

NE Drive Specifications



0.4 kW - 900 kW (0.5 hp to 1200 hp)

200 V | 400 V

NE Drives Highlights

- Excellent Low-Frequency Torque Characteristics
- Advanced Vector Control Algorithm
- Highly Dynamic Response
- Strong Overload Capacity
- Current Vector Control
- Diverse Functions
- Adaptability
- Flexibility
- Novel Structure
- Stability

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: $\pm 5\%$
	400V voltage level: 304 V to 456 V; voltage unbalance: 3%; allowable frequency fluctuation: $\pm 5\%$

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
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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	$\pm 0.02\%$	$\pm 0.2\%$	220.00
Torque control	Yes	Yes	250.00
Torque precision	$\pm 5\%$	$\pm 10\%$	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/A12, 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

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.

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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/s ² , 9 - 200 Hz 15 m/s ² , 200 - 500 Hz
Storage temperature	-40 to +70°C

Structure

Protection rating	IP20
Cooling method	Forced air cooling



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

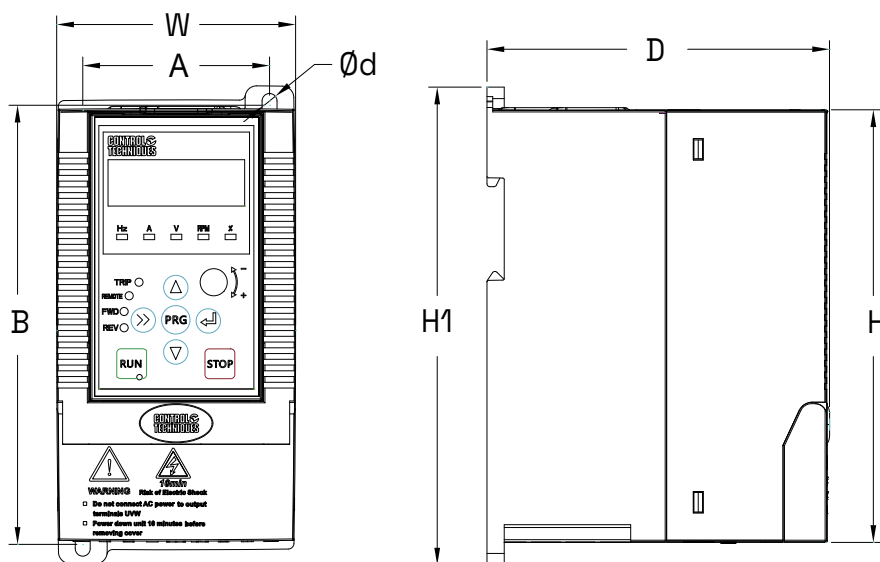
M

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

Special Model

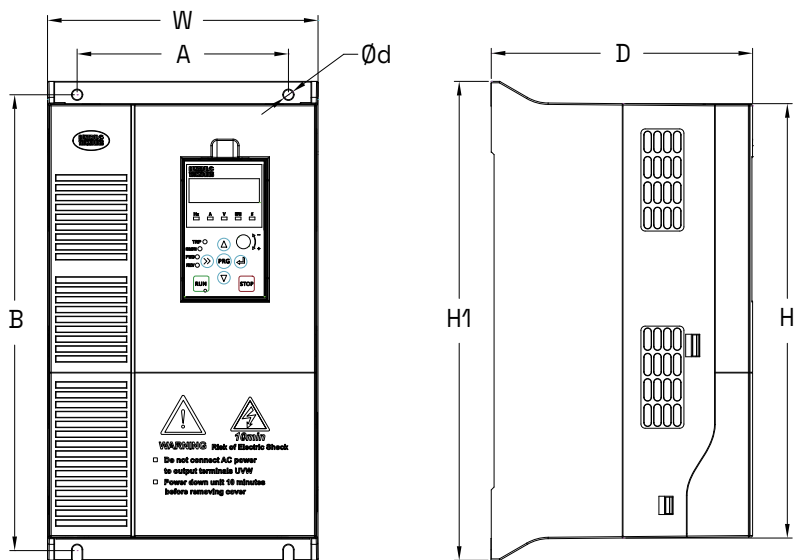
Model and Dimension

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	202	200	120	140	215	98	202	5	1.8
NE200-2S0022GB	10	2.2									
NE200-4T0022G/0040PB	6.0/9.0	2.2/4.0									
NE200-4T0040G/0055PB	9.0/13	4.0/5.5									

