

Goodrive270 Series VFD for Fan and Pump



CONTENTS



About Us	2
Application Scenarios.....	4
Product Features.....	5
Technical Specification.....	10
Model Description.....	11
Expansion Card Selection.....	12
Reactor&Filter Selection.....	12
Accessory Selection.....	13
Standard Wiring	14
Installation Dimensions	15
Automation Product Family.....	19

N T S

Energy-efficient and highly flexible, tailored for fan and pump applications

Goodrive270 series VFD is designed for fan and pump driving in wastewater treatment, HVAC, chemical, metallurgical, electric power and other industries, with high energy efficiency and flexibility.

- ◆ Size advantage: Adopts book-type design for easy installation and compact structure
- ◆ Motor compatible: Supports the driving of synchronous motors and asynchronous motors
- ◆ Install and play: Integrated with the fan and pump industrial application functions (HVAC)
- ◆ Energy saving and high efficiency: Uses new ECO algorithm, reducing operating costs
- ◆ Flexible configuration: Optionally configured with built-in DC reactor and output reactor
- ◆ Highly extensible: Supports Profibus-DP, Profinet, CANopen communications, and I/O expansion
- ◆ Enhanced protection: Equipped with thickened protective coating in the core circuit board

Power range: 1.5–1200kW Voltage class: AC 3PH 380–480V



About Us



INVT (Shenzhen INVT Electric Co., Ltd) has been concentrating on industry automation and energy power since its foundation in 2002 and is committed to "Providing the best product and service to allow customers more competitiveness". INVT goes public in 2010 and is the first A-share listed company (002334) in Shenzhen Stock Exchange in the industry. At present, INVT owns 15 subsidiaries and more than 4500 employees, over 40 branches, forming a sales network covering more than 100 overseas countries and regions.

INVT has been awarded as the Key High-tech Enterprise of National Torch Plan based on mastering of key technologies in power electronics, auto control and IT. With business covering industry automation, electric vehicle, network power and rail transit, INVT has established 10 R&D centers nationwide, boasts more than 1400 patents and owns the first lab in the industry awarded ACT qualification from TÜV SÜD, UL-WTDP and CNAS National Lab. The industrial parks in Shenzhen and Suzhou aim to provide customers with advanced integrated product development design management, comprehensive product R&D test and auto informational production. The worldwide INVT branches and warranty service centers are ready to offer customers all-around back-ups including professional solutions, technical trainings and service support.

In the next decade, INVT will continue to take " Sincere Virtuous, Professional Aspiring" as our business philosophy, enhance core business sectors including industrial automation, electric vehicle, network power and rail transit based on the three major technologies in industry automation and energy power fields, and strive to become a leading, responsible and harmonic international professional group armed with proper product structure, leading technologies, efficient management, robust profitability and superior competitiveness.



Application Scenarios



HVAC



Municipal water supply



Sewage treatment



Municipal heating system



Delivery pump

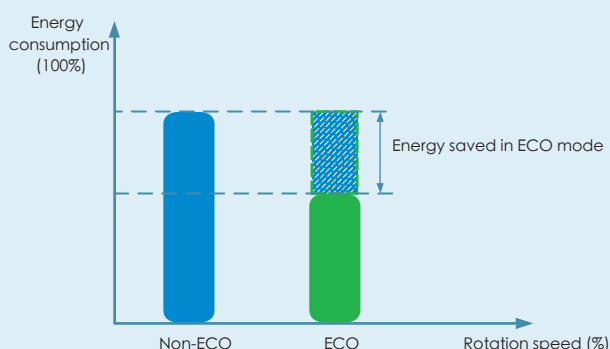


Irrigation pump

Product Features Application Scenarios

Energy-efficient

- ◆ ECO mode: ensures optimal performance and lowest losses at low dynamic loads, optimizing output power



Outcome

Annual power saving:
about **8100 kWh**

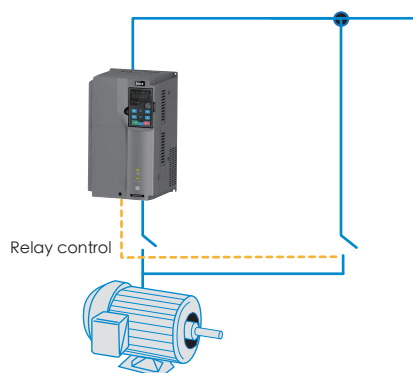
Note: This is an internal measured data. The actual effect differs from motor feature and performance.

Conditions

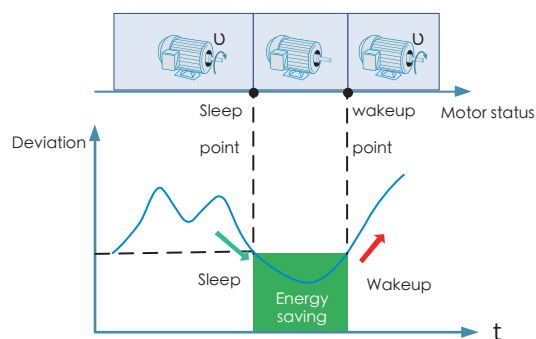
- Applicable to 4kW IE2 asynchronous motors
- Load rate: 40% Motor count: 10
- Running times per year: 24 hours, 365 days
- Control mode: V/F; energy-saving mode: max. efficiency mode
- Gain coefficient for energy saving: 100%
- Angle compensation coefficient for energy saving: 80%

Valid only for asynchronous motor control and V/F control. It is recommended to enable this function for fan and pump applications with small load variations.

- ◆ Bypass function: external contactors can be controlled by relays to achieve industrial frequency switching and reduce energy consumption

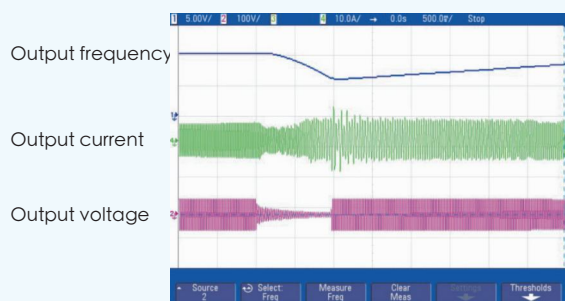


- ◆ Energy-saving control: enables sleep at night or energy-saving operation under extremely low load conditions by avoiding frequent start and stop



Multifunctional

- ◆ Retention at transient voltage drop: ensures continuous operation of equipments during short-term fluctuations in the power grid.



- ◆ Level control

When the water level is lower than the lower level limit and higher than the water shortage level, the system runs with the reserve pressure for abnormal cases. When the water level is lower than the water shortage level, the system stops all operations.

