



NUCOR
TECHNOLOGY

PRODUCT CATALOG

Elevator Control System



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Ne200

Elevator Open Loop Drive

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 380 ~ 460V.....2.2 ~ 45kW



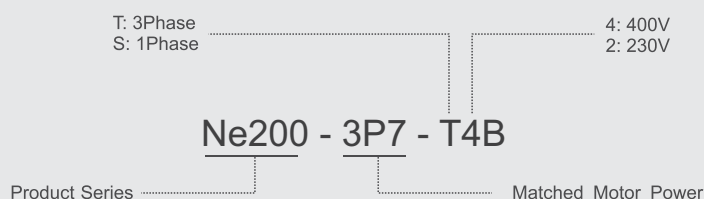
Product Features

Multiple programmable I/O terminal, flexible timing	Compatible with various elevator control systems
Smooth S-curve acceleration and deceleration	Optimized S-curve brings perfect elevator riding performance
Built-in brake	Built-in brake unit to reduce costs and workload
High-performance SVC control	Starting torque: 180% rated torque / 0.5Hz; No encoder open loop vector control
Two designs for option	Metal design: can be modified as other model by exchanging top control board; Plastic design: More compact and keypad built-in

Technical Data

Electrical data	Input voltage	Single phase 200~240V; Three phase 380~460V; Fluctuations not exceed 10 %, unbalanced rate <3%
	Input frequency	50 / 60Hz: 5%
	Output voltage	0 / Input voltage
	Output frequency	0~400.0Hz
Performance	Control mode	V/f control, SVC control(OLV Control)
	Overload capability	2 minutes for 150% rated output current; 10 seconds for 180% rated output current
	Velocity resolution	Digital setting: 0.01Hz; Analogue setting: 0.1%□Max. frequency
	SVC Control	Speed control accuracy: □0.5%; Speed control range: 1:100; Torque control response: <200ms; Starting torque: 180% rated torque / 0.5Hz
Input / Output	Digital power supply	+24V, load capacity 200mA
	Digital input	DI1~DI7
	Digital output	DO1~DO2
	Relay output	R1A/R1B/R1C R2A/R2B/R2C Contactor capacity: 250VAC/3A or 30VDC/1A

Configuration Parameter



Ne600

Elevator Close Loop Drive

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 200 ~ 240V.....15 ~ 30kW
Three phase 380 ~ 460V.....2.2 ~ 45kW



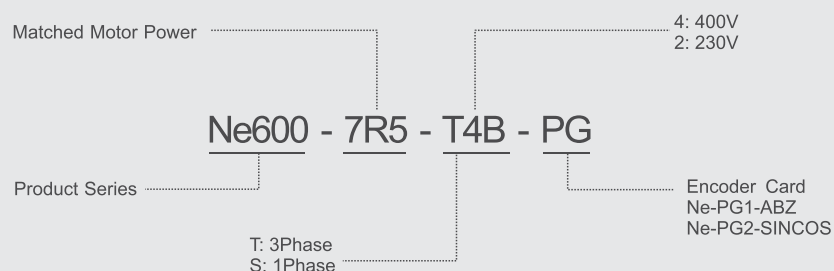
Product Features

Multiple programmable I/O terminal, flexible timing	Compatible with various elevator control systems
Starting torque automatic compensation function	Support starting torque automatic compensation of all types of encoder cards to reduce the debugging workload during Commissioning
Smooth S-curve acceleration and deceleration	Optimized S-curve brings perfect elevator riding performance
Built-in brake unit	Built-in brake unit to reduce costs and workload
Debug optimization	Support Bluetooth debugging can display English and customer local language, like Vietnamese, Korean, Russian, Arabic, etc;

