Nidec

Drives

NE200 & NE300

The best choice for simplifying complexity

Universal AC Drives

Nidec Drives

Excellent Control Performance

Excellent Low-Frequency Torque Characteristics

In open-loop vector control, it can generate 150% of the rated torque at 0.5Hz, perfectly meeting the low-frequency and high-torque demands of industries like machine tools and lifting equipment.

Advanced Vector Control Algorithm

It can control induction motors and permanent magnet motors. High-precision speed control technology empowers high-precision synchronous control.

Highly Dynamic Response

Dynamic torque current control, rapid response to load changes.

Strong Overload Capacity

Withstand 180% of its rated current for 20 seconds and 150% of its rated current for 1 minute.

Current Vector Control

Outstanding software control platform and unique vector control algorithm empower the decoupling control of torque current and excitation current.

Diverse Functions

Setting function for multi-frequency composite.

Open-loop/closed-loop torque control, online switching between torque mode and speed mode.

Three control modes: Vector Control without PG, Vector Control with PG, V/F control.

PID function provides two sets of proportional-integral parameters, and the PID output range can be set arbitrarily.

V/F control includes V/F separation control function.

Support sleep function.

Automatic load balancing droop control and fixed length control;

Abundant fault protection and operation monitoring functions.

Flexibility

Configurable with various expansion cards for increased flexibility.

Automatic energy-saving operation, automatic restart after power failure, and keyboard user parameter copying function.

User parameters can be backed up and restored through available terminals.

Adaptability

Unique IGBT driving circuit ensures more reliable operation of power devices.

All models in the series are equipped with phase-to-phase short circuit protection.

Wide working voltage range: 304VAC~456VAC.

Novel Structure

All models in the series feature an independent air duct design, which separates cooling air ducts from electrical components;

Compact design with a volume of only about 70% of mainstream products with the same power.

Graphical keyboard and dual crystal head interfaces, meeting operational habits while enhancing anti-interference capability.

Stability

Optimized EMC design ensures reliable operation in strong interference working environments.

All PCBs are coated with three-proof paint, making them suitable for various harsh environments.

Automated single board and whole machine testing reduce testing blind spots.

Nidec Drives

Globally versatile application products

Conveyors

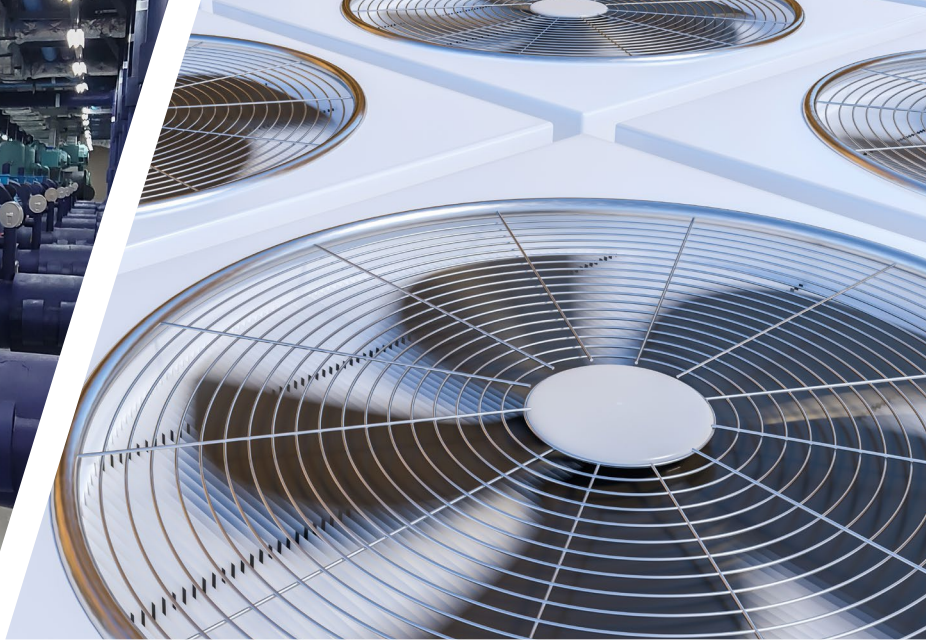
- Accurate remote speed control through fieldbus modules.
- Smooth speed transition with S-curve acceleration and deceleration, minimizing machine vibration.
- High overload capacity of up to 180% for enhanced stability.
- Prevent premature equipment wear.

Access Control

- Smooth operation is achieved through enhanced open-loop control.
- Compact physical size of drives allows easy installation in smaller control cabinets.
- High reliability and long service life, even in harsh environments.

Lifters, Cranes, Winches

- Handle heavy load at low speed, light load at high speed, significantly improving work efficiency.
- Dynamically adjust the V/F (Voltage-to-Frequency) ratio based on the input voltage to output sufficient torque, ensuring the stability of lifting machine.



Processing (Closed Plastic Mixer, Crushers, Stirrers, Centrifuges, Extruders)

- Easily connectable to external PLCs or other management systems through powerful communication option modules.
- Surface coating for enhanced environmental protection.
- Overload capacity of up to 180%.
- More stable motor control.

Pumps, Fans, Compressors

- Improved energy efficiency under light loads.
- Frequency hopping allows users to easily avoid equipment resonance frequencies, thereby reducing high vibration level.
- The Instantaneous Stop Continuous Operation Function ensures continuous operation of the drive even under power fluctuations.

Nidec Drives

Application solutions for Air compressor industry

Customizable Units

High-performance speed sensorless vector control technology is adopted to achieve efficient frequency conversion, while saving up to 50% of energy. Based on the operational characteristics of air compressors, integrated structure is specially designed to break away from the traditional control mode of ”general-purpose driver + dedicated controller”.

High Energy Efficiency

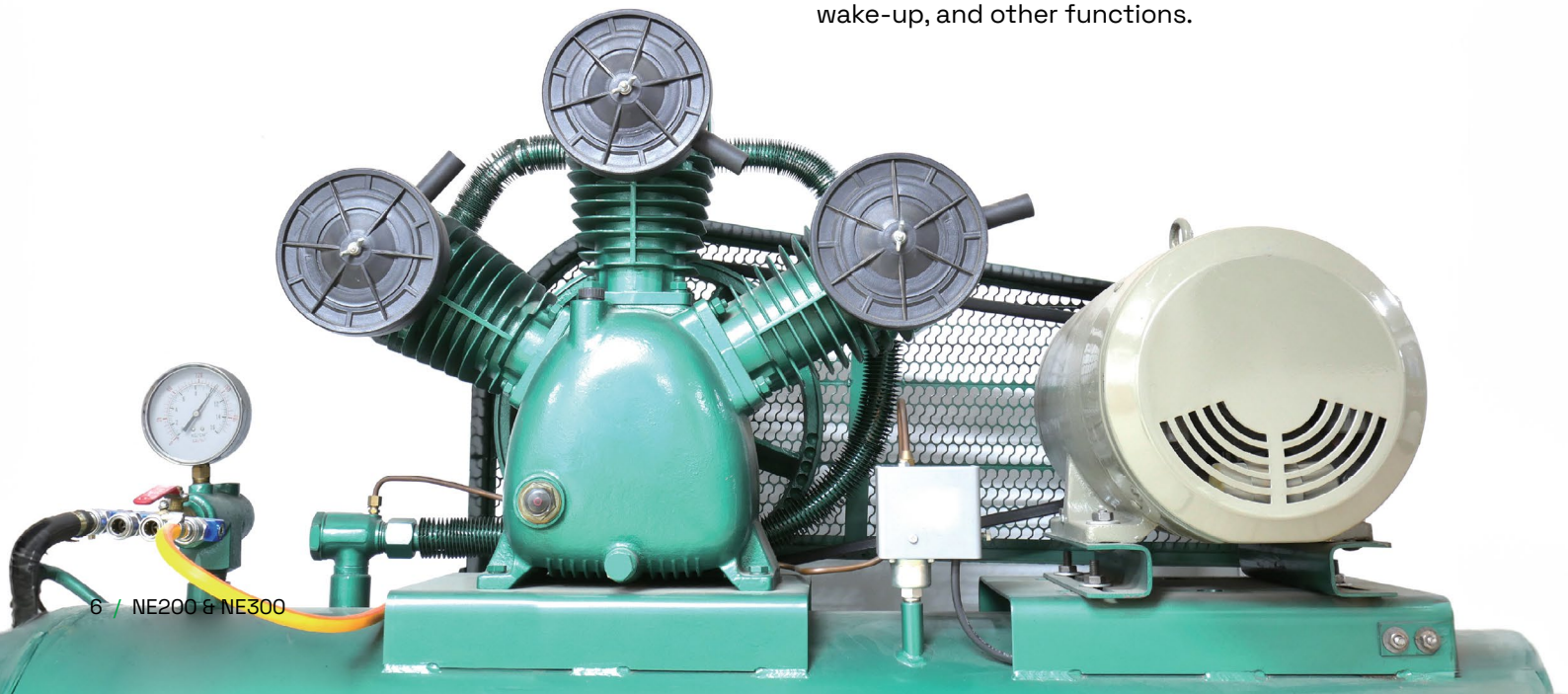
Equipped with an efficient built-in PID algorithm for rapid response to gas consumption. Vector control ensures a steady-speed precision of 0.2%, allowing for rapid and precise response to changes in pressure. The closed-loop constant pressure gas supply precision can achieve ±0.01MPa.

