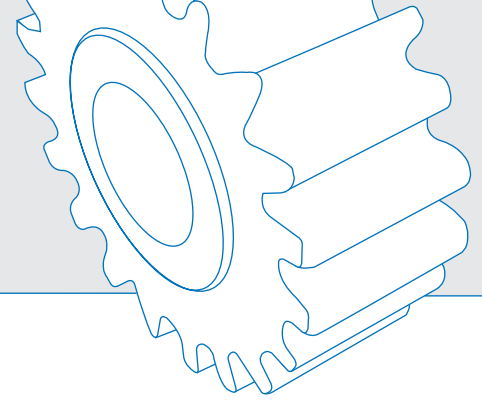


SK 500E Family Selection Steps



NORDAC SK 500E AC Vector Drives

NORD has an expanded centralized control family with increased functionality that is included in our wide range of the SK 500E AC vector drive line. This series is designed to be mounted in a control panel to seamlessly integrate with centralized controls.

NORD offers intelligent, cost effective solutions and an abundance of equipment options with the SK 500E series of AC vector drives. The 500E is fully compatible with a wide motor performance, supply voltage and size range. The basis for the 500E is a well-equipped basic unit with expansion possibilities through optional modules. SK 500E AC vector drives are suitable for all application areas and are easily adapted to specific requirements with plug-in technology units.



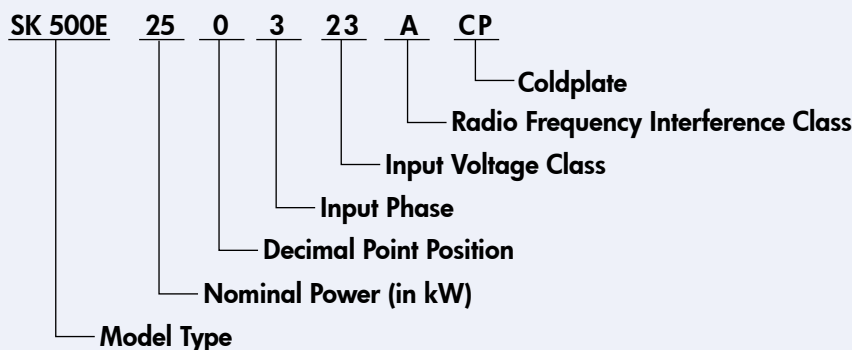
Selection Steps

- SK 500E AC Vector Drive Selection:**
Choose the SK 500E AC vector drive based on motor power rating, input voltage supply, and drive features. Use the SK 500E Rating & Voltage Matrix to ensure the desired Series is available in the selected kW Rating and Input Voltage ratings.
- Technology Unit Selection** (if required):
Choose specific technology unit such as speed POT with start/stop, fieldbus interface, or programming and display module.
- Dynamic Braking Resistor Selection** (if required):
Choose a specific braking resistor based on the AC vector drive's voltage and power rating
- Programmer/Operator Selection** (recommended):
Choose a specific type of programming/operation device based on specified needs. (if required)

Explanation of Nomenclature Entries

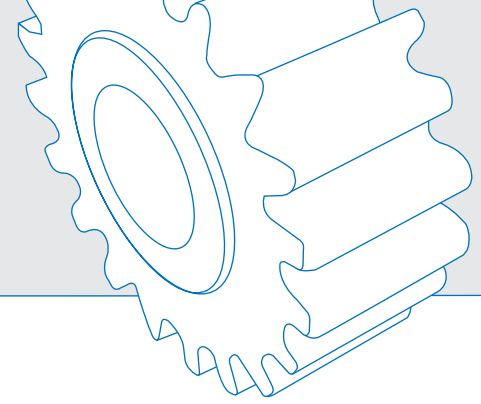
Model Type	Model Type Determines what features are included in the drive.
Nominal Power	Power Measured in kW
Decimal Point Position	0=Nominal Power/100 1=Nominal Power/10 2=Nominal Power/1
Input Phase	1=Single Phase 3=3 phase
Input Voltage Class	12=115V 23=230V 40=400V
Radio Freq. Interference Filter Class	0=No filter A=Class 2 Industrial B=Class 3 Residential
Version	CP=Coldplate

Nomenclature Example



SK500E250323ACP - An SK500E with 25kW Nominal Power, 0 Decimal Point Position, 3-phase input, 230V operation with class 2 industrial radio frequency interference and a coldplate.

