- Induction Heating
- Industrial Automation
- Photovoltaic Energy Storage

Canroon

CV800D Compact Frequency Inverter

Compact Design Beyond Imagination







CV800D

Compact Frequency Inverter

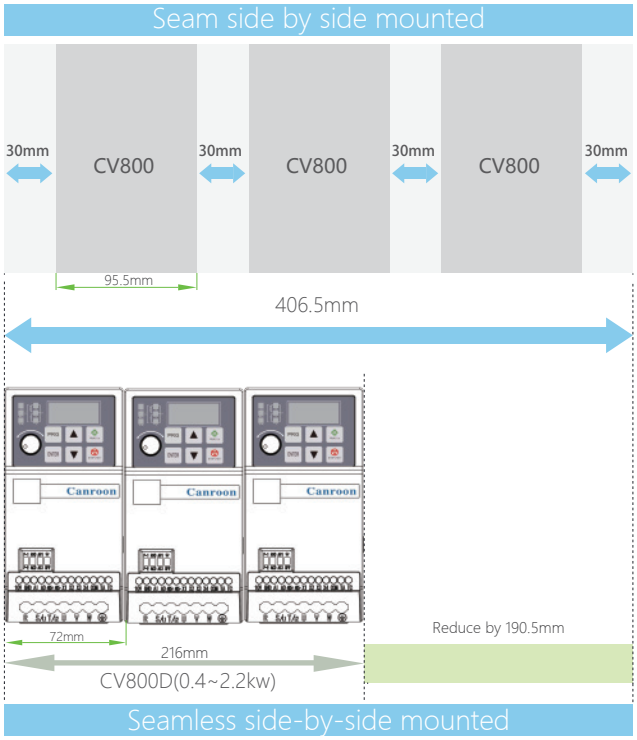
CV800D series compact multi-function inverter is a single-phase 220V AC and three-phase 380V AC mini inverter launched by Canroon based on the market demand of easy speed regulation, small power and small volume.

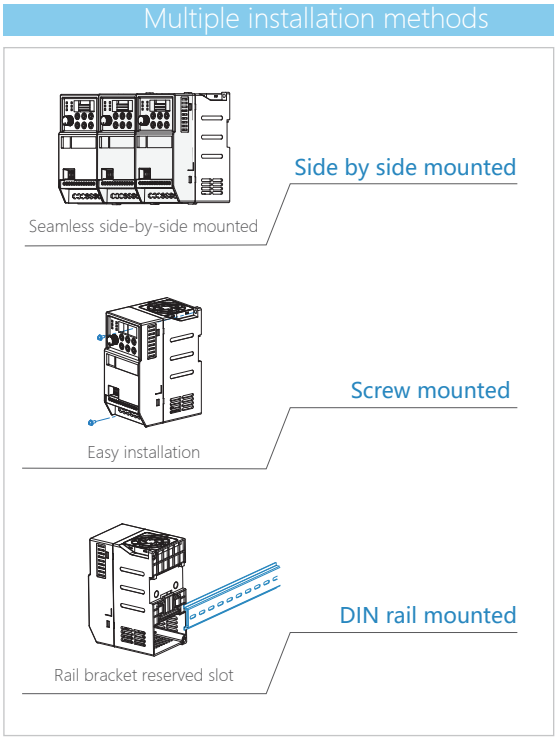
CV800D is a compact inverter product with small size and great ability. It has significant advantages such as compact mini size, high power density, high EMC specification design, and high protection performance. It can be widely used in small automatic machinery represented by glass edging, food filling, ceramic equipment, medical centrifuges, woodworking engraving, automatic production lines, electronic equipment, logistics equipment, machine tool spindles, textiles, etc.

