

CONTROL TECHNIQUES



NE200 & NE300

HIGH PERFORMANCE VECTOR CONTROL DRIVE

200/480VAC 0.4~900KW 0~550HZ

DRIVE OBSESSED

NE200 & NE300 FEATURES & ACCESSORIES

Outstanding control performance

- Outstanding software control platform with unique vector control algorithm
- Renesas 32 bit high speed motor control DSP
- Authentic current vector control: torque current and field current decoupling control
- Advanced vector control algorithm: induction motor and PM motor control
- Three control modes: Vector control without PG, Vector control with PG and V/F control
- The real hardware speed tracking function, more stable and reliable than the software tracking function
- Dynamic current torque control, quickly response to load variation
- Accelerating current suppression, unique current algorithm avoid machine trip due to high startup current without impacting startup torque
- Superior torque performance at low frequency, open loop vector control 150% torque output at 0.5Hz, satisfied low frequency high torque applications such as machine tool, crane and hoist industry.
- Superior overload performance: 180% current for 20s
- High precision speed control, enable high accurate synchronous control

Powerful function

- Multiple frequency setup function
- Open-loop / close-loop torque control function, torque control mode/ speed control mode online switching
- PID function provide two groups PI parameters, PID output range is settable, supporting sleep mode
- V/F separate control function in V/F control mode
- Tension control drive enable automatic rolling diameter calculation pre-setup function
- Automatic load balance droop control function
- Fixed length control function
- RS-485 communication port supporting MODBUS-RTU communication protocol for multi drive synchronization.
- Various extension cards are optional for flexible applications.
- Automatic energy saving function, power off automatically restart function, and parameter cloning through keypad.
- Parameter backup function and recovery through terminals.
- Rich protection and supervision functions.

Novel design

- Independent ventilation design for all whole series products, ventilation channel and electrical components are separated, reduce the failure rates for electrical parts.
- Compact design, based on thermal simulation and design to reduce product size, the size of products is around 70% of main stream brands at the same power rating.
- Graphic keypad to satisfy majority operation behavior
- Control panel standard RJ45 port, enhanced communication anti-interference ability, convenient to extension.
- Aluminum zinc plate and painting protection ensure the grounding protection, shielding performance and products' rot resistance.
- DC fan design for whole series products, reduce cooling system failure rate leading by AC fan breakdown

Superior adaptability

- Unique IGBT drive circuit, more reliable operation for power components
- Phase-to-phase Short-circuit protection for all product, grounding protection for >18.5KW products, adaptable for harsh environment
- Wide working voltage range: 200V - 240V & 380V - 480V
- German conformal coating material
- Optimize EMC design, immunity for high interference environment
- 100% incoming inspection
- Automatic PCB and drive tests
- High temperature aging test for PCB and drives.

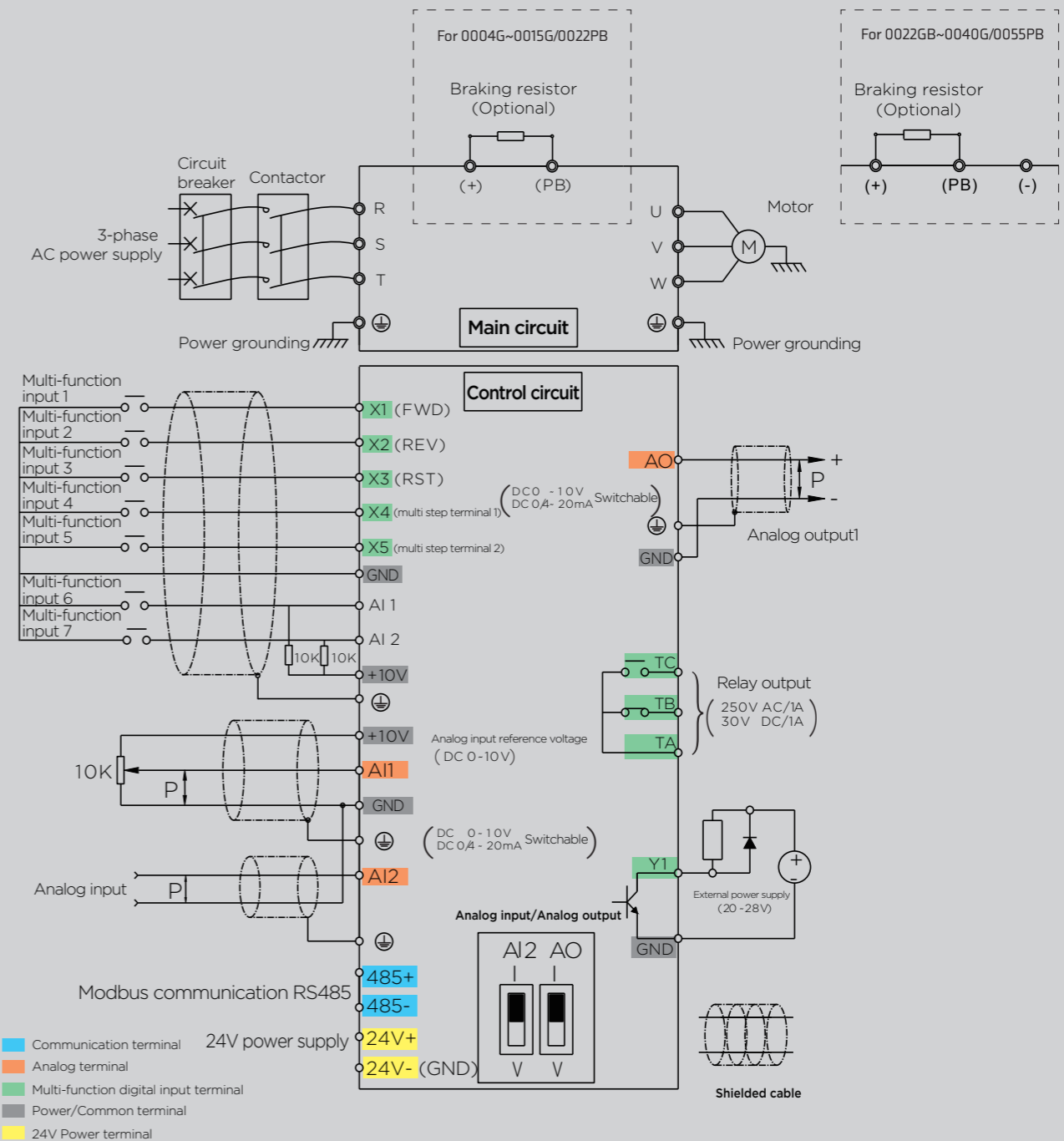


*Please consult our company for customized drive model detail.