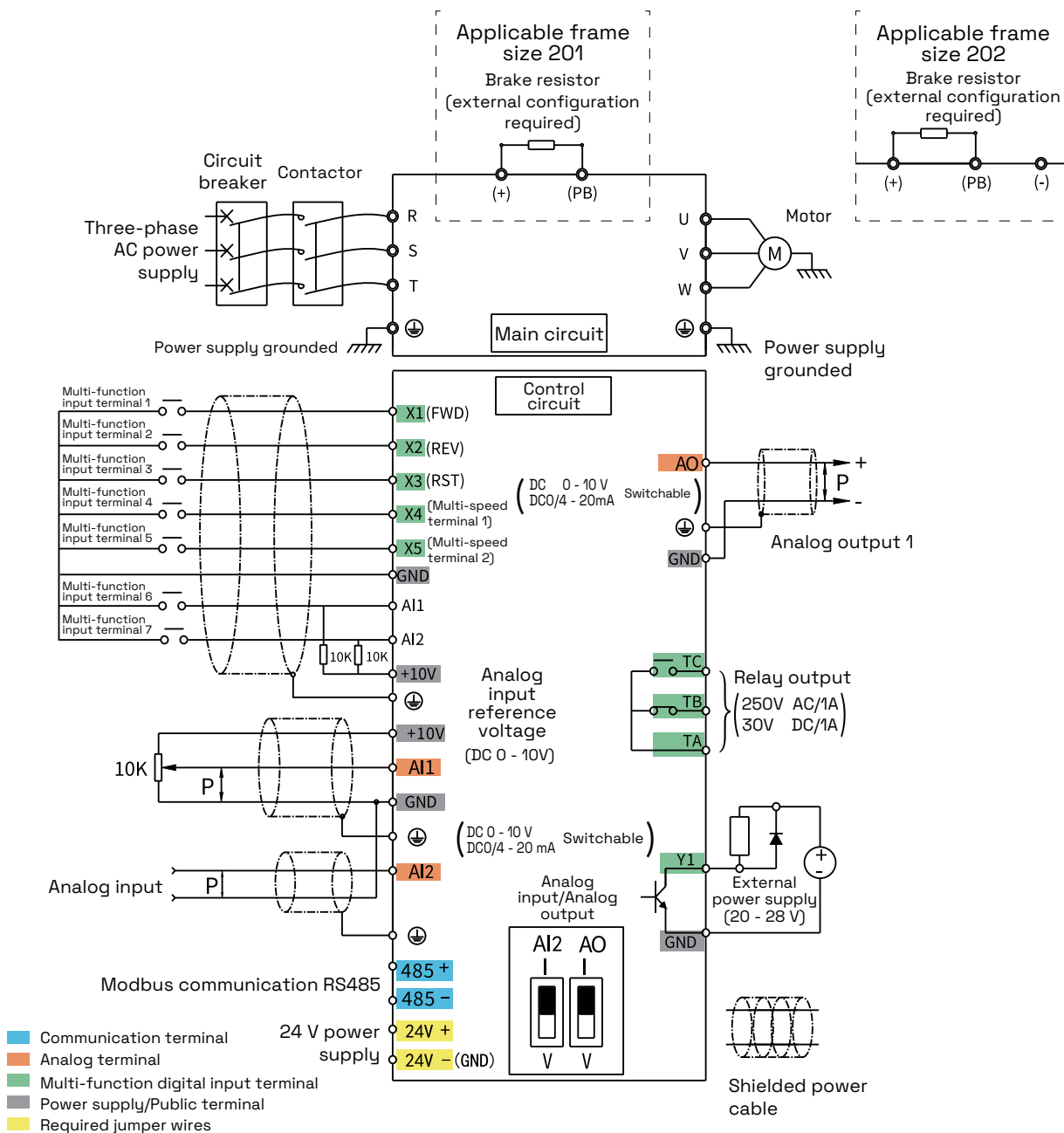
NE300 Driver Model and External Dimensions (unit: mm)