- ◆ Soft filling of water pipes

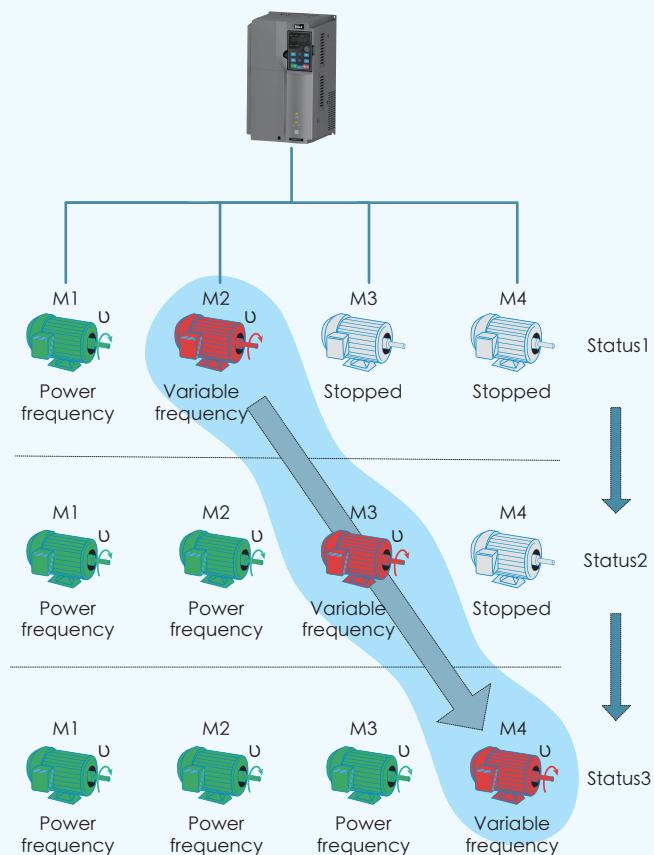
The VFD prevents the water hammer effect by slowly and smoothly injecting water into the water pipe during power-up.

- ◆ Pipe break detection

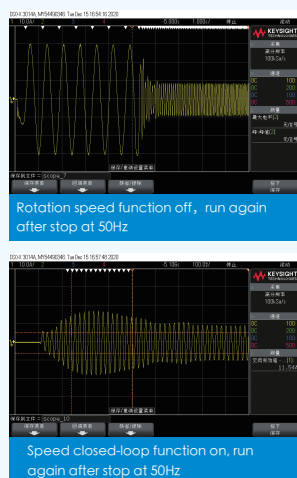
Pipe break detection is conducted based on the running frequency of VFD or the upper limit of PID output frequency.

- ◆ Multi-pump switch-over and auxiliary pump start/stop: supports variable-frequency pump water supply in the cyclic mode and the fixed mode, and provides sleep control (Note: An additional relay card is required).

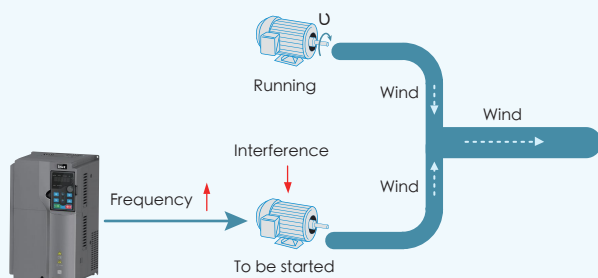
The VFD does not designate a pump as the variable-frequency pump. When the water supply pressure is insufficient, the running variable-frequency pump will switch to the power frequency operation and then the next pump will become the variable-frequency pump (up to 8 variable-frequency pumps can be controlled. Only one variable-frequency pump can be used at the same time).



- ◆ Rotating speed tracking (for fan): tracks the rotating speed of fan before start-up to reduce the shock to the devices and improve the restart efficiency.

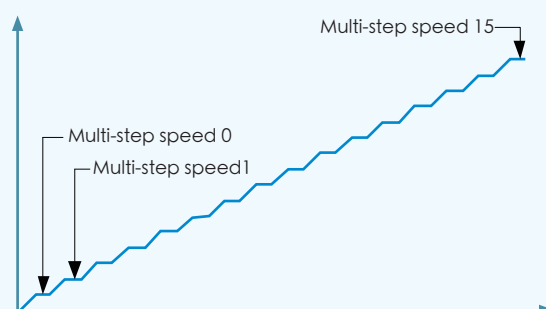


- ◆ Regeneration avoidance (for fan): A fan is in the state of slight regeneration under the influence of other fans that share the same pipe. The VFD will automatically increase the output frequency to prevent over-voltage alarm and ensure the stable operation of the machine.



- ◆ Restart after power off: The VFD can automatically start up by itself when power-off restart is enabled.

- ◆ Multi-step speed reference: A total of 16-step speeds can be set by combining digital states of the four terminals, enabling airflow regulation at different time periods or load conditions.

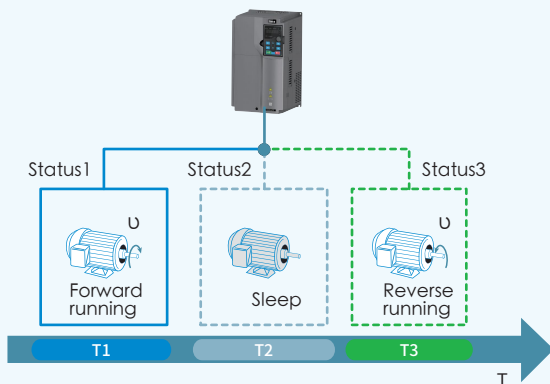


- ◆ Fire override (for pumps): In emergencies, this fire mode is used for tunnel or building water supply. It shields fault alarms and maintains continuous output for longer operation.



Safe and Reliable

- ◆ **Desilting:** The motor periodic forward rotation, sleep, and reverse rotation enable the pump self-cleaning function, reducing the manual cleaning workload.



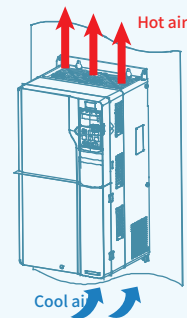
- ◆ **Frost proofing:** When the ambient temperature falls below a set threshold, the motor will automatically rotate to prevent water from freezing and thus protect the pump.



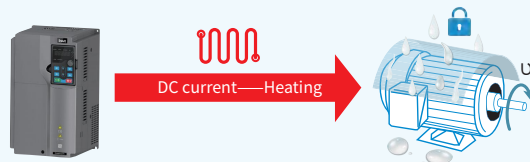
- ◆ **Enhanced PCB coating:** After strengthened in terms of three proofings, the PCB gains a strong protection ability to resist harsh environment, which guarantees the long-term healthy operation of the VFD.



- ◆ **Independent air duct design:** Effectively improves VFD protection by preventing dust from entering the VFD and reducing the risk of faults such as short circuits. It also dissipates internal heat, improves thermal performance, enhances reliability, and extends the VFD service life.

