## **NL1000** series AC VFD



### NL1000 series Micro & Economic

- Micro size, low cost
- Terminals uncovered, easy for wiring
- DIN-rail mounting and wall mounting for installation
- Supports MODBUS via RS485
- Maintenance-free
- V/F control; Built-in PID control, frequency range 0.1~400 Hz

### Power range

220V / 0.4 ~ 2.2 kW 380V / 0.75 ~ 37 kW

### Technical specification

	Item	specification
Control Specifications	Output Frequency Range /Accuracy	0.10Hz~400.00Hz /0.1Hz
	Frequency Setting Resolution	Digital input: 0.1Hz, analog input: 0.1% of max. output frequency
	V/F Control	Setting V/F curve to satisfy various load requirements.
	Torque Control	Auto increase: auto raise torque by loading condition; Manual increase; enable to set $0.0\sim20.0\%$ of raising torque.
	Multifunctional Input Terminal	Four multi-function input terminals, realizing functions including fifteen section speed control, program running, four-section acceleration/deceleration speed switch, UP/DOWN function and emergency stop and other functions.
	Multifunctional Output Terminal	multi-function output terminals for displaying of running, zerospeed, counter, external abnormity, program operation and other information and warnings.
	Acceleration/ deceleration Time Setting	$0{\sim}999.9$ s acceleration/deceleration time can be set individually.
Other functions	PID Control	Built-in PID control
	RS485	Standard RS485 communication function (MODBUS)
	Frequency Setting	Analog input: 0 to 10V, 4 to 20mA can be selected; Digital input: Input using the setting dial of the operation panel or RS485 or UP/DOWN. Note: AVI terminals can be used to select an analog voltage input (0-10V) and an analog current input (4-20mA) through the switch J2.
	Multi-speed	Four multifunction input terminals, 15 section speed can be set.
	Automatic voltage regulation	Automatic voltage regulation function can be selected.
	Counter	Built-in 2 group of counters
Protection/ Warning Function	Overload	150%, 60 S (Constant torque)
	Over Voltage / Under Voltage	Over Voltage Protection can be set. /Under Voltage protection can be set.
	Other Protections	Output shortcircuit, over current, an parameter lock and so on.

# **NZ2000 series AC VFD**

## NZ2000 series Compact Vector Control

- Senseless flux vector control (VC), V/F (Voltage/Frequency) control
- Overload capacity is 150% (100%) of the rated current, 3s for 180% of the rated current
- There are ten auxiliary frequency sources. It can implement fine tuning of auxiliary frequency and frequency synthesis
- Support PM motor (NZ2000 T series)

### Power range

220V / 0.25 ~ 5.5 kW 380V / 0.75 ~ 250 kW



#### Technical specification

ltem		specification
Standard functions	Control mode	V/F(Voltage/Frequency) control Senseless flux vector control (VC)
	Maximum frequency	Vector control: 0-300 Hz; V/F control: 0-3200Hz
	Carrier frequency	1.0–16.0 kHz; The carrier frequency is automatically adjusted based on the load features.
	Input frequency solution	Digital setting: 0.01 Hz Analog setting: 0.025% of maximum frequency
	Startup torque	G type: 0.5 Hz/150% (VC) P type: 0.5 Hz/100% (VC)
	Speed range / stability accuracy	1:100 (VC) / ± 0.2% (VC)
	Torque control accuracy	± 20%
	Overload capacity	G type: 60s for 150% of the rated current, 3s for 180% of the rated current.
	Torque boost	Auto boost Customized boost 0.1%–30.0%
	V/F curve	Line V/F curve Multi-point V/F curve N-power V/F curve (1.2-power, 1.4-power, 1.6-power,1.8-power, square)