Function And Performance Features

Small And Compact Design

- Optimal power density design, effectively realize the product volume minimization;
- With the full power section equal volume book structure design, support seamless side-by-side installation in the minimum space;
- Installation mode: support screw mounted and rail mounted





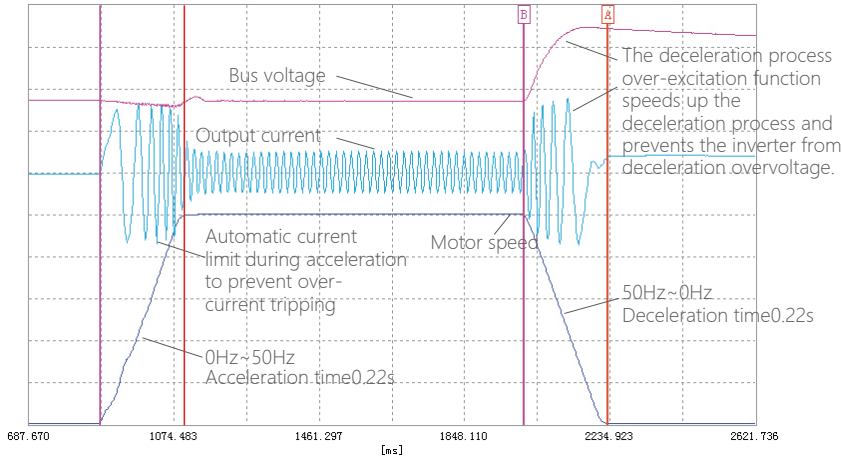
Stable And Reliable Operation

- High-standard EMC design, effectively reduce external interference, meet precise control requirements;
- Fully enclosed shell + independent air duct design, which can isolate dust to the greatest extent, ensure long-term stable operation of electronic components;
- The conformal coating is thickened, IGBT pins are added with casing, glue dispensing treatment for the anti-seismic weaker part, improve the environmental coverage.



Excellent Performance And Functions

- Large rated current design, large overload current and short acceleration time;
- Deceleration process automatically add overexcitation function, deceleration time is short;
- Strong overmodulation capability, higher output voltage under the same input voltage;
- Powerful overload suppression ability ensures that the inverter will not stop due to overload fault at the maximum output;
- Support Modbus communication, easy to realize industrial automation networking:



Easy And Simple Debugging

- Built-in industry professional macro application, support industry parameters one-click setting
- Support external operating panel



Obtained EU CE And ISO Quality Certification

EU CE certification

ISO 9001:2015 Certification

Model Selection

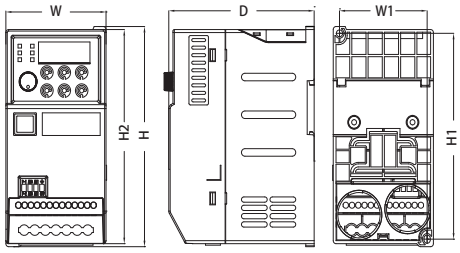
CV800D - 002 G -14TF					
①			⑤	Voltage level	1：110V　2：220V　4：380V
②	Model power	00A：0.4KW~015：15KW	⑥	Input	S：1-phase　T：3-phase
③	Load type	G：Constant torque	⑦	Cooling mode	B：Air cooling (with built-in braking unit) F：Air cooling (without built-in braking unit)
④	Output	1：3-phase　2：1-phase			

Specification Model	Rated Power (KW)	Rated output current (A)
	1-phase 220V	
CV800D-00AG-12SF	0.4	2.3
CV800D-00BG-12SF	0.75	4
CV800D-001G-12SF	1.5	7
CV800D-002G-12SF	2.2	9.6
	3-phase 380V	
CV800D-00BG-14TF	0.75	2.1
CV800D-001G-14TF	1.5	3.8
CV800D-002G-14TF	2.2	5.1
CV800D-004G-14TF	4	8.5
CV800D-005G-14TF	5.5	13
CV800D-007G-14TF	7.5	17
CV800D-011G-14TF	11	25
CV800D-015G-14TF	15	32