Strong Overload Capacity

With outstanding overload capacity and a broader speed regulation range, it fully meets the temporary high load demands of the air system. With high starting torque, the air compressor is capable of full-pressure loaded startup.

Intelligent System

When multiple air compressors work in coordination, they autonomously allocate work time and output power. Powerful software and hardware protection ensures the reliability and stability of the air compressor system. Smooth startup and operation, without exerting impact on the power grid; low equipment loss, extended service life, and low noise. Timed control, automatic sleep, and automatic wake-up, and other functions.



Application solutions for Machine tool industry

Control Mode

Voltage/current analog setting, pulse setting, and communication setting. Unique digital signal small pulse harmonic control technology ensures ultra-quiet operation. Diverse V/F and vector control methods are suitable for various machine tools, such as lathes, milling machine, drilling machine, grinders, engraving machine, etc.

Large Low-Frequency Torque

During cutting, the speed drop is equivalent to one-tenth of the open-loop state, meeting the processing requirements of low-speed heavy cutting of the machine tool spindle.

Rapid Dynamic Response

Dynamic torque response time is <20ms, resulting in small speed fluctuations during sudden load changes. The stable-speed precision is 0.02% of the rated speed, with small speed fluctuations.

Strong Overload Capacity

Withstand 150% of its rated current for 1 minute; and 200% of its rated current for 0.5 seconds. The built-in torque limit and overvoltage regulation avoid tripping phenomenon.

Nidec Drives

Specifications

Input	
Rated voltage/frequency	200V voltage level 400V voltage level
Allowable operating voltage range	200V voltage level: 176 V to 264 V; voltage unbalance: 3%; allowable frequency fluctuation: ±5% 400V voltage level: 304 V to 456 V; voltage unbalance: 3%; allowable frequency fluctuation: ±5%

Output	
Voltage range	200V voltage level: 0 to 200V/240V 400V voltage level: 0 to 380V/440V
Overload capacity	Withstand 150% of its rated current for 1 minute, and 180% of its rated current for 20 seconds

Protection Function

Under-voltage and over-voltage protection, over-current protection, module protection, sink overheating protection, driver overload protection, motor overload protection, peripheral protection, output phase-to-phase short circuit, power failure during operating, input power supply anomaly, output phase loss anomaly, EEPROM anomaly, analog input anomaly, communication anomaly, version compatibility anomaly, copy anomaly, hardware overload protection, etc.

Feature Functions

Multifunctional MFK button	The innovative multifunctional button allows you to set frequently used operations, including JOG, forward and reverse switching, switching the running command setting mode, etc. (only applicable to LCD).
Parameter copy	Parameter upload and download. For the parameters that have been uploaded, you can choose to prohibit the system from overwriting the parameters.
Operation panel	Standard LED Display Panel or Optional LCD Display Panel
Independent air duct	All models in the series feature an independent air duct design

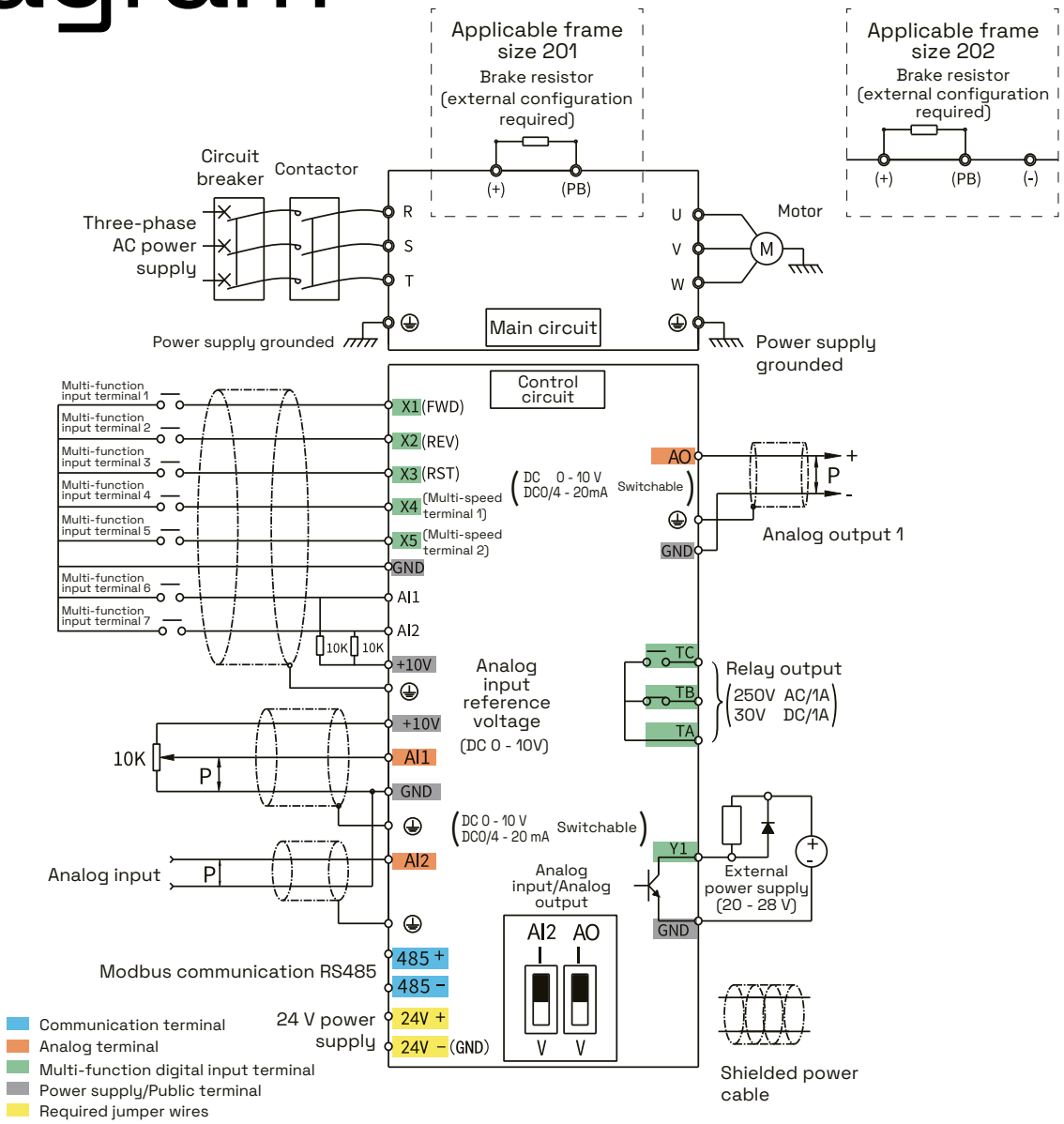
Control Mode and Features	Vector Control with PG (NE300 Only)	Vector Control without PG (SVC)	V/F Control
Start torque	0.00Hz 180%	0.5Hz 150%	1.5Hz 150%
Speed range	1:1000	1:100	1:50
Steady-speed precision	± 0.02%	± 0.2%	220.00
Torque control	Yes	Yes	250.00
Torque precision	± 5%	± 10%	280.00
Torque response time	<10ms	<20ms	315.00

