

Velkommen til Siemens Webinar: Sizer for drives – eksempel Transportbånd

SIEMENS

- Velkommen vi begynner ca : «11.03»

- Vi tar opptak av presentasjonen (kun selve presentasjonen).
Blir delt senere



- Full-skjerm:



Fullskjermmodus

- Vi tar gjerne spørsmål i chatten og vi går gjennom disse til slutt.



Lars.Stenmark@Siemens.com
Motion Control

3

3

3

3

3

3

3

Agenda

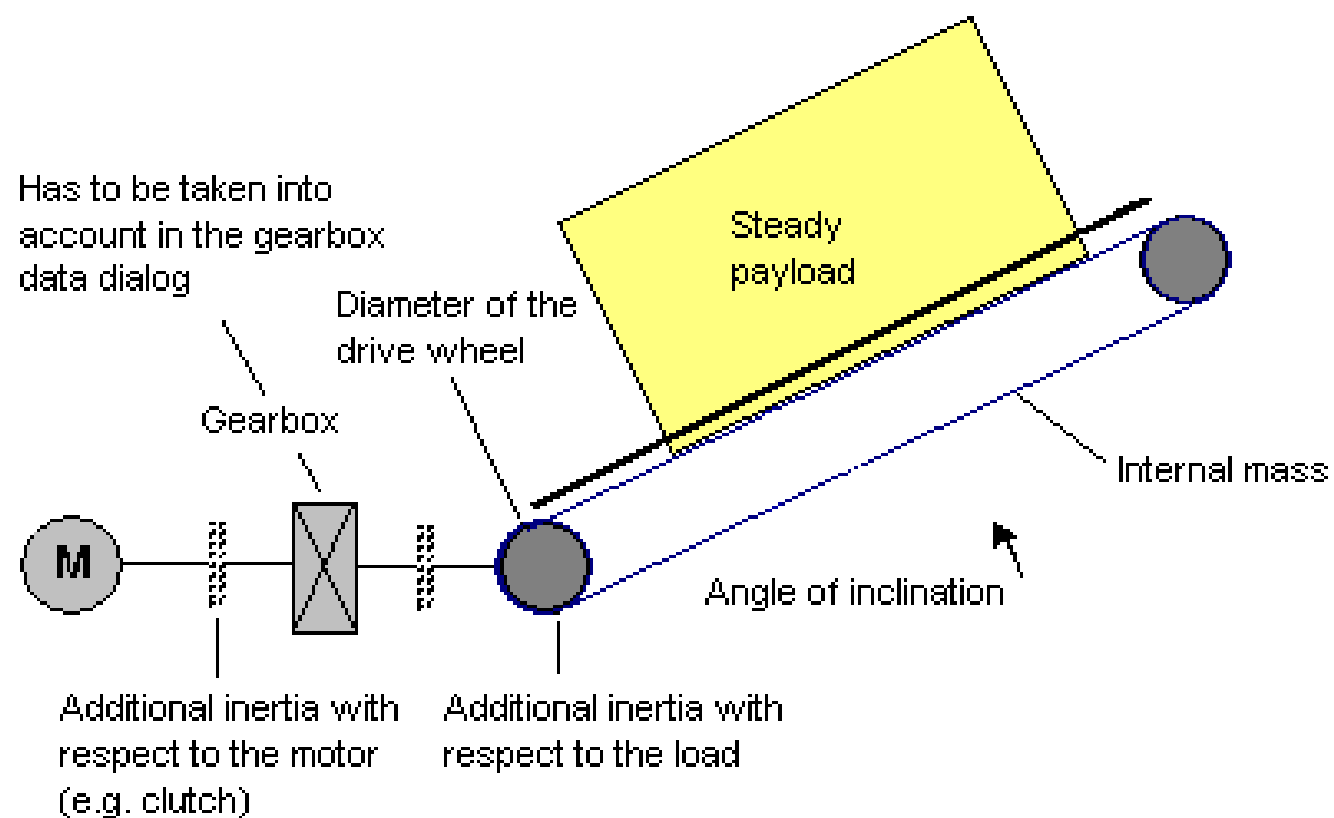


Sizer - Mekanisk model av transportbånd – drives.

Gjennomgang av demo av mekanisk profil for kuleskrue og dimensjonering av servomotorer.

Sizer er gratis www.siemens.com/sizer

Transportbånd



Hvorfor?

Hvorfor?

