



GD27 Series Smart VFD

Intelligence drives the future
Larger than life

GD27, a newly INVT designed series smart VFD, features simple and compact structure, ease of use, reliable performance, and rich functions. It can be widely used in woodworking, textile, food, printing and packaging, plastics, logistics conveying equipment and other industries.



Power range

AC 1PH 200~240VAC: 0.4kW~2.2kW

AC 3PH 200~240VAC: 0.4kW~4kW

AC 3PH 380~480VAC: 0.75kW~7.5kW

Feature	Advantage
Built-in EMC filter ¹⁾	Compliant with EN/IEC 61800-3 category C3 requirements
Built-in STO function ¹⁾	Compliant with EN/IEC61800-5-2 SIL2 class requirements
Compact book-type design	Supports side-by-side installation, saving cabinet space
PUSH-IN spring-type control terminals	Support tool-free wiring, saving 50% of wiring time
Support for rail mounting ²⁾	Facilitates disassembly and assembly, saving time and effort
Free cooling (in the A frame)	No noise, good environmental adaptability
Support for parameter copy keypad	Facilitates batch operation and maintenance
Standard version and EU version available	For customers to choose the right model at least cost
Support for IM and PM motors	For customers to choose the motor that they need
Coated circuit board	Improve reliability in harsh environments
Pluggable fan	Easy to maintain
Built-in braking unit	Requires no external configuration, reducing costs

¹⁾ EU models are equipped with built-in STO and EMC filters as standard

²⁾ The guide rail is an option, and only the A and B frames support the rail installation

Rich

Excellent drive control

Control of asynchronous/ synchronous motors, V/F and sensorless vector control; braking units already built in the full range of product; built-in Modbus communication; non-stop upon instantaneous power loss; multi-step speed and simple PLC control; STO and EMC filters already built in EU models.

Fast

Simple operation

User-friendly operation interface, simple parameter menu, and one-key parameter download, making debugging easy; small product size, and uncovered design for power line terminals, facilitating site installation.

Stable

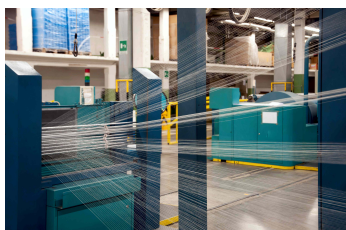
Stable and reliable

Innovative independent air duct design and standard coated circuit board help prevent dust and oil from entering the VFD, so that the electronic components on the PCB board are fully protected to ensure a long service life and high reliability.

Save

Improve timeliness

Supports side-by-side installation, saving cabinet space; push-in spring-type control terminals achieve tool-free wiring; multiple versions for customers to select based on actual needs, reducing procurement costs.