Technical Data

Electrical data	Input voltage	Single/three phase 200~240V; Three phase 200~240V; Three phase 380~460V; Fluctuations not exceed $\pm 10\%$, unbalanced rate $< 3\%$, 50/60Hz $\square 5\%$
	Output voltage	0~Input voltage 0~100.0Hz
Performance	Control mode	V/f control, SVC control(OLV Control), VC control(CLV control)
	Overload capability	2 minutes for 150% rated output current; 10 seconds for 180% rated output current
	Velocity resolution	Digital setting: 0.01Hz; Analogue setting: 0.1%*Max.frequency
	SVC control	Speed control accuracy: $\pm 0.5\%$; Speed control range: 1:100; Torque control response: $< 200\text{ms}$; Starting torque: 180% rated torque / 0.5Hz
	VC control	Speed control accuracy: $\pm 0.05\%$; Speed control range: 1:1000; Torque control response: $< 50\text{ms}$; Starting torque: 200% rated torque / 0Hz
Input / Output	Analog power supply	+10V, load capacity 100mA; -10V, load capacity 10mA
	Digital power supply	External DC24V input
	Analog input	Ai: Voltage 0~10V
	Digital input	DI1~DI8
	Digital output	DO1~DO2
	Relay output	RA/RB/RC Y1-Y3/CM1-CM3 Contactor capacity: 250VAC/3A or 30VDC/1A

Configuration Parameter



SAFE1000

Elevator Parallel Integrated Controller

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 200 ~ 240V.....15 ~ 30kW
Three phase 380 ~ 460V.....2.2 ~ 45kW



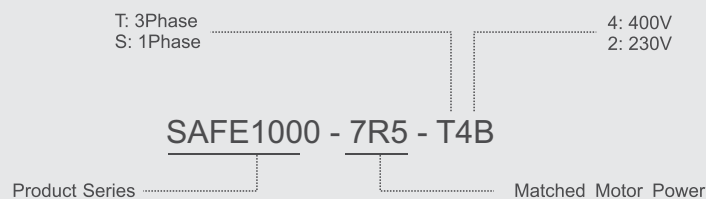
Product Features

Power Rating	3-Phase 3.7kW to 15kW 1Phase, 2.2kW to 7.5kW
Floor Support	Standard 12 floor supported, expansion upto 15 floors Best Suitable for Simplex & Duplex Elevator
Advance Algorithm	Supports Speed up to 1.5 m/s Direct Landing to Floor Function to Enhance Comfort Smooth and jerk less ride Flexible Acceleration Deceleration S Curves
Built-in brake unit	Brake unit built-in, which reduces costs and labor work.

Technical Data

Electrical data	Input voltage	Single phase 200~240V; Single / Three phase 200~240V; Three phase 200~240V; Three phase 380~460V; Fluctuations not exceed $\pm 10\%$, unbalanced rate $< 3\%$
	Input frequency	50 / 60Hz $\square 5\%$
	Output voltage	0 ~ Input voltage
	Output frequency	0 ~ 100.0Hz
Input / Output	Analog input	AI: Voltage - 10 - +10V
	Digital input	X1 ~ X24
	High voltage input	X25 ~ X28
	Relay output	Y1~Y3 Contactor capacity: 250VAC/5A or 30VDC/3A; Y4~Y6 Contactor capacity: 250VAC/3A or 30VDC/1A
Elevator basic characteristics	Floor	16F Max.
	Running speed	Max. 1.4m/s
	Group number	Max. 2 sets
	Communication mode	CAN, Modbus

Configuration Parameter



SAFE3000

Elevator serial integrated controller

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 200 ~ 240V.....15 ~ 30kW
Three phase 380 ~ 460V.....2.2 ~ 45kW