NE200 series drive technical specifications:

Input	Rated power/ frequency	NE200-2Sxxxx: 1-phase 200V ~ 240V; 50Hz/60Hz		
		NE200-5Txxxx: 3-phase 380V ~ 480V; 50Hz/60Hz		
	Voltage range	NE200-2Sxxxx: 200V ~ 240V; Voltage unbalance degree: $\leq 3\%$; permissible frequency fluctuation: $\pm 10\%$		
		NE200-5Txxxx: 380V ~ 480V; Voltage unbalance degree: $\leq 3\%$; permissible frequency fluctuation: $\pm 10\%$		
Output	Voltage range	NE200-2Sxxxx: 0~240V; NE200-5Txxxx: 0~380V/480V		
	Overload capacity	Type G: 150% rated current 1min, 180% rated current 20s Type P: 120% rated current 1min, 150% rated current 1s		
Control features	Control mode	Vector control with PG (VC)	Vector control without PG (SVC)	V/F control
	Startup torque	---	0.5Hz 150%	1.5Hz 150%
	Speed adjustable range	---	1:100	1:50
	Speed Precision	---	$\pm 0.2\%$	$\pm 0.5\%$
	Torque control	---	Yes	N/A
	Torque precision	---	$\pm 10\%$	---
	Torque response time	---	<20ms	---
Product functions	Key functions	Torque/speed control mode switching, Multi-function input/output terminals, under voltage regulation, AC operation grounding switching, torque limit, multi step operation, slip compensation, PID regulation, simple PLC, current control, manual/ automatic torque boost, current limit, AVR function		
	Frequency setup	Keypad, terminal Up/Down, Communication, Analog input AI1/AI2		
	Output frequency	0.00~550.0Hz		
	Startup frequency	0.00~60.00Hz		
	Acc/Dec time	0.01~3600.0s		
	Dynamic braking	400V drive: braking unit action voltage: 650 ~ 750V;		
		200V drive: braking unit action voltage: 360 ~ 390V;		
	DC injection braking	DC braking activation frequency: 0.00 ~ 550.0Hz		
		DC braking current: G type 0.0 ~ 100.0%; P type 0.0 ~ 80.0%		
	Magnetic flux braking	DC braking time: 0.0 ~ 30.0s; Quick DC brake activation without lag time		
Fast deceleration through adding motor magnetic flux				
Unique functions	Parameter cloning	Parameter upload, download. User can forbid the overwriting of the uploaded parameters.		
Protection function	Power undervoltage/overvoltage protection, overcurrent protection, IGBT protection, heatsink overheat protection, drive overload protection, motor overload protection, External devices faults protection, output phase-to-phase short-circuit protection, Abnormal power failure in running, power supply trip, output phase loss, EEPROM trip, Analog input trip, communication trip, version compatibility trip, cloning trip, hardware overload protection			
Environment	Application environment	Vertical installation in well ventilated cabinet. Horizontal or other installation are forbidden. The cooling medium is air. Free from direct sunlight, dust, corrosive gas, combustible gas, oil mist, steam, and water drop.		
	Ambient temperature	-10~+40°C, deration is required from 40 to 50°C, rated output current decreasing 1% per 1°C temperature higher		
	Humidity	5~95% without condensation		
	Altitude	0~2000m, deration is required for more than 1000 meters, at rated output current decreasing 1% per 100m higher		
Structure	Vibration	3.5mm, 2~9Hz; 10 m/s ² , 9~200Hz; 15 m/s ² , 200~500Hz		
	Storage temperature	-40~+70°C		
Structure	Protection level	IP20		
	Cooling	Fan air cooling		

