

KNC-VFD-CV100-1S Series



FEATURES

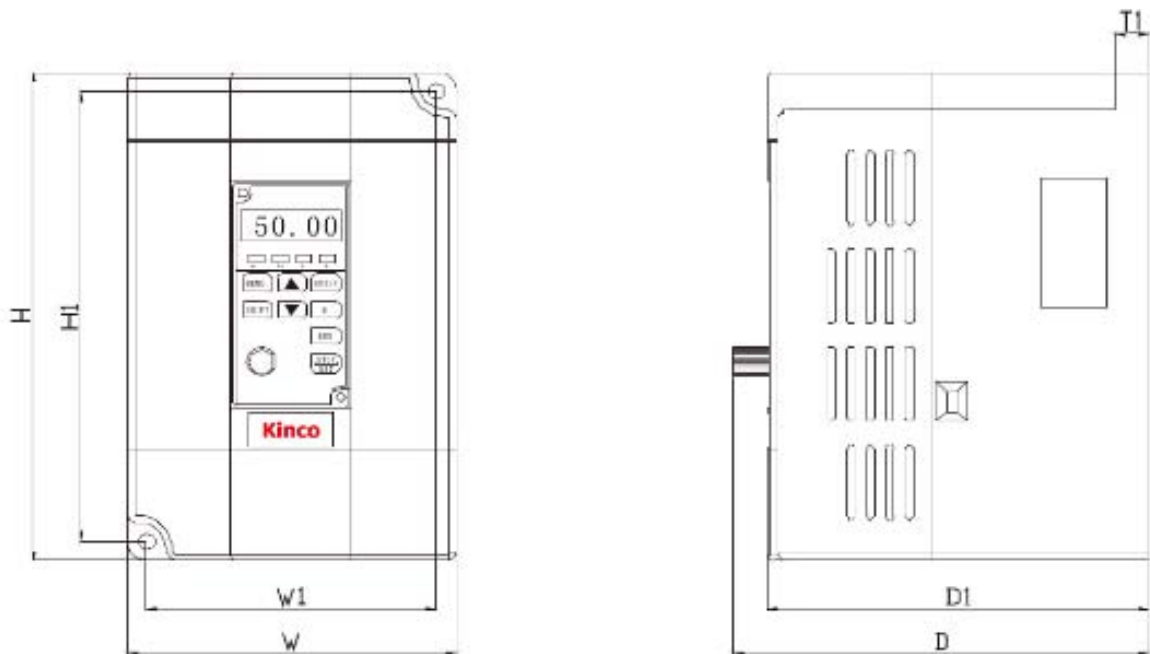
- Control Mode: V/F Control: Openloop Vector Control
- Auto torque boost and auto slip compensation function
- Built-in PID control
- Standard equipped Modbus (RS485 baud rate up to 4800-125000bps)
- Sleep/wake up function



DESCRIPTION

The CV100-1S Series is a rugged line of AC Variable Frequency Drives for OEM and Industrial applications, combining high performance and cost efficiency into one powerful package. Available in input voltages of 120V and output voltages of 220V, which are capable of powering AC motors from 0.25 to 1.5Hp, these VFDs are great for normal duty and soft-start operation. These drives provide energy savings and increased efficiency, making them ideal for fan, pump, and HVAC applications. They are equipped with a number of different features such as momentary power loss restarts, flying starts, auto-acceleration/deceleration, and sensorless vector control. These features make the VFDs compatible with most AC motors and allow for flexibility within an application.