SK 500E Family Selection Guide



SK 500E AC Vector Drive Selection		
Series	kW Ratings	Input Voltage
SK ①*	E- ①*	- ②*
①* kW Rating		
250: 0.25 kW (0.33 hp)		
370: 0.37 kW (0.50 hp)		
550: 0.55 kW (0.75 hp)		
750: 0.75 kW (1 hp)		
111: 1.11 kW (1.50 hp)		
151: 1.5 kW (2 hp)		
221: 2.2 kW (3 hp)		
301: 3.0 kW (4 hp)		
401: 4.0 kW (5 hp)		
551: 5.5 kW (7.5 hp)		
751: 7.5 kW (10 hp)		
112: 11 kW (15 hp)		
152: 15 kW (20 hp)		
182: 18.5 kW (25 hp)		
222: 22 kW (30 hp)		
302: 30 kW (40 hp)		
372: 37 kW (50 hp)		
452: 45 kW (60 hp)		
552: 55 kW (75 hp)		
751: 75 kW (100 hp)		
902: 90 kW (125 hp)		
②* Input Voltage		
112-O: 100-120V, 1-phase (0.25 - 0.75 kW) (0.33 - 1.0 hp)		
323-A: 200-240V, 1-phase (0.25 - 2.2 kW) (0.33 - 3 hp)		
323-A: 200-240V, 3-phase (0.25 - 18.5 kW) (0.33 - 25 hp)		
340-A: 380-480V, 3-phase (0.55 - 90 kW) (0.75 - 125 hp)		
③* Series		
500: Basic		
505: Basic + 24V Operation*		
510: Basic + Safe Stop		
511: Basic + Safe Stop + CANOpen		
515: Basic + Safe Stop + 24V Operation* + CANOpen		
520: Basic + CANOpen + Encoder Input + Extra I/O		
530: Basic + Safe Stop + CANOpen + Encoder Input + Extra I/O + Posicon		
535: Basic + Safe Stop + CANOpen + Encoder Input + Extra I/O + Posicon + 24V Operation*		
540: Basic + Safe Stop + CANOpen + Encoder Input + Extra I/O + Posicon + Additional RS485 Input + Universal Encoder Input + PLC		
545: Basic + Safe Stop + CANOpen + Encoder Input + Extra I/O + Posicon + Additional RS485 Input + Universal Encoder Input + PLC + 24V Operation*		

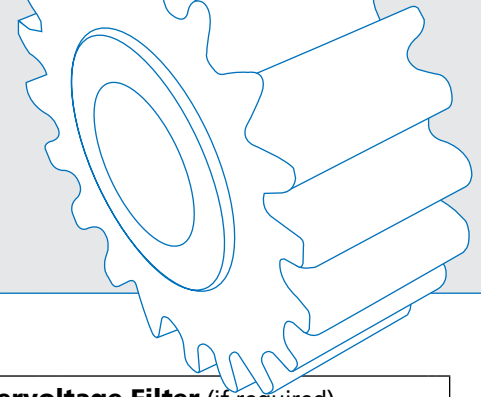
Technology Unit Selection (if required)	
Module Type	
SK TU3 -	④
④ Module Type (Internal/External)	
CTR - Control box programmer & display	
PAR - Parameter box programmer & English display	
POT - Speed potentiometer with star/stop and reverse direction	
PBR - Profibus interface	
PBR-24V - Profibus interface requiring external 24VDC supply	
IBS - Interbus interface	
CAO - CANopen interface	
DEV - DeviceNet interface	
AS1 - AS interface	
ECT - Ethercat interface	
PNT - Profinet interface	
EIP - Ethernet/IP interface	
POL - POWERLINK interface	

Dynamic Braking Resistor Selection (if required)				
		Resistance Ohms (Ω)	Continuous Rating (W)	
SK BR	⑤	⑥	/	⑦
⑤ Model Type	Input Voltage	Drive Rating	⑥ Resistance Ohms	⑦ Continuous Rating
4: Footprint (SK 500E) (SK 505E) (SK 510E) (SK 511E)	115/230V	0.25 - 0.37 kW	240	100
		0.55 - 0.75 kW	150	100
		1.1 - 2.2 kW	75	200
		3.0 - 4.0 kW	35	400
5: Chassis (SK 520E) (SK 530E) (SK 540E)	460V	0.55 - 0.75 kW	400	100
		1.1 - 2.2 kW	210	200
		3.0 - 4.0 kW	100	400
		5.5 - 7.5 kW	60	600
2: Chassis (SK 515E) (SK 535E) (SK 545E)	230V	3.0 - 4.0 kW	35	400
		5.5 - 7.5 kW	22	600
		11.0 kW	12	1500
		15.0 - 18.5 kW	9	2200
	460V	3.0 - 4.0 kW	100	400
		5.5 - 7.5 kW	60	600
		11.0 - 15.0 kW	30	1500
		18.5 - 22.0 kW	22	2200
		30.0 - 37.0 kW	12	4000
		45.0 - 55.0 kW	8	6000
		75.0 - 90.0 kW	6	7500

* Please Refer to the Rating and Voltage Matrix to ensure the desired Series is available in the selected kW and Input Voltage Ratings that you have selected.