Product Functions	
Key function	Switching between torque and speed control, multi-function input/ output terminals, under-voltage adjustment, three-place switching, torque limit, multi-speed operating, slip compensation, PID adjustment, simple PLC, current limiting control, manual/automatic torque boost, current limit, and AVR function
Frequency setting	Operation panel setting, terminal Up/Dn setting, host computer communication setting, analog setting A11/AI2, terminal pulse X4, and X5 setting
Output frequency	0.00 - 599.0 Hz
Start frequency	0.00 - 60.0 Hz
Acceleration and deceleration time	0.01 - 3600.0 s
Dynamic braking capacity	400 V driver: Brake unit operating voltage: 650 - 750 V; 200 V driver: Brake unit operating voltage: 360 - 390 V;
DC brake capacity	DC brake start frequency: 0.00 - 599.0 Hz DC brake current: For G model, 0.00 - 100.0%; For P model, 0.00 - 80.0% DC brake time: 0.0 - 30.0s; no latency for starting the DC brake, thus ensuring fast brake
Flux braking function	The motor can be decelerated quickly by increasing the magnetic flux of the motor

Environment	
Applicable scenarios	The equipment shall be vertically installed in a well-ventilated electric control cabinet. Horizontal installation or other installation methods are not allowed. The cooling medium is air. It shall be installed in an environment free from direct sunlight and with no dust, no corrosive gas, no flammable gas, no oil mist, no steam, and no dripping water.
Ambient temperature	-10°C to +40°C, derating between 40°C and 50°C. The rated output current is reduced by 1% for each increase of 1°C.
Humidity	5 - 95%, non-condensing
Altitude	0 - 3000 m, derating above 1000 m. At an altitude of 1000 - 2000 m, the rated output current is reduced by 1% for each increase of 100 m. At an altitude of 2000 - 3000 m, the rated output current is reduced by 2% for each increase of 100 m.
Vibration	3.5 mm, 2 - 9 Hz; 10 m/s², 9 - 200 Hz 15 m/s², 200 - 500 Hz
Storage temperature	-40 to +70°C

Structure	
Protection rating	IP20
Cooling method	Forced air cooling

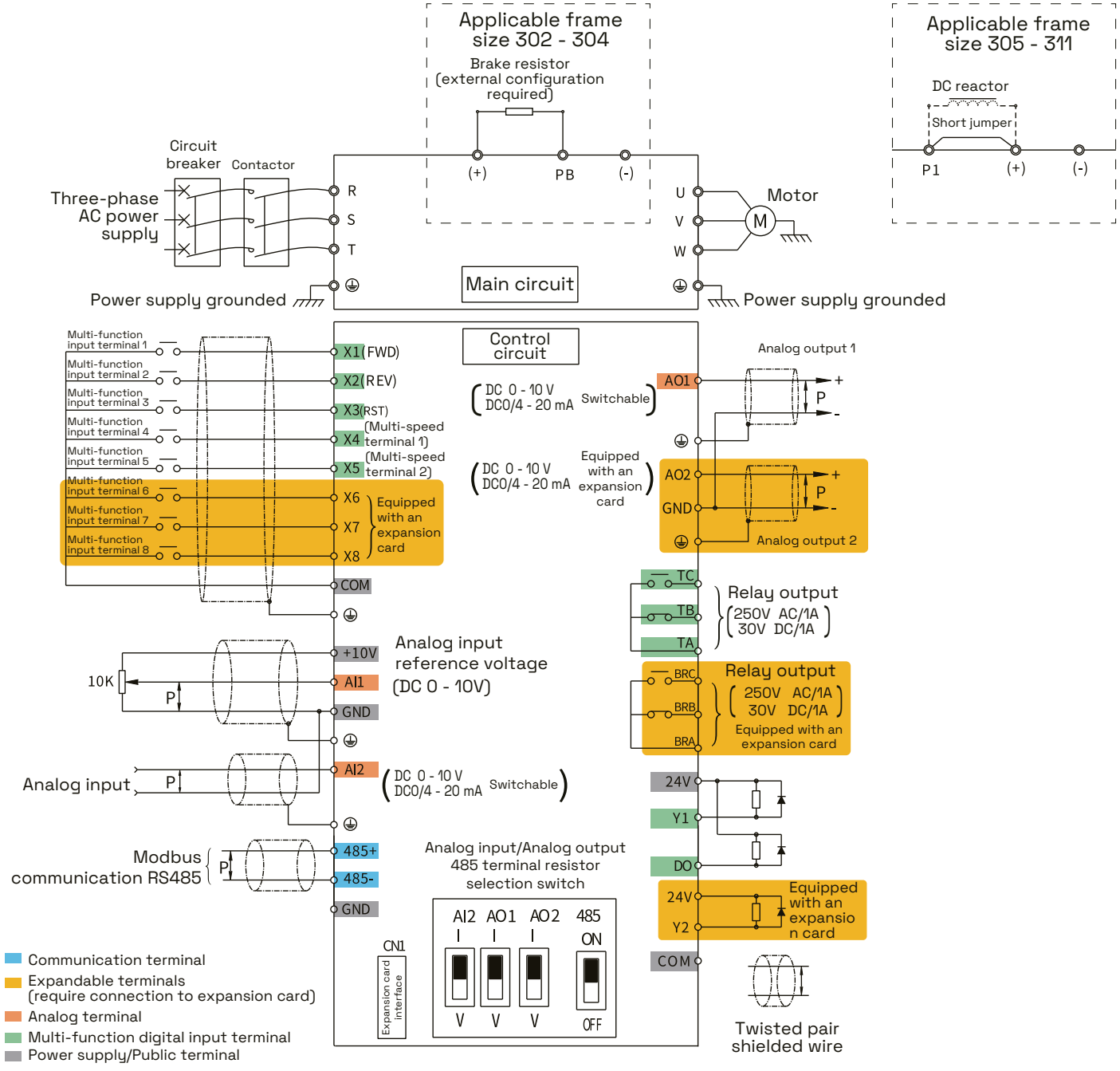
Terminal Wiring Diagram



Note 1: The NE200 series drivers are equipped with standard built-in brake units

Note 2: The voltage range of X1~X5 is 0 - 12V

NE200 Terminal Wiring Diagram



Note 1: Built-in brake units are provided for frame size of 302 - 304

Note 2: Built-in DC reactors are provided for frame size of 308F - 311

NE300 Terminal Wiring Diagram

Main Circuit Terminal of NE200 Driver

1. Frame size: 201

Terminal Symbol	Terminal Name and Function Description
⏚	Ground terminal PE
R, S	Single-phase AC input terminal
R, S, T	Three-phase AC input terminal
(+), PB	Reserved terminals for connecting external brake resistors, connecting brake resistors
U, V, W	Three-phase AC output terminal

2. Frame size: 202

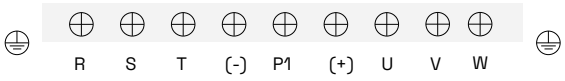
Terminal Symbol	Terminal Name and Function Description
⏚	Ground terminal PE
R, S	Single-phase AC input terminal
R, S, T	Three-phase AC input terminal
(+), (-)	Negative and positive terminals of the DC bus, used for common DC bus input
(+), PB	Reserved terminals for connecting external brake resistors, connecting brake resistors
U, V, W	Three-phase AC output terminal