Fra roterende bevægelse

-> til lineær bevægelse

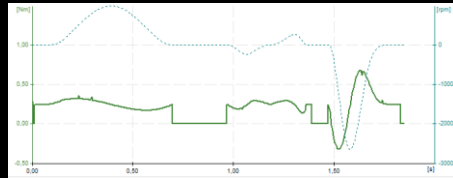
Design og komponentvalg

Transportbånd->Sizer->24/7

Lit
praktisk

Dagens Sizer ☺

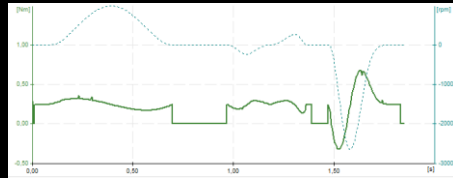
Kjappeste vei til best egnede komponenter I en tidlig designfase!



Mekaniske data
(Dynamikk) 1

Komponentliste

Kjappeste vei til best egnede komponenter I en tidlig designfase!

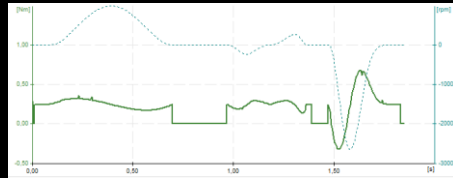


Mekaniske data
(Dynamikk) 1

Komponentliste

Kjappeste vei til designfrys ?

Kjappeste vei til best egnede komponenter I en tidlig designfase!

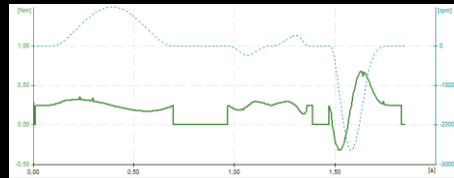


Mekaniske data
(Dynamikk) 1

?

Komponentliste

Kjappeste vei til best egnede komponenter i en tidlig designfase!

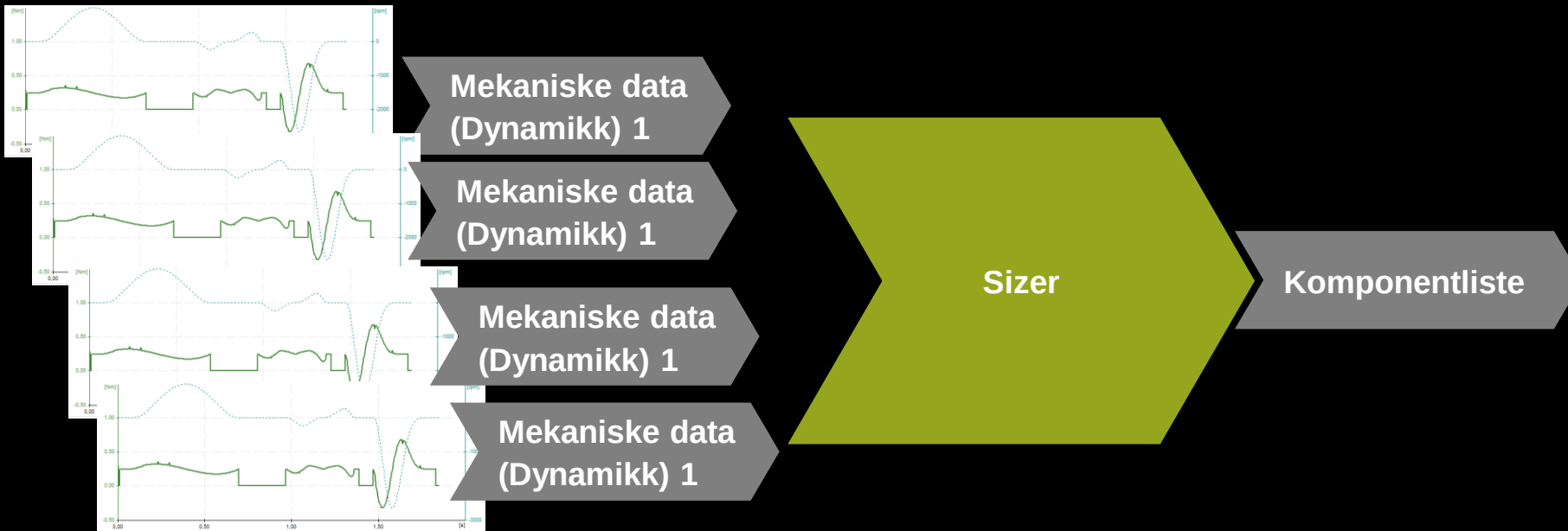


Mekaniske data
(Dynamikk) 1

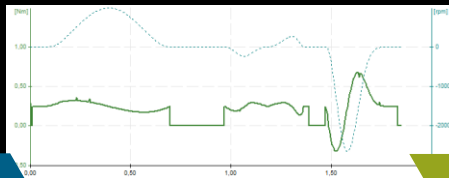
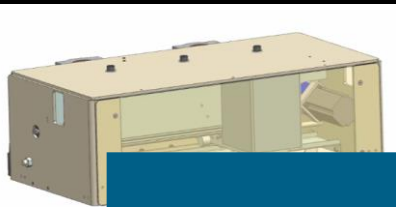
SIZER

