



VSD2001 EEV Driver (one-driven-two)

Quick Reference Guide

1. Dimension

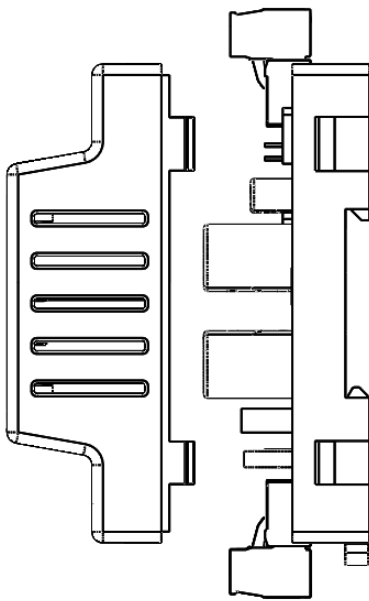


fig.1

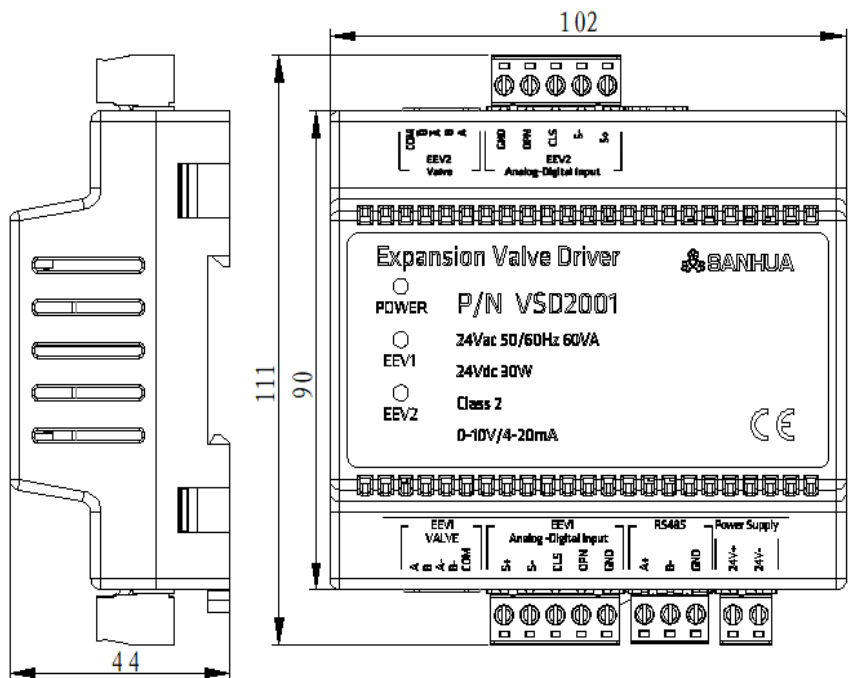


fig.2

2. Installation

Slide rail mounting

Mounting VSD1002 to DIN35 slide rail through the buckle on shell. Please install in a control cabinet to avoid moisture and dust.