Main Circuit Terminal of NE300 Driver

1. Frame size: 302 - 304

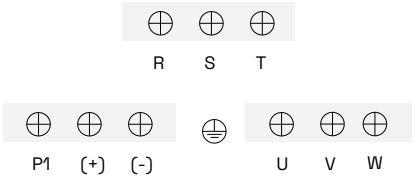
Terminal Symbol	Terminal Name and Function Description
⏚	Ground terminal PE
R, S, T	Three-phase AC input terminal
(+), (-)	Negative and positive terminals of the DC bus, used for common DC bus input
(+), PB	Reserved terminals for connecting external brake resistors, connecting brake resistors
U, V, W	Three-phase AC output terminal

2. Frame size: 305 - 307



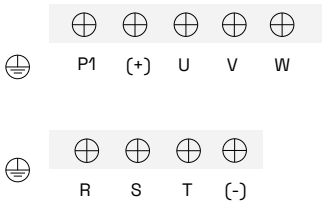
Terminal Symbol	Terminal Name and Function Description
⏚	Ground terminal PE
R, S, T	Three-phase AC input terminal
(+), (-)	Negative and positive terminals of the DC bus, used for common DC bus input
P1, (+)	Reserved terminals of DC reactors, connected with copper busbars before delivery
U, V, W	Three-phase AC output terminal

3. Frame size: 308a - 308b



Terminal Symbol	Terminal Name and Function Description
⏚	Ground terminal PE
R, S, T	Three-phase AC input terminal
(-), (+)	Negative and positive terminals of the DC bus, used for common DC bus input
P1, (+)	Reserved terminals of DC reactors, connected with copper busbars before delivery
U, V, W	Three-phase AC output terminal

4. Frame size: 308F - 311



Terminal Symbol	Terminal Name and Function Description
⏚	Ground terminal PE
R, S, T	Three-phase AC input terminal
(-), (+)	Negative and positive terminals of the DC bus, used for common DC bus input
P1, (+)	Reserved terminals of DC reactors, connected with copper busbars before delivery
U, V, W	Three-phase AC output terminal

Naming Rules

NE200 — **Product Line**
E300 - 1 x STO
RS845 comms

4T — **Voltage Level**
2S -- 200 V - 240V
4T -- 380 V - 440V

0022 — **Power code**
0004 -- (0.4 KW)
0007 -- (0.75 KW)
0015 -- (1.5 KW)
0022 -- (2.2 KW)
...
9000 -- (900 KW)

G — **Load Type**
G -- Heavy load
P -- Light load

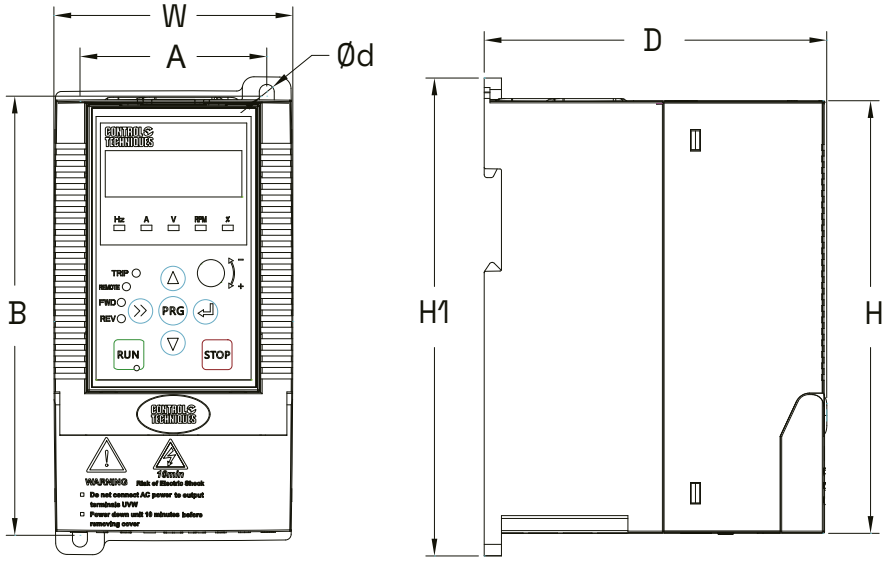
B — **Brake Unit**
Default -- No
B -- Yes

M — **Structure Code**
Default -- Standard
M -- Compact
U -- Up In and Down Out
D -- Down In and Down Out
F -- Cabinet Driver

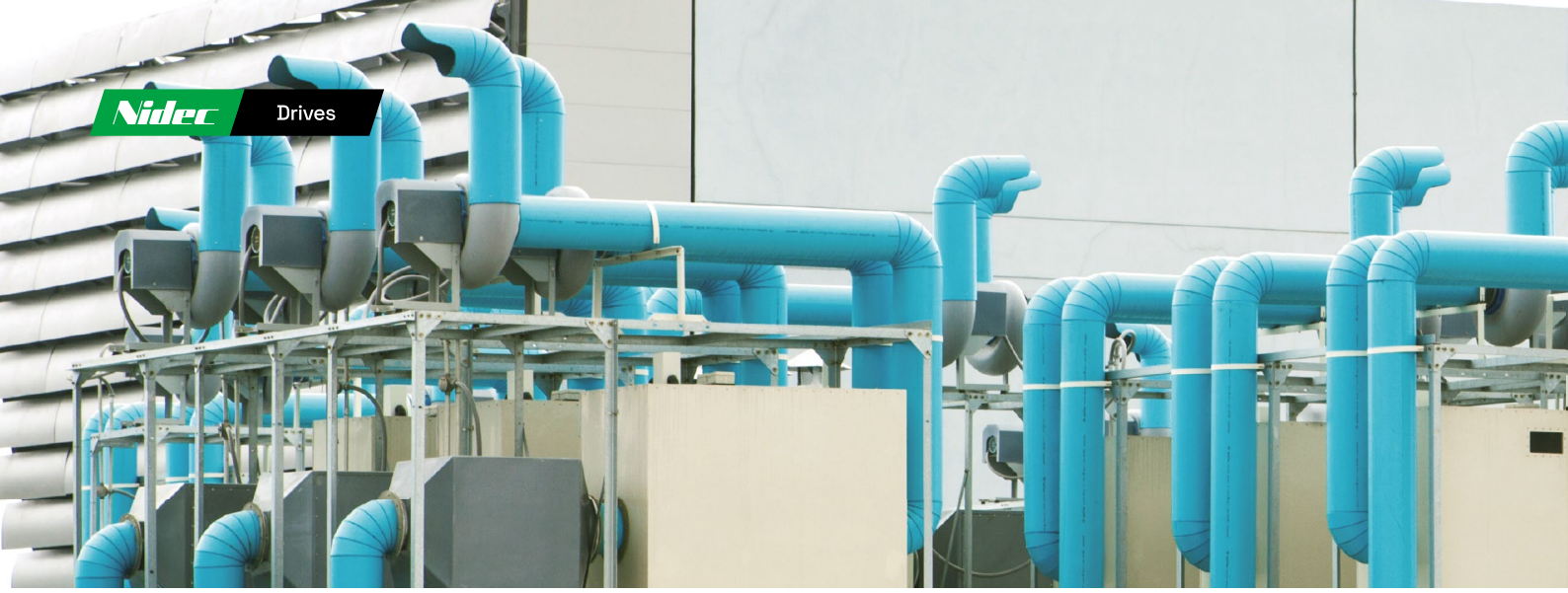
******** — **Special Model**

Model and Dimension

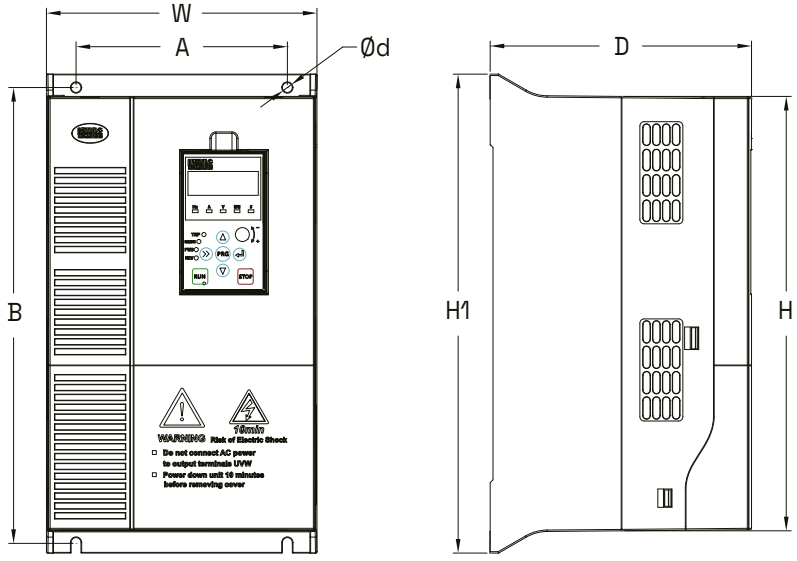
NE200 Driver Model and External Dimensions (unit: mm)