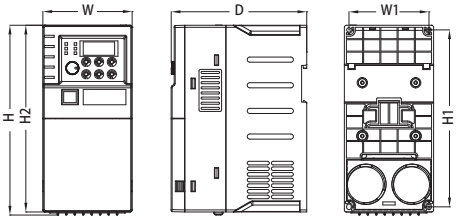
Optional accessories

Type	Description	Support models
External operating panel	LED External operating panel	All models
External operating panel cable	External operating panel cable, 3 meters length	
	External operating cable,1.5 meters length	
DIN rail mounted accessories	DIN rail mounted accessories	

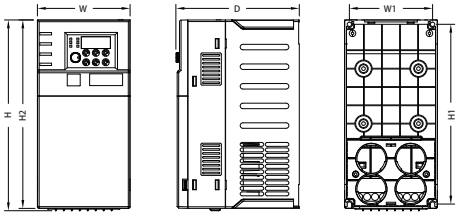
Structure And Dimensions



Picture 1: CV800D-00AG-12SF ~ 002G-14TF

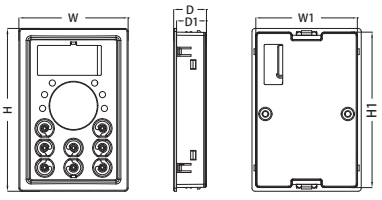


Picture 2: CV800D-004G ~ 005G-14TF



Picture 3: CV800D-007G ~ 015G-14TF

Specification Model	Overall Dimensions		Installation Hole Position				Installation Aperture (mm)
	W1 (mm)	H1 (mm)	W (mm)	H (mm)	H2 (mm)	D (mm)	
CV800D-00AG-12SF	63	136.5	72	146	142	104.5	4.5
CV800D-00BG-12SF							
CV800D-001G-12SF							
CV800D-002G-12SF							
CV800D-00BG-14TF							
CV800D-001G-14TF							
CV800D-002G-14TF							
CV800D-004G-14TF	78	172.5	87	185	182	132	4.5
CV800D-005G-14TF							
CV800D-007G-14TF	106	229	118	243	240	157.6	5.6
CV800D-011G-14TF							
CV800D-015G-14TF							



Installation dimensions of external keyboard

Panel size(mm)		Hole size(mm)		Keyboard thickness(mm)	
W	H	W1	H1	D	D1
53	79	49.4	75.4	15.9	14.5