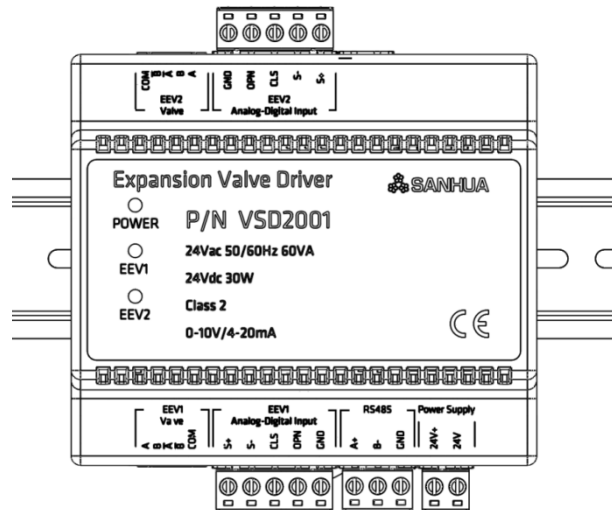
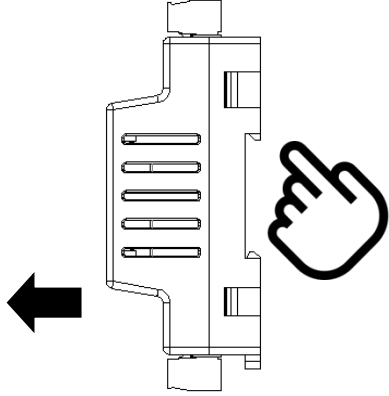
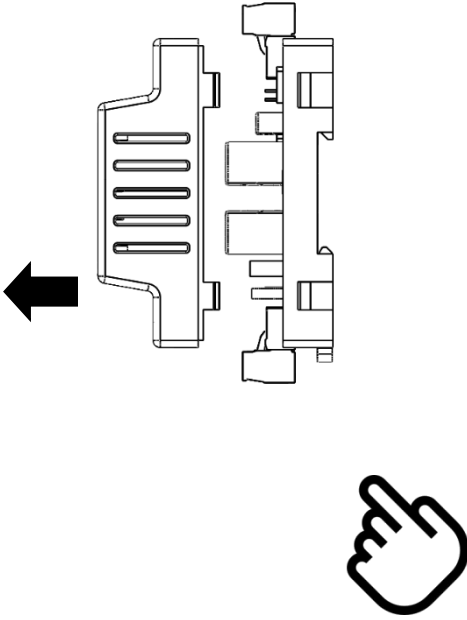


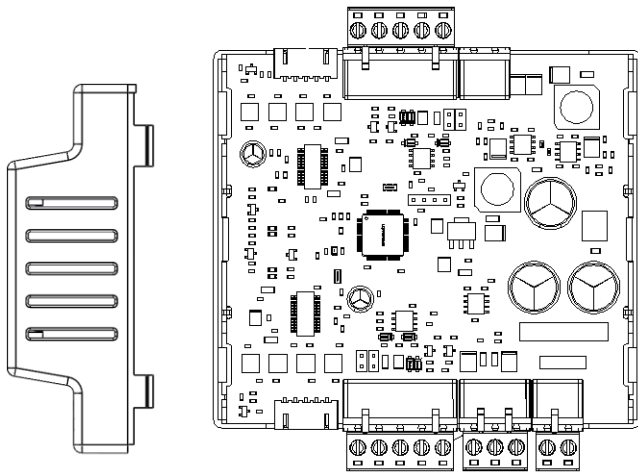
fig.3

3.Shell open

The upper and below panels of controller shell are connected by 4 buckles, DIP SW and jumper are on the internal PCB, please follow below steps to open the shell:

1		<p>step 1:</p> <p>Squeezes the larger buckle on the side, and lift the upper panel up until buckle</p>
2		<p>step 2:</p> <p>Repeat step 1 on smaller buckle, pull out the connected XHP terminal, The upper and below panels are separated.</p>

3



step 3:

DIP switches and jumpers are located on the PCB board.

4. Jumper switch setting

Function	EEV1	EEV2
Valve type	P6 1-2 bipolar	P5 1-2 bipolar
	2-3 unipolar	2-3 unipolar
Analog voltage	P1(0-10V)	P2(0-10V)
Analog current	P4(4-20mA)	P3(4-20mA)