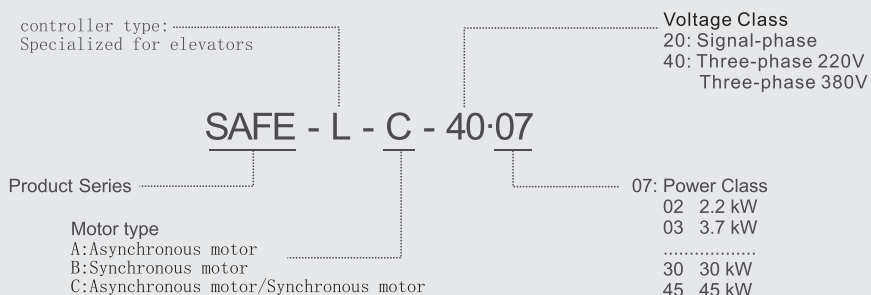
Product Features

Built-in brake unit	Brake unit built-in, which reduces costs and labor work.
Advanced algorithm	Advanced direct stop algorithm, wonderful operation performance.
Smooth S curve acceleration and deceleration	Flexible acceleration and deceleration S curves bring perfect elevator riding performance
More convenient	4 elevators group control via direct connection, no group control card required .

Technical Data

Electrical data	Input voltage	Single phase 200~240V; Single / Three phase 200~240V; Three phase 200~240V; Three phase 380~460V; Fluctuations not exceed $\pm 10\%$, unbalanced rate $< 3\%$
	Input frequency	50 / 60Hz $\square 5\%$
	Output voltage	0 ~ Input voltage
	Output frequency	0 ~ 100.0Hz
Input / Output	Analog input	AI: Voltage - 10 - +10V
	Digital input	X1 ~ X24
	High voltage input	X25 ~ X28
	Relay output	Y1~Y3 Contactor capacity: 250VAC/5A or 30VDC/3A; Y4~Y6 Contactor capacity: 250VAC/3A or 30VDC/1A
Elevator basic characteristics	Floor	48F Max.
	Running speed	Max. 4m / s
	Group number	Max. 4 sets
	Communication mode	CAN, Modbus

Configuration Parameter



Ne3000

Elevator Serial Integrated Controller

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 200 ~ 240V.....15 ~ 30kW
Three phase 380 ~ 460V.....2.2 ~ 45kW



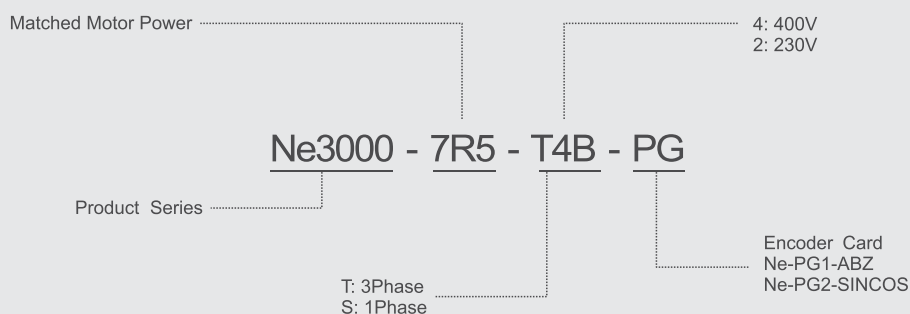
Product Features

Built-in brake unit	Brake unit built-in, which reduces costs and labor work.
Advanced algorithm	Advanced direct stop algorithm, wonderful operation performance.
Smooth S curve acceleration and deceleration	Flexible acceleration and deceleration S curves bring perfect elevator riding performance
More convenient	Built in button for parameters setting, Simplex, Duplex

Technical Data

Electrical data	Input voltage	Single phase 200~240V; Single / Three phase 200~240V; Three phase 200~240V; Three phase 380~460V; Fluctuations not exceed $\pm 10\%$, unbalanced rate $< 3\%$
	Input frequency	50 / 60Hz $\square 5\%$
	Output voltage	0 ~ Input voltage
	Output frequency	0 ~ 100.0Hz
Input / Output	Analog input	AI: Voltage - 10 - +10V
	Digital input	X1 ~ X24
	High voltage input	X25 ~ X28
	Relay output	Y1~Y3 Contactor capacity: 250VAC/5A or 30VDC/3A; Y4~Y6 Contactor capacity: 250VAC/3A or 30VDC/1A
Elevator basic characteristics	Floor	48F Max.
	Running speed	Max. 4m / s
	Group number	Max. 8 sets
	Communication mode	CAN, Modbus