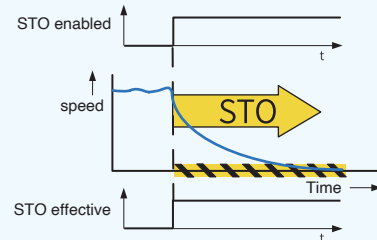


- ◆ **Motor heating:** The VFD outputs DC current to increase the surface temperature of the motor during work interruption, avoiding motor failure caused by condensed water.



- ◆ **built in Safe Torque Off (STO) function** (only GD270-EU models support)
Designed according to relevant international standards, meeting SIL3 level (TUV certificate acquisition in progress)

EN ISO 13849-1:2015(Cat. 3 PL e)
EN IEC 62061:2021 (SIL 3)
EN 61800-5-2:2017



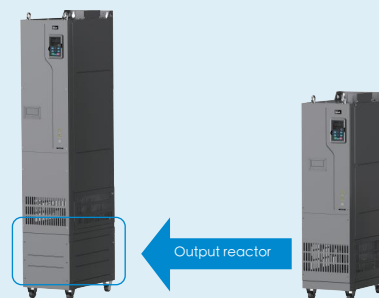
Configurable

Reactor configurations

- ◆ A 11–355kW: Optional built-in DC reactor
400–630kW: DC reactor supplied as standard
710–800kW: Input reactor supplied as standard
900–1200kW: DC reactor and output reactor supplied as standard



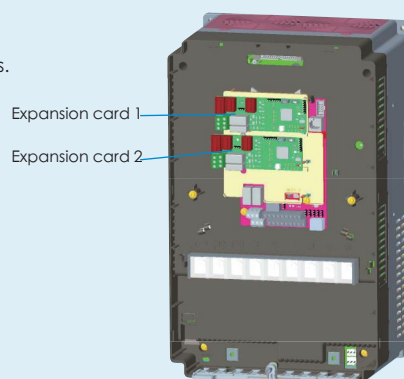
- ◆ B For 220kW and higher: Output reactor is available as an option (select L3 model)



Expansion card configurations

- ◆ Support a variety of application environments, meeting the customization requirements.

1	Optional IO expansion card	Provides digital input, digital output, analog input, analog output, and relay terminals
2	Optional communication expansion card	Supports multiple industrial fieldbus systems such as PROFINET/PROFIBUS-DP/CANopen



Technical Specifications

	Function	Specifications
Technical control performance	Input voltage (V)	◆ AC 3PH 380–480V; rated voltage: 380V
	Allowed voltage transient fluctuation	◆ -15%~+10%
	Input frequency (Hz)	◆ 50Hz or 60Hz; allowed range: 47–63Hz
	Output frequency (Hz)	◆ 0–400Hz
	Control mode	◆ Space voltage vector control, and sensorless vector control (SVC)
	Motor type	◆ Asynchronous motor (AM) and permanent magnet synchronous motor (PMSM)
	Speed ratio	◆ For AMs: 1:200 (SVC), for SMs: 1:20 (SVC)
	Speed control accuracy	◆ $\pm 0.2\%$ (SVC)
	Speed fluctuation	◆ $\pm 0.3\%$ (SVC)
	Torque response	◆ <20ms (SVC)
	Torque control accuracy	◆ $\pm 10\%$ (SVC)
	Overload capacity	◆ Able to run at 110% of rated current for 1 min, and an overload allowed for every 5 min
Running control performance	Frequency setting method	◆ Settings can be implemented through digital, analog, pulse frequency, multi-step speed run, simple PLC, PID, and communication. ◆ Settings can be combined and the setting channels can be switched.
	Automatic voltage regulation	◆ The output voltage can be kept constant although the grid voltage changes.
	Fault protection	◆ Various protection functions, such as protection against overcurrent, overvoltage, undervoltage, overtemperature, phase loss, and overload
	Speed tracking restart	◆ Used to implement impact-free smooth startup for rotating motors
Peripheral interface	Analog input	◆ Two inputs. AI1: 0(2)–10V/0(4)–20mA; AI2: -10~+10V
	Analog output	◆ Two outputs. AO0/AO1: 0(2)–10V/0(4)–20mA
	Digital input	◆ Five regular inputs. Max. frequency: 1kHz; internal impedance: 3.3k Ω ◆ One high-speed input. Max. frequency: 50kHz
	Digital output	◆ One Y terminal open collector output, sharing the terminal with S4. The function can be selected through a jumper.
	Relay output	◆ Two programmable relay outputs. ◆ RO1A: NO; RO1B: NC; RO1C: common ◆ RO2A: NO; RO2B: NC; RO2C: common ◆ Contact capacity: 3A/AC250V, 1A/DC30V
	H1	◆ Safe torque off (STO) inputs ◆ STO redundant input, connected to the external NC contact. When the contact opens, STO acts and the VFD stops output. ◆ Safety input signal wires use shielded wires whose length is within 25m.
	H2	◆ The H1 and H2 terminals are short connected to +24V by default. Remove the jumper from the terminals before using the STO function. Note: 1. Only the -EU Models support safe-torque-off function. 2. For the 1.5-7.5kW -EU models, the extended interface SLOT1 will be occupied due to the H1/H2 terminals.
	Extended interfaces	◆ Two extended interfaces: SLOT1 and SLOT2 ◆ Supporting communication expansion cards, I/O cards and so on Note: For the 1.5~7.5kW -EU models, the extended interface SLOT1 will be occupied due to the H1/H2 terminals. That is, 1.5~7.5kW -EU models only support extended interface SLOT2.
Other	Installation method	◆ 1.5–250kW: Supports wall mounting ◆ 1.5–200kW: Supports flange mounting ◆ 220–1200kW: Supports floor mounting
	Keypad	◆ 1.5–22kW: Membrane LED keypad supplied as standard ◆ 30–1200kW: Remote-mountable LED keypad supplied as standard
	EMC filter	◆ 1.5–22kW: Built-in C2 filter available as an option; 30–132kW: Built-in C3 filter available as an option ◆ 160kW and higher: Built-in C3 filter supplied as standard
	Temperature of running environment	◆ -10° C~+50° C. Derating is required when the ambient temperature exceeds 40° C
	IP rating	◆ ≤ 200 kW: IP20 ◆ 220kW~630kW: IP00 ◆ 710–1200kW: IP21
	Pollution degree	◆ Degree 2
	Cooling method	◆ 1.5kW: Natural cooling ◆ 2.2kW and higher: Forced air cooling

