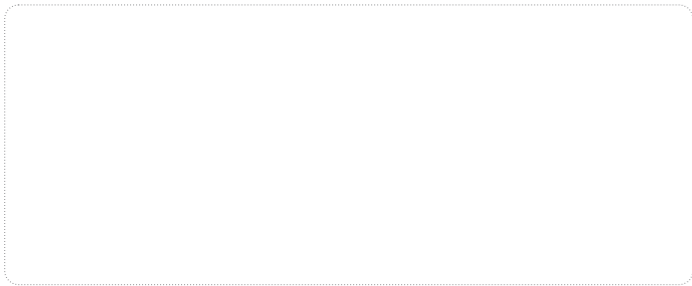


# Goodrive300-02

## Flange-Mounting Drive

Your trusted industry automation solution provider



Service line:86-755-86312859    E-mail:overseas@invt.com.cn    Website:www.invt.com

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- Industrial Automation:
- Frequency Inverter

■HMI

■SVG
- Servo & Motion Control

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■Solar Inverter
- Motor & Electric Spindle

■Traction Drive

■UPS
- PLC

■Online Energy Management System

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201406(V1.0)



## Product Introduction

Input voltage: AC 3PH 380V (-15%)~440V (+10%)  
Power range: 7.5~55kW

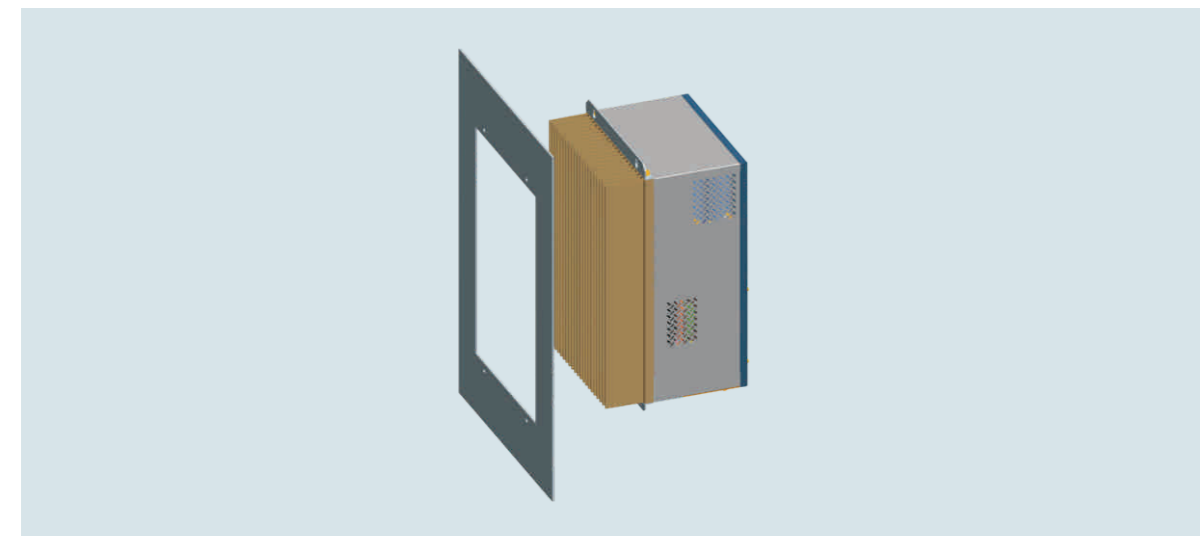


By the design of flange-mounting structure, Goodrive300-02 inverter, a special product developed according to the application features of textile industry, can effectively avoid foreign objects such as cotton fiber, dust and oil causing secondary pollution to the inverter and improve the temperature in the electrical cabinet and air ducts.

Goodrive300-02 inverter uses the design against cotton fiber blockage and it can run reliably for a long term at the high temperature of 50°C;

## Product Features

Flange-mounting will avoid external cotton fiber, dust and oil causing secondary pollution.