Configuration Parameter



Ne900

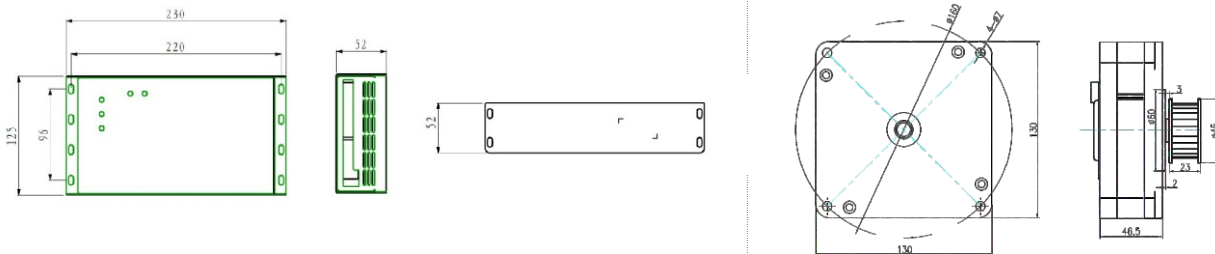
Elevator Door Controller

One key for all / Support Sync&Async motor/With encoder&Without encoder



NC-PM-65

Overall Dimensions and Mounting Dimensions



Technical Data

Control Terminal		Description
Rj45	Rj45 Connector	Rj45 connector used for keypad connection
DI1-DI4	Digital input	Optical-cupler isolated input signal Connect to COM (ON) : Command is valid Disconnect to COM (OFF) : Command is invalid · Use F09.01-F09.07 to Set DI1- DI4 function
OD	Open door command input	
CD	Close door command input	
P24	+24V power supply	
COM	Input reference ground	
DPA	Replay output	Contact rating: 125VAC/0.5A or 24VDC/1A · F09.09-F09.11 sets the function · DPA, when door closing stuck,door will reopen
DOA , CME	Door open arrival relay	DOA, DCA: Normally close; CME is isolated from COM · F09.09-F09.11; 3rd bit setting 1 is NC (Normal close)
DCA, CME	Door close arrival relay	
Motor	NC-PM-65	Rated torque:3.4N.m Rated Voltage:145V Rated Current:0.85A Rated Power:65W RPM:180r/min Encoder power:24V IP rating:IP44

MONT20

Elevator Door Controller

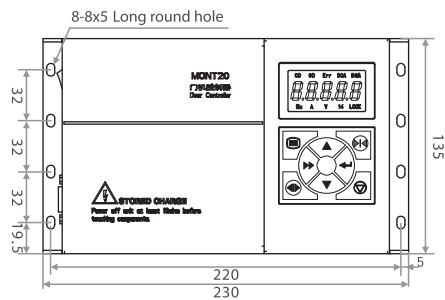
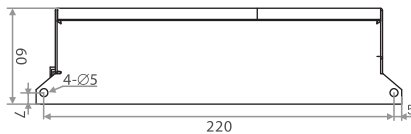
One key for all / Support Sync&Async motor/With encoder&Without encoder



Product Features

Power Rating	0.4 KW, Rated Output Current 2.5 Amp.
Abundant Interfaces	Suitable for different encoder voltage interface (5/12/24VDC)
Multi-Protection Function	Over / Under Voltage Protection Over Current Protection Over Load Protection Inter phase Short Circuit Protection
High Compatibility	Support Synchronous and Asynchronous Motor Support Distance Control with encoder and speed control deceleration Switch