Model description

Product model designation and selection

GD270-160-4-L1-C3-EU

① ② ③ ④ ⑤ ⑥

Field	No.	Field description	Content
Product series abbreviation	①	Product series abbreviation	◆ GD270: Goodrive270 series VFD for fan and pump
Rated power	②	Power range	◆ 160: 160kW
Voltage class	③	Voltage class	◆ 4: AC 3PH 380V~480V ◆ Rated voltage: 380V
Reactor configuration	④	Reactor configuration	◆ Default: None ◆ L1: Built-in DC reactor for 11~630kW models; built-in input reactor for 710~800kW models. ◆ L3: Built-in DC reactor and output reactor for 220~630kW and 900~1200kW models; built-in input reactor and output reactor for 710~800kW models. Note: DC reactors are supplied as standard for 400~630kW models; input reactors are supplied as standard for 710~800kW models; DC reactors and output reactors are supplied as standard for 900~1200kW models.
Filter configuration	⑤	Filter configuration	◆ Blank: Built-in C3 filter for 160~1200kW models; no built-in C3/C2 filter for 1.5~132kW models ◆ C2: Built-in C2 filter for 1.5~22kW models ◆ C3: Built-in C3 filter for 30~132kW models
safe torque off function configuration	⑥	/	◆ Safety function configuration ◆ Safety function configuration ◆ EU: Built-in Safe Torque Off (STO) function, applicable to 1.5~1200kW models

VFD mode	Output power (kW)	Input (A)	Output current (A)
GD270-1R5-4(-C2)(-EU)	1.5	5 (5)	3.7
GD270-2R2-4(-C2)(-EU)	2.2	6 (6)	5
GD270-004-4(-C2)(-EU)	4	15 (15)	9.5
GD270-5R5-4(-C2)(-EU)	5.5	20 (20)	13
GD270-7R5-4(-C2)(-EU)	7.5	27 (27)	17
GD270-011-4(-L1/-C2)(-EU)	11	35 (35)	25
GD270-015-4(-L1/-C2)(-EU)	15	44 (44)	32
GD270-018-4(-L1/-C2)(-EU)	18	46 (46)	38
GD270-022-4(-L1/-C2)(-EU)	22	54 (54)	45
GD270-030-4(-L1)(-C3)(-EU)	30	75 (56)	60
GD270-037-4(-L1)(-C3)(-EU)	37	90 (69)	75
GD270-045-4(-L1)(-C3)(-EU)	45	108 (101)	92
GD270-055-4(-L1)(-C3)(-EU)	55	142 (117)	115
GD270-075-4(-L1)(-C3)(-EU)	75	177 (149)	150
GD270-090-4(-L1)(-C3)(-EU)	90	200 (171)	180
GD270-110-4(-L1)(-C3)(-EU)	110	240 (205)	215
GD270-132-4(-L1)(-C3)(-EU)	132	278 (235)	250
GD270-160-4(-L1)(-EU)	160	310 (296)	305
GD270-185-4(-L1)(-EU)	185	335 (320)	330
GD270-200-4(-L1)(-EU)	200	385 (368)	380
GD270-220-4(-Ln)(-EU)	220	430 (411)	425
GD270-250-4(-Ln)(-EU)	250	465 (444)	460
GD270-280-4(-Ln)(-EU)	280	540 (485)	530
GD270-315-4(-Ln)(-EU)	315	605 (550)	600
GD270-355-4(-Ln)(-EU)	355	655 (600)	650
GD270-400-4-Ln(-EU)	400	660	720
GD270-450-4-Ln(-EU)	450	745	820
GD270-500-4-Ln(-EU)	500	800	860
GD270-560-4-Ln(-EU)	560	970	1020
GD270-630-4-Ln(-EU)	630	1100	1120
GD270-710-4-Ln(-EU)	710	1200	1260
GD270-800-4-Ln(-EU)	800	1320	1460
GD270-900-4-L3(-EU)	900	1490	1640
GD270-1000-4-L3(-EU)	1000	1600	1720
GD270-1120-4-L3(-EU)	1120	1940	2040
GD270-1200-4-L3(-EU)	1200	2200	2240

Note:

n=1 or 3

The parentheses "()" in the "VFD model" column are used to distinguish models when selecting different product configurations. Please note that 11~22kW models can only be configured with one from the built-in DC reactor (L1) and the built-in C2 filter.

The rated output current is the output current when the output voltage is 380V.

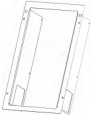
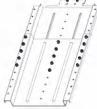
The data in the "Input current" column are measured at an input voltage of 380V. The data in "I" are measured when a DC reactor is configured.

Expansion card

Card type	Model	Name	Specifications
IO card	EC-IO501-00	IO expansion card	◆ Four digital inputs ◆ One digital output ◆ One analog input ◆ One analog output ◆ Two relay outputs: one double-contact output, and one single-contact output
	EC-IO503-00	Relay card	◆ Two digital inputs ◆ Six relay outputs
Communication card	EC-TX503D	PROFIBUS-DP communication card	◆ Supports the PROFIBUS-DP protocol
	EC-TX505C	CAN multi-protocol communication card	◆ Supports the CANopen protocol and INVT's master-slave control proprietary protocol
	EC-TX509C	PROFINET communication card	◆ Supports the PROFINET protocol
	EC-TX510B	EtherNet IP/ Modbus TCP communication card	◆ Supports the EtherNet IP and Modbus TCP protocols (switch using the switch SW1)
	EC-TX507B	BACnet MSTP communication card	◆ Supports the BACnet MSTP protocol
Power supply card	EC-PS501-24	24V power supply card	◆ Supports the 24V external power supply

Note: The expansion cards are optional and need to be purchased separately.

Optional parts

Name	Image	Model/Function/Apply to	Name	Image	Model/Function/Apply to
LCD keypad		Model: SOP-270 Function: External LCD display and operation panel Applicable to: Full series	LED keypad		Model: BOP-270 Function: External LCD display and operation panel Applicable to: 1.5–22kW models (Supplied as standard for 30–1200kW models)
Keypad bracket		Model: GD350-JPZJ Function: For fixing LED/LCD keypad outside the electrical cabinet Applicable to: Full series	GD270-JPFH		Model: GD270-JPFH Function: To enhance keypad port protection when the local keypad is externally extended Applicable to: ≥30kW models
Flange mounting bracket		Model: Conatct us Functions: For flange mounting Applicable to: 1.5–132kW models	Cabinet rail component		Model: GD270-DGZJ Function: To assist cabinet installation to improve installation efficiency and safety Applicable to: 250–630kW models
Base		Model: Consult us Functions: Raises the cabinet unit and reserves bottom wiring space, making on-site wiring easier Applicable to: 710–1200kW models Note: The base is optional	Ventilation dust cover		Model: Consult us Function: Prevents dust and foreign matter from entering the circuit board area Applicable to: 11–45kW models