NE200 TERMINAL DIAGRAM

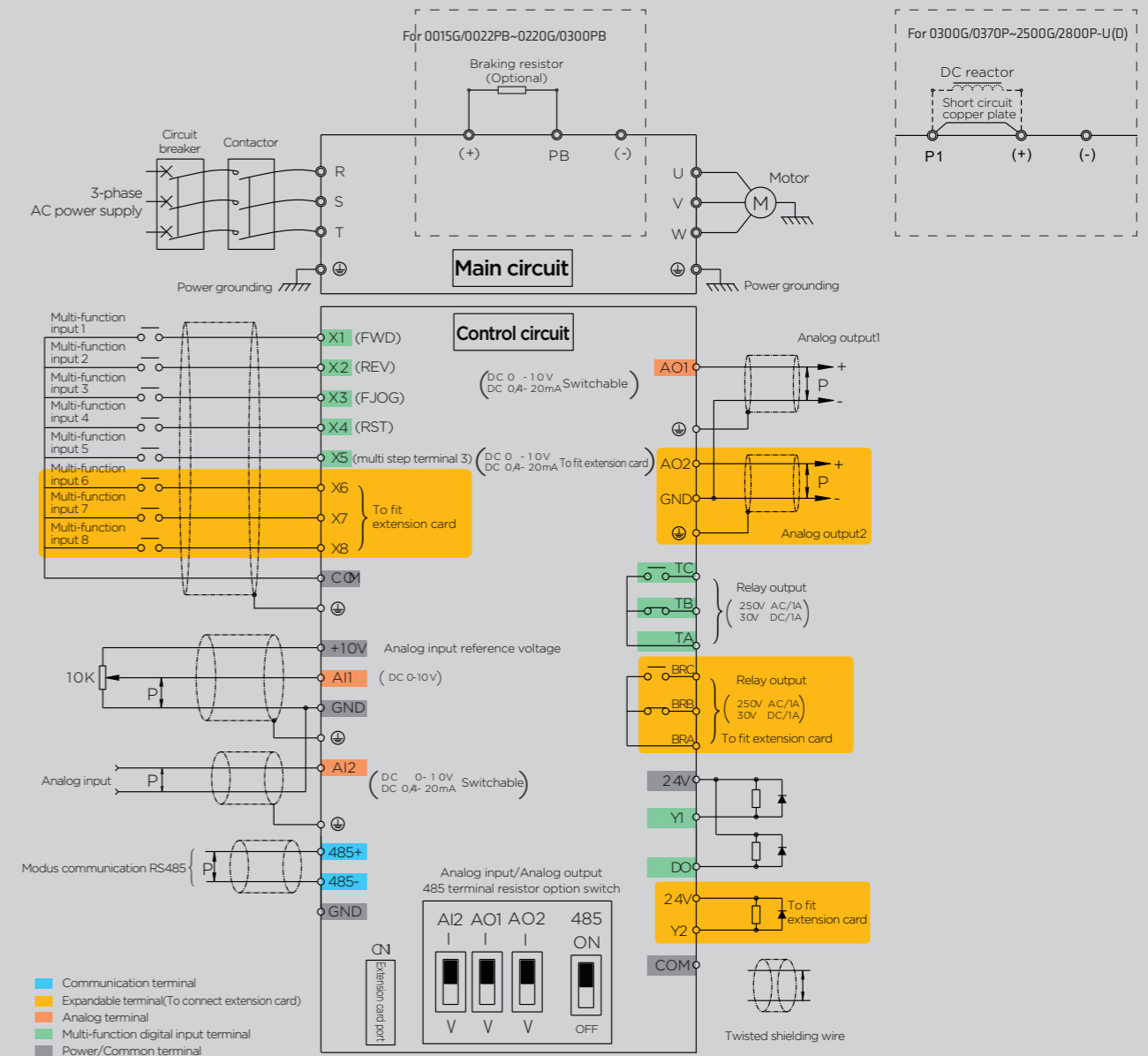


NE300 series drive technical specifications:

Input	Rated power/ frequency	3-phase 380V ~ 480V; 50Hz/60Hz		
	Voltage range	200V ~ 240V; Voltage unbalance degree: ≤ 3% ; permissible frequency fluctuation: ±10%		
		380V ~ 480V; Voltage unbalance degree: ≤ 3% ; permissible frequency fluctuation: ±10%		
Output	Voltage range	0~200V/480V; NE200-5Txxxx: 0~380V/480V		
	Overload capacity	Type G: 150% rated current 1min, 180% rated current 20s		
		Type P: 120% rated current for 1min, 150% rated current for 1s		
Control features	Control mode	Vector control with PG(VC)	Vector control without PG(SVC)	V/F control
	Startup torque	0.00Hz 180%	0.5Hz 150%	1.5Hz 150%
	Speed adjust range	1:1000	1:100	1:50
	Speed stabilization precision	± 0.02%	± 0.2%	± 0.5%
	Torque control	Yes	Yes	N/A
	Torque precision	± 5%	± 10%	---
	Torque response time	<10ms	<20ms	---
	Key functions	Torque/speed control switching, Multi-function input/ output terminals, under voltage regulation, AC operation grounding switching, flying start, torque limit, multi speed operation, autotune, S curve Acc/Dec, slip compensation, PID regulation, simple PLC, fix length control, droop control, current control, manual/ automatic torque increase, current limit, AVR function		
	Frequency setup	Keypad, terminal Up/Down, communication, Analog input AI1/AI2, Terminal pulse input X4,X5		
	Output frequency	0.00~550.0Hz		
Startup frequency	0.00~60.00Hz			
Product functions	Acc/Dec time	0.1~3600s		
	Dynamic braking	400V drive: braking unit voltage: 650 ~ 750V;		
		200V drive: braking unit voltage: 360 ~ 390V;		
	DC injection braking	DC braking activation: 0.00 ~ 550.0Hz DC braking current: G type 0.0 ~ 100.0%; P type 0.0 ~ 80.0% DC braking time: 0.0 ~ 30.0s; Quick DC brake activation without lag time		
Magnetic flux braking	Fast deceleration through adding motor magnetic flux			
Parameter cloning	Parameter upload, download. User can forbid the overwriting of the uploaded parameters.			
Unique functions	Keypad	LED keypad as standard.		
	Common DC bus	Common DC bus for multiple drives power supply		
	Independent air duct	Independent air duct design for whole series product		
	Extension card	IO extension card, injection molding machine connecting card etc.		
Power-up detection	Automatic detection of internal and external circuits when power-up			
Protection function	Power undervoltage/overvoltage protection, overcurrent protection, autotune trip, IGBT protection, heatsink overheat protection, drive overload protection, motor overload protection, external device false protection, output to ground short-circuit protection, abnormal power failure in running, power supply abnormal, output phase loss, EEPROM trip, relay contact error, temperature sampling abnormal, encoder off-line, analog input trip, communication trip, version compatibility trip, cloning trip, extension card connection trip, hardware overload protection			
Efficiency	Operation at rated power: 7.5kW or below ≥ 93%; 11kW~45kW ≥ 95%; 55kW or above ≥ 98%			
Environment	Application environment	Vertical installation in well ventilated cabinet. Horizontal or other installation are forbidden. The cooling medium is air. Free from direct sunlight, dust, corrosive gas, combustible gas, oil mist, steam, and water drop.		
	Ambient temperature	-10°C~+40°C, deration is required from 40 to 50°C, rated output current decreasing 1% per 1°C temperature higher		
	Humidity	5~95% without condensation		
	Altitude	0~2000m, deration is required for more than 1000 meters, at rated output current decreasing 1% per 100m higher		
	Vibration	3.5mm, 2~9Hz; 10 m/s ² , 9~200Hz; 15 m/s ² , 200~500Hz		
Structure	Storage temperature	-40~+70°C		
	Protection level	IP20		
	Cooling	Fan force cooling		

*Please consult our company for vector control drive with PG model selection.

