OFF	OFF	Drum motor stops running

model	VECTOR-T100
Rated power input	24V/48V
Allowable voltage range	20~28/40~60V
Allow voltage fluctuations	±15%
Driver peak input current	5A

Notice:

1. The green light turns on when the motor receives the control signal;
2. The peak current in the above table is the DC bus current limit value of the controller. After reaching the limit current, it will maintain the limit current and continue to output.

Motor Port

Pin serial number	name	Remark
1	Hall sensor GND	GND
2	Hall sensor positive pole	Hall sensor positive pole
3	Coil U	Coil U
4	Coil V	Coil V
5	Coil W	Coil W
6	Hall sensor U	Hall sensor U
7	Hall sensor V	Hall sensor V
8	Hall sensor W	Hall sensor W
9	Temperature sensing line	/

Note: When the lead wire of the electric drum motor is connected to the controller end or the extension cord end, the connector needs to be plugged in tightly so that the white positioning line on the male head is completely covered by the female head (the white line on the female head is not exposed), and it is determined to be a connector. Insert firmly into place.

Power Supply Requirements

Switching power supply selection requirements:

Electric drum power	Switching power supply power
40w	60W~80W
80w	120W~160W
100w	150W~200W

Do not allow any liquid to penetrate inside the controller, otherwise it may cause damage to the controller.

The power supply of the controller needs to meet the following requirements::

- The output current of the 24V/48V power supply needs to meet the current supply of 5A for each driver card.
- Has NEC Class II certification
- The power output has suitable short circuit and overload protection

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