VSD2001 EEV Driver

(one-driven-two)

※SAFETY ATTENTION※

1. Do not turn on the power before completing the wiring, cut off the power before changing the wiring.

2. Although the electronic circuit inside this product has been protected to a certain extent, long-term operation in a humid environment will still cause damage to components, so please avoid install and operate in environments such as rain, moisture and with other liquids.

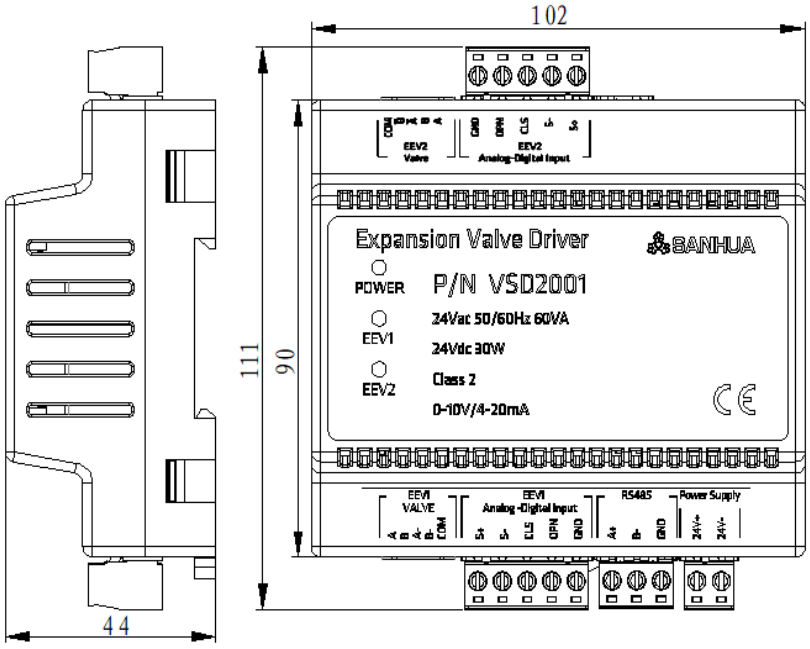
3. An output wire to be used for this product should be inflammable grade FV1 (v-1 grade or above).

4. Please avoid installing the product in a place where a strong magnetism, noise, severe vibration and impact exist.

5. Please avoid using the product near a device generating strong high frequency noise (high frequency welding machine, high-frequency sewing machine, high-frequency radiotelegraph, high capacity SCR controller)

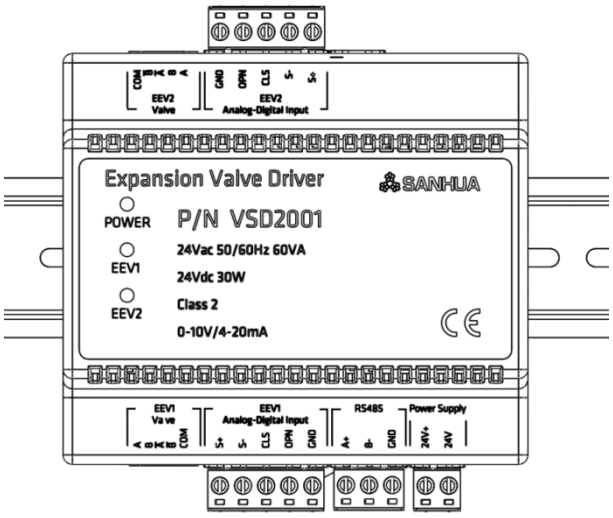
6. Please confirm that the jumper caps and valve type parameters of the VSD2001 driver are set correctly, and there is no error state which green and yellow lights flashing at the same time for EEV1 and EEV2 before use.