NE300 TERMINAL DIAGRAM

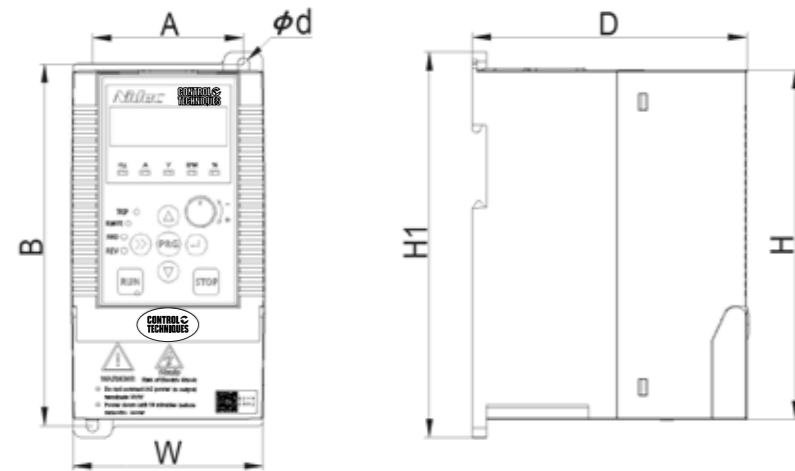


Terminal connection

Note 1: NE300-5T0015G/0022PB ~ NE300-5T0220G/0300PB equip braking unit

Note 2: NE300-5T1600G/1850P-F ~ NE300-5T9000G-F equip DC reactor

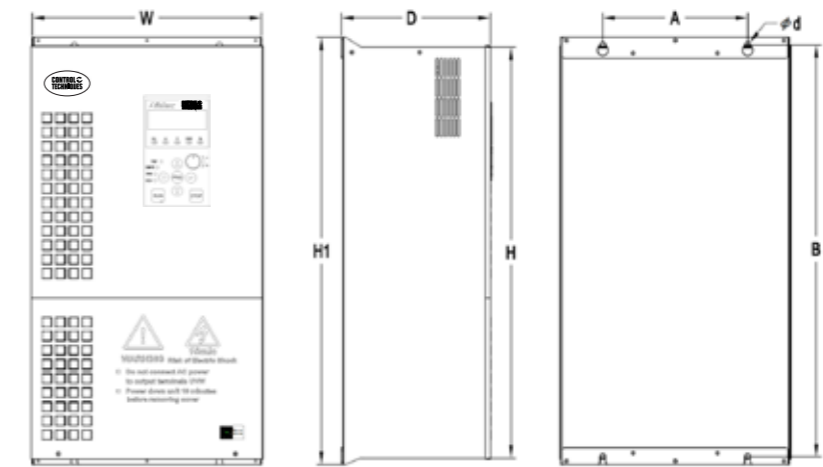
NE200 DIMENSIONS & WEIGHTS



200 / 240 V

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	3 ph motor power (KW)	1 ph motor power (KW)	H Height (mm)	W Width (mm)	D Depth (mm)	H1 Height (mm)	A (mm)	B (mm)	d (mm)
NE200-2S0004GB	2.5	0.4kW	-							
NE200-2S0007GB	4.5	0.75kW	-	150	83	120	166	65	153	5
NE200-2S0015GB	7	1.5kW	-							
NE300-2T0007G	6	0.75kW	0.75kW	210	133	180	238	108	225	7
NE300-2T0015G	13	2.2kW	1.5kW							
NE300-2T0022G	17	3kW	2.2kW							
NE300-2T0040G	25	4kW	3kW	258	155	180	285	120	270	7
NE300-2T0055G	32	5.5kW	4kW							
NE300-2T0075G	37	7.5kW	5.5kW							
NE300-2T0110G	60	11kW	7.5kW	308	192	186	340	150	323	7
NE300-2T0150G	75	15kW	11kW							
NE300-2T0220G	110	22kW	15kW	535	320	248	560	240	540	9
NE300-2T0370G	176	37kW	22kW							
NE300-2T0450G	210	45kW	37kW	640	380	248	665	240	640	9
NE300-2T0550G	250	55kW	45kW							
NE300-2T0750G-U	300	75kW	55kW							
NE300-2T0750G-D	300	75kW	55kW							
NE300-2T0900G-U	340	90kW	-	710	465	355	750	380	719	11
NE300-2T0900G-D	340	90kW	-							
NE300-2T1100G-U	420	110kW	75kW	859	550	385	900	440	868	11
NE300-2T1100G-D	420	110kW	75kW							
NE300-2T1320G-F	540	132kW	90kW	1800	780	580	1870	-	-	-

NE300 DIMENSIONS & WEIGHTS



380 / 480 V

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	H Height (mm)	W Width (mm)	D Depth (mm)	H1 Height (mm)	A (mm)	B (mm)	d (mm)
NE300-5T0015G/0022PB	4.0/6.0	1.5/2.2							
NE300-5T0022G/0040PB	6.0/9.0	2.2/4.0	210	133	180	238	108	225	7
NE300-5T0040G/0055PB	9.0/13	4.0/5.5							
NE300-5T0055G/0075PB	13/17	5.5/7.5							
NE300-5T0075G/0110PB	17/25	7.5/11	258	155	180	285	120	270	7
NE300-5T0110G/0150PB	25/32	11/15							
NE300-5T0150G/0185PB	32/37	15/18.5							
NE300-5T0185G/0220PB	37/45	18.5/22	308	192	186	340	150	323	7
NE300-5T0220G/0300PB	45/60	22/30							
NE300-5T0300G/0370P	60/75	30/37	425	270	200	450	200	430	7
NE300-5T0370G/0450P	75/90	37/45							
NE300-5T0450G/0550P	90/110	45/55	535	320	248	560	240	540	9
NE300-5T0550G/0750P	110/150	55/75							
NE300-5T0750G/0900P	150/176	75/90							
NE300-5T0900G/1100P	176/210	90/110	640	380	248	665	240	640	9
NE300-5T1100G/1320P	210/250	110/132							

* Specialized drive and Vector control with PG card (VC) model selection, please consult our company for detail.