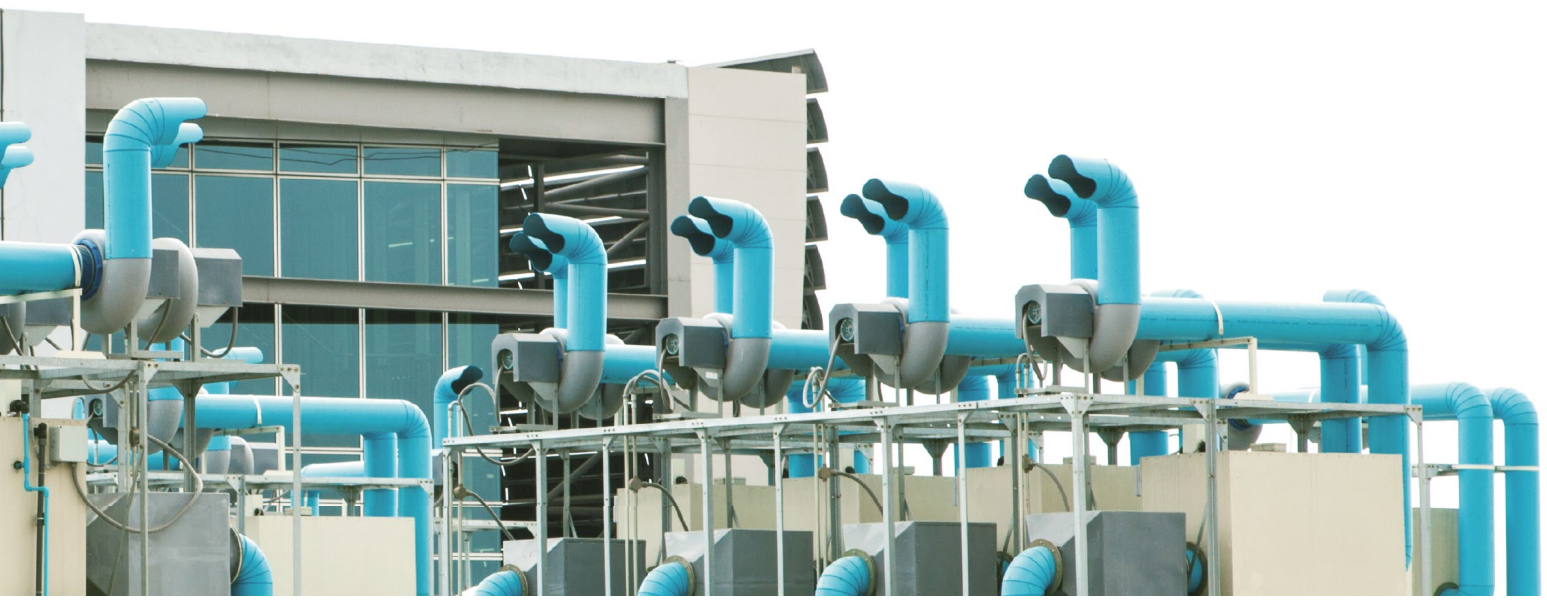
Model	Rated output current (A)	Adapted motor (KW)	Frame size	H	W	D	H1	A	B	d	Net weight (kg)
NE200-2S0004GB	2.5	0.4	201	150	83	120	166	65	153	5	1
NE200-2S0007GB	4.5	0.75									
NE200-2S0015GB	7	1.5									
NE200-4T0007G/0015PB	2.5/4.0	0.75/1.5									
NE200-4T0015G/0022PB	4.0/6.0	1.5/2.2									
NE200-4T0022GB-M	6.0	2.2									
NE200-2S0022GB	10	2.2	202	200	120	140	215	98	202	5	1.8
NE200-4T0022G/0040PB	6.0/9.0	2.2/4.0									
NE200-4T0040G/0055PB	9.0/13	4.0/5.5									



NE300 Driver Model and External Dimensions (unit: mm)

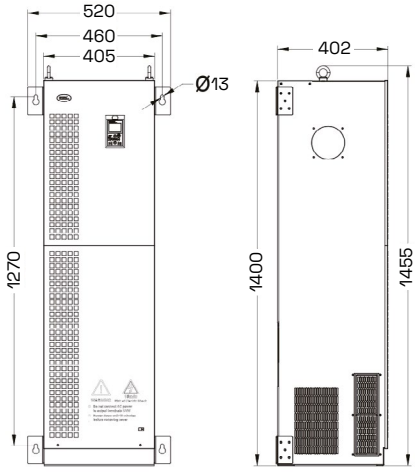


Model	Rated output current (A)	Adapted motor (KW)	Frame size	H	W	D	H1	A	B	d	Net weight (kg)
NE300-4T0015G/0022PB	4.0/6.0	1.5/2.2									
NE300-4T0022G/0040PB	6.0/9.0	2.2/4.0	302	210	135	180	238	108	225	7	2.3
NE300-4T0040G/0055PB	9.0/13	4.0/5.5									
NE300-4T0055G/0075PB	13/17	5.5/7.5									
NE300-4T0075G/0110PB	17/25	7.5/11	303	258	155	180	285	120	270	7	3.2
NE300-4T0110G/0150PB	25/32	11/15									

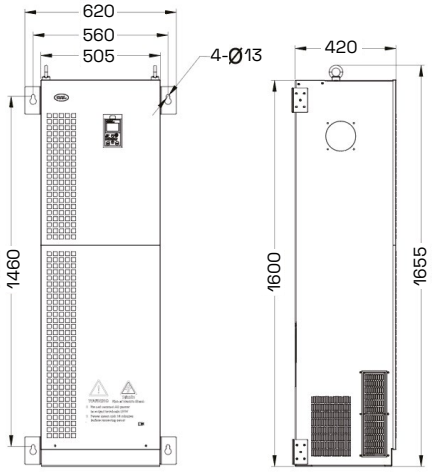


Model	Rated output current (A)	Adapted motor (KW)	Frame size	H	W	D	H1	A	B	d	Net weight (kg)
NE300-4T0150G/0185PB	32/37	15/18.5	304	310	192	186	340	150	323	7	4.8
NE300-4T0185G/0220PB	37/45	18.5/22									
NE300-4T0220G/0300PB	45/60	22/30									
NE300-4T0300G/0370P	60/75	30/37	305	425	270	200	450	200	430	7	13.5
NE300-4T0370G/0450P	75/90	37/45									
NE300-4T0450G/0550P	90/110	45/55	306	535	320	248	560	240	540	9	26
NE300-4T0550G/0750P	110/150	55/75									
NE300-4T0750G/0900P	150/176	75/90	307	640	380	248	665	240	640	9	42
NE300-4T0900G/1100P	176/210	90/110									
NE300-4T1100G/1320P	210/250	110/132									
NE300-4T1320G/1600P-U	250/300	132/160	308a	710	465	355	750	380	719	11	64
NE300-4T1320G/1600P-D	250/300	132/160									
NE300-4T1600G/1850P-U	300/340	160/185									
NE300-4T1600G/1850P-D	300/340	160/185									
NE300-4T1850G/2000P-U	340/380	185/200	308b	859	550	385	900	440	868	11	89.5
NE300-4T1850G/2000P-D	340/380	185/200									
NE300-4T2000G/2200P-U	380/420	200/220									
NE300-4T2000G/2200P-D	380/420	200/220									
NE300-4T2200G/2500P-U	420/470	220/250									
NE300-4T2200G/2500P-D	420/470	220/250									
NE300-4T2500G/2800P-U	470/540	250/280									
NE300-4T2500G/2800P-D	470/540	250/280									