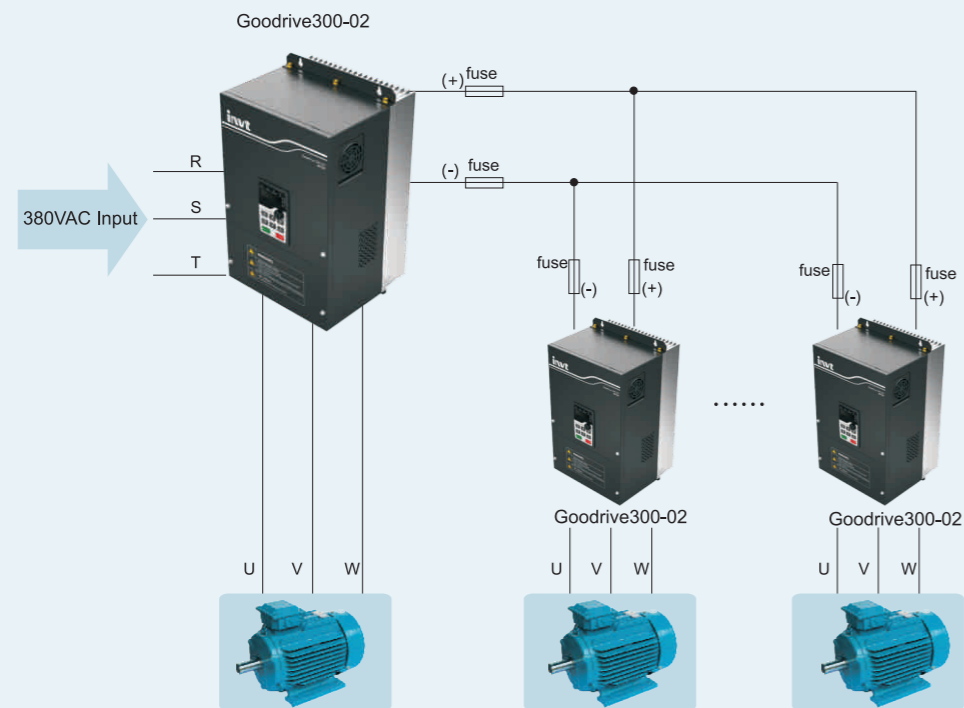
Based on the application features of textile industry, the special design of cooling structure can prevent cotton fiber from covering and blocking the radiator; the fans of electrical circuit are easy to clean and replace.



Metal casing design for all series adopts aluminum radiator in large size, so the inverter can run reliably for a long term at the environment temperature of 50°C.