* External 24V supply required on select ratings. Refer to the Rating and Voltage Matrix for more detail.

SK 500E Family Selection Guide



Programmer / Operator Selection (recommended)	
SK	Module Type
SK	<input type="text"/>
ⓐ Programmer / Operator Type	
CSX-3H - Handheld Simple Box (LED Display)	
PAR-3H - Handheld Parameter Box (LCD English Display)	
CSX 3E - Panel Mounted Simple Box (LED Display)	
PAR-3E - Panel Mounted Parameter Box (LCD English Display)	
CSX-0 - Simple Programmer and Display Mounted on top of SK500E	
RJ12-SUB/D - PC Cable for NORDCON Software	

Footprint Line Filter (if required)			
SK	Model Type	Continuous Amps	
SK	<input type="text"/>	480 / <input type="text"/>	F
ⓐ Model Type	Input Voltage	Drive Rating	ⓐ Continuous Amps
NHD: (SK 500E) (SK 505E) (SK 510E) (SK 511E) (SK 520E) (SK 530E) (SK 540E)	230V	0.25 - 0.75 kW	6 (5.5)
		1.1 - 2.2 kW	10 (9.5)
		3.0 - 4.0 kW	16
	460V	0.55 - 0.75 kW	3 (2.3)
		1.1 - 2.2 kW	6 (5.5)
		3.0 - 4.0 kW	10 (9.5)
LF2: (SK 515E) (SK 535E) (SK 545E)	230V	5.5 - 7.5 kW	16
		5.5 - 7.5 kW	45
		11 kW	66
	460V	15 - 18.5 kW	105
		11 - 15 kW	45
		18.5 - 22 kW	66
		30 - 37 kW	105

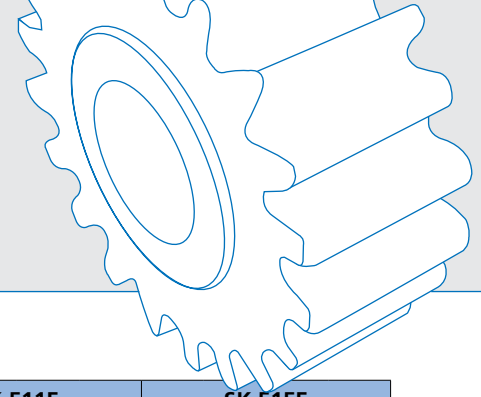
Chasis Line Filter (if required)			
SK	Model Type	Continuous Amps	
SK	<input type="text"/>	110 - 500 / <input type="text"/>	
ⓐ Model Type	Input Voltage	Drive Rating	ⓐ Continuous Amps
HLD: (For all Model Types)	230V	0.25 - 1.1 kW	8
		1.5 - 2.2 kW	16
		3.0 - 5.5 kW	30
		7.5 kW	42
		11 kW	75
		15 - 18.5 kW	100
	460V	0.55 - 2.2 kW	8
		3.0 - 5.5 kW	16
		7.5 - 11 kW	30
		15 kW	42
		18.5 kW	55
		22 kW	75
		30 - 37 kW	130
		45 - 55 kW	180
		75 - 90 kW	250

Transient Overvoltage Filter (if required)				
SK	Model Type	Phase & Voltage Rating	Continuous Amps	
SK	<input type="text"/>	- <input type="text"/>	- <input type="text"/>	
ⓐ Model Type	Input Voltage	ⓑ Phase & Voltage	Drive Rating	ⓐ Continuous Amps
CIF:	230V	323	0.25 - 3.0 kW	20
			4.0 - 11 kW	40
	460V	340	0.55 - 7.5 kW	30
			11 - 22 kW	60

Chokes (if required)					
SK	Model Type	Choke Voltage Rating	Continuous Amps		
SK	<input type="text"/>	- <input type="text"/>	/ <input type="text"/>	- C	
ⓐ Model Type	Phases	Input Voltage	ⓑ Choke Voltage	Drive Rating	ⓐ Continuous Amps
CI1: Input	1	230V	230	0.25 - 0.75 kW	8
				1.1 - 2.2 kW	20
				0.25 - 0.75 kW	6
				1.1 - 1.5 kW	11
				2.2 - 3.0 kW	20
				4.0 - 7.5 kW	40
	3	230V	480	11 - 15 kW	70
				18.5 kW	100
				0.55 - 2.2 kW	6
				3.0 - 4.0 kW	11
				5.5 - 7.5 kW	20
				11 - 15 kW	40
				18.5 - 30 kW	70
				37 - 45 kW	100
3	460V	480	55 - 75 kW	160	
			90 kW	280	