DIMENSIONS



L011464

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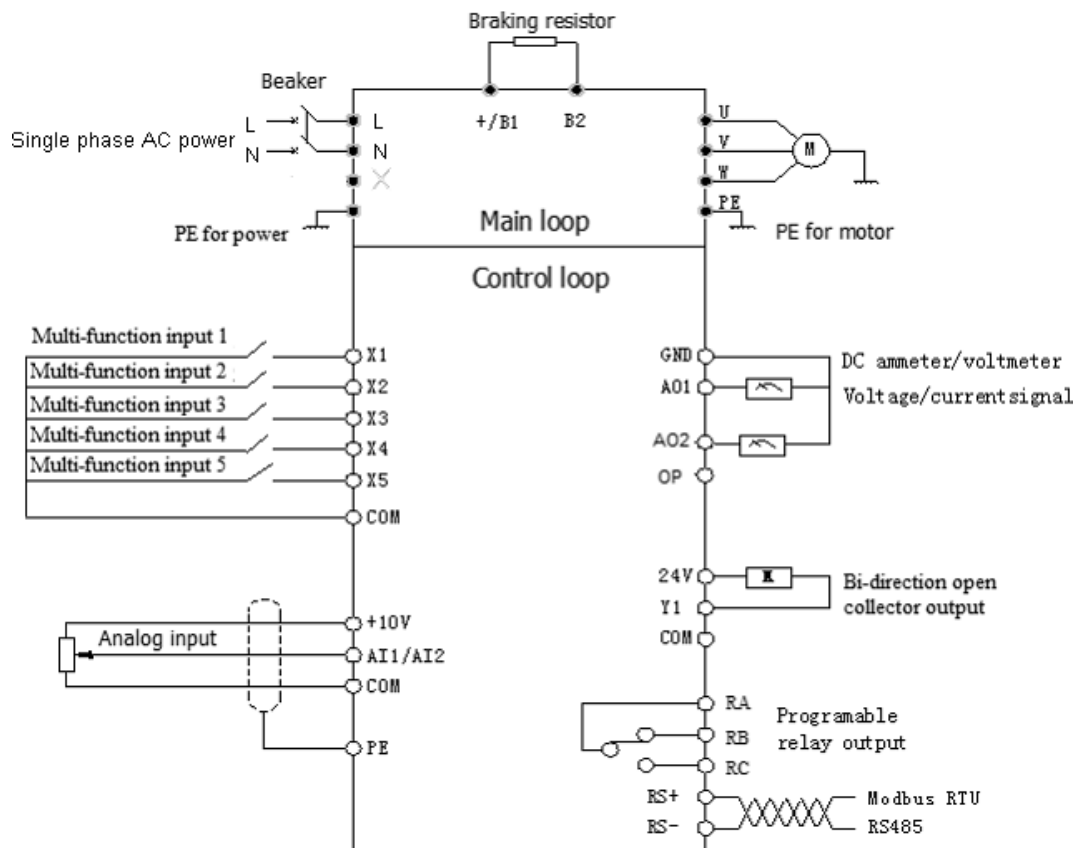


SPECIFICATIONS

Part #	W	H	D	W1	H1	D1	T1
0002G	85	142	122	73	130	112	10
0004G	85	142	122	73	130	112	10
0007G	85	142	122	73	130	112	10
0011G	101	152	127	89	140	117	10

	CV100-1S-0002	CV100-1S-0004	CV100-1S-0007	CV100-1S-0011
Max Power (HP)	0.25	0.50	1	1.5
Max Power (W)	200	400	750	1100
Input Voltage (V)	Single-Phase, 100-120V; 50/60Hz			
Output Voltage (V)	3 Phase, Twice the Input Voltage			
Rated Input Current (A)	6.0	9.0	18.0	25.0
Rated Output Current (A)	2.5	4.0	7.5	10
Overload Capacity	150% Rated Current for 1 Minute, 180% Rated Current for 10 Seconds			
Rated Output Voltage/Frequency	0V~Input Voltage; 0Hz ~ 300Hz			
Brake Unit	Built-In			
Protection Class	IP20			
Cooling Method	Air Cooling, with Fan Control			

WIRING DIAGRAM



L011464

Main Control Characteristics	
Control Method	Vector Control Without PG, V/F Control
Modulation Mode	Space Vector PWM Modulation
Starting Torque	0.5 Hz: 150% Rated Torque
Frequency Accuracy	Digital Setting: Max. Frequency x $\pm 0.01\%$; Analog Setting: Max. Frequency x $\pm 0.2\%$
Frequency Resolution	Digital Setting: 0.01Hz; Analog Setting: Max. Frequency x 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, 1.2 Order)
Acceleration/Deceleration Curve	Linear Acceleration/Deceleration. Four Kinds of Acceleration/Deceleration
Auto Current Limit	Limit Current During Operation Automatically to Prevent Frequent Overcurrent Trip
Customized Functions	
Operation Command	Keypad Setting, Terminal Setting, Communication Setting.
Frequency Command	Keypad Setting, Analog Input, Communication Setting.
Auxiliary Frequency Setting	Implement Flexible Auxiliary Frequency Trim and Frequency Synthesis
Analog Output	1 Channel Analog Output (0/4~20mA or 0/2~10V)
Protection Function	Open Phase Protection (Optional), Over Current, Over Voltage, Under Voltage, Overheat, Over Load Protections and more
Environmental	
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/s ² (0.6g)
Storage Temperature	-40°C~ + 70°C