1. Dimensions



2. Installation

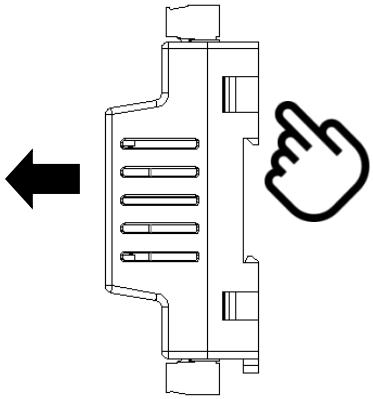
Slide rail mounting.
Mounting VSD2001 to DIN35 slide rail through the buckle on shell. Please install in a control cabinet to avoid moisture and dust.



3. Shell open

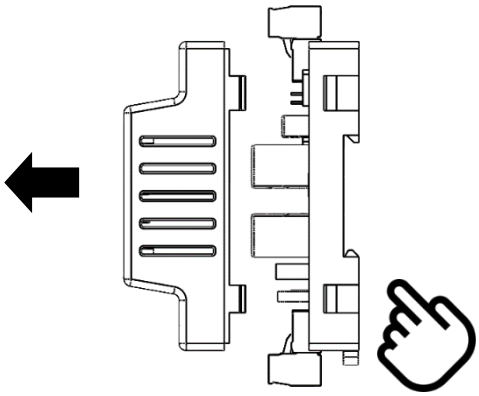
The upper and below panels of controller shell are connected by 4 buckles, DIP SW and jumpers are on the internal PCB, please follow below steps to open the shell：

1



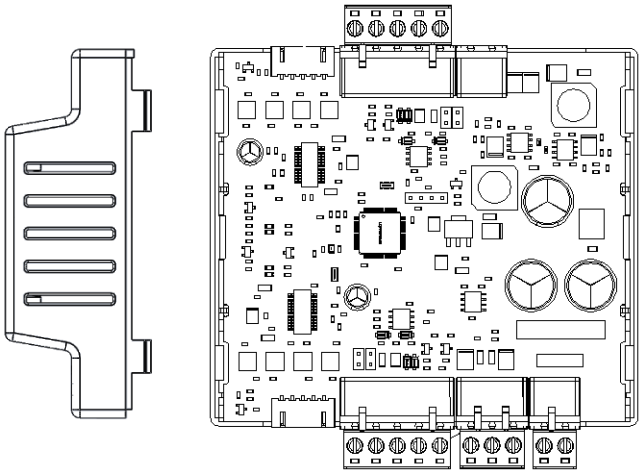
Step 1：Squeezes the larger buckle on the side, and lift the upper panel up until buckle separated.

2



Step 2：Repeat step 1 on smaller buckle, pull out the connected XHP terminal, The upper and below panels are separated.

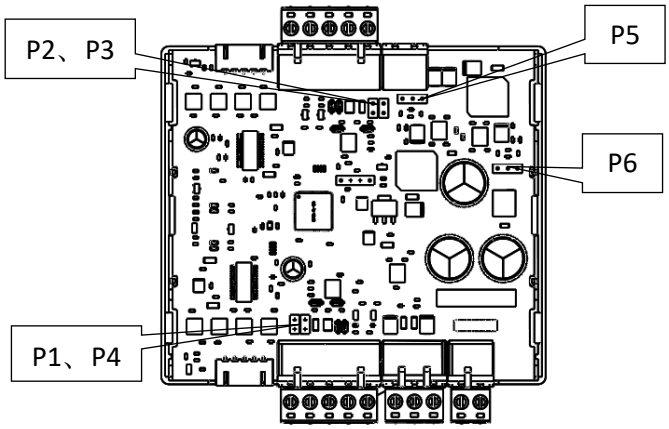
3



Step 3：DIP switches and jumpers are located on the PCB board.