NE300 order code and dimension:

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	H Height (mm)	W Width (mm)	D Depth (mm)	H1 Height (mm)	A (mm)	B (mm)	d (mm)
NE300-ST1320G/1600P-U	250/300	132/160	710	465	355	750	380	719	11
NE300-ST1320G/1600P-D	250/300	132/160							
NE300-ST1600G/1850P-U	300/340	160/185							
NE300-ST1600G/1850P-D	300/340	160/185							
NE300-ST1850G/2000P-U	340/380	185/200							
NE300-ST1850G/2000P-D	340/380	185/200							
NE300-ST2000G/2200P-U	380/420	200/220	859	550	385	900	440	868	11
NE300-ST2000G/2200P-D	380/420	200/220							
NE300-ST2200G/2500P-U	420/470	220/250							
NE300-ST2200G/2500P-D	420/470	220/250							
NE300-ST2500G/2800P-U	470/540	250/280							
NE300-ST2500G/2800P-D	470/540	250/280							
NE300-ST3550G/4000P-F	660/730	355/400	1800	780	500	1870	840	1630	13
NE300-ST4000G/4500P-F	730/840	400/450							
NE300-ST4500G/5000P-F	840/900	450/500							
NE300-ST5000G/5600P-F	900/950	500/560							
NE300-ST5600G/6300P-F	950/1160	560/630							
NE300-ST6300G/7100P-F	1160/1300	630/710							
NE300-ST7100G/8000P-F	1300/1460	710/800	1800	780	500	1870	-	-	-
NE300-ST8000G/9000P-F	1460/1640	800/900							
NE300-ST9000G-F	1640	900	1800	1560	500	1800	-	-	-

NE300 series cabinet machine model and dimension:

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	Dimensions
NE300-ST1600G/1850P-F	300/340	160/185	
NE300-ST1850G/2000P-F	340/380	185/200	
NE300-ST2000G/2200P-F	380/420	200/220	
NE300-ST2200G/2500P-F	420/470	220/250	

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	Dimensions
NE300-ST2500G/2800P-F	470/540	250/280	
NE300-ST2800G/3150P-F	540/600	280/315	
NE300-ST3150G/3550P-F	600/660	315/355	

NE300 series cabinet machine model and dimension:

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	Dimensions
NE300-ST3550G/4000P-F	660/730	355/400	
NE300-ST4000G/4500P-F	730/840	400/450	
NE300-ST4500G/5000P-F	840/900	450/500	
NE300-ST5000G/5600P-F	900/950	500/560	

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	Dimensions
NE300-ST5600G/6300P-F	950/1160	560/630	
NE300-ST6300G/7100P-F	1160/1300	630/710	
NE300-ST7100G/8000P-F	1300/1460	710/800	
NE300-ST8000G/9000P-F	1460/1640	800/900	

Drive model G: Heavy Duty P: Normal Duty	Rated output current (A)	Motor power (KW)	Dimensions
NE300-ST9000G-F	1640	900	

- *-F freestanding drive with DC reactor inbuilt;
- *-U upside input downside output type wall mounting structure;
- *-D downside input upside output type wall mounting structure.

* Specialized drive and Vector control with PG card model selection, please consult our company for detail.

Product Model description

NE300 -	5T	1320	G	B	-	U
Product series: NE200 NE300	Voltage rating: 2S/2T -- 200V~240V 5T -- 380V~480V	Power rating: 0004 -- (0.4KW) 0007 -- (0.75KW) 0015 -- (1.5KW) 1320 -- (132KW) 9000 -- (900KW)	Load type: G -- Heavy duty P -- Normal duty	Braking unit: None -- No braking unit B -- With braking unit		Structure code: None -- Standard M -- Compact U -- top input-bottom output D -- bottom input--top output F -- cubicle

Note: Some types of NE200 and NE300 products are dual rated e.g. NE300-ST0185G/0220PB

Keypad

	Order code	Specification	Drive model
LED Keypad	NEF-LED01	Standard	NE200/NE300
LCD Keypad	NEF-LCD01	Optional	NE200/NE300
Keypad holder	NEF-KB01	Optional	NE200/NE300
Keypad cable	NEF-CB0020	2m(Optional)	NE200/NE300
Keypad cable	NEF-CB0030	3m(Optional)	NE200/NE300