## All series support common DC bus

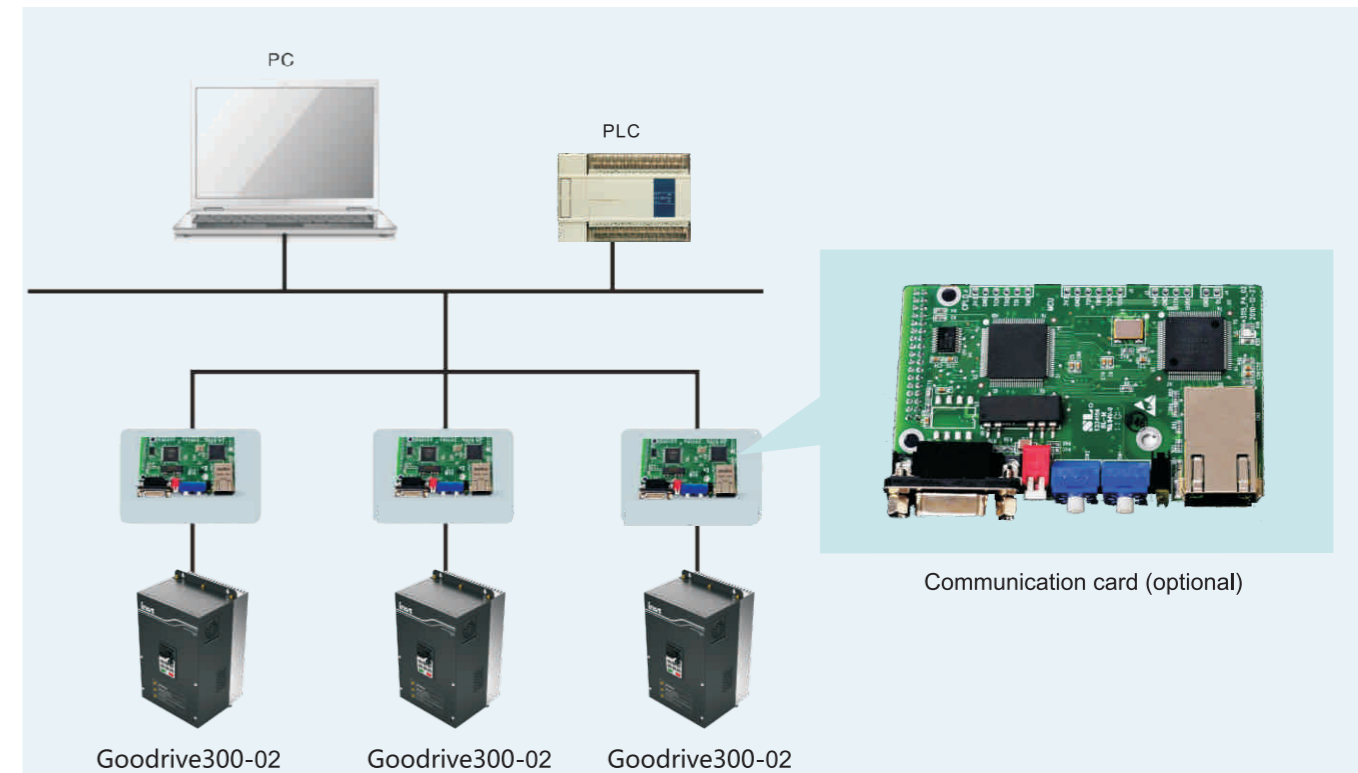


## Nonstop function at instantaneous power loss



The inverter can run without stop by feedback energy in a valid time when the grid drops suddenly, which is especially suitable for the cases requiring continuous operations such as chemical fiber and textile production lines.

## Standard MODBUS communication, optional Profibus-DP, CANopen and Ethernet communication



## Product Applications

**Solved problems:** Spinning , weaving, dyeing and finishing, nonwoven and chemical fiber

**Application process:** Cotton fiber blockage in spinning, high temperature and humidity in dyeing and finishing, oil corrosion in chemical fiber, etc.

**Applicable equipment:** Spinning frame, fly frame, double twister, cone winding machine, combing machine, rapier/towel loom, nonwoven machinery, texturing machine, chemical fiber winding head, etc.