Reactor & filter

VFD model	Reactor		Filter	
	Input reactor	Output reactor	Input filter	Output filter
GD270-1R5-4(-C2)(-EU)	GDL-ACL0005-4CU	GDL-OCL0005-4CU	FLT-P04006L-B	FLT-L04006L-B
GD270-2R2-4(-C2)(-EU)	GDL-ACL0006-4CU	GDL-OCL0006-4CU		
GD270-004-4(-C2)(-EU)	GDL-ACL0014-4CU	GDL-OCL0010-4CU	FLT-P04016L-B	FLT-L04016L-B
GD270-5R5-4(-C2)(-EU)	GDL-ACL0020-4CU	GDL-OCL0014-4CU	FLT-P04032L-B	FLT-L04032L-B
GD270-7R5-4(-C2)(-EU)	GDL-ACL0025-4CU	GDL-OCL0020-4CU		
GD270-011-4(-L1/-C2)(-EU)	GDL-ACL0035-4AL	GDL-OCL0025-4CU	FLT-P04045L-B	FLT-L04045L-B
GD270-015-4(-L1/-C2)(-EU)	GDL-ACL0040-4AL	GDL-OCL0035-4AL		
GD270-018-4(-L1/-C2)(-EU)	GDL-ACL0051-4AL	GDL-OCL0040-4AL	FLT-P04065L-B	FLT-L04065L-B
GD270-022-4(-L1/-C2)(-EU)	GDL-ACL0051-4AL	GDL-OCL0050-4AL		
GD270-030-4(-L1)(-C3)(-EU)	GDL-ACL0070-4AL	GDL-OCL0060-4AL	FLT-P04100L-B (FLT-P04065L-B)	FLT-L04065L-B
GD270-037-4(-L1)(-C3)(-EU)	GDL-ACL0090-4AL	GDL-OCL0075-4AL	FLT-P04100L-B	FLT-L04100L-B
GD270-045-4(-L1)(-C3)(-EU)	GDL-ACL0110-4AL	GDL-OCL0092-4AL		
GD270-055-4(-L1)(-C3)(-EU)	GDL-ACL0150-4AL	GDL-OCL0115-4AL	FLT-P04150L-B	FLT-L04150L-B
GD270-075-4(-L1)(-C3)(-EU)	GDL-ACL0150-4AL	GDL-OCL0150-4AL	FLT-P04240L-B (FLT-P04150L-B)	FLT-L04150L-B
GD270-090-4(-L1)(-C3)(-EU)	GDL-ACL0220-4AL	GDL-OCL0220-4AL	FLT-P04240L-B	FLT-L04240L-B
GD270-110-4(-L1)(-C3)(-EU)	GDL-ACL0220-4AL	GDL-OCL0220-4AL		
GD270-132-4(-L1)(-C3)(-EU)	GDL-ACL0265-4AL	GDL-OCL0265-4AL	FLT-P04400L-B	FLT-L04400L-B
GD270-160-4(-L1)(-EU)	GDL-ACL0330-4AL	GDL-OCL0330-4AL		
GD270-185-4(-L1)(-EU)	GDL-ACL0390-4AL	GDL-OCL0400-4AL		
GD270-200-4(-L1)(-EU)	GDL-ACL0390-4AL	GDL-OCL0400-4AL		
GD270-220-4(-Ln)(-EU)	GDL-ACL0450-4AL	GDL-OCL0450-4AL	FLT-P04600L-B	FLT-L04600L-B
GD270-250-4(-Ln)(-EU)	GDL-ACL0500-4AL	GDL-OCL0500-4AL		
GD270-280-4(-Ln)(-EU)	GDL-ACL0500-4AL	GDL-OCL0560-4AL		
GD270-315-4(-Ln)(-EU)	GDL-ACL0580-4AL	GDL-OCL0660-4AL	FLT-P04800L-B	FLT-L04800L-B
GD270-355-4(-Ln)(-EU)	GDL-ACL0660-4AL	GDL-OCL0660-4AL		
GD270-400-4(-Ln)(-EU)	GDL-ACL0715-4AL	GDL-OCL0720-4AL		
GD270-450-4(-Ln)(-EU)	GDL-ACL0840-4AL	GDL-OCL0820-4AL	FLT-P041000L-B	FLT-L041000L-B
GD270-500-4(-Ln)(-EU)	GDL-ACL1000-4AL	GDL-OCL1000-4AL		

Note:

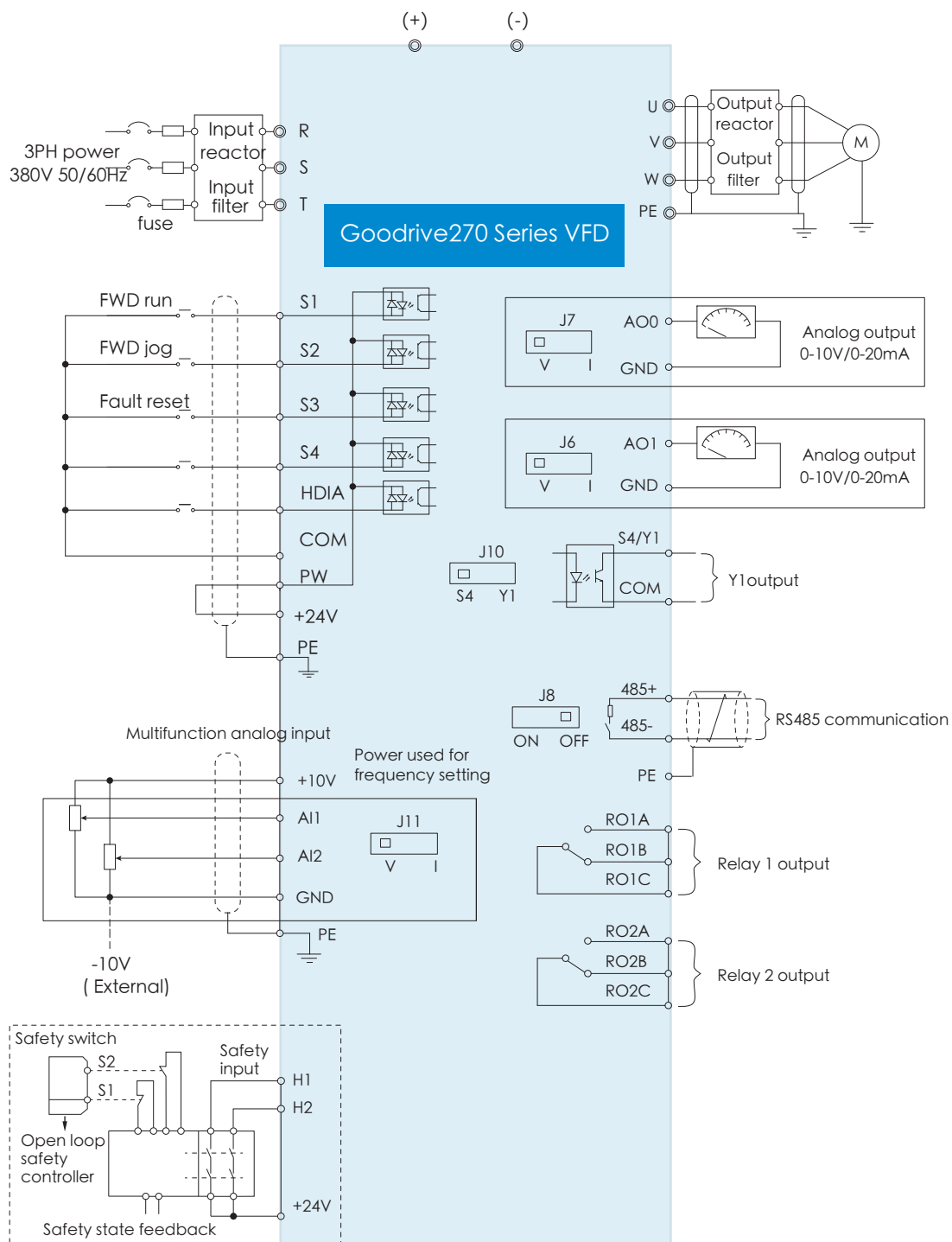
For reactor or filter selection for 560kW and above models, consult us.

