

GD270 Technical specification

Power input	Input voltage(V) & Power	3ph AC 380~440V(Rated 380V): 1.5~500kW Allowable voltage fluctuation: -15%~+10%
	Input frequency(Hz)	50Hz or 60Hz, allowable range: 47~63Hz
Power output	Output voltage(V)	0~input voltage
	Output frequency(Hz)	0~400Hz
Technical control performance	Control mode	SVPWM control, SVC
	Motor type	Asynchronous motor, permanent-magnet synchronous motor
	Speed regulation ratio	Asynchronous motor 1: 200 (SVC); Synchronous motor 1: 20 (SVC).
	Speed control precision	±0.2%(SVC)
	Speed fluctuation	± 0.3%(SVC)
	Torque response	<20ms(SVC)
	Torque control precision	10%(SVC)
	Starting torque	Asynchronous motor: 0.5Hz/150% (SVC) Synchronous motor: 2.5 Hz/150% (SVC) .
	Overload capacity	110% rated current: 60s. Allow overload 1 time for every 5 minutes.
Running control performance	Frequency setting mode	Digital, analog, pulse frequency, multi-step speed , simple PLC, PID, communication, etc.
	Automatic voltage regulation	Keep the output voltage constant when grid voltage changes
	Fault protection function	Provide fault protection functions: overcurrent, overvoltage, undervoltage, over-temperature, phase loss and overload, etc
	Speed tracking restart	Realize impact-free starting of the motor in rotating.
Peripheral interface	Analog input	2 inputs, AI1: 0~10V/0~20mA; AI2: -10~10V
	Analog output	2 outputs, AO0/AO1: 0(2)~10V/0(4)~20mA
	Digital input	5 regular inputs; max. frequency: 1kHz; internal impedance:3.3kΩ 1 high-speed input; max. frequency: 50kHz
	Digital output	1 Y terminal open collector output. Use same terminal of S4, select the function through jumper.
	Relay output	1 programmable relay output. Contact capacity: 3A/AC250V, 1A/DC30V
	Keypad	Standard LED keypad, optional LCD keypad
Optional Expansion cards	Expansion interface	2 expansion interfaces: SLOT1, SLOT2.
	Expansion I/O card	EC-IO-501-00. 4 DI, 1 AI, 1 AO, 1 DO, 2 RO
	Communication card	Optional Profibus-DP, CANopen, Profinet, Ethernet, CAN Master/Slave card.
	IOT card	EC-IC501-2F: GPRS card
	Power supply card	24VDC power supply card
	Wireless communication	Bluetooth, WiFi, realize wireless communication
Others	Installation mode	Support wall-mounting, floor-mounting and flange-mounting
	Temperature	-10~50°C(Derating is required if the ambient temperature exceeds 40°C)
	Protection level	IP20: ≤200kW IP00: ≥220kW (INVT can provide components for uses to meet IP20)
	Cooling mode	Air cooling
	Reactor	L1: Built in DC reactor, suitable for 30kW and above models. L2: Include output AC reactor, suitable for 220kW and above. L3: Built in DC reactor and AC output reactor, suitable for 220kW and above models. Note: 400-500kW standard DC reactor is equipped.
	Brake unit	Standard built-in for 400V (≤45kW). 45~132kW: Optional built-in braking unit
	EMC filter	The VFDs of 380V are configured with built-in C3 filters, meeting the requirements of IEC61800-3 C2.



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Model: GD270-160-4

IP20

Power(Output): 160kW

Input: AC 3PH 380V-480V 310A 47Hz-63Hz

Output: AC 3PH 0V-U_{input} 305A 0Hz-400Hz

S/N:

Made in China

Shenzhen INVT Electric Co., Ltd.

GD270 – 160 – 4 – L1

Products Series

GD270: Goodrive270

Rated Power

160:160kW

Rated Voltage

4: AC 3PH 380V (-15%) ~440V (+10%)

Reactor configuration

L1: Built in DC reactor, suitable for 30kW and above models.

L2: Include output AC reactor, suitable for 220kW and above.

L3: Built in DC reactor and AC output reactor, suitable for 220kW and above models.

Note: 400-500kW standard DC reactor is equipped.

Frame	INVT internal code	Model	Note
/	/	<30kW models will be finished before 2022.	
1	11001-02130	GD270-030-4	Standard built-in DBU
	11001-02129	GD270-030-4-L1	
	11001-02128	GD270-037-4	
	11001-02127	GD270-037-4-L1	
2	11001-02143	GD270-045-4	
	11001-02142	GD270-045-4-L1	
3	11001-02122	GD270-055-4	Optional built-in DBU
	11001-02120	GD270-055-4-B-L1	
	11001-02121	GD270-075-4	
	11001-02118	GD270-075-4-B-L1	
	11001-02117	GD270-090-4	
	11001-02126	GD270-090-4-B-L1	
4	11001-02109	GD270-110-4	
	11001-02112	GD270-110-4-B-L1	
	11001-02110	GD270-132-4	
	11001-02111	GD270-132-4-B-L1	
5	11001-01932	GD270-160-4	Optional external DBU
	11001-02125	GD270-160-4-L1	
	11001-01934	GD270-185-4	
	11001-02124	GD270-185-4-L1	
	11001-01933	GD270-200-4	
	11001-02123	GD270-200-4-L1	
6	11001-01987	GD270-220-4	
	11001-02140	GD270-220-4-L3	
	11001-01986	GD270-250-4	
	11001-02139	GD270-250-4-L3	
7	11001-02104	GD270-280-4	
	11001-02131	GD270-280-4-L3	
	11001-02103	GD270-315-4	
	11001-02133	GD270-315-4-L3	
	11001-02105	GD270-355-4	
	11001-02132	GD270-355-4-L3	
8	11001-02173	GD270-400-4-L1	
	11001-02172	GD270-400-4-L3	
	11001-02171	GD270-450-4-L1	
	11001-02169	GD270-450-4-L3	
	11001-02168	GD270-500-4-L1	
	11001-02170	GD270-500-4-L3	

Basic Features:

1. For fan/pump application
2. Light overload design
3. Book structure design, easy to install into cabinet
4. Support synchronous and asynchronous motor
5. Support IO expansion and communication expansion
6. Integrates multiple speed, constant pressure water supply, multiple pump control, water hammer suppression, dormant energy-saving function, multiple water pressure or wind pressure stabilizing control, speed tracking, power failure restart function, regeneration and avoidance function (fan), dredging function (water pump), frost protection (water pump), bypass function, fire crossing function, etc.