## Product Model

**GD300-02 – 7R5G – 4**

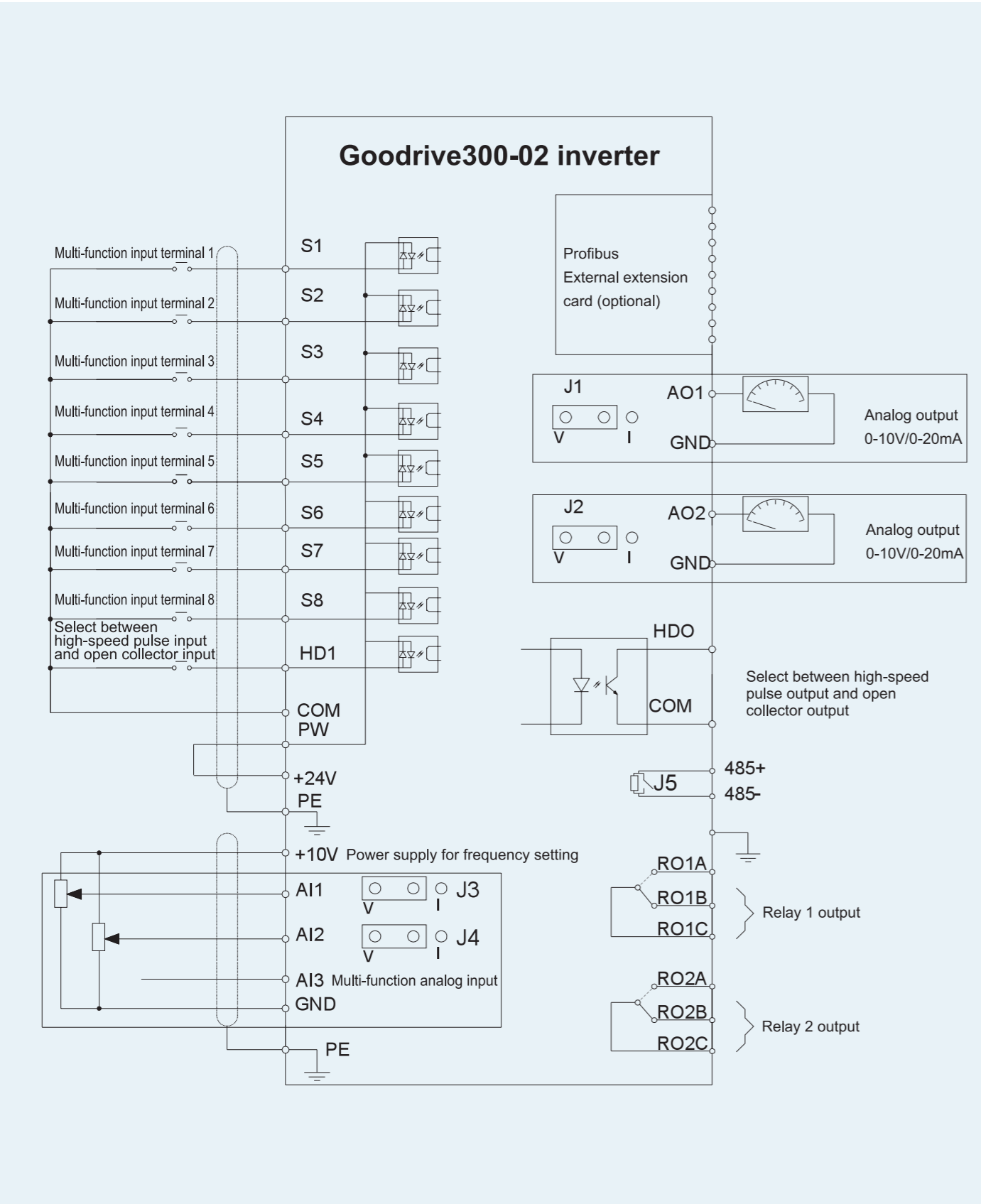
①                      ②                      ③

Key	No.	Description	Detailed content
Abbreviation	①	Product abbreviation	GD300-02 is short for Goodrive300-02
Rated power	②	Power range+load type	7R5-7.5kW G—Constant torque load
Voltage degree	③	Voltage degree	4: AC 3PH 380V (-15%)~440V (+10%) Rated voltage: 380V