NEF-LED01

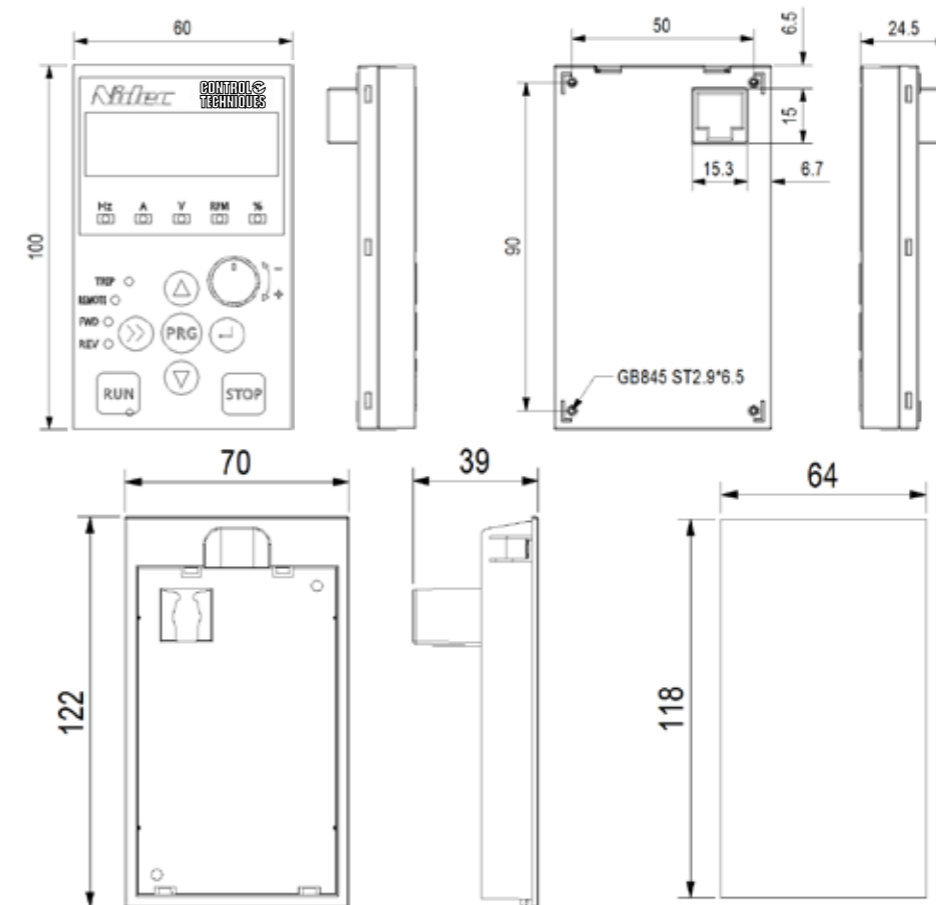


NEF-LCD01



NEF-KB01

LED keypad display and keypad holder dimensions: (mm)



Braking resistor NE200 braking resistor

Drive model	Braking unit	Braking resistor		Braking torque %	
		Braking resistor	Quantity		
NE200-2S0004GB	Inbuilt as standard	100W	200Ω	1	135
NE200-2S0007GB		200W	150Ω	1	135
NE200-2S0015GB		400W	100Ω	1	125
NE200-2S0022GB		300W	70Ω	1	125
NE200-5T0007G/0015PB		400W	300Ω	1	135
NE200-5T0015G/0022PB		400W	300Ω	1	135
NE200-5T0022GB-M		500W	200Ω	1	135
NE200-5T0022G/0040PB		500W	200Ω	1	135
NE200-5T0040G/0055PB		500W	200Ω	1	135

NE300 braking resistor

Drive model	Braking unit	Braking resistor		Braking torque %	
		Braking resistor	Quantity		
NE300-5T0015G/0022PB	Inbuilt as standard	400W	300Ω	1	135
NE300-5T0022G/0040PB		500W	200Ω	1	135
NE300-5T0040G/0055PB		500W	200Ω	1	135
NE300-5T0055G/0075PB		500W	100Ω	1	135
NE300-5T0075G/0110PB		800W	75Ω	1	130
NE300-5T0110G/0150PB		1000W	50Ω	1	135
NE300-5T0150G/0185PB		1500W	40Ω	1	125
NE300-5T0185G/0220PB		4000W	30Ω	1	125
NE300-5T0220G/0300PB		4000W	30Ω	1	125
NE300-5T0300G/0370P		6000W	20Ω	1	125
NE300-5T0370G/0450P	Need external	9000W	16Ω	1	125
NE300-5T0450G/0550P		9000W	13.6Ω	1	125
NE300-5T0550G/0750P		6000W	20Ω	2	135
NE300-5T0750G/0900P		9000W	13.6Ω	2	145
NE300-5T0900G/1100P		6000W	20Ω	3	130
NE300-5T1100G/1320P		6000W	20Ω	3	130
NE300-5T1320G/1600P-U		6000W	20Ω	4	130
NE300-5T1320G/1600P-D		6000W	20Ω	4	130
NE300-5T1600G/1850P-U		9000W	13.6Ω	4	130
NE300-5T1600G/1850P-D		9000W	13.6Ω	4	130
NE300-5T1600G/1850P-F	9000W	13.6Ω	4	130	

* Multi braking resistors parallel connection. E.g. NE300-5T0550G/0750P recommended to select 2 of 6000W, 20Ω resistors parallel connection, compound braking resistor is 12000W, 10Ω.

NE300 braking resistor

Drive model	Braking unit	Braking resistor		Braking torque %	
		Braking resistor	Quantity		
NE300-5T1850G/2000P-U	Need external	9000W	13.6Ω	4	130
NE300-5T1850G/2000P-D		9000W	13.6Ω	4	130
NE300-5T1850G/2000P-F		9000W	13.6Ω	4	130
NE300-5T2000G/2200P-U		9000W	13.6Ω	5	130
NE300-5T2000G/2200P-D		9000W	13.6Ω	5	130
NE300-5T2000G/2200P-F		9000W	13.6Ω	5	130
NE300-5T2200G/2500P-U		9000W	13.6Ω	5	130
NE300-5T2200G/2500P-D		9000W	13.6Ω	5	130
NE300-5T2200G/2500P-F		9000W	13.6Ω	5	130
NE300-5T2500G/2800P-U		9000W	13.6Ω	5	130
NE300-5T2500G/2800P-D		9000W	13.6Ω	5	130
NE300-5T2500G/2800P-F		9000W	13.6Ω	5	130
NE300-5T2800G/3150P-F		9000W	13.6Ω	6	130
NE300-5T3150G/3550P-F		9000W	13.6Ω	6	130
NE300-5T3550G/4000P-F		40000W	3Ω	2	130
NE300-5T4000G/4500P-F		40000W	3Ω	2	130
NE300-5T4500G/5000P-F		60000W	2Ω	2	130
NE300-5T5000G/5600P-F		60000W	2Ω	2	130
NE300-5T5600G/6300P-F		60000W	2Ω	2	130
NE300-5T6300G/7100P-F		60000W	2Ω	3	130
NE300-5T7100G/8000P-F	60000W	2Ω	3	130	
NE300-5T8000G/9000P-F	80000W	2Ω	3	130	
NE300-5T9000G-F	80000W	2Ω	3	130	

* Multi braking resistors parallel connection. E.g. NE300-5T0550G/0750P recommended to select 2 of 6000W, 20Ω resistors parallel connection, compound braking resistor is 12000W, 10Ω.