Production and Installation Size



Technical Data

Technical Specification		Description
Input Voltage		Single Phase 200-240 Fluctuating Within $\pm 5\%$, Imbalance rate $< 3\%$
Control Mode		SVC, VC
Capacity		150% Rated output Current for 1 Minute 180% Rated output Current for 1 Second
Output Voltage		0V - Input Voltage
Power Supply		+24V, Max. output Current 200mA
Digital Input	Digital input	Di1 Di5, OD, CD
Digital Output	Replay output	DOA, DCA, PA, PB, PC Contact rating: 125VAC/0.5A or 24VDC/1A
Environment	Running Temperature	-10 - 40°C Max. 50°C, The derating value of output current shall be 2% for each degree centigrade above 40°C
	Storage Temperature	-40 - +70°C
	Vibration & Resistance	It is 3.5m/s ² in 2-9Hz and 10m/s ² in 9-200Hz (IEC 60721-3-3)

SAFE1000

Elevator Parallel Control Panel

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 200 ~ 240V.....15 ~ 30kW
Three phase 380 ~ 460V.....2.2 ~ 45kW



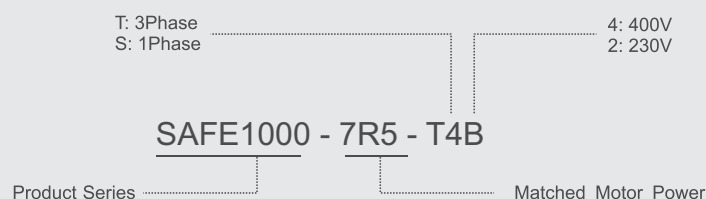
Product Features

Design	Wall Mount & Vertical MRL Cabinet
Floor Support	Standard 12 Floor Max. 16 Floor
Function	Simplex - Duplex Operation, Semi Serial, Direct to Floor Landing Auto Door, Manual Door, Full Collective, Down Collective
Rescue	220V 1-Phase UPS Support & 440V 2-Phase ARD Support For Rescue Operation
Installation	Pre Factory Parameter Setting, Easy to install, Easy to Debug, User Friendly

Technical Data

Electrical data	Input voltage	Single phase 200~240V; Single / Three phase 200~240V; Three phase 200~240V; Thre ceed $\pm 10\%$, unbalanced rate $< 3\%$
	Input frequency	50 / 60Hz $\square 5\%$
	Output voltage	0 ~ Input voltage
	Output frequency	0 ~ 100.0Hz
Input / Output	Analog input	AI: Voltage - 10 - +10V
	Digital input	X1 ~ X24
	High voltage input	X25 ~ X28
	Relay output	Y1~Y3 Contactor capacity: 250VAC/5A or 30VDC/3A; Y4~Y6 Contactor capacity: 250VAC/3A or 30VDC/1A
Elevator basic characteristics	Floor	16F Max.
	Running speed	Max. 1.4m/s
	Group number	Max. 2 sets
	Communication mode	CAN, Modbus

Configuration Parameter



SAFE3000

Elevator Serial Integrated Control Panel

Single / Three phase 200 ~ 240V.....2.2 ~ 11kW Three phase 200 ~ 240V.....15 ~ 30kW
Three phase 380 ~ 460V.....2.2 ~ 45kW