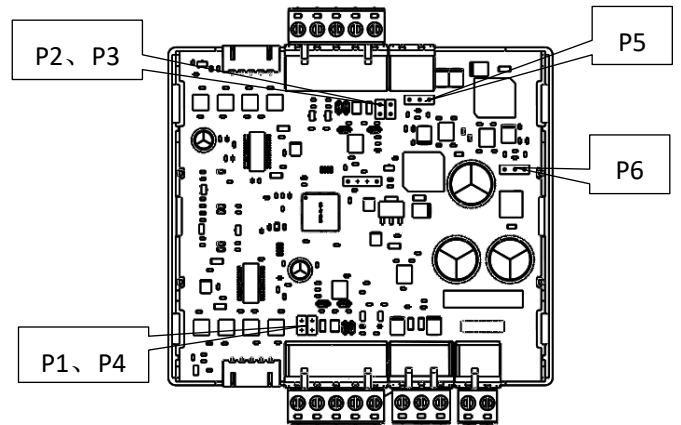


fig.4

In default mode, EEV1 and EEV2 jumper SW all under 1-2 (bipolar) and 0-10V status.

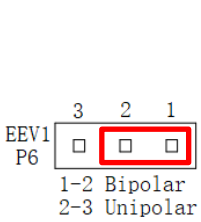


fig.5



fig.6

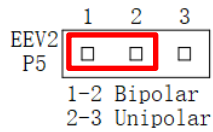


fig.7

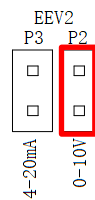


fig.8

5.Valve Parameter settings:

After jumper setting, the relevant parameters in the RS485 communication should be set at the same time:

Valve selection (add. 40105&40125)

EEV Customize detail (When add. 40105=110& 40125=110)

NO.	EEV1	EEV2	Function	Description
1	40106	40126	Drive current	1~700
2	40107	40127	Hold current	10~40
3	40110	40130	Max. pulses	1~12000
4	40111	40131	Motor type	0= Bipolar 1=Unipolar
5	40112	40132	Motor Direction	0= Positive 1= Reverse
6	40113	40133	PPS	1~600
7	40114	40134	Unipolar mode	0=1-2 phase 1= 2-2 phase

6.Wiring guide

Bipolar valve			Unipolar valve		
EEV1	EEV2	Description	EEV1	EEV2	Description
40105	40125		40105	40125	
0	0	VPF - 3800 pulse 200PPS	50	50	LPF/DPF/DBF - 500 pulse 30PPS
1	1	VPF - 3500 pulse 200PPS	51	51	DBF12 - 600 pulse 30PPS
2	2	VPF - 2700 pulse 200PPS	60	60	EBV - 2800 pulse 100PPS
10	10	EBV - 3500 pulse 200PPS	70	70	EBV - 2800 pulse 200PPS
20	20	EBV - 3500 pulse 300PPS	80	80	EBV - 3500 pulse 80PPS
30	30	EBV 9600 pulse 200PPS	90	90	DPF(O) series - 2000 pulse 100PPS
			100	100	EBV - 1050 pulse 200PPS
110	110	Customize			

Symbol	Function	Description	Symbol	Function	Description
A+	RS485	MODBUSRTU parameter settings	A	BK (Black)	Bipolar stepper motor is 4-wire
B-	RS485		B	GN (Green)	
GND	Comm. GND		A	WH (White)	Unipolar stepper motor is 5-wire
S+	Analog +	B	RD (Red)		
S-	Analog -	Voltage or current input selected by jumper switch	COM	Com terminal	
CLS	Force close	form a switch with GND	24+	Power 24V +	24VAC or 24VDC
OPN	Force open	form a switch with GND	24-	Power 24V -	
GND	Analog ground	Connect with OPN and CLS			