## Product Specification

Function		Specification
Power Input	Input voltage (V)	AC 3PH 380V (-15%)~440V (+10%), rated voltage: 380V
	Input frequency (Hz)	50Hz/60Hz, allowable range: 47~63Hz
Technical control feature	Control mode	SVPWM, sensorless vector control
	Motor type	Asynchronous motor, PMS motor
	Adjustable-speed ratio	Asynchronous motor 1:200 (SVC), synchronous motor 1:20 (SVC)
	Speed control accuracy	±0.2% (sensorless vector control)
	Speed fluctuation	±0.3% (sensorless vector control)
	Torque response	<20ms (sensorless vector control)
	Torque control accuracy	10% (sensorless vector control)
	Starting torque	Asynchronous motor: 0.25Hz/150% (sensorless vector control); synchronous motor: 2.5Hz/150% (sensorless vector control)
	Overload capability	150% of rated current: 1 minute; 180% of rated current: 10 seconds; 200% of rated current: 1 second
	Peripheral interface	Terminal analog input resolution
Terminal switch input resolution		≤2ms
Analog input		2 (AI1, AI2) 0~10V/0~20mA, 1 (AI3) -10~10V
Analog output		2 (AO1, AO2) 0~10V/0~20mA
Digital input		8 common inputs, Max. frequency 1kHz, internal impedance: 3.3kΩ; 1 high speed input, Max. frequency 50kHz
Digital output		1 high speed pulse output, Max. frequency 50kHz; 1 Y terminal open collector output
Relay output		2 programmable relay outputs RO1A NO, RO1B NC, RO1C common terminal RO2A NO, RO2B NC, RO2C common terminal Contact capacity: 3A/AC250V, 1A/DC30V
Others	Installation manner	Through-the-wall
	Temperature of running environment	-10~50℃
	Protective degree	IP20
	Cooling	External air duct cooling, air speed>5m/s
	Braking unit	Built-in for inverters of 380V 30kW and below, external for inverters of 380V 37kW and above
	EMC filter	Built-in C3 filter: meet the degree requirement of IEC61800-3 C3 External filter: meet the degree requirement of IEC61800-3 C2