Input/output reactor

DC input reactor parameters

Drive model	Drive power(KW)	DC reactor model	Current(A)	Inductance(mH)	Insulation level
NE300-5T0300G/0370P	30	NE-DCL-0065-AL/4	65	0.8	F
NE300-5T0370G/0450P	37	NE-DCL-0078-AL/4	78	0.7	F
NE300-5T0450G/0550P	45	NE-DCL-0095-AL/4	95	0.54	F
NE300-5T0550G/0750P	55	NE-DCL-0115-AL/4	120	0.45	F
NE300-5T0750G/0900P	75	NE-DCL-0160-AL/4	160	0.36	F
NE300-5T0900G/1100P	90	NE-DCL-0180-AL/4	180	0.33	F
NE300-5T1100G/1320P	110	NE-DCL-0250-AB/4	250	0.26	F
	132		340	0.26	F
	160			0.17	F
	185			0.09	F
	200			0.06	F
	220			0.06	F
	250			0.05	F

3-phase AC input reactor parameter

Drive model	Drive power(KW)	Filter model	Reactor model	Current(A)	Voltage drop (%)	Inductance(mH)	Insulation level
	1.5			5	2	2.8	F
NE200-ST0022G/0040PB	2.2	NE-EFI-0010/4-T	NE-ACL-0007-CL/4-2	7	2	2	F
NE200-ST0040G/0055PB	3.7	NE-EFI-0015/4-T	NE-ACL-0010-CL/4-2	10	2	1.4	F
NE300-ST0055G/0075PB	5.5	NE-EFI-0016/4-T	NE-ACL-0015-AL/4-2	15	2	0.94	F
NE300-ST0075G/0110PB	7.5	NE-EFI-0020/4-T	NE-ACL-0020-AL/4-2	20	2	0.7	F
NE300-ST0110G/0150PB	11	NE-EFI-0030/4-T	NE-ACL-0030-AL/4-2	30	2	0.47	F
NE300-ST0150G/0185PB	15	NE-EFI-0045/4-T	NE-ACL-0040-AL/4-2	40	2	0.36	F
NE300-ST0185G/0220PB	18.5	NE-EFI-0050/4-T	NE-ACL-0050-AL/4-2	50	2	0.28	F
NE300-ST0220G/0300PB	22	NE-EFI-0060/4-T	NE-ACL-0060-AL/4-2	60	2	0.24	F
NE300-ST0300G/0370P	30	NE-EFI-0080/4-T	NE-ACL-0080-AL/4-2	80	2	0.18	F
NE300-ST0370G/0450P	37		NE-ACL-0090-AL/4-2	90	2	0.156	F
NE300-ST0450G/0550P	45	NE-EFI-0100/4-T	NE-ACL-0120-AL/4-2	120	2	0.117	F
NE300-ST0550G/0750P	55	NE-EFI-0120/4-T	NE-ACL-0150-AL/4-2	150	2	0.094	F
NE300-ST0750G/0900P	75	NE-EFI-0150/4-T	NE-ACL-0200-AL/4-2	200	2	0.07	F
NE300-ST0900G/1100P	90	NE-EFI-0200/4-T	NE-ACL-0240-AB/4-2	240	2	0.058	F
NE300-ST1100G/1320P	110	NE-EFI-0300/4-C	NE-ACL-0250-AB/4-2	250	2	0.056	F
	132			290	2	0.048	F
	160			330	2	0.042	F
	185			390	2	0.036	F
	200			490	2	0.028	F
	220			490	2	0.028	F
	250			530	2	0.026	F
	280			600	2	0.024	F
	315			660	2	0.022	F
	355			800	2	0.018	F
	400			1000	2	0.014	F
	450			1130	2	0.012	F
	500			1250	2	0.0117	F