The preceding table lists only external accessories. You need to specify whether external or built-in accessories are needed in your purchase order.

In actual applications, flexible selection can be made based on the current value in the reactor model, provided that it is not lower than the rated operating current.

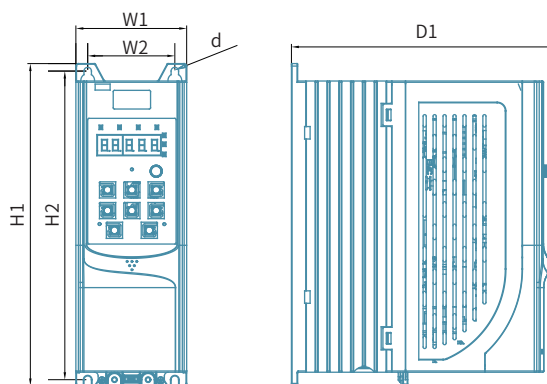
For the selection of reactors with different material requirements than those listed above, please refer to the low-voltage VFD GDL series filter option brochure.

Wiring diagram



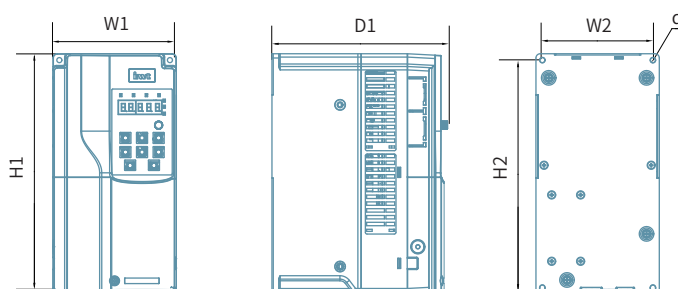
Installation method

Wall mounting



AC 3PH 380V

Wall mounting diagram for AC 3PH 380V 1.5~7.5kW models



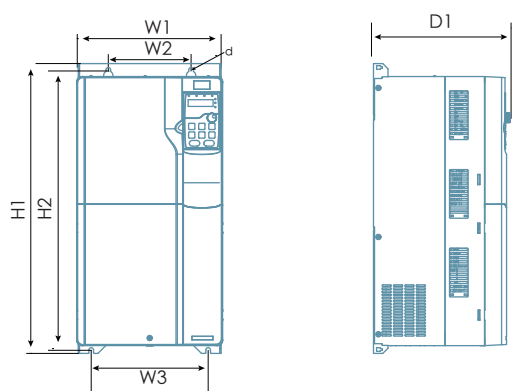
AC 3PH 380V

Wall mounting diagram for AC 3PH 380V 11~45kW models

Dimensions (unit: mm)

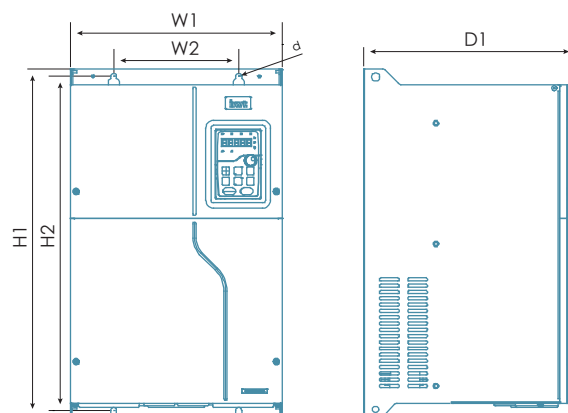
VFD model	Outline dimensions (mm)			Mounting hole distance (mm)			Mounting hole diameter (mm)	Fixing screw
	W1	H1	D1	H2	W2	D2		
1.5~4kW	89	231	193	221	70	/	5	M4
5.5~7.5kW	89	259	212	248	70	/	6	M5
11~15kW	145	280	207	268	130	/	6	M5
18.5~22kW	169	320	214	308	154	/	6	M5
30~37kW	200	341	213	328.5	185	/	6	M5
45kW	250	400	228	380	230	/	6	M5