# Standard Wring

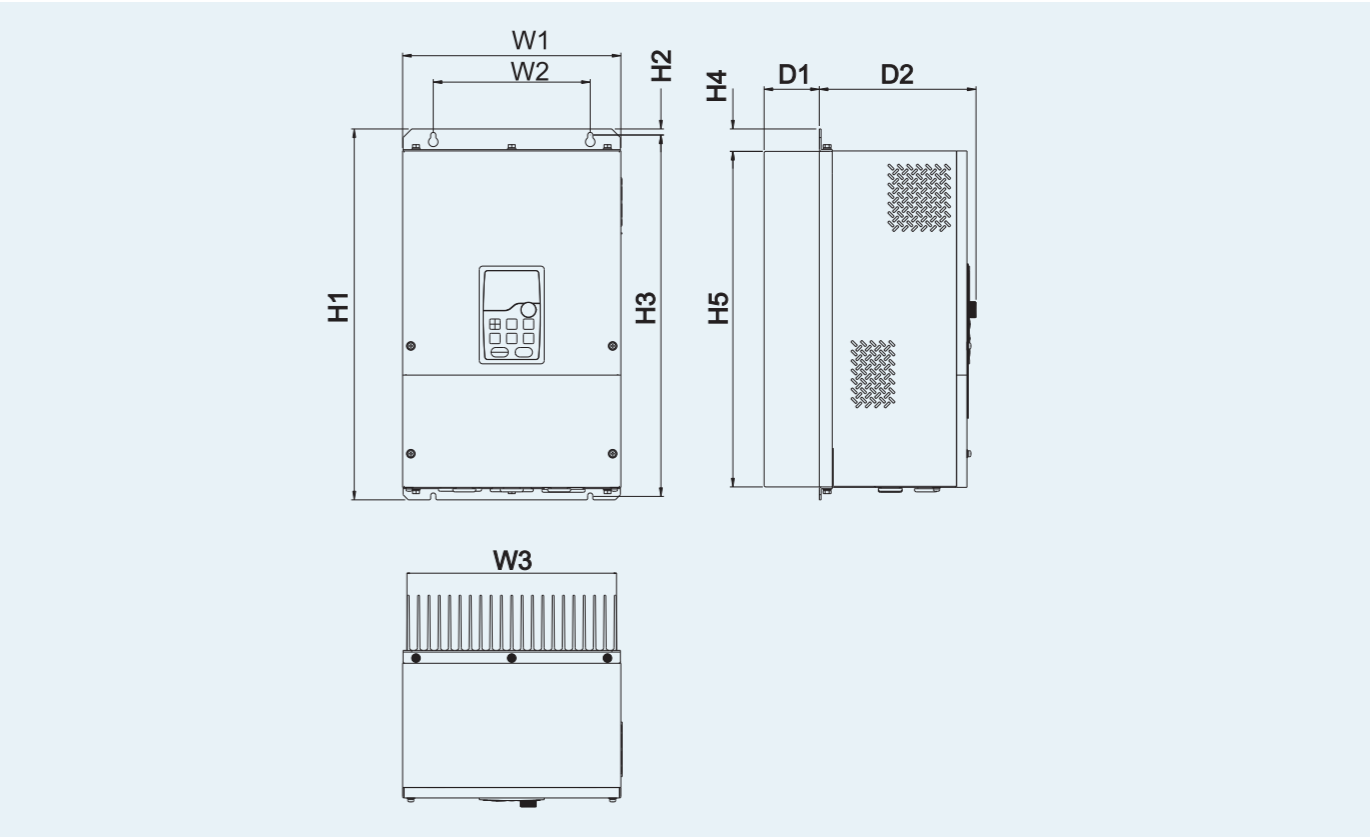


# Power Degree

Model	Rated output power (kW)	Rated input current (A)	Rated output current (A)
GD300-02-7R5G-4	7.5	25	18.5
GD300-02-011G-4	11	32	25
GD300-02-015G-4	15	40	32
GD300-02-018G-4	18.5	47	38
GD300-02-022G-4	22	56	45
GD300-02-030G-4	30	70	60
GD300-02-037G-4	37	80	75
GD300-02-045G-4	45	94	92
GD300-02-055G-4	55	128	115

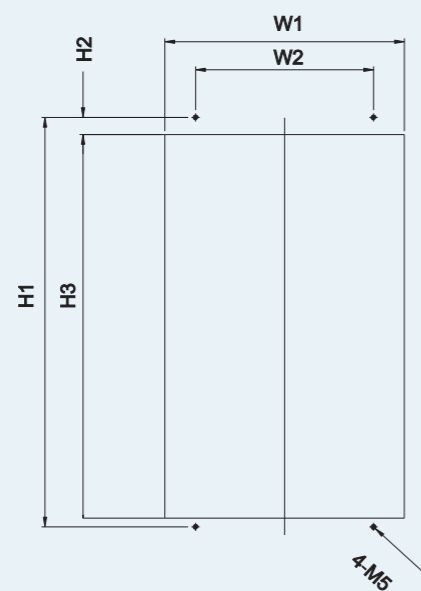
# Installation Manner

Overall dimension (unit: mm)



