## Kinco步科



# **CV20**

# Improvised mini VFD

Feature:

V/F control;

Built-in PID control;

Extreme compact size saves installation space;

DIN-rail mounting and wall mounting speed up installation;

Terminals uncovered, easy for wiring;

Standard supports MODBUS via RS485, baud rate up to 19200bps;

Maintenance-free.

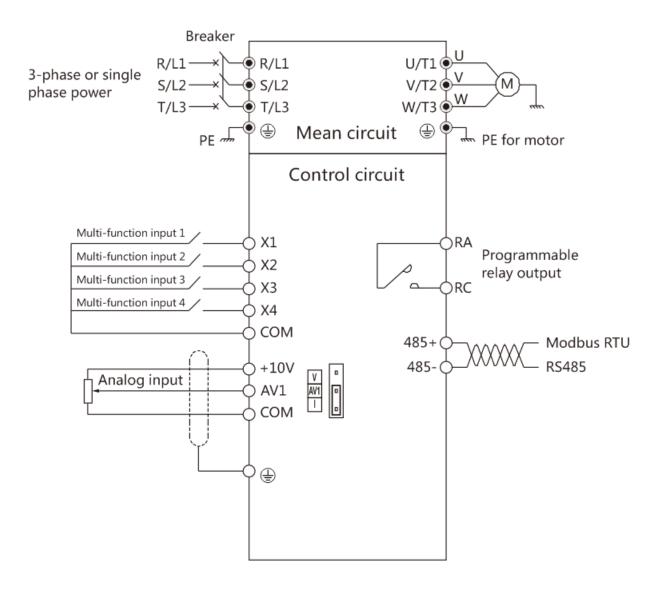
## Kinco CV20 Improvised Mini VFD

### **Technical specification:**

Item		CV20-2S-0004G	CV20-2S-0007G						
Adaptable motor(KW)		0.4	0.75						
Rated output current(A)		2.5	4.0						
Rated input current(A)		5.3	8.2						
	Rated voltage&	2T: 3-phase, 200~240VAC; 50Hz/60Hz							
Input	frequency	2S: Single-phase, 200~240VAC; 50Hz/60Hz							
	Allowable voltage range	2T: 180~260VAC; 2S: 180~260VAC; Voltage tolerance<3%; Frequency: ±5%							
Output	Rated voltage	0~Rated input voltage							
	Frequency	0Hz~300Hz							
	Overload capacity	G type: 150% rated current for 1 minute; 180% rated current for 10 seconds;							
	Control mode	V/F control							
	Modulation mode	Space vector PWM modulation							
	Starting torque	1 Hz 150% rated torque							
	Frequency accuracy	Digital setting: Max frequency ×±0.01%; Analog setting: Max. frequency ×±0.2%							
Control	Frequency resolution	Digital setting: 0.01Hz; Analog setting: Ma	ax frequency×0.05%						
Characteristics	Torque boost	Manual torque boost :0% $\sim$ 30.0%							
	V/F nottorn	4 patterns: 1 V/F curve mode set by user	and						
	V/F pattern	3 kinds of torque-derating modes (2.0 order, 1.7 order, and 1.2 order)							
	Acc/Dec curve	Linear acceleration/deceleration: Four kinds of acceleration/deceleration time							
	Auto current limit	Limit current during the operation autom	atically to prevent frequent over current trip						
	Operation Command	Operation Panel, Terminal, Communication Control,							
Operation	Operation Command	Support switching between these control channels.							
Function	Frequency Setting	Digital, Analog Voltage/current setting.							
	Auxiliary frequency	Support main and auxiliary setting("+","-", "min", "max")							
	LED Display	Display setting frequency, output frequency, output voltage, output current and so on,							
Operation panel		about 20 parameters.							
operation paries	·	Lock part of keys or all the keys.							
	selection	Define the function of part of keys							
Protection function	on	Open phase protection (optional), over current protection, overvoltage protection,							
	T	under-voltage protection, overheat protection, over-load protection and so on.							
	Operating site	Indoor, installed in the environment free from direct sunlight, dust, corrosive gas,							
Environment		combustible gas, oil mist, steam and drip.							
	Altitude	Derated above 1000m, the rated output current shall be decreased by 10% for every							
		rise of 1000m							
	Ambient temperature	-10°C~40°C, derated at 40°C~ 50°C							
	Humidity	5%~95%RH, non-condensing							
	Vibration	Less than 5.9m/s2 (0.6g)							
	Storage temperature	-40° °C~+70°C							
Structure	Protection class	IP20							
	Cooling method	Air cooling, with fan control.							
Installation metho	od .	DIN-rail mounting; Wall-mounted							
Efficiency		≥90%							

### Kinco CV20 Improvised Mini VFD

#### Wiring diagram



**Control loop terminal arrangement:** 

RA	AC	+10V	AV1	X1	Х2	ХЗ	Х4	сом	
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**RS-485 PIN definition:** 

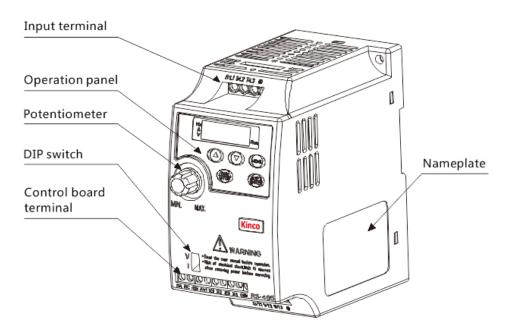
PIN	1	2	3	4	5	6
Signal	NA	NA	485+	485-	NA	NA



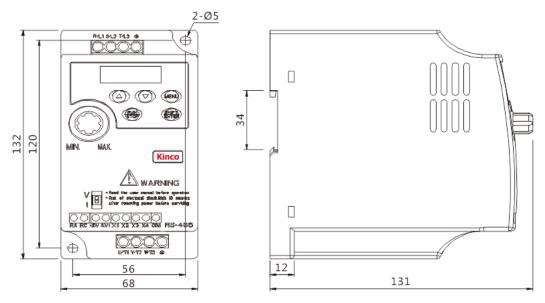
RS-485

### Kinco CV20 Improvised Mini VFD

#### **Outlook**



#### **Mechanical dimensions**



CV20-2S-0004G~CV20-2S-0007G

### **Mechanical parameters**

	External dimension and (mm)							Weight
VFD model	W	Н	D	W1	H1	T1	Installation hole(d)	(kg)
CV20-2S-0004G	68	132	131	56	120	12	5	0.8
CV20-2S-0007G							,	