Wall mounting



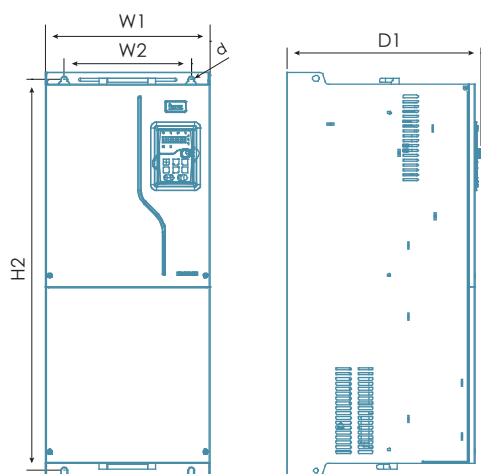
AC 3PH 380V

Wall mounting diagram for AC3PH
380V 55~90kW models



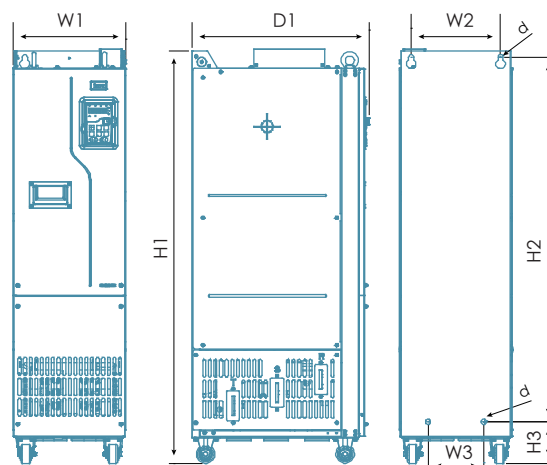
AC 3PH 380V

Wall mounting diagram for AC 3PH
380V 110~132kW models



AC 3PH 380V

Wall mounting diagram for AC 3PH
380V 160~200kW models



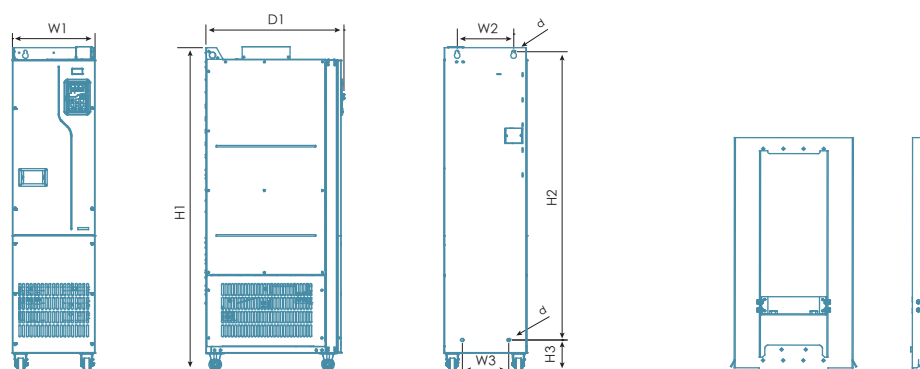
AC 3PH 380V

Wall mounting diagram for AC 3PH
380V 220~250kW models

Dimensions (unit: mm)

VFD model	Outline dimensions (mm)			Mounting hole distance (mm)			Mounting hole diameter (mm)	Fixing screw
	W1	H1	D1	H2	W2	W3		
55~90kW	282	560	264	542	160	226	9	M8
110~132kW	338	554	338	534	200	/	9.5	M8
160~200kW	338	825	398	800	260	/	11	M10
220~250kW	303	1108	477	980	240	150	14	M12

Floor mounting

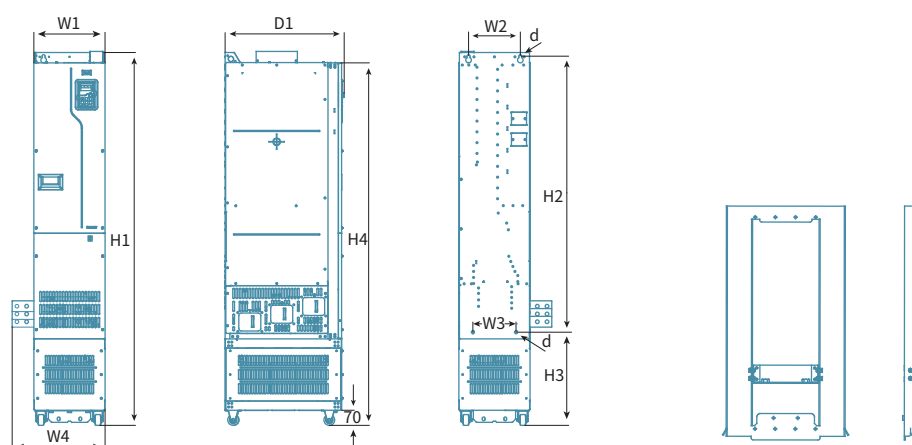


AC 3PH 380V

Floor mounting diagram for AC 3PH 380V 220-630kW models without an output reactor

Dimensions (unit: mm)

VFD model	Outline dimensions(mm)			Mounting hole distance(mm)				Mounting hole diameter(mm)	Fixing screw
	W1	H1	D1	H2	H3	W2	W3		
220~250kW	303	1108	477	980	111	240	150	14	M12
280~355kW	330	1288	552	1150	122	225	185	13	M10
400~500kW	330	1398	552	1280	101	240	200	13	M10
560~630kW	380	1450	582	1320	112	240	300	14	M12



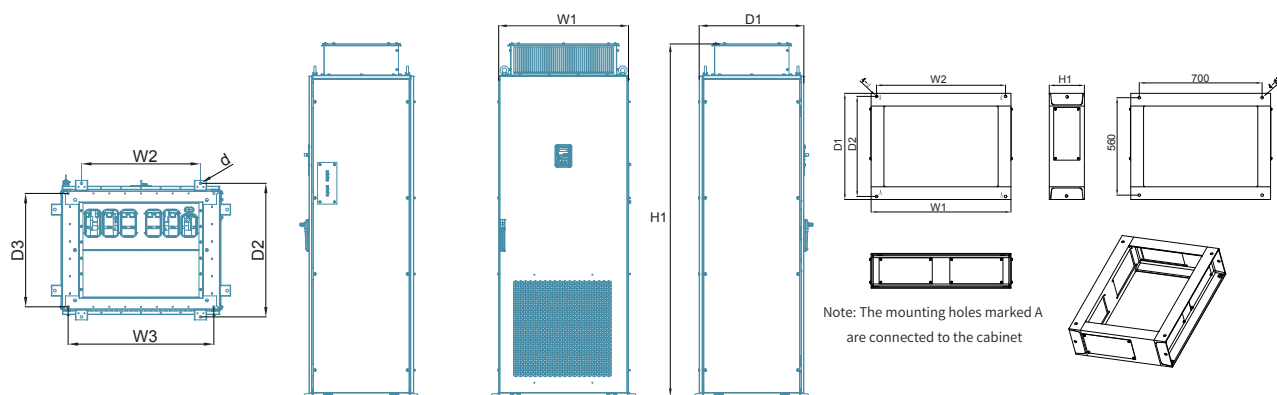
Floor mounting diagram for AC 3PH 380V 220-630kW L3 models with an output reactor

Dimensions (unit: mm)

VFD model	Outline dimensions (mm)				Mounting hole distance (mm)					Mounting hole diameter(mm)	Fixing screw
	W1	W4	H1	D1	H2	H3	H4	W2	W3		
220~250kW	303	350	1470	477	980	471	1420	240	150	14	M12
280~355kW	330	428	1619	552	1150	453	1571	225	185	13	M10
400~500kW	330	430	1729	552	1280	432	1681	240	200	13	M10
560~630kW	380	480	1780	582	1320	442	1730	240	200	14	M12

Note: Please refer to the product manual for more information about the size of the installation base.

