



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.

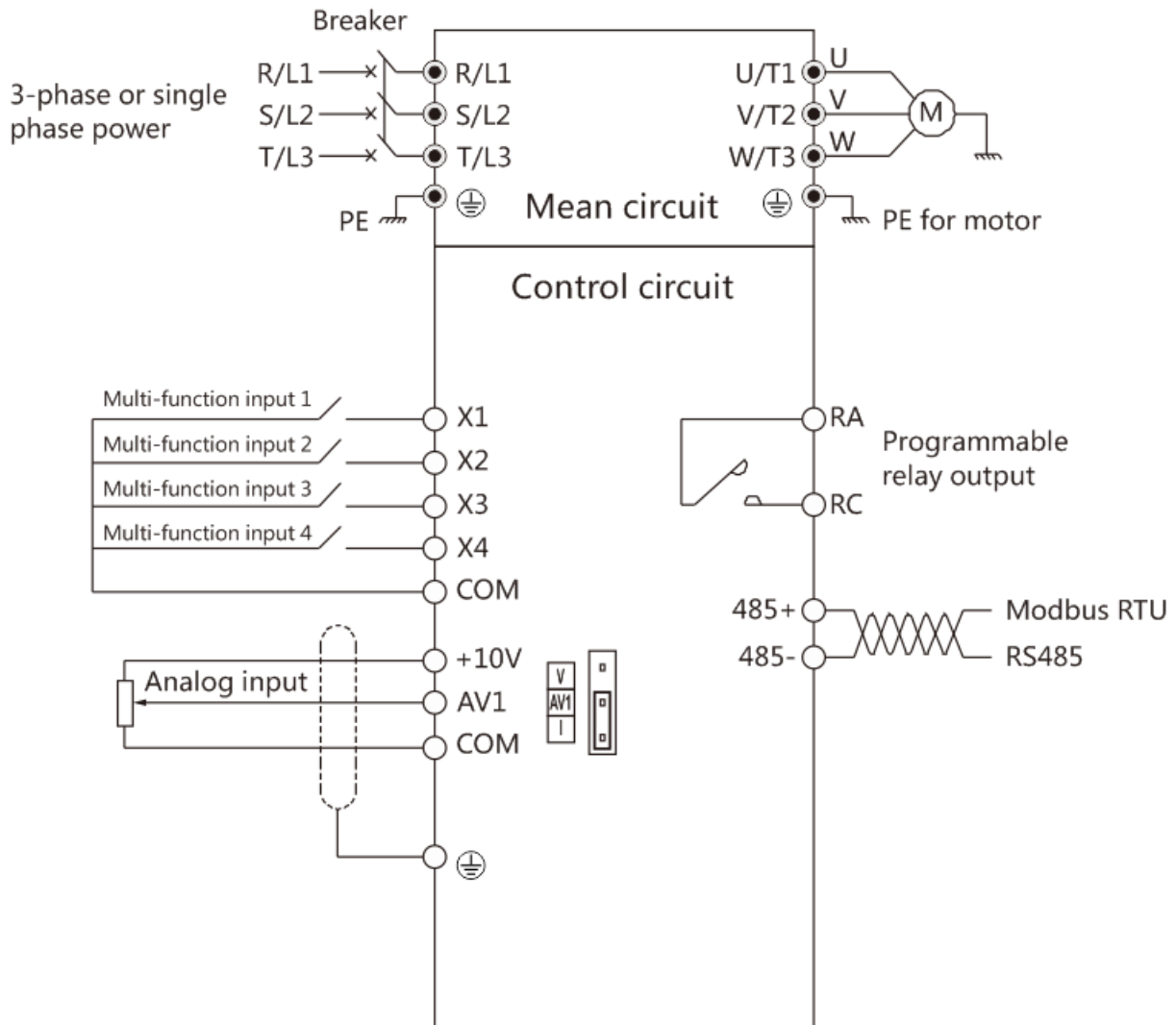
Kinco CV20 Improvised Mini VFD

Technical specification:

| Item | | CV20-2S-0004G | CV20-2S-0007G | CV20-2S-0015G |
|-------------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Adaptable motor(KW) | | 0.4 | 0.75 | 1.5 |
| Rated output current(A) | | 2.5 | 4.0 | 7.5 |
| Rated input current(A) | | 5.3 | 8.2 | 14.0 |
| Input | Rated voltage & frequency | 2T: 3-phase, 200~240VAC; 50Hz/60Hz 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 Characteristics | 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% | | |
| | Frequency resolution | Digital setting: 0.01Hz; Analog setting: Max frequency×0.05% | | |
| | Torque boost | Manual torque boost :0%~30.0% | | |
| | V/F pattern | 4 patterns: 1 V/F curve mode set by user and 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 automatically to prevent frequent over current trip | | |
| Operation Function | Operation Command | Operation Panel, Terminal, Communication Control, Support switching between these control channels. | | |
| | Frequency Setting | Digital, Analog Voltage/current setting. | | |
| | Auxiliary frequency | Support main and auxiliary setting("+", "-", "min", "max") | | |
| Operation panel | LED Display | Display setting frequency, output frequency, output voltage, output current and so on, about 20 parameters. | | |
| | Keys lock and function selection | Lock part of keys or all the keys. Define the function of part of keys | | |
| Protection function | | Open phase protection (optional), over current protection, overvoltage protection, under-voltage protection, overheat protection, over-load protection and so on. | | |
| Environment | Operating site | Indoor, installed in the environment free from direct sunlight, dust, corrosive gas, 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℃~40℃, derated at 40℃~50℃ | | |
| | Humidity | 5%~95%RH, non-condensing | | |
| | Vibration | Less than 5.9m/s ² (0.6g) | | |
| | Storage temperature | -40℃~+70℃ | | |
| Structure | Protection class | IP20 | | |
| | Cooling method | Air cooling, with fan control. | | |
| Installation method | | DIN-rail mounting; Wall-mounted | | |
| Efficiency | | ≥90% | | |