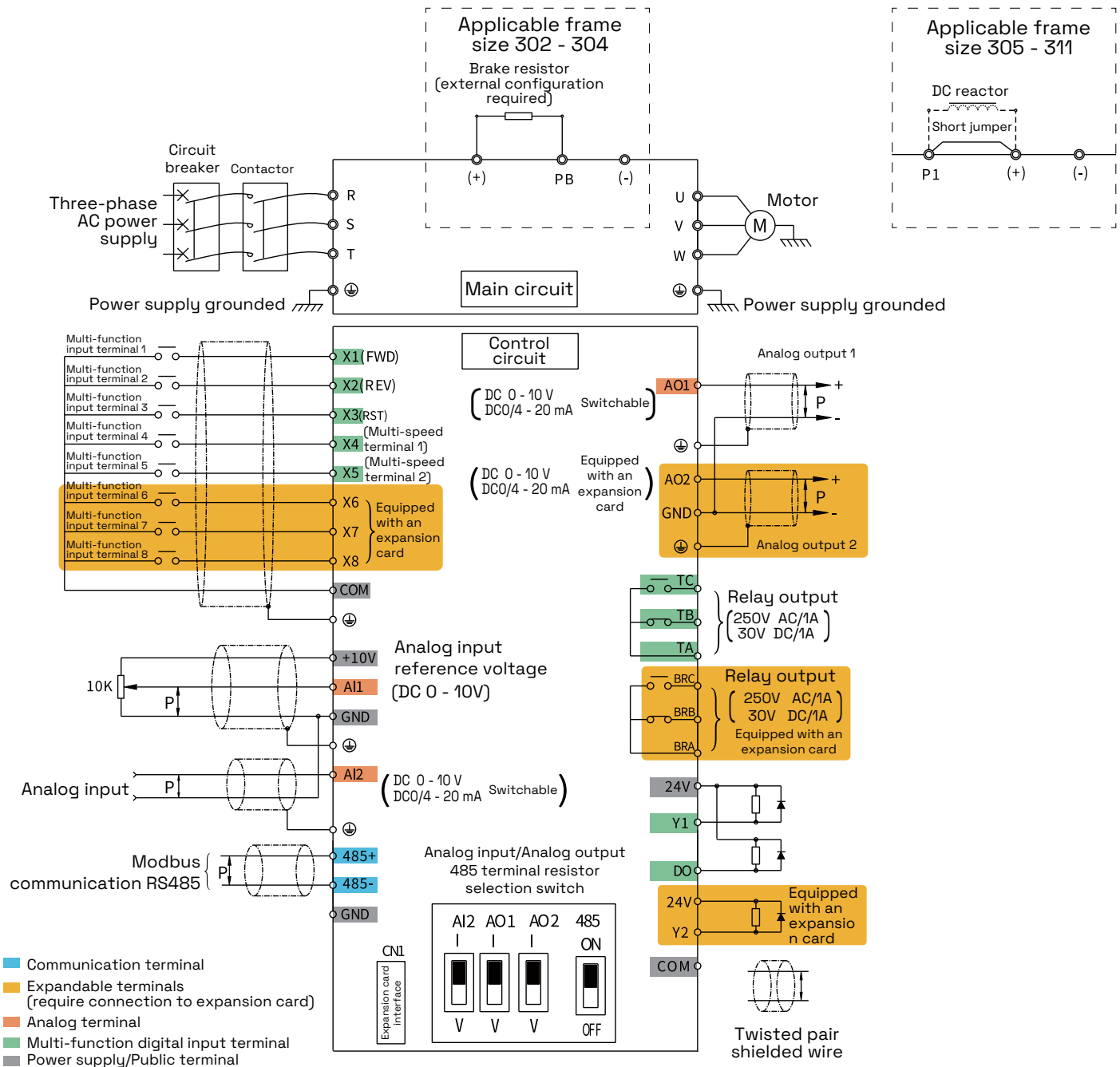
Model	Rated output current (A)	Adapted motor (KW)	Frame size	H	W	D	H1	A	B	d	Net weight (kg)
NE300-4T0015G/0022PB	4.0/6.0	1.5/2.2	302	210	135	180	238	108	225	7	2.3
NE300-4T0022G/0040PB	6.0/9.0	2.2/4.0									
NE300-4T0040G/0055PB	9.0/13	4.0/5.5									
NE300-4T0055G/0075PB	13/17	5.5/7.5	303	258	155	180	285	120	270	7	3.2
NE300-4T0075G/0110PB	17/25	7.5/11									
NE300-4T0110G/0150PB	25/32	11/15									
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									
NE300-4T0550G/0750P	110/150	55/75	306	535	320	248	560	240	540	9	26
NE300-4T0750G/0900P	150/176	75/90									
NE300-4T0900G/1100P	176/210	90/110									
NE300-4T1100G/1320P	210/250	110/132	307	640	380	248	665	240	640	9	42
NE300-4T1320G/1600P-U	250/300	132/160									
NE300-4T1320G/1600P-D	250/300	132/160									
NE300-4T1600G/1850P-U	300/340	160/185	308a	710	465	355	750	380	719	11	64
NE300-4T1600G/1850P-D	300/340	160/185									
NE300-4T1850G/2000P-U	340/380	185/200									
NE300-4T1850G/2000P-D	340/380	185/200	308b	859	550	385	900	440	868	11	89.5
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									

Terminal Wiring Diagram

NE200 Terminal Wiring Diagram



NE300 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



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