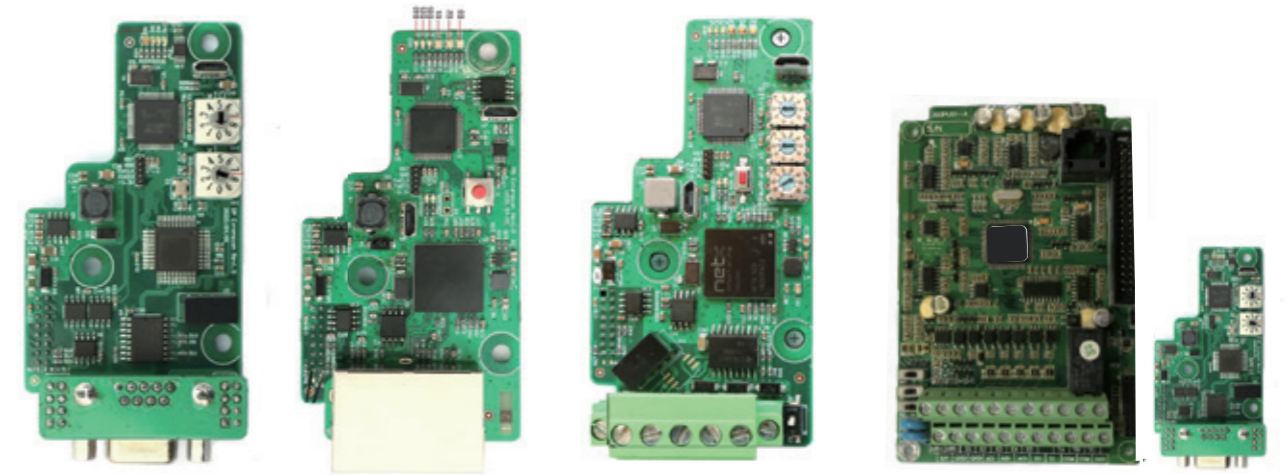
3-phase AC output reactor parameter

Drive model	Drive power(KW)	Filter model	Reactor model	Current(A)	Voltage drop (%)	Inductance(mH)	Insulation level
	1.5			5	1	1.4	F
NE200-ST0022G/0040PB	2.2	NE-EFO-0010/4-T	NE-OCL-0007-CL/4-1	7	1	1	F
NE200-ST0040G/0055PB	4	NE-EFO-0015/4-T	NE-OCL-0010-CL/4-1	10	1	0.7	F
NE300-ST0055G/0075PB	5.5	NE-EFO-0016/4-T	NE-OCL-0015-AL/4-1	15	1	0.47	F
NE300-ST0075G/0110PB	7.5	NE-EFO-0020/4-T	NE-OCL-0020-AL/4-1	20	1	0.35	F
NE300-ST0110G/0150PB	11	NE-EFO-0030/4-T	NE-OCL-0030-AL/4-1	30	1	0.23	F
NE300-ST0150G/0185PB	15	NE-EFO-0045/4-T	NE-OCL-0040-AL/4-1	40	1	0.18	F
NE300-ST0185G/0220PB	18.5	NE-EFO-0050/4-T	NE-OCL-0050-AL/4-1	50	1	0.14	F
NE300-ST0220G/0300PB	22	NE-EFO-0060/4-T	NE-OCL-0060-AL/4-1	60	1	0.12	F
NE300-ST0300G/0370P	30	NE-EFO-0080/4-T	NE-OCL-0080-AL/4-1	80	1	0.087	F
NE300-ST0300G/0370P	37		NE-OCL-0090-AL/4-1	90	1	0.078	F
NE300-ST0450G/0550P	45	NE-EFO-0100/4-T	NE-OCL-0120-AL/4-1	120	1	0.058	F
NE300-ST0550G/0750P	55	NE-EFO-0120/4-T	NE-OCL-0150-AL/4-1	150	1	0.047	F
NE300-ST0750G/0900P	75	NE-EFO-0150/4-T	NE-OCL-0200-AL/4-1	200	1	0.035	F
NE300-ST0900G/1100P	90	NE-EFO-0200/4-T	NE-OCL-0240-AB/4-1	240	1	0.029	F
NE300-ST1100G/1320P	110	NE-EFO-0300/4-C	NE-OCL-0250-AB/4-1	250	1	0.028	F
	132			290	1	0.024	F
	160			330	1	0.021	F
	185			390	1	0.018	F
	200			490	1	0.014	F
	220			490	1	0.014	F
	250			530	1	0.013	F
	280			600	1	0.012	F
	315			660	1	0.011	F
	355			800	1	0.009	F
	400			1000	1	0.007	F
	450			1130	1	0.006	F
	500			1250	1	0.0055	F

NE300 Options

Optional card	Order code	Terminal	Description	Drive model
I/O extension card	NE30-I/O Lite	X6	Multi-function input 6 (to PLC)	NE300 whole series
		X7	Multi-function input 7 (to PLC)	
		X8	Multi-function input 8 (to PLC)	
		Y2	Multi-function output Y2 (to COM)	
		BRA/BRB/BRC	Relay output 2	
		PLC	PLC common end (to PLC)	
		A02	Analog output 2 (0 ~ 10V, 0/4 ~ 20mA selectable)	
		GND	Analog output common end	
NE30-I/O Relay	NE30-I/O Relay	BRA/BRB/BRC	Relay output 2	NE300 whole series
		A02	Analog output 2 (0 ~ 10V, 0/4 ~ 20mA selectable)	
		GND	Analog output common	
Injection molding machine extension card	NE30-ZS01	+A1	0-1A current input	NE300-5T0110G/0150PB ~ NE300-5T9000G-F
		-A1	0-1A current output	
		+A2	0-1A/2A current input	
		-A2	0-1A/2A current output	
		X6	Multi-function input 6 (to COM)	
		COM	Multi-function input common	
+/- 10V extension card	NE30-AN01	485+	485 differential signal positive	NE300 whole series
		485-	485 differential signal negative	
		-10V	Provide -10V to external (to GND)	
		A13	+/- 10V analog input (to GND)	
		GND	Analog output common	
Speed tracking extension card	NE30-SP01	U	Connect to drive U-phase output	NE300-5T0015G/0022PB ~ NE300-5T0150G/0185PB
		W	Connect to drive W-phase output	
CC-Link Communication card	NEF - CCLink	DA	DA Signal	NE300 whole series
		DB	DB Signal	
		DG	Signal Ground	
		SD	Shield ground	
		FG	Protected area	
Profinet Communication card	NEF - Profinet	RJ45	Two network interfaces	NE300 whole series
Profibus DP	NEF - Profibus	RxD/TxD-P	Positive Data transfer	NE300 whole series
		RxD/TxD-N	Negative Data transfer	
		+5V	Power supply	
		0V	Ground	
Modbus TCP	NEF - TCP	Shield	Shield	NE300 whole series
		RJ45	Two gateways	

NE Series Expansion Card



*NE200 does not support any optional cards

NOTES

NOTES

THINK DRIVES, THINK CONTROL TECHNIQUES.

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5M+

Installed Drives

1.4K+

Employees

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Countries

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