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Wiring diagram

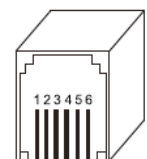


Control loop terminal arrangement:



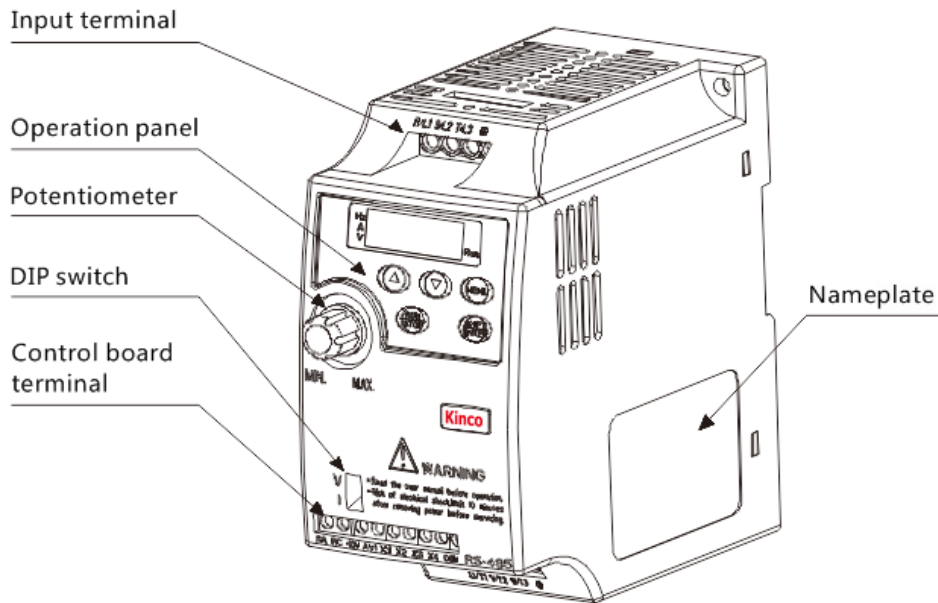
RS-485 PIN definition:

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

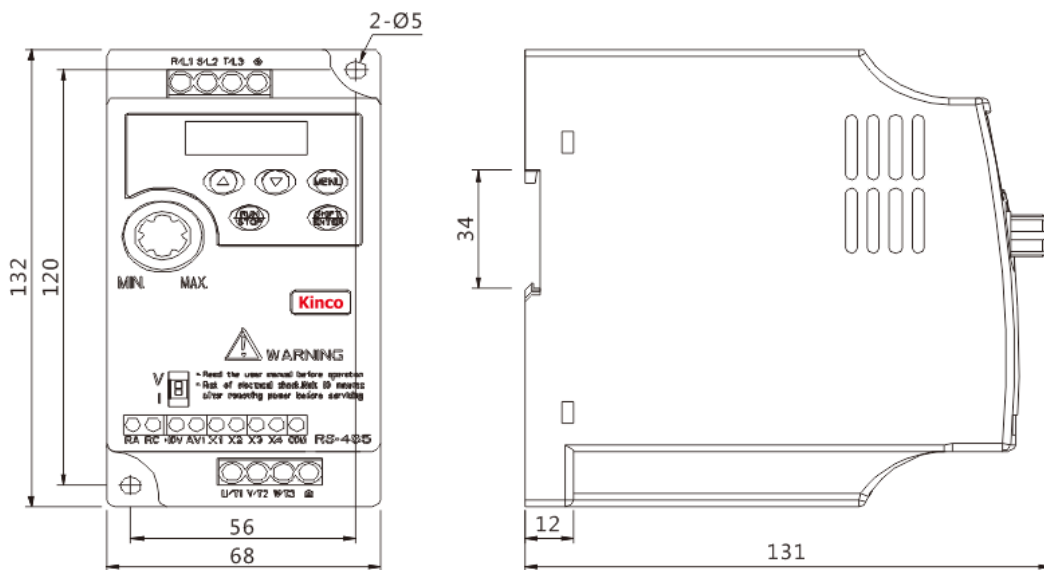


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Outlook



Mechanical dimensions



CV20-2S-0004G~CV20-2S-0015G

Mechanical parameters

| VFD model | External dimension and (mm) | | | | | | | Weight (kg) |
|---------------|-----------------------------|-----|-----|----|-----|----|----------------------|-------------|
| | W | H | D | W1 | H1 | T1 | Installation hole(d) | |
| CV20-2S-0004G | 68 | 132 | 131 | 56 | 120 | 12 | 5 | 0.8 |
| CV20-2S-0007G | | | | | | | | |
| CV20-2S-0015G | | | | | | | | |