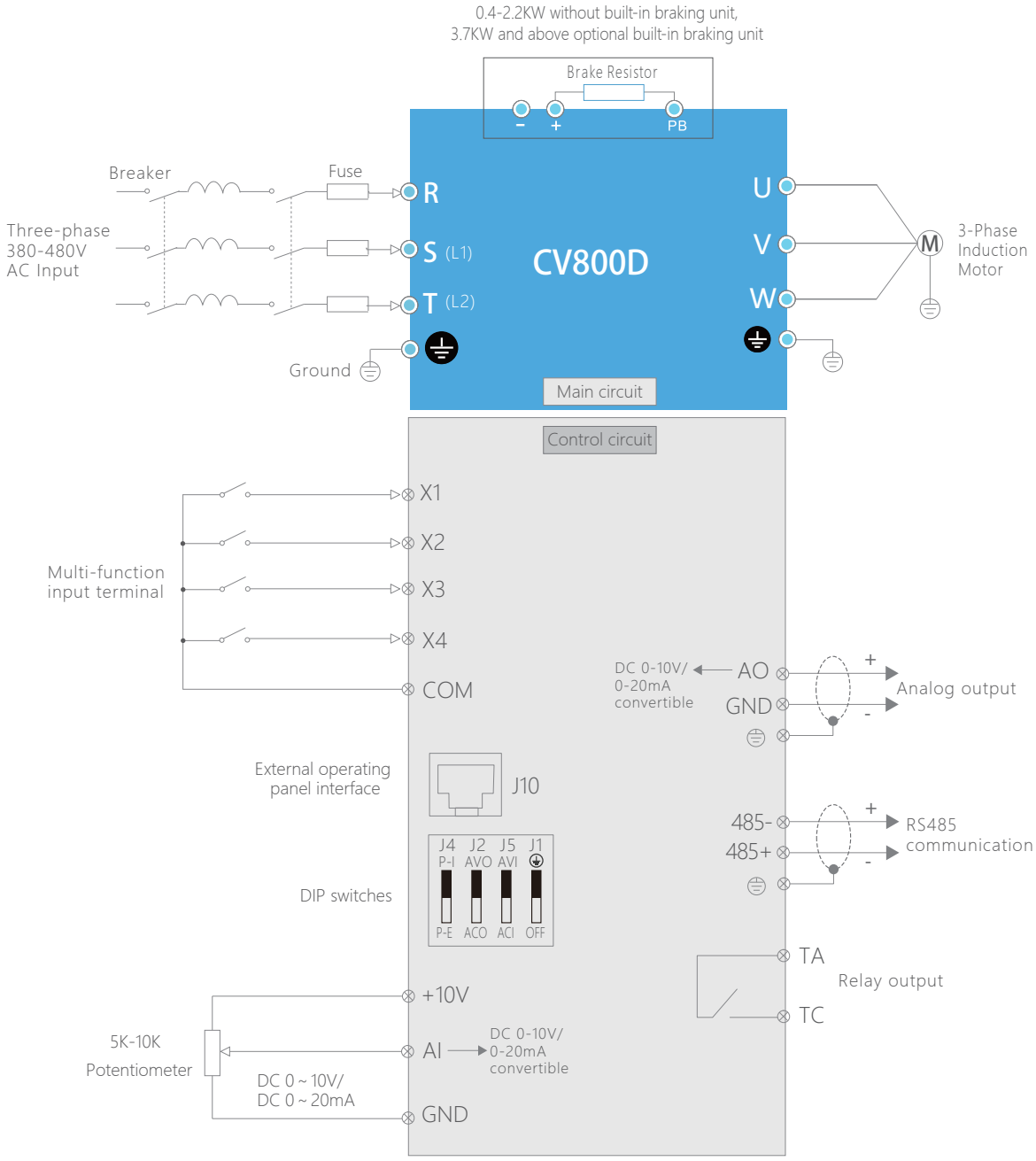
Technical Parameter

	Functional Description		Specification Index
Input	Rated Voltage,Frequency		3-phase（4T）AC380V，47～63Hz；1-phase（2S）AC220V，47～63Hz
	Allowed Voltage Range		3-phase（4T）AC320V～480V；1-phase（2S）AC160V～260V
Output	Voltage		4T，0～480V；2S，0～260V
	Frequency		Vector control：0～500Hz V/F control:0~1000Hz
	Overload Capacity		150% rated current 60s；180% rated current 5s；195% rated current 0.5s
Control Mode			V/F Control、Speed Sensorless Vector Control (SVC)
Control Character	Frequency Setting Resolution	Analog Input	Max. Frequency × 0.025%
		Digital Setting	0.01Hz
	V/F Control	V/F Curve	Three ways: the first is the linear torque characteristic curve, the second is the square torque characteristic curve, and the third is the user-set V/F curve
		V/F separation	2 types: full separation and half separation
		Torque Compensation	Manual setting: 0.0~30% of rated output Automatic compensation: according to output current and motor parameter
		Automatic Currentlimiting and Voltage-limiting	During acceleration, deceleration or steady running, detect automatically the current and voltage of motor stator, and control it within bounds based on unique algorithm, minimize fault-trip chanc
	Senseless Vector Control	Voltage Frequency Character	Adjust pressure/frequency ratio according to motor parameter and unique algorithm
		Torque Character	Starting torque: 0.1Hz 150% rated torque (V/F control) 0.25Hz 150% rated torque (SVC) Operating speed precision in steady state: ≤±0.2% rated synchronous speed speed fluctuation: ≤±0.5% rated synchronous speed Torque response: ≤20ms (SVC)
		Motor parameter self-measurement	Without any restrictions, the automatic detection of parameters can be completed under the static and dynamic conditions of the motor to obtain the best control effect.
		Current and Voltage Restrain	Current closed-loop control, free from current impact, perfect restrain function of overcurrent and overvoltage
	Undervoltage Restrain during Running		Specially for users with a low or unsteady voltage power grid: even lower than the allowable voltage range, the system can maintain the longest possible operating time based on its unique algorithm and residual energy allocation strategy
Typical Function	Multi-velocity and Traverse Operation		16 segments programmable multi-segment speed control, a variety of operating modes are optional. Swing frequency operation: preset frequency, center frequency adjustable, state memory and recovery after power failure.