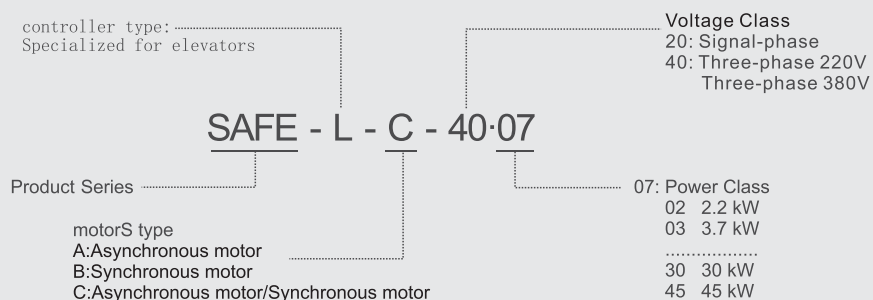
Product Features

Design	Wall Mount & Vertical MRL Cabinet
Floor Support	Max. 48 Floor
Function	Full Serial, Simplex - Duplex Operation, Direct to Floor Landing , Auto Door, Manual Door, Full Collective, Down Collective
Rescue	220V 1-Phase UPS Support & 440V 2-Phase ARD Support For Rescue Operation
Installation	Less Wiring, Less Labor Work, Easy & Fast installation, Easy to Debug, User Friendly



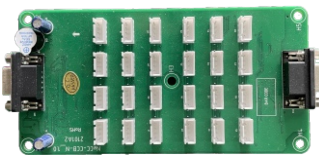








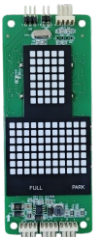
Technical Data

Electrical data	Input voltage	Single phase 200~240V; Single / Three phase 200~240V; Three phase 200~240V; Three phase 380~460V; Fluctuations not exceed $\pm 10\%$, unbalanced rate $< 3\%$
	Input frequency	50 / 60Hz $\square 5\%$
	Output voltage	0 ~ Input voltage
	Output frequency	0 ~ 100.0Hz
Input / Output	Analog input	AI: Voltage - 10 - +10V
	Digital input	X1 ~ X24
	High voltage input	X25 ~ X28
	Relay output	Y1~Y3 Contactor capacity: 250VAC/5A or 30VDC/3A; Y4~Y6 Contactor capacity: 250VAC/3A or 30VDC/1A
Elevator basic characteristics	Floor	48F Max.
	Running speed	Max. 4m / s
	Group number	Max. 4 sets
	Communication mode	CAN, Modbus










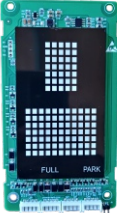


Configuration Parameter



System Components

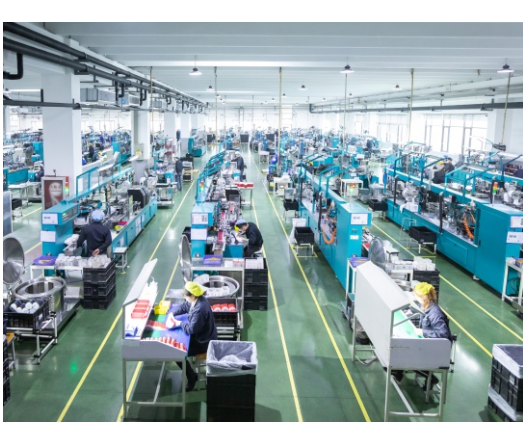
Ne-CTB-N (Car Top Board)		NC-MIC (Cabin intercom)	
Ne-CCB-N (Car Command board)		NC-MIC-C (Car Top intercom)	
Ne-LED-N(Keypad tool)		NC-BAT-C(Car Top Emergency power)	
NC-SINCOS-1024 (Sincos Encoder)		Intercom (Telephone)	
NC-ANM (Elevator announcement)		NC-INS (Car Top Box)	
NECC-CTB-B(Elevator car top board)		NC-L5-O(Slim Dotmatrix Display)	

System Components

SAFE-CTB-B(Elevator car top board)		KCB-B4A(Elevator safe interface board)	
SAFE-CCB-A(Elevator command board)		3M cables	
SAFE-PG-A2(Elevator ABZ encoder card)		NC-LCD-C(Colorful LCD display)	
SAFF-PG-E (Elevator SINCOS encorder card)		Announcement card with speaker	
NECC-CCB-A(Elevator command board)		NC-L5-W(Slim White Dotmatrix Display)	
Pencil type Leveling Sensor		Limit Switch	

Reference

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