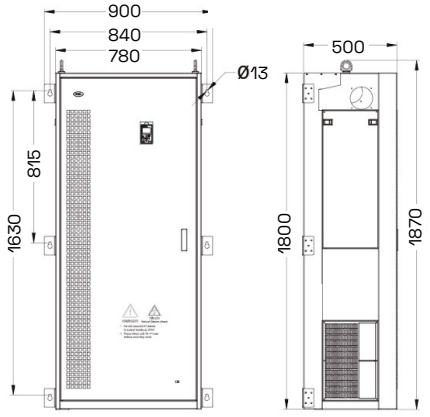
NE300 Cabinet Driver Model and External Dimensions (unit: mm)



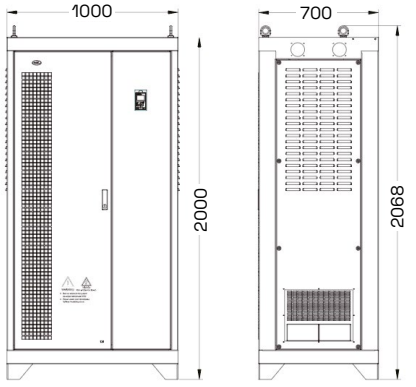
Model	Rated output current (A)	Adapted motor (KW)	Frame size	Net weight (kg)
NE300-4T1600G/1850P-F	300/340	160/185	308F	118
NE300-4T1850G/2000P-F	340/380	185/200		
NE300-4T2000G/2200P-F	380/420	200/220		
NE300-4T2200G/2500P-F	420/470	220/250		



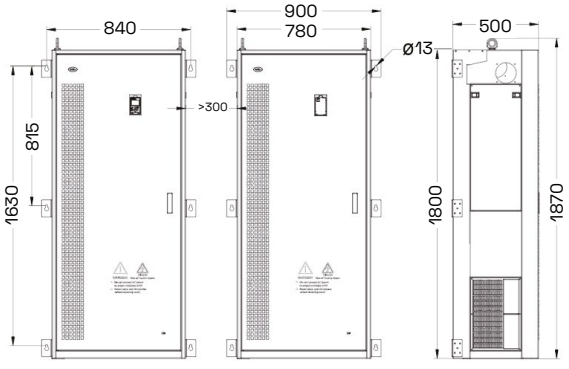
Model	Rated output current (A)	Adapted motor (KW)	Frame size	Net weight (kg)
NE300-4T2500G/2800P-F	4470/540	250/280	309	175
NE300-4T2800G/3150P-F	540/600	280/315		
NE300-4T3150G/3550P-F	600/660	315/355		



Model	Rated output current (A)	Adapted motor (KW)	Frame size	Net weight (kg)
NE300-4T3550G/4000P-F	660/730	355/400	310	235
NE300-4T4000G/4500P-F	730/840	400/450		
NE300-4T4500G/5000P-F	840/900	450/500		
NE300-4T5000G/5600P-F	900/950	500/560		



Model	Rated output current (A)	Adapted motor (KW)	Frame size	Net weight (kg)
NE300-4T5600G/6300P-F	950/1160	560/630	311	400
NE300-4T6300G/7100P-F	1160/1300	630/710		
NE300-4T7100G/8000P-F	1300/1460	710/800		
NE300-4T8000G/9000P-F	1460/1640	800/900		

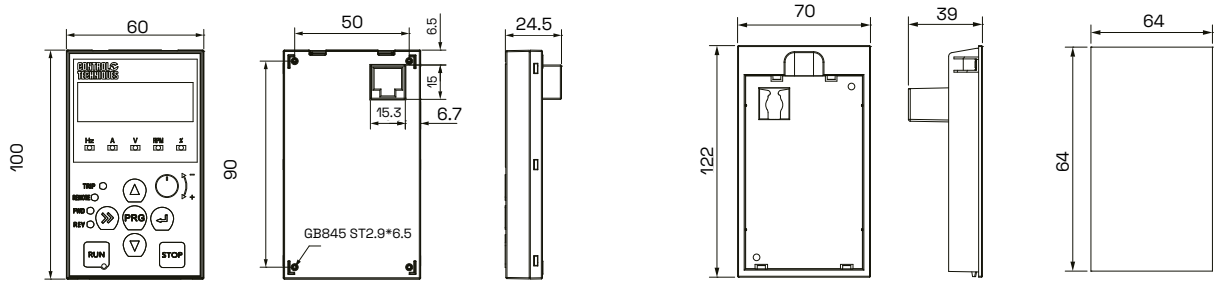


Model	Rated output current (A)	Adapted motor (KW)	Frame size	Net weight (kg)
NE300-4T9000G-F	1640	900	310*2	470

Ordering guide

Component No.	Model	Specifications	Description
LED keypad	NEF-LED01	Standard	
LCD keypad	NEF-LCD01	Optional	
Keypad mounting base	NEF-KB01	Optional	
Keypad connection cable	NEF-CB0020	2 m (optional)	
Keypad connection cable	NEF-CB0020	3 m (optional)	
Metal backplate	NEF-201BN	The NE201 model, Recessed metal backplate(Optional)	
	NEF-202BN	The NE202 model, Recessed metal backplate(Optional)	
	NEF-202BP	The NE202 model, thread-reinforced metal backplate(Optional)	
	NEF-302BP	The NE302 model, thread-reinforced metal backplate(Optional)	
	NEF-303BP	The NE303 model, thread-reinforced metal backplate(Optional)	
	NEF-304BP	The NE304 model, thread-reinforced metal backplate(Optional)	

Keypad and mounting base dimensions



NE300 expansion card

Expansion Card Name	Expansion Card Model	Terminal Symbol	Function Description	Adapted Frequency Converter Model
IO expansion card	NE30-I/O Lite	X6	Multi-function input terminal 6 (for PLC)	NE300 Series
		X7	Multi-function input terminal 7 (relative to PLC)	
		X8	Multi-function input terminal 8 (relative to PLC)	
		Y2	Multi-function Output terminal Y2 (for COM)	
		BRA/BRB/BRC	Relay output 2	
		PLC	PLC common terminal (relative to PLC)	
		AO2	Analog output 2 (0 - 10V/ 4 -20 mA optional)	
		GND	Analog output common terminal	
	NE30-I/O Relay	BRA/BRB/BRC	Relay output 2	
		AO2	Analog output 2 (0 - 10V/ 4 -20 mA optional)	
		GND	Analog output common terminal	
Positive/ negative 10V expansion card	NE30-AN01	485+	485 differential signal positive terminal	
		485-	485 differential signal negative terminal	
		-10V	Provide -10V of power supply for external device (relative to GND)	
		A13	Positive/ negative 10V analog input (relative to GND)	
		GND	Analog input/output common terminal	
CC-Link communication card	NEF-CCLink	DA	Signal DA	
		DB	Signal DB	
		DG	Signal ground	
		SLD	Shielded ground	
		FG	Protected ground	
Profinet communication card	NEF-Profinet	RJ45	Two network ports	
Profibus DP communication card	NEF-Profibus	RxD/TxD-P	Data transmission positive terminal	
		RxD/TxD-N	Data transmission negative terminal	
		+5V	Power supply	
		0V	Ground	
		Shield	Shield	
Modbus TCP communication card	NEF- TCP	RJ45	Two network ports	

Note: The NE200 series does not support any tabs.

