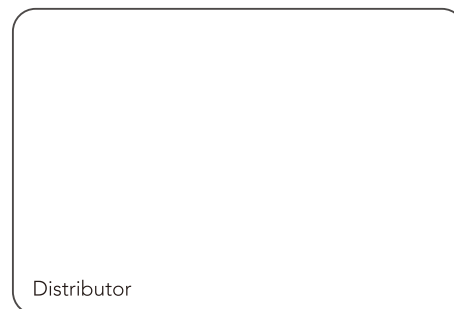


Intelligent Control, Sustainable Drive



SL300

Compact Vector Frequency Inverter



Distributor

Lorem ipsum

SL300 - 043 - 0.4K □ - xyz
 ① ② ③ ④ ⑤

①Product Series	②Voltage Class	③Rated Power	④STO Selection	⑤Model Description
SL300 Series	-021: 220V Single-phase -043: 440V Three-phase	0.4kW...	None: No STO, NPN type -T: With STO, PNP type -N: With STO, NPN type -P: No STO, PNP type	None: General model -xyz: Special-purpose model

Note: The part numbers here are intended to illustrate the naming rule; not all arbitrary combinations are available. For detailed ordering models, please contact a Shihlin Electric sales representative.

Applicable Capacity

Model		kW (HP)	0.4 (0.5)	0.75 (1)	1.5 (2)	2.2 (3)	3.7 (5)	5.5 (7.5)
SL300	021	1-phase 220V						
	043	3-phase 440V						

Applications



Packaging Machinery



Logistics Equipment



Tobacco Equipment



Electronics Manufacturing



Food Processing



Woodworking Machinery

Product Features

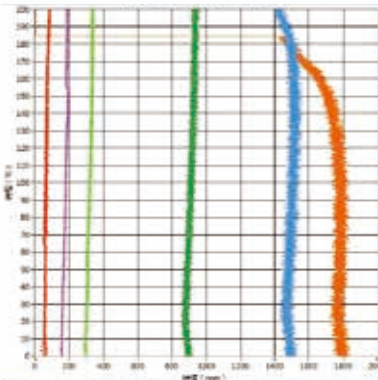
1. Flexible Motor Control

© Supports V/F and SVC control modes for IM and PM motors. With built-in complete motor auto-tuning capability to automatically identify motor parameters, optimizing control performance to suit different drive applications.



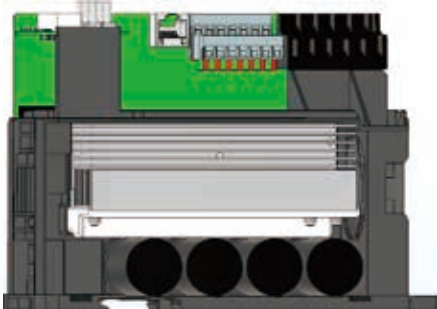
2. High Starting Torque

© Offers 150% starting torque at 5Hz, with an overload capacity of 150% for 60 seconds and 200% for 3 seconds, which can handling harsh operating conditions like heavy-load starts and instantaneous impacts.



3. Reliable Protection Performance

© Isolated and sealed air duct design isolates the cooling system from electronic components, preventing dust from being forced inside by the fan. The PCB features a UV conformal coating, significantly enhancing moisture, dust, and corrosion resistance to withstand harsh environments.



4. Easy & Convenient Installation

© Book-type compact design supporting side-by-side mounting, significantly saving cabinet space.

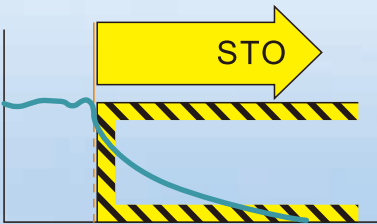


5. Intelligent Thermal Management

© The entire series is equipped with a built-in cooling fan and smart temperature control system. Parameters can be set to automatically start or stop the fan based on temperature. This ensures optimal heat dissipation while significantly extending fan lifespan and effectively reducing operating noise.

6. International Safety Certification

© Optional Safe Torque Off (STO) function, meeting the SIL 3 safety standard.



