# User Manual

VH10 Soft Starter Manual

Precautions

1. When the input of the soft starter is energized, the output is energized, don't operate it under energized condition.

2. Ensure that the motor power and specifications match the soft starter as much as possible.

3. It is strictly prohibited to connect a capacitor to the output terminal (U.V.W) of the soft starter.4. The input and output wires of the soft starter should be wrapped with insulating tape.

5. The soft starter shell must be reliably grounded.

6. When repairing the equipment, the input power must be cut off first.

7. The internal circuit board has high voltage, non-professionals should not repair.

3 phase AC power input

R   S   T

电机软起动

U   V   W

M
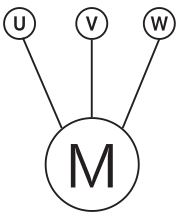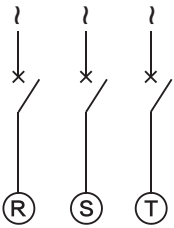
Protection

Undercurrent ✔

Over-current ✔

3-phase unbalance ✔

Undervoltage ✔

Over-voltage ✔
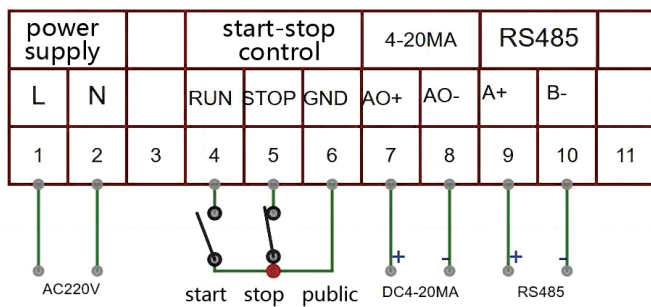
Weight:1.8kg

Dimension

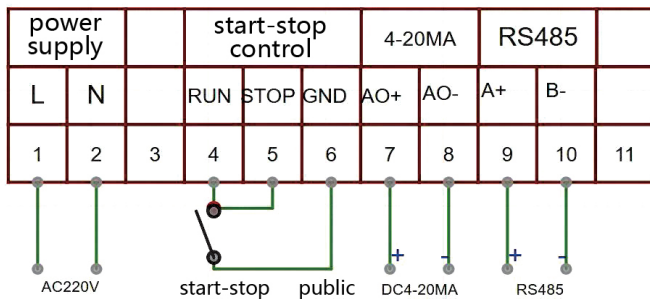**Mounting hole:120*133mm**

Mounting：120x133mm
Size：161x141x139mm

1. Press " Programming" to enter the parameter group, press " Up and Down " Keys to switch the parameter group.
2. **Parameter modification**, according to the first step to enter the corresponding parameters, press the " Programming" key to enter the parameters, press the " Up and Down " keys to modify the parameter value, after the modification is completed, press the " Programming" key to save the parameters, and then press the " Return" key again to return to the main interface.
3. Press the " Run" button to start the soft starter.
4. Press the " Stop" key to stop the soft starter.
5. Press the " Return" key to view the fault record in standby mode.
6. Press and hold the " Up" key to clear the fault record.
7. Long press " Down" to restore factory settings.

two-wire control

power supply			start-stop control			4-20MA		RS485		
L	N		RUN	STOP	GND	AO+	AO-	A+	B-	
1	2	3	4	5	6	7	8	9	10	11

AC220V   start   stop   public   DC4-20MA   RS485

three-wire control

power supply			start-stop control			4-20MA		RS485		
L	N		RUN	STOP	GND	AO+	AO-	A+	B-	
1	2	3	4	5	6	7	8	9	10	11

AC220V   start-stop   public   DC4-20MA   RS485

No.	Function	Setting range	Default value	Permission	Mod bus address
F00	Control mode	0: Keyboard control 1 : External control 2: Communication control 3:Keypad + external control 4: Keyboard ten communication 5: external control ten communication 6: Keyboard 10 communication + external control	1 : External control	Read-write	0
F01	Starting mode	0: Voltage ramp start 1 : Current limiting start	0: Voltage ramp start	Read-write	1
F02	Starting current limit value	50%~600%	3	Read-write	2
F03	Percentage of starting voltage	30%~80%	0.3	read-only	3
F04	Starting time	1s~120s	10S	read-only	4
F05	Soft stop time	Os~60s	0S	Read-write	5
F06	Starting overcurrent protection current	50%-601% 601%indicates closure	5	Read-write	6
F07	Starting overcurrent protection time	0~120s	2s	Read-write	7
F08	Running overcurrent protection current	50%-601% 601%indicates closure	2	Read-write	8
F09	Running overcurrent protection time	0~999s	2s	Read-write	9
F10	Undercurrent protection current	10%~100% 100% indicates closure	0.5	Read-write	10
F11	Undercurrent protection time	0~120s	5s	Read-write	11
F12	Unbalance degree	20%~100% 100% indicates closure	0.4	Read-write	12
P13	Unbalance protection time	0~120s	5s	Read-write	13
F14	Overvoltage protection multiplier	100%~140% 100% indicates closure	1.2	Read-write	14
F15	Overvoltage protection time	Os~120s	5s	Read-write	15
	Undervoltage protection times	50%-100% 100%indicates closure	0.8	Read-write	16
F17	Undervoltage protection time	0s~120s	5s	Read-write	17
F22	Motor rated current	1~500A	30A	Read-write	20
F23	Address	1~64	1	Read-write	21
F24	Baud rate	0: 2400 1 : 4800 2: 9600 3: 19200	2: 9600	Read-write	22
F25	Software version			read-only	23
U0	Main control software version			read-only	100

No.	Function	Setting range	Default value	Permission	Mod bus address
U1	Soft start status	0: Standby 1 : Soft Start 2: Run 3: Soft Stop 5: Fault			101
U2	Current Fault	0: No fault 1 : Input phase loss 2: Output phase loss 3: Starting overcurrent 4: Running overcurrent 5: Undercurrent 6: Current unbalance 7: Phase sequence protection 8: Soft start overheat protection			102
U3	Average Output Current				103
U4	Input Voltage				104
U5	A-phase current				105
U6	B-phase current				106
U7	C-phase current				107
U8	Three-phase unbalance				108
U9	Power Supply Phase Sequence				109
U10	Soft start temperature switch status				110
U11	Percentage of Starting Completion				111
	First fault record				200
	Second fault record				201
	Third fault record				202
	Fourth fault record				203
	Fifth failure record				204
	Sixth failure record				205
	Seventh failure record				206
	Eighth failure record				207
	Ninth failure record				208
	Tenth failure record				209
	Eleventh failure record				210
	Twelfth failure record				211
	Start-stop order	0x0001 start 0x0002 stop 0x0003 Fault reset 0x0030 Restore factory values 0x0031 Clear Fault			300