Reference Table for Selection of Brake Units and Brake Resistors

Driver Model	Usage Rate	Braking Torque	Compatible Brake Unit Model	Single Unit/ Parallel	Recommended Resistance Power (KW)	Recommended Resistance Value (Ω)
NE200-4T0007G/0015PB	50%	150%	Built-in Brake Unit	/	0.4	600
NE200-4T0015G/0022PB	50%	150%	Built-in Brake Unit	/	0.8	300
NE300-4T0015G/0022PB	50%	150%	Built-in Brake Unit	/	0.8	300
NE200-4T0022G/0040PB	50%	150%	Built-in Brake Unit	/	1.1	200
NE300-4T0022G/0040PB	50%	150%	Built-in Brake Unit	/	1.1	200
NE200-4T0040G/0055PB	50%	150%	Built-in Brake Unit	/	1.85	120
NE300-4T0040G/0055PB	50%	150%	Built-in Brake Unit	/	1.85	120
NE300-4T0055G/0075PB	50%	150%	Built-in Brake Unit	/	2.75	80
NE300-4T0075G/0110PB	50%	150%	Built-in Brake Unit	/	4	60
NE300-4T0110G/0150PB	50%	150%	Built-in Brake Unit	/	6	41
NE300-4T0150G/0185PB	50%	150%	Built-in Brake Unit	/	8	30
NE300-4T0185G/0220PB	50%	150%	Built-in Brake Unit	/	10	24
NE300-4T0220G/0300PB	50%	150%	Built-in Brake Unit	/	11	20
NE300-4T0300G/0370P	50%	130%	CTB-4X02-0550	Single Unit	15	17.2
NE300-4T0370G/0450P	50%	130%	CTB-4X02-0550	Single Unit	20	13.9
NE300-4T0450G/0550P	50%	130%	CTB-4X02-0750	Single Unit	23	11.5
NE300-4T0550G/0750P	50%	130%	CTB-4X02-0750	Single Unit	28	9.4
NE300-4T0750G/0900P	50%	130%	CTB-4X03-1100	Single Unit	38	6.9
NE300-4T0900G/1100P	50%	130%	CTB-4X03-1100	Single Unit	45	5.7
NE300-4T1100G/1320P	50%	130%	CTB-4X03-1100	Single Unit	55	4.7
NE300-4T1320G/1600P-U	50%	130%	CTB-4X04-2000	Single Unit	66	3.9
NE300-4T1320G/1600P-D	50%	130%	CTB-4X04-2000	Single Unit	66	3.9
NE300-4T1600G/1850P-U	50%	130%	CTB-4X04-2000	Single Unit	80	3.2
NE300-4T1600G/1850P-D	50%	130%	CTB-4X04-2000	Single Unit	80	3.2
NE300-4T1600G/1850P-F	50%	130%	CTB-4X04-2000	Single Unit	80	3.2
NE300-4T1850G/2000P-U	50%	130%	CTB-4X04-2000	Single Unit	93	2.8
NE300-4T1850G/2000P-D	50%	130%	CTB-4X04-2000	Single Unit	93	2.8
NE300-4T1850G/2000P-F	50%	130%	CTB-4X04-2000	Single Unit	93	2.8
NE300-4T2000G/2200P-U	50%	130%	CTB-4X04-2000	Single Unit	100	2.6
NE300-4T2000G/2200P-D	50%	130%	CTB-4X04-2800	Single Unit	100	2.6
NE300-4T2000G/2200P-F	50%	130%	CTB-4X04-2800	Single Unit	100	2.6
NE300-4T2200G/2500P-U	50%	130%	CTB-4X04-2800	Single Unit	100	2.3

Driver Model	Usage Rate	Braking Torque	Compatible Brake Unit Model	Single Unit/ Parallel	Recommended Resistance Power (KW)	Recommended Resistance Value (Ω)
NE300-4T2200G/2500P-D	50%	130%	CTB-4X04-2800	Single Unit	110	2.3
NE300-4T2200G/2500P-F	50%	130%	CTB-4X04-2800	Single Unit	110	2.3
NE300-4T2500G/2800P-U	50%	130%	CTB-4X04-2800	Single Unit	125	2.1
NE300-4T2500G/2800P-D	50%	130%	CTB-4X04-2800	Single Unit	125	2.1
NE300-4T2500G/2800P-F	50%	130%	CTB-4X04-2800	Single Unit	125	2.1
NE300-4T2800G/3150P-F	50%	130%	CTB-4X04-4500	Single Unit	140	2.0
NE300-4T3150G/3550P-F	50%	130%	CTB-4X04-4500	Single Unit	158	1.6
NE300-4T3550G/4000P-F	50%	130%	CTB-4X04-2800	2 units in parallel	180	1.5
NE300-4T4000G/4500P-F	50%	130%	CTB-4X04-2800	2 units in parallel	200	1.3
NE300-4T4500G/5000P-F	50%	130%	CTB-4X04-4500	2 units in parallel	225	1.2
NE300-4T5000G/5600P-F	50%	130%	CTB-4X04-4500	2 units in parallel	250	1.0

Caution:

1. In most instances, brakes are activated only sporadically. This allows the brake resistor's continuous rated power to be considerably lower than the driver's rated power. Therefore, selecting brake resistors with continuous rated power values is generally more suitable for most applications. However, it's important to ensure that the brake resistor's instantaneous rated power is sufficient to cope with potential extreme braking load scenarios.
2. When optimizing braking resistors, the brake duty cycle must be carefully considered.
3. The resistance value of selected brake resistor should not be lower than the specified minimum value. Choosing brake resistors with a larger resistance value can be a cost-effective solution, ensuring additional safety in case of a brake system failure.
4. Conversely, if the selected resistance value is too high, the braking capability will correspondingly decrease, potentially leading to the activation of overvoltage protection in the driver during braking.
5. When using more than 2 brake units, pay close attention to the equivalent resistance value after the units are connected in parallel. This value should not be lower than the minimum equivalent resistance of each driver. When operating the brake unit, make sure to read and follow the wiring instructions provided in the brake unit user manual.

DC Input Reactor Parameters

Driver Model	Power (KW)	DC Reactor Model	Current (A)	Inductance (mH)	Insulation Grade
NE300-4T0300G/0370P	30	NE-DCL-0065-AL/4	65	0.8	F
NE300-4T0370G/0450P	37	NE-DCL-0078-AL/4	78	0.7	F
NE300-4T0450G/0550P	45	NE-DCL-0095-AL/4	95	0.54	F
NE300-4T0550G/0750P	55	NE-DCL-0115-AL/4	120	0.45	F
NE300-4T0750G/0900P	75	NE-DCL-0160-AL/4	160	0.36	F
NE300-4T0900G/1100P	90	NE-DCL-0180-AL/4	180	0.33	F
NE300-4T1100G/1320P	110	NE-DCL-0250-AB/4	250	0.26	F
NE300-4T1320G/1600P	132	NE-DCL-0300-AB/4	300	0.26	F
NE300-4T1600G/1850P	160	NE-DCL-0350-AB/4	350	0.17	F
NE300-4T1850G/2000P	185	NE-DCL-0460-AB/4	450	0.09	F
NE300-4T2000G/2200P	200	NE-DCL-0500-AB/4	500	0.06	F
NE300-4T2200G/2500P	220	NE-DCL-0500-AB/4	500	0.06	F
NE300-4T2500G/2800P	250	NE-DCL-0650-AB/4	650	0.05	F

Parameters of the AC Reactors and EMC Filters Mounted on the Input Terminal of Driver