Electrical Specifications

220V Single-Phase Series

Frame Size		A			
Model SL300-021-□□□K□-xyz		0.4	0.75	1.5	2.2
Output	Rated Output Capacity kVA	1	1.5	2.5	4.2
	Rated Output Current A	2.7	4.5	8	11
	Applicable Motor Capacity HP	0.5	1	2	3
	Applicable Motor Capacity kW	0.4	0.75	1.5	2.2
	Overcurrent Capacity	150% 60s, 200% 1s inverse-time characteristics			
	Carrier Frequency kHz	1~15kHz			
	Maximum Output Voltage	3-phase 200-240V			
Input	Rated Input Current A _(note 1)	6.5	9.3	15.7	24
	Rated Power Supply Voltage	1-phase 200-240V 50Hz/60Hz			
	Allowable Voltage Fluctuation Range	1-phase 170-264V 50Hz/60Hz			
	Frequency Fluctuation Range	±5%			
	Power Capacity kVA	1.5	2.5	3.5	6.4
Cooling Method					
Inverter Weight kg		0.63	0.66	0.69	0.73

440V Three-Phase Series

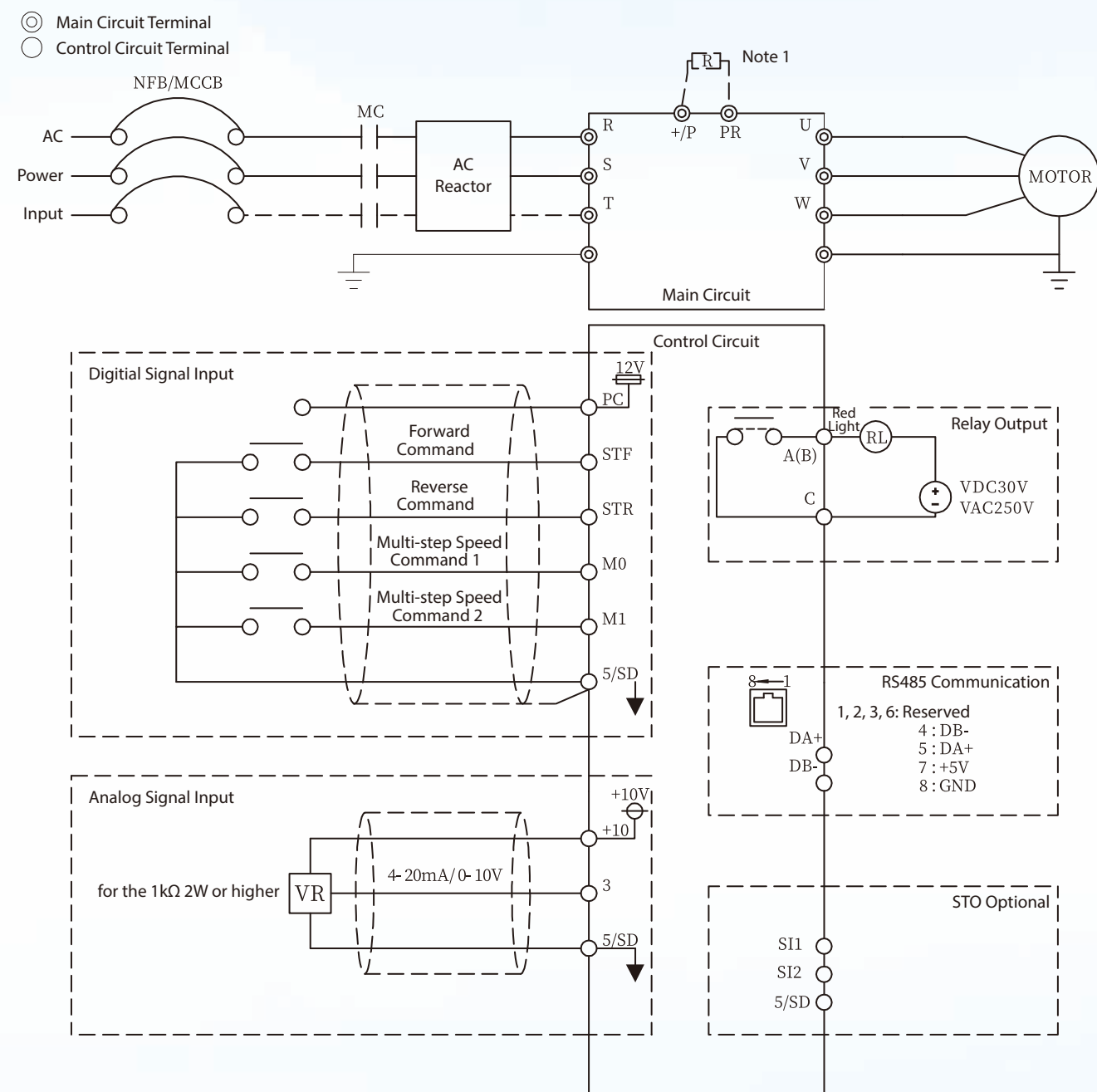
Frame Size		A				B	
Model SL300-043-□□□K□-xyz		0.4	0.75	1.5	2.2	3.7	5.5
Output	Rated Output Capacity kVA	1	2	3	4.6	6.9	9.2
	Rated Output Current A	1.5	2.6	4.2	6	9	12
	Applicable Motor Capacity HP	0.5	1	2	3	5	7.5
	Applicable Motor Capacity kW	0.4	0.75	1.5	2.2	3.7	5.5
	Overcurrent Capacity	150% 60s, 200% 1s inverse-time characteristics					
	Carrier Frequency kHz	1~15kHz					
Input	Maximum Output Voltage	3-phase 380-480V					
	Rated Input Current A _(note 1)	1.8	3.2	4.3	7.1	10	14
	Rated Power Supply Voltage	3-phase 380-480V 50Hz/60Hz					
	Allowable Voltage Fluctuation Range	3-phase 323-528V 50Hz/60Hz					
	Frequency Fluctuation Range	±5%					
Cooling Method		Forced Air Cooling					
Inverter Weight kg		0.64	0.64	0.7	0.72	0.97	1.00