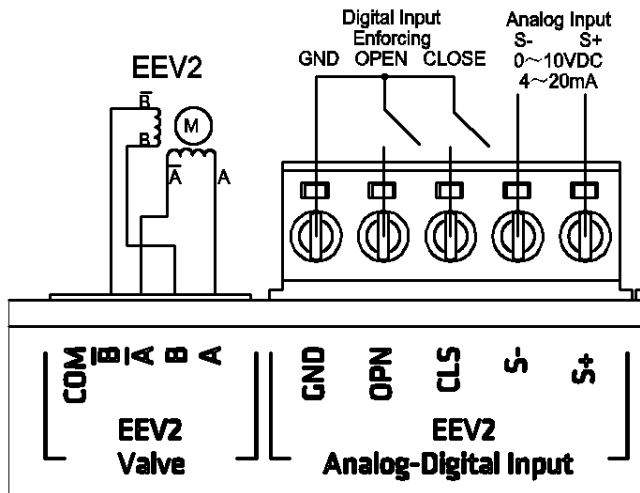


fig.9 EEV2 Bipolar wire

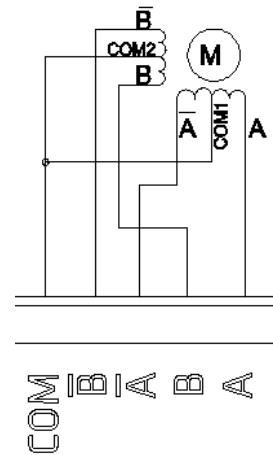


fig.10 Unipolar wire

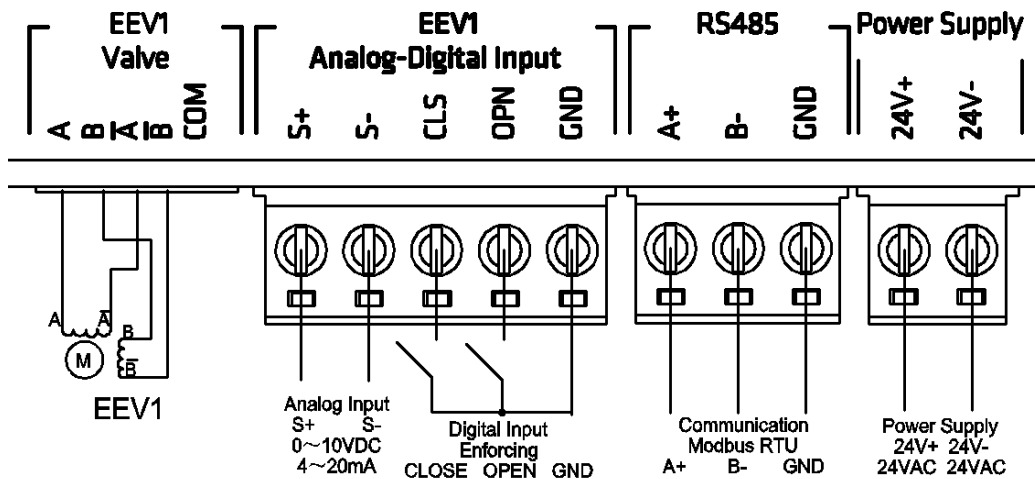


fig.11 EEV1 Bipolar wire

7.Other settings

Reset method

EEV1	EEV2	Function	Description	Default
40102	40122	Reset method	0: fully close valve 1: fully open to fully close	0
40115	40135	Reset valve open percentage	0~100	100

If 40102/40122 =0,when driver power on, valve will fully closed to reset

If 40102/40122 =1, when driver power on, valve will first open to reset valve open percentage then fully closed.

Zero point and full scale point parameters

EEV1	EEV2	Function	Description	Default
40103	40123	Zero point ‰	5~50	5
40104	40124	Full scale point‰	900~995	995

Analog voltage signal $\leq 0.05V$ or current signal $\leq 4.05mA$, valve will fully colse.

Note:

- 1.Do not turn on the power before completing the wiring, cut off the power before changing the wiring.
 - 2.Pay attention to avoid EEV1 and EEV2 misconnection. For example, connecting EEV1 to the EEV2 port or connecting the EEV2 to EEV1 port will cause the valve work abnormal as expected.
 - 3.Do not connect 24- wire and GND wire together.
 - 4.Adaptive wire models:Y02B、Y08B、Y02A+Y02C、Y08A+Y02C.
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