4. Jumper switch setting

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



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

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)

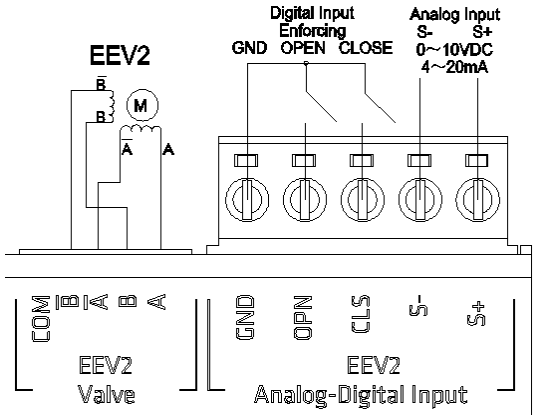
EEV1	EEV2	Description
40105	40125	address
0	0	EBV13 3500 pulse
1	1	VPF 2700 pulse
2	2	VPF 3500 pulse
3	3	VPF 3800 pulse
4	4	DPF/LPF 500 pulse
5	5	EBV05/07 2800 pulse
6	6	DPF(O) series 2000 pulse
7	7	EBV09 3500 pulse
8	8	Customize

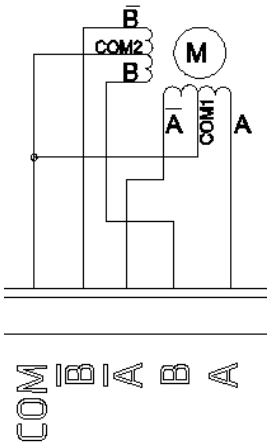
EEV Customize detail (When add. 40105=8 & 40125=8)

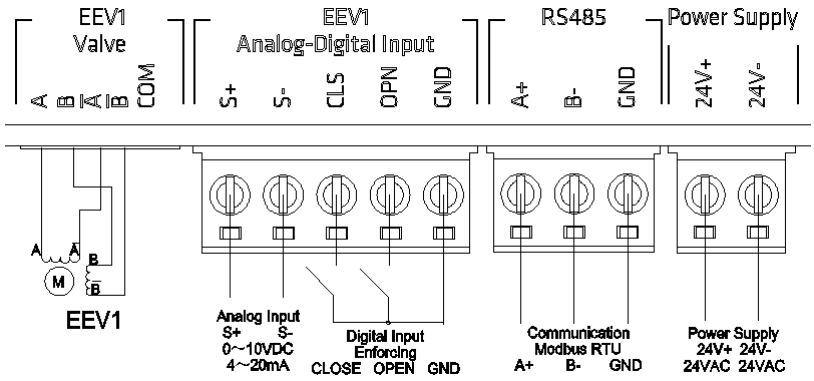
NO.	EEV1	EEV2	Function	Description
1	40106	40126	Drive current	1～750
2	40107	40127	Hold current	10～40
3	40110	40130	Max. pulses	1～7600
4	40111	40131	Motor type	0=Bipolar 1=Unipolar
5	40112	40132	Motor Direction	0=Positive 1=Reverse
6	40113	40133	PPS	1～1000
7	40114	40134	Unipolar excitation	0 =1-2

6.Wiring guide

Symbol	Function	Description	Symbol	Function	Description
A+	RS485	MODBUS RTU	A	BK（Black）	Bipolar stepper motor is 4-wires
B-	RS485	parameter settings	B	GN（Green）	
GND	Comm. GND		$\overline{A}$	WH（White）	Unipolar stepper motor is 5-wires
S+	Analog+	Voltage or current input selected by jumper switch	$\overline{B}$	RD（Red）	
S-	Analog-		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			







Note :

1. Cable wire range : 28 ~12 AWG (0.2 ~ 0.8 mm²).
2. Do not tun on the power before completing the wiring, cut off the power before changing the wiring.
3. Pay attention to not reverse the EEV connection. EEV1 with the analog signal 1 and the EEV 1 parameters.
4. Do not connect 24V- wire and GND wire together.
5. If you want to use 1 analog signal to control 2 x EEV in parallel, please connect the 0-10V signal on both analog inputs. Check that the 0-10V supplier voltage doesn't deform the signal.