Note 1: Indicates the value at rated output current. The rated input current value is not only affected by power transformers, input reactors, and wiring conditions, but also fluctuates with the impedance on the power supply side.

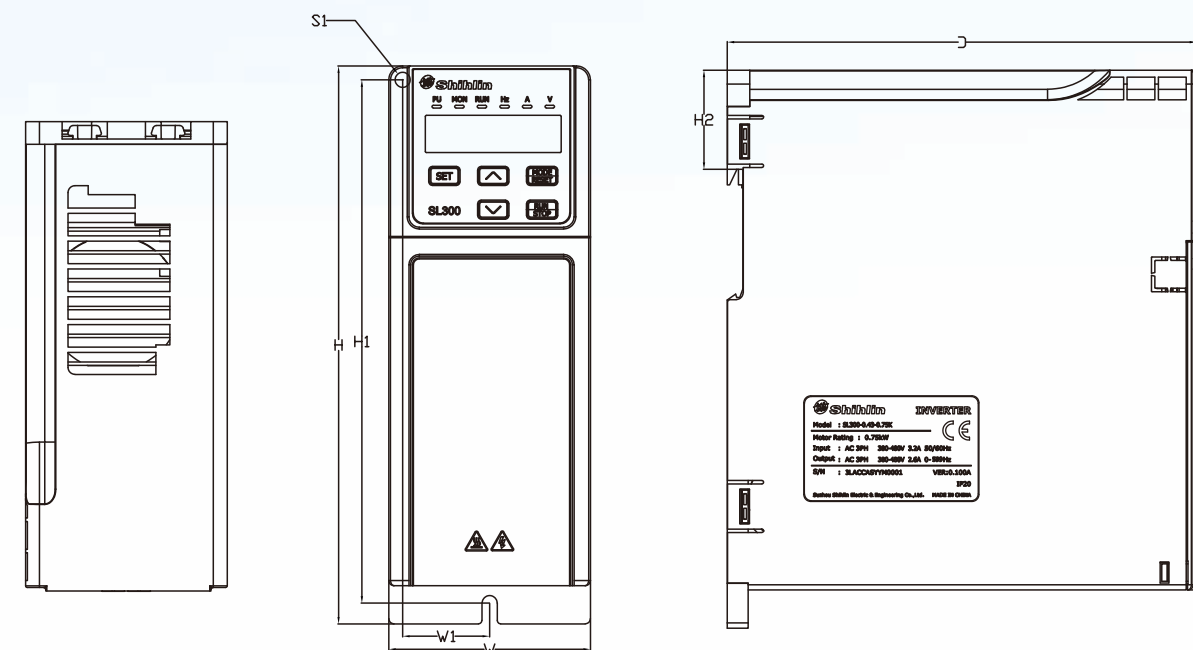
General Specifications

Control Method		V/F, SVC control
Output Frequency Range		0.00~599.00Hz
Frequency Setting Resolution	Digital Setting	0.01Hz
	Analog Setting	0.1% of max. output frequency
Output Frequency Accuracy	Digital Setting	0.01 of max. target frequency
	Analog Setting	0.1% of max. target frequency
Starting Torque		150% / 5 Hz automatic torque boost
V/F Curve Characteristics		Constant torque curve, Variable torque curve, 5-point flexible curve
Acceleration/Deceleration Characteristics		Linear acceleration/deceleration curve, S-curve acceleration/deceleration 1, 2 & 3
Drive Motor		Induction Motor (IM), Permanent Magnet Synchronous Motor (PM)
Current Stall Prevention		Settable stall prevention level: 0~200%
Target Frequency Setting		Up/Down key setting, VR knob setting, DC 0~5V / 0~10V signal, DC 4~20mA signal, Multi-step speed setting, Communication setting, PWM pulse setting frequency
Operation Panel	Operation Status Monitoring	Output frequency, output current, output voltage, electronic thermal accumulator rate, cumulative temperature rise rate, output power, analog input signal, external terminal status...; Alarm history up to 12 records, with detailed alarm information for the last 2 records.
	LED Indicators (6 LEDs)	Frequency monitor indicator, Voltage monitor indicator, Current monitor indicator, Motor operation indicator, Mode switch indicator, PU control indicator
Communication Function		RS-485 communication, selectable Shihlin / Modbus protocol