Textile machinery

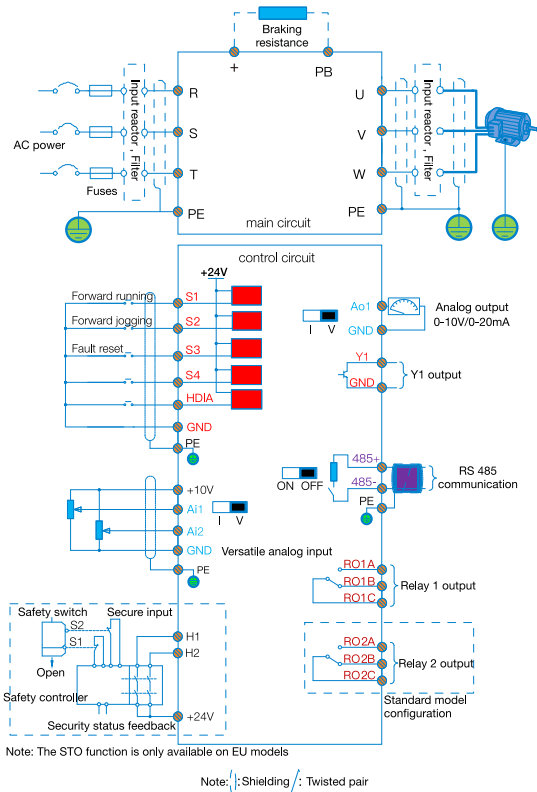


Logistics equipment



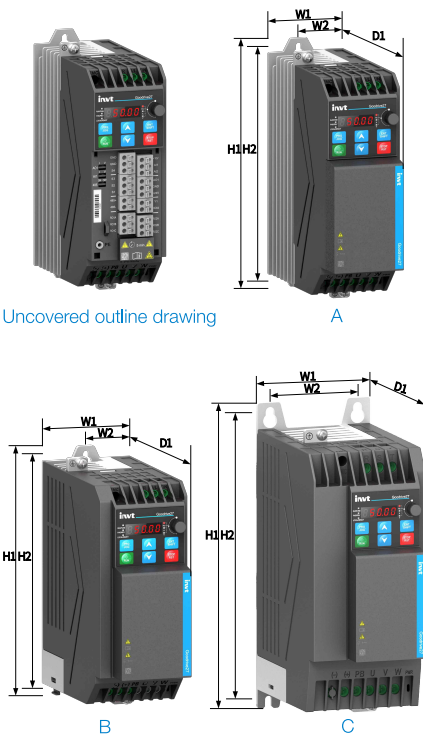
Food & Beverage

VFD wiring diagram



Product specifications

Input voltage	AC 1PH 200V - 240V AC 3PH 200V - 240V AC 3PH 380V - 480V
Overload capacity	150%/60s ,180%/10s
IP rating	IP20
Environmental condition	-10- 50°C
Elevation	Below 1000m ,1000-2000m increase 1% capacity reduction for every 100m increase
EMC	EU model built-in C3 filter to meet C3 class requirements (4kHz/10m)
Security technology	Safety Torque OFF (STO) meets EN/IEC 61800-5-2:SIL2 design
Motor control	SVPWM (V/F), Sensorless vector control (SVC)
Motor type	Asynchronous motor, permanent-magnet synchronous motor
External power supply	10V, maximum output 50mA; 24V, maximum output 100mA
Analog input	AI1: 0- 10V/0- 20mA; AI2: 0-10V
Analog output	AO1: 0- 10V/0- 20mA
Digital input	4 normal inputs, maximum frequency 1kHz; 1 high-speed input, maximum frequency 50KHz
Digital output	1 Y-terminal open-collector output
Relay output	2 sets of relay outputs (3A/AC250V, 1A/DC30V) Note: The EU model has one relays and STO function terminals
Communication	Built-in standard 485, Modbus protocol
Authentication	Meet CE certification requirements



VFD model	VFD dimension (mm)			Mounting hole (mm)		Mounting hole diameter (mm)	Frame structure
	W1	H1	D1	W2	H2		
GD27-0R4G-S2-B-XX	60	190	155	36	180	Ø 5	A
GD27-0R7G-S2-B-XX	60	190	155	36	180	Ø 5	A
GD27-1R5G-S2-B-XX	70	190	155	36	180	Ø 5	B
GD27-2R2G-S2-B-XX	70	190	155	36	180	Ø 5	B
GD27-0R4G-2-B-EU	60	190	155	36	180	Ø 5	A
GD27-0R7G-2-B-EU	60	190	155	36	180	Ø 5	A
GD27-1R5G-2-B-EU	70	190	155	36	180	Ø 5	B
GD27-2R2G-2-B-EU	70	190	155	36	180	Ø 5	B
GD27-004G-2-B-EU	90	235	155	70	220	Ø 6	C
GD27-0R7G-4-B-XX	60	190	155	36	180	Ø 5	A
GD27-1R5G-4-B-XX	60	190	155	36	180	Ø 5	A
GD27-2R2G-4-B-XX	70	190	155	36	180	Ø 5	B
GD27-003G-4-B-XX	70	190	155	36	180	Ø 5	B
GD27-004G-4-B-XX	70	190	155	36	180	Ø 5	B
GD27-5R5G-4-B-XX	90	235	155	70	220	Ø 6	C
GD27-7R5G-4-B-XX	90	235	155	70	220	Ø 6	C

Note: -XX means no or -EU, -EU means with STO and EMC filtering.



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