CO1: Output	3	230V	460	0.25 - 0.75 kW	4
				1.1 - 1.5 kW	9
				2.2 - 4.0 kW	17
				5.5 - 7.5 kW	33
				11 - 15 kW	60
				18.5 kW	90
	3	460V	460	0.55 - 1.5 kW	4
				2.2 - 4.0 kW	9
				5.5 - 7.5 kW	17
				11 - 15 kW	33
				18.5 - 30 kW	60
				37 - 45 kW	90
				55 - 75 kW	170
				90 kW	240

SK 500E Rating & Voltage Matrix



kW (hp)	SK 500E				SK 505E				SK 510E				SK 511E				SK 515E			
	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ
0.25 (0.33)	♦	♦	♦			●	●			♦	♦			♦	♦					
0.37 (0.50)	♦	♦	♦			●	●			♦	♦			♦	♦					
0.55 (0.75)	♦	♦	♦	♦		●	●	●		♦	♦	♦		♦	♦	♦				
0.75 (1.0)	♦	♦	♦	♦		●	●	●		♦	♦	♦		♦	♦	♦				
1.1 (1.5)		♦	♦	♦		●	●	●		♦	♦	♦		♦	♦	♦				
1.5 (2.0)		♦	♦	♦		●	●	●		♦	♦	♦		♦	♦	♦				
2.2 (3.0)		♦	♦	♦		●	●	●		♦	♦	♦		♦	♦	♦				
3.0 (4.0)			♦	♦			●	●			♦	♦			♦	♦				
4.0 (5.0)			♦	♦			●	●			♦	♦			♦	♦				
5.5 (7.5)				♦				●				♦				♦			⊙	
7.5 (10.0)				♦				●				♦				♦			⊙	
11.0 (15.0)																			⊙	⊙
15.0 (20.0)																			⊙	⊙
18.5 (25.0)																			⊙	⊙
22.0 (30.0)																				⊙
30.0 (40.0)																				⊙
37.0 (50.0)																				⊙
45.0 (60.0)																				⊙
55.0 (75.0)																				⊙
75.0 (100.0)																				⊙
90.0 (125.0)																				⊙

♦ 24VDC control voltage supply internal

● 24VDC control voltage required from external source

⊙ 24VDC control voltage supply internal or external

kW (hp)	SK 520E				SK 530E				SK 535E				SK 540E				SK 545E			
	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ	120V 1-φ	230V 1-φ	230V 3-φ	460V 3-φ
0.25 (0.33)	♦	♦	♦		♦	♦	♦			●	●		♦	♦	♦			●	●	
0.37 (0.50)	♦	♦	♦		♦	♦	♦			●	●		♦	♦	♦			●	●	
0.55 (0.75)	♦	♦	♦	♦	♦	♦	♦			●	●	●	♦	♦	♦	♦		●	●	●
0.75 (1.0)	♦	♦	♦	♦	♦	♦	♦			●	●	●	♦	♦	♦	♦		●	●	●
1.1 (1.5)		♦	♦	♦		♦	♦	♦		●	●	●	♦	♦	♦	♦		●	●	●
1.5 (2.0)		♦	♦	♦		♦	♦	♦		●	●	●	♦	♦	♦	♦		●	●	●
2.2 (3.0)		♦	♦	♦		♦	♦	♦		●	●	●	♦	♦	♦	♦		●	●	●
3.0 (4.0)			♦	♦			♦	♦			●	●			♦	♦			●	●
4.0 (5.0)			♦	♦			♦	♦			●	●			♦	♦			●	●
5.5 (7.5)				♦				♦			⊙	●				♦			⊙	●
7.5 (10.0)				♦				♦			⊙	●				♦			⊙	●
11.0 (15.0)											⊙	⊙							⊙	⊙
15.0 (20.0)											⊙	⊙							⊙	⊙
18.5 (25.0)											⊙	⊙							⊙	⊙
22.0 (30.0)												⊙								⊙
30.0 (40.0)												⊙								⊙
37.0 (50.0)												⊙								⊙
45.0 (60.0)												⊙								⊙
55.0 (75.0)												⊙								⊙
75.0 (100.0)												⊙								⊙
90.0 (125.0)												⊙								⊙

♦ 24VDC control voltage supply internal

● 24VDC control voltage required from external source

⊙ 24VDC control voltage supply internal or external