Protection Mechanisms / Alarm Functions		Output short-circuit protection, Overcurrent protection, Overvoltage protection, Undervoltage protection, Motor overheat protection, IGBT module overheat protection, Communication abnormal protection, PID abnormal protection, Memory abnormal protection, CPU abnormal protection, Stall prevention protection, Module overheat protection, Power input abnormal protection, Terminals 3-5 disconnection protection, Overtorque protection, Ground leakage current protection, Hardware detection circuit abnormal protection
Environment	Ambient Temperature	-10~+40°C (non-freezing)
	Ambient Humidity	90%Rh or less (non-condensing)
	Storage Temperature	- 20~+65°C
	Ambient Environment	Indoor, free from corrosive gases, flammable gases, and flammable dust
	Altitude	Below 2000m; derate by 2% for every 100m increase above 1000m
	Vibration	5.9m/s ² (0.6G) or less
	IP Rating	IP20
	Overvoltage Category	II
	Pollution Degree	2
Protection Class		Class I
International Certification		CE, STO (Optional)

Wiring Diagram



Dimensions



Unit : mm								
Frame	Model	W	W1	H	H1	H2	D	S1
A	SL300-021-0.4K	58	25	160.5	150.5	28.5	135	4.4 (Tightening torque: 20~25 kgf.cm)
	SL300-021-0.75K							
	SL300-021-1.5K							
	SL300-021-2.2K							
	SL300-043-0.4K							
	SL300-043-0.75K							
	SL300-043-1.5K							
B	SL300-043-2.2K	68	30	180.5	170.5			
	SL300-043-3.7K							
	SL300-043-5.5K							

- Notes: 1. +/P and PR terminals are supported only by Frame B.
2. The entire series are equipped with a built-in basic RFI filter. If compliance with CE standards is required, please refer to Section 3.5.4 of the user manual.
3. When RJ45 is connected to an external keypad/keypad unit, DA+/DB- cannot be used as an RS-485 port.
4. When switching between voltage/current input for terminals 3-5, please ensure that parameter 02-20 (P.17) is set correctly.