	PID Control RS485 Communication		Built-in PID controller (able to preset frequency). Standard configuration RS485 communication function.
	Frequency Setting	Analog Input	Direct voltage 0~10V, direct current 0~20mA (optional up limit and lower limit)
		Digital Intput	Operation panel setting, RS485 port setting, UP/DW terminal control, or combined with analog input
	Output Signal	Digital Output	One relay output
		Analog Output	1-channel analog output, 0-20mA / 0-10V free switching
	Automatic Steady voltage Operation		Dynamic steady state, static steady state, and unsteady voltage for choices to obtain the steadiest operation
	Acceleration and Deceleration Time Setting		0.0s～65000.0s min continuous setting, S type and linear type mode for choice
	Brake	Dynamic Braking	Dynamic braking initial voltage, backlash voltage and dynamic braking continuous adjustable
		DC Braking	Halt DC braking initial frequency: 0.00~[F00.10] Max.frequency Braking time: 0.0~100.0s; Braking current: 0.0%~100.0% of rated current
	Low Noise Running		Carrier frequency 1.0kHz~16.0kHz continuous adjustable, minimize motor noise
	Counter		A built-in counter, facilitate system integration
	Operation Function		Upper limit and lower limit frequency setting, frequency hopping operation, reversal running restraint, slip frequency compensation, RS485 communication, frequency control of progressive increase and decrease, failure recovery aomatically, etc.
Display	Operation Panel Display	Running State	Output frequency, output current, output voltage, motor speed, set frequency, module temperature, PID setting, feedback, analog input and output.
		Alarm	There are 8 operating parameter records including output frequency, output current, bus voltage, input terminal status, output terminal status, inverter status, power-on time, and running time when three faults trip
Protective Function			Overcurrent, overvoltage, undervoltage, module fault, electric thermal relay, overheat, short circuit, default phase of input and output, motor parameter adjustment abnormality, internal memory fault, etc.
Environment	Ambient Temperature		-10°C ~ +40°C (please run the VFD in derated capacity when ambient temperature is 40°C~50°C)
	Ambient Humidity		5%~95%RH, without condensing drops
	Surroundings		Indoors (without direct sunlight, corrosive or flammable gas, oil fog and dust)
	Altitude		Running in derated capacity above 1000m, derate 10% for every 1000m rise.
Structure	Protection Level		IP20
	Cooling Method		Air cooling with fan control
Installation Method			Wall-hanging type