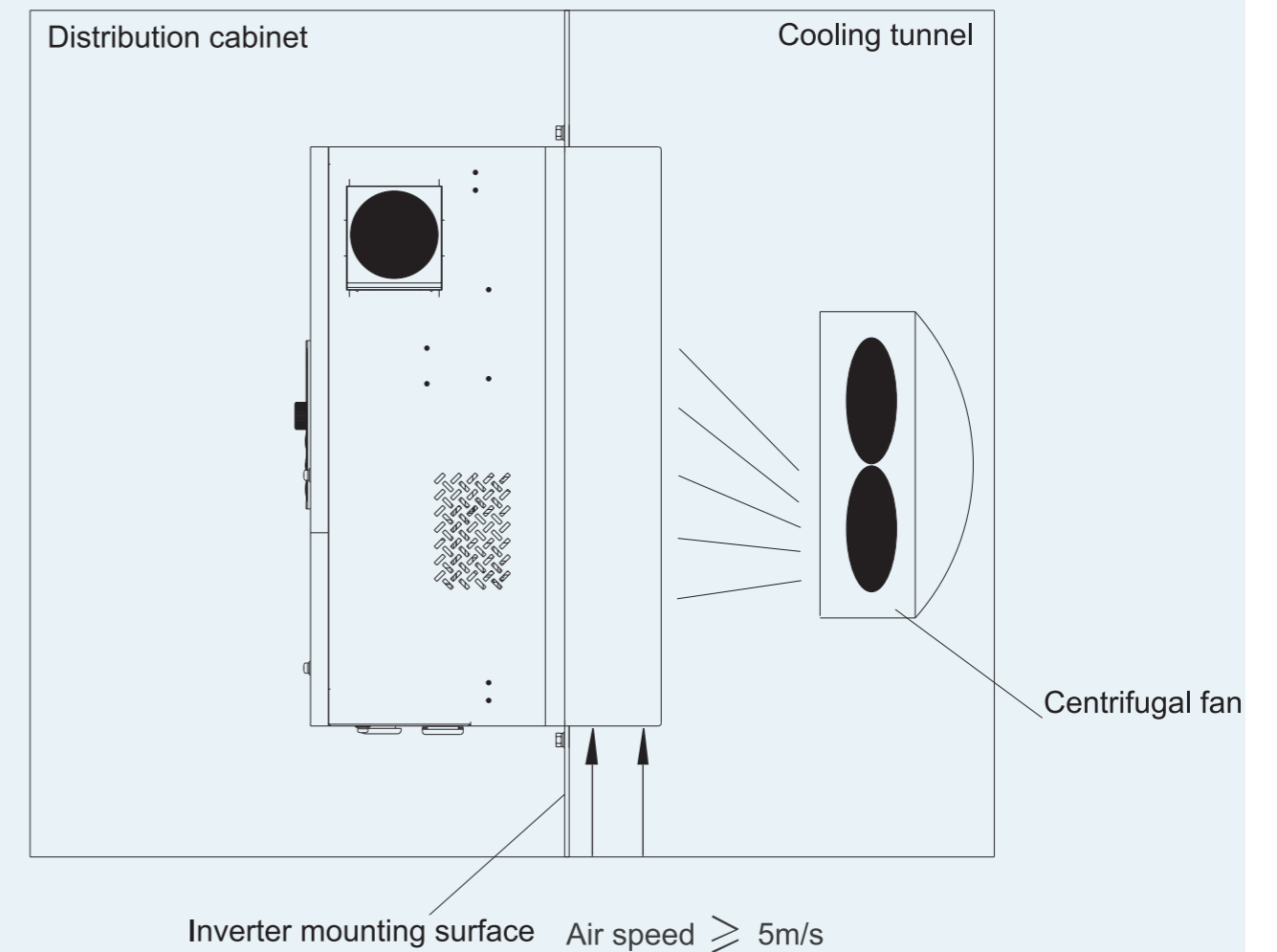
Inverter specification	W1	W2	W3	H1	H2	H3	H4	H5	D1	D2
7.5kW~18.5kW	230	160	194	419	7	408	26	379	65	154.5
22kW~30kW	253	182	243	430.2	7	419	26	389.2	64	181.7
37kW~55kW	320	220	290.5	515.3	7	504	26	474	79	282.2

Installation dimension (unit: mm)



Inverter specification	W1	W2	H1	H2	H3
7.5kW~18.5kW	198	160	408	17	383
22kW~30kW	245	182	419	17.5	392.5
37kW~55kW	295	220	504	16.5	478

## Recommended Configuration Diagram of Cooling System



Note: As the actual working conditions, it is difficult to convert into a unified simulation model for the position relationship between the fan and the radiator is not fixed, so the wind direction of the configuration diagram is defined as a bottom-up wind which is vertical through the radiator fin (that is, air inputs from the bottom side of the radiator, flows out from the top side of the radiator), and the average speed of the wind of the radiator inlet position (that is, the bottom side of the radiator) is defined as the wind speed.