Driver Model	Power (KW)	EMC Filter Model	Input Reactor Model	Current (A)	Voltage Drop (%)	Inductance (mH)	Insulation Grade
NE200-4T0007G/0015PB	0.75	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE200-4T0015G/0022PB	1.5	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE300-4T0015G/0022PB	1.5	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE200-4T0022GB-M	2.2	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE200-4T0022G/0040PB	2.2	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE300-4T0022G/0040PB	2.2	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE200-4T0040G/0055PB	4	NE-EFI-0015/4-T	NE-ACL-0010-CL/4-2	10	2	1.4	F
NE300-4T0040G/0055PB	4	NE-EFI-0015/4-T	NE-ACL-0010-CL/4-2	10	2	1.4	F
NE300-4T0055G/0075PB	5.5	NE-EFI-0016/4-T	NE-ACL-0015-AL/4-2	15	2	0.94	F
NE300-4T0075G/0110PB	7.5	NE-EFI-0020/4-T	NE-ACL-0020-AL/4-2	20	2	0.7	F
NE300-4T0110G/0150PB	11	NE-EFI-0030/4-T	NE-ACL-0030-AL/4-2	30	2	0.47	F
NE300-4T0150G/0185PB	15	NE-EFI-0045/4-T	NE-ACL-0040-AL/4-2	40	2	0.36	F
NE300-4T0185G/0220PB	18.5	NE-EFI-0050/4-T	NE-ACL-0050-AL/4-2	50	2	0.28	F
NE300-4T0220G/0300PB	22	NE-EFI-0060/4-T	NE-ACL-0060-AL/4-2	60	2	0.24	F
NE300-4T0300G/0370P	30	NE-EFI-0080/4-T	NE-ACL-0080-AL/4-2	80	2	0.18	F
NE300-4T0370G/0450P	37	NE-EFI-0080/4-T	NE-ACL-0090-AL/4-2	90	2	0.156	F
NE300-4T0450G/0550P	45	NE-EFI-0100/4-T	NE-ACL-0120-AL/4-2	120	2	0.117	F
NE300-4T0550G/0750P	55	NE-EFI-0120/4-T	NE-ACL-0150-AL/4-2	150	2	0.094	F
NE300-4T0750G/0900P	75	NE-EFI-0150/4-T	NE-ACL-0200-AL/4-2	200	2	0.07	F
NE300-4T0900G/1100P	90	NE-EFI-0200/4-T	NE-ACL-0240-AB/4-2	240	2	0.058	F
NE300-4T1100G/1320P	110	NE-EFI-0300/4-C	NE-ACL-0250-AB/4-2	250	2	0.056	F
NE300-4T1320G/1600P	132	NE-EFI-0300/4-C	NE-ACL-0290-AB/4-2	290	2	0.048	F
NE300-4T1600G/1850P	160	NE-EFI-0300/4-C	NE-ACL-0330-AB/4-2	330	2	0.042	F
NE300-4T1850G/2000P	185	NE-EFI-0400/4-C	NE-ACL-0390-AB/4-2	390	2	0.036	F
NE300-4T2000G/2200P	200	NE-EFI-0400/4-C	NE-ACL-0490-AB/4-2	490	2	0.028	F
NE300-4T2200G/2500P	220	NE-EFI-0500/4-C	NE-ACL-0490-AB/4-2	490	2	0.028	F
NE300-4T2500G/2800P	250	NE-EFI-0500/4-C	NE-ACL-0530-AB/4-2	530	2	0.026	F
NE300-4T2800G/3150P	280	NE-EFI-0600/4-C	NE-ACL-0600-AB/4-2	600	2	0.024	F
NE300-4T3150G/3550P	315	NE-EFI-0600/4-C	NE-ACL-0660-AB/4-2	660	2	0.022	F
NE300-4T3550G/4000P	355	NE-EFI-0800/4-C	NE-ACL-0800-AB/4-2	800	2	0.018	F
NE300-4T4000G/4500P	400	NE-EFI-0800/4-C	NE-ACL-1000-AB/4-2	1000	2	0.014	F
NE300-4T4500G/5000P	450	NE-EFI-0800/4-C	NE-ACL-1130-AB/4-2	1130	2	0.012	F
NE300-4T5000G/5600P	500	NE-EFI-1000/4-C	NE-ACL-1250-AB/4-2	1250	2	0.0117	F

Parameters of the AC Reactors and EMC Filters Mounted on the Output Terminal of Driver

Driver Model	Power (KW)	EMC Filter Model	Output Reactor Model	Current (A)	Voltage Drop (%)	Inductance (mH)	Insulation Grade
NE200-4T0007G/0015PB	0.75	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE200-4T0015G/0022PB	1.5	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE300-4T0015G/0022PB	1.5	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE200-4T0022GB-M	2.2	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE200-4T0022G/0040PB	2.2	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE300-4T0022G/0040PB	2.2	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE200-4T0040G/0055PB	4	NE-EFO-0015/4-T	NE-OCL-0010-CL/4-1	10	1	0.7	F
NE300-4T0040G/0055PB	4	NE-EFO-0015/4-T	NE-OCL-0010-CL/4-1	10	1	0.7	F
NE300-4T0055G/0075PB	5.5	NE-EFO-0016/4-T	NE-OCL-0015-AL/4-1	15	1	0.47	F
NE300-4T0075G/0110PB	7.5	NE-EFO-0020/4-T	NE-OCL-0020-AL/4-1	20	1	0.35	F
NE300-4T0110G/0150PB	11	NE-EFO-0030/4-T	NE-OCL-0030-AL/4-1	30	1	0.23	F
NE300-4T0150G/0185PB	15	NE-EFO-0045/4-T	NE-OCL-0040-AL/4-1	40	1	0.18	F
NE300-4T0185G/0220PB	18.5	NE-EFO-0050/4-T	NE-OCL-0050-AL/4-1	50	1	0.14	F
NE300-4T0220G/0300PB	22	NE-EFO-0060/4-T	NE-OCL-0060-AL/4-1	60	1	0.12	F
NE300-4T0300G/0370P	30	NE-EFO-0080/4-T	NE-OCL-0080-AL/4-1	80	1	0.087	F
NE300-4T0370G/0450P	37	NE-EFO-0080/4-T	NE-OCL-0090-AL/4-1	90	1	0.078	F
NE300-4T0450G/0550P	45	NE-EFO-0100/4-T	NE-OCL-0120-AL/4-1	120	1	0.058	F
NE300-4T0550G/0750P	55	NE-EFO-0120/4-T	NE-OCL-0150-AL/4-1	150	1	0.047	F
NE300-4T0750G/0900P	75	NE-EFO-0150/4-T	NE-OCL-0200-AL/4-1	200	1	0.035	F
NE300-4T0900G/1100P	90	NE-EFO-0200/4-T	NE-OCL-0240-AB/4-1	240	1	0.029	F
NE300-4T1100G/1320P	110	NE-EFO-0300/4-C	NE-OCL-0250-AB/4-1	250	1	0.028	F
NE300-4T1320G/1600P	132	NE-EFO-0300/4-C	NE-OCL-0290-AB/4-1	290	1	0.024	F
NE300-4T1600G/1850P	160	NE-EFO-0300/4-C	NE-OCL-0330-AB/4-1	330	1	0.021	F
NE300-4T1850G/2000P	185	NE-EFO-0400/4-C	NE-OCL-0390-AB/4-1	390	1	0.018	F
NE300-4T2000G/2200P	200	NE-EFO-0400/4-C	NE-OCL-0490-AB/4-1	490	1	0.014	F
NE300-4T2200G/2500P	220	NE-EFO-0500/4-C	NE-OCL-0490-AB/4-1	490	1	0.014	F
NE300-4T2500G/2800P	250	NE-EFO-0500/4-C	NE-OCL-0530-AB/4-1	530	1	0.013	F
NE300-4T2800G/3150P	280	NE-EFO-0600/4-C	NE-OCL-0600-AB/4-1	600	1	0.012	F
NE300-4T3150G/3550P	315	NE-EFO-0600/4-C	NE-OCL-0660-AB/4-1	660	1	0.011	F
NE300-4T3550G/4000P	355	NE-EFO-0800/4-C	NE-OCL-0800-AB/4-1	800	1	0.009	F
NE300-4T4000G/4500P	400	NE-EFO-0800/4-C	NE-OCL-1000-AB/4-1	1000	1	0.007	F
NE300-4T4500G/5000P	450	NE-EFO-0800/4-C	NE-OCL-1130-AB/4-1	1130	1	0.006	F
NE300-4T5000G/5600P	500	NE-EFO-1000/4-C	NE-OCL-1250-AB/4-1	1250	1	0.0055	F

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