Floor mounting

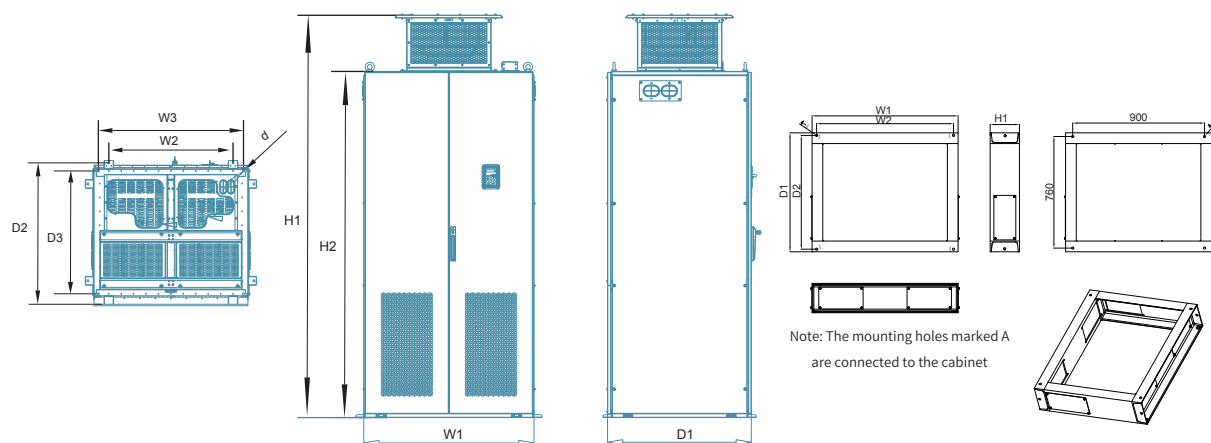


Floor mounting diagram for AC 3PH 380V 710~800kW models

Base installation drawing (optional)

Dimensions (unit: mm)

Specifications	Outline dimensions (mm)			Mounting hole distance (mm)				Mounting hole diameter (mm)	Fixing screw
	W1	H1	D1	W2	W3	D2	D3		
710~800kW(VFD)	806	2200	650	600	735	677	575	14	M12
710~800kW(base)	797	200	610	735	/	575	15(D)	15	M12×30 + spring and flat washer 12



Floor mounting diagram for AC 3PH 380V 900~1200kW models

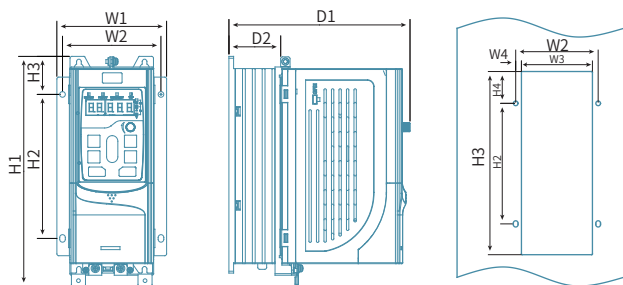
Base installation diagram (optional)

Dimensions (unit: mm)

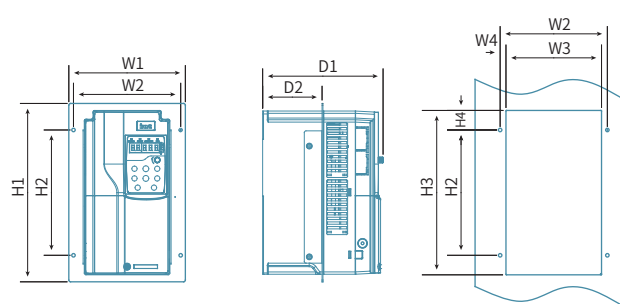
Specifications	Outline dimensions (mm)				Mounting hole distance (mm)				Mounting hole diameter (mm)	Fixing screw
	W1	H1	H2	D1	W2	W3	D2	D3		
900~1200kW(VFD)	1006	2329	2004	850	800	935	877	775	13	M12
900~1200kW(base)	997	200	/	810	935	/	775	15(D)	15	M12×30 + spring and flat washer 12

Note: Please refer to the product manual for more information about the size of the installation base.

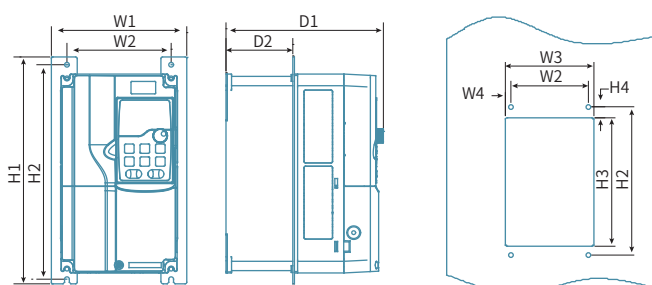
Flange mounting



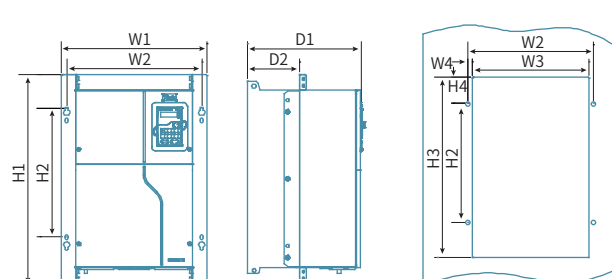
AC 3PH 380V
1.5~7.5kW mounting diagram



AC 3PH 380V
11~22kW mounting diagram



AC 3PH 380V
30~90kW mounting diagram



AC 3PH 380V
110~200kW mounting diagram

Dimensions (unit: mm)

VFD model	Outline dimensions (mm)			Mounting hole distance (mm)							Mounting hole diameter (mm)	Fixing screw
	W1	H1	D1	H2	H3	H4	W2	W3	W4	D2		
1.5~4kW	117	234	193	153.5	225	30	105	92.5	6.5	55	6	M5
5.5~7.5kW	117	261	212	180	250	30	105	92.5	6.5	75	6	M5
11~15kW	200	306	207	215	282	33.5	184	164	10	102	6	M5
18.5~22kW	224	346	214	255	322	33.5	208	189	9.5	108	6	M5
30~37kW	266	371	213	250	350.5	50.5	250	224	13	104	6	M5
45kW	316	430	228	300	410	55	300	274	13	118.5	6	M5
55~90kW	352	580	264	400	570	90	332	306	13	134	9	M8
110~132kW	419	600	338	370	559	80.5	389.5	361	14	149.5	10	M8
160~200kW	428	868	398.5	625	830	80	394	345	24.5	183	11	M10

Your trusted industry automation solution provider



E-mail: overseas@invt.com.cn Website: www.invt.com

SHENZHEN INVT ELECTRIC CO.,LTD. INVT Guangming Technology Building, Songbai Road, Matian, Guangming District, Shenzhen, China

- Industrial Automation:**
- HMI
 - PLC
 - VFD
 - Servo System
 - Elevator Intelligent Control System
 - Rail Transit Traction System
- Electric Power:**
- UPS
 - DCIM
 - Solar Inverter
 - New Energy Vehicle Powertrain System
 - New Energy Vehicle Charging System
 - New Energy Vehicle Motor

INVT Copyright.
Information may be subject to change without notice during product improving.

66003-00257 20260625(V3.0)