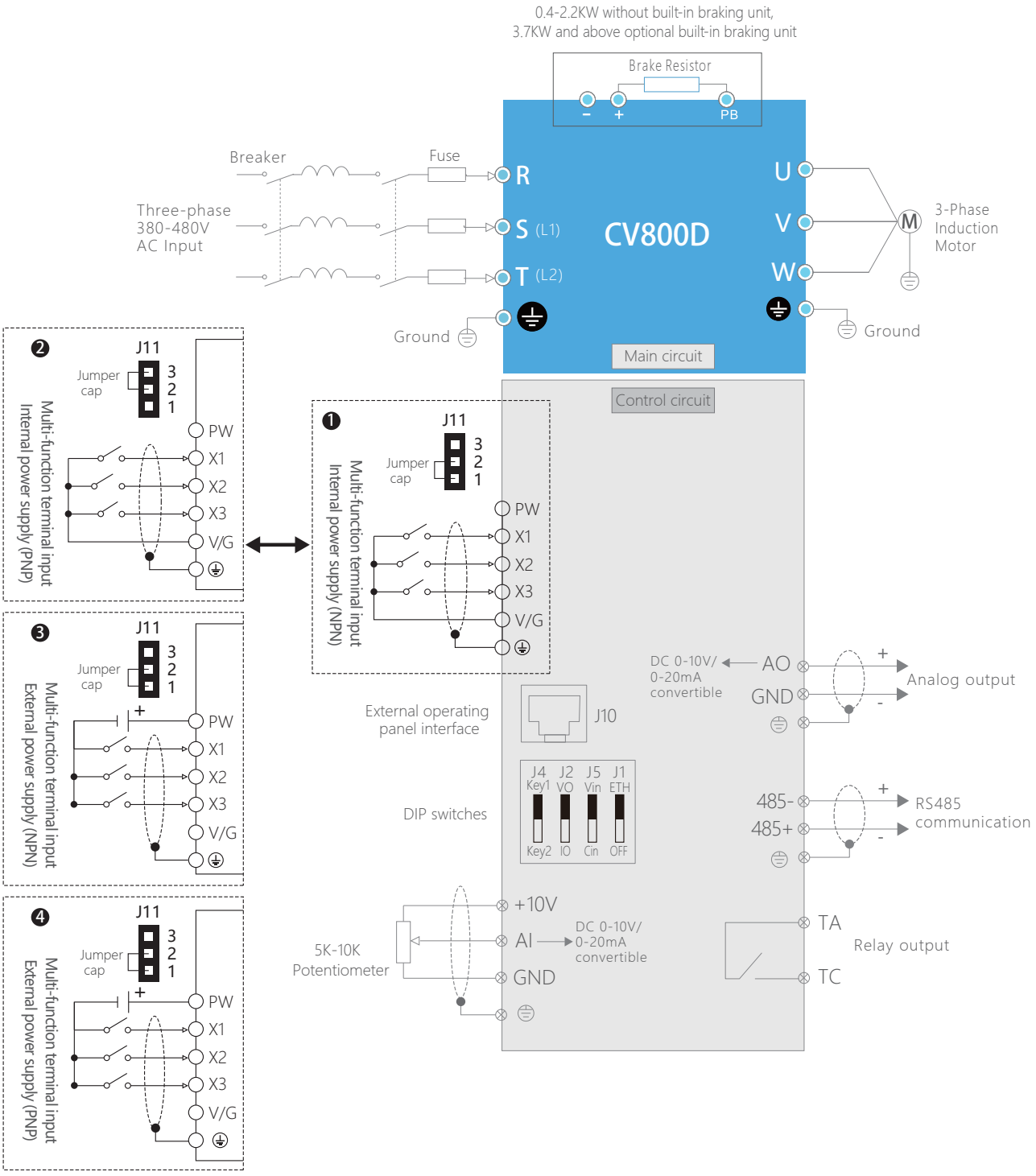
Terminal Wiring Diagram

The wiring part of the frequency converter is divided into the main circuit and the control circuit. Users can lift the cover of thecasing to see J11, the main circuit terminal, and the control circuit terminal. Users must clearly identify the selected model andaccurately connect and set the position of J11 adjustment cap according to the following wiring diagram for different models.

(1) NPN version



(2)NPN+PNP version



Official WeChat

Official website

Shenzhen Canroon Electrical Appliances Co., Ltd

Headquarters address : 9/F, Skyworth Innovation Valley, No. 8 Tangtou 1 Road, Shiyan Street, Baoan District, Shenzhen
Factory address : 8/F, Building 8, Zhongyuntai Hi-tech Ind Zone, Songbai Road,Shiyan Street, Bao'an District, Shenzhen, China.
sales@canroon.com www.canroon.com 0755-26890923 / 26890925

Copyright © Copyright Shenzhen Canroon Electrical Appliances Co., Ltd
Content changes due to the company's continuous product upgrades without prior notice