Komponentliste

Kjappeste vei til best egnede komponenter I en tidlig designfase!



Sizer (Henter in dynamisk profil MDIX)

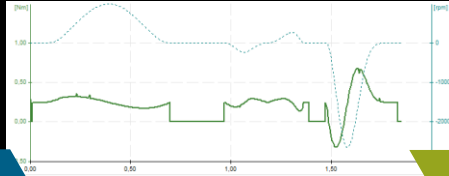
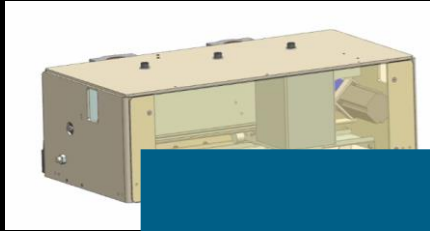


info om applikasjon
og kuleskrue.

Mekaniske data
(Dynamikk) 1

Sizer

Komponentliste



Motor wizard 371/176, Step 3

Basic motor type

Determine optimum motor according to energy requirement / frame size

Only display possible components

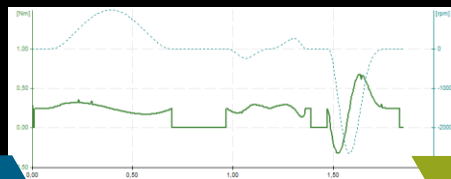
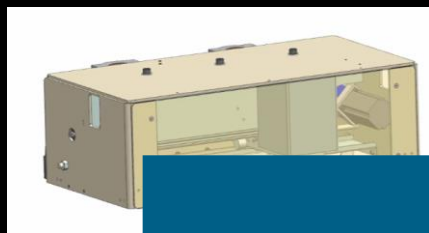
Basic type	Mounted gearbox	Rated	Rated	Rated	Rated
VPK7032-2A	LP070-M01	0.50 kW	0.50 Nm	1.30 A	6000.00 rpm
VPK7032-2A	LP070-M01	0.63 kW	1.00 Nm	1.30 A	6000.00 rpm
VPK7032-2A	LP080-M01	0.38 kW	0.50 Nm	1.40 A	6000.00 rpm
VPK7032-2C	LP070-M01	0.57 kW	0.90 Nm	1.60 A	6000.00 rpm
VPK7042-2A	LP080-M01	0.69 kW	2.00 Nm	1.60 A	2000.00 rpm
VPK7042-2A	LP080-M01	0.69 kW	1.10 Nm	1.70 A	6000.00 rpm
VPK7042-2AF	LP080-M01	0.62 kW	2.60 Nm	1.90 A	2000.00 rpm
VPK7042-2A	LP080-M01	0.94 kW	1.90 Nm	2.40 A	6000.00 rpm
VPK7042-2B	LP080-M01	0.94 kW	1.90 Nm	2.50 A	6000.00 rpm
VPK7042-2A	LP120-M01	1.50 kW	7.00 Nm	2.50 A	2000.00 rpm
VPK7060-2A	LP120-M01	1.11 kW	5.30 Nm	2.90 A	2000.00 rpm
VPK7042-2C	LP080-M01	1.23 kW	2.60 Nm	3.30 A	4500.00 rpm
VPK7042-2A	LP120-M01	1.41 kW	3.00 Nm	3.30 A	4500.00 rpm
VPK7044-2CF	LP080-M01	1.16 kW	3.70 Nm	3.40 A	3000.00 rpm
VPK7042-2C	LP080-M01	1.26 kW	2.00 Nm	3.50 A	6000.00 rpm
VPK7060-2A	LP100-M01	1.41 kW	3.00 Nm	3.60 A	4500.00 rpm
VPK7060-2AF	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
VPK7060-2BF	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
VPK7063-2B	LP120-M01	1.41 kW	3.00 Nm	3.70 A	4500.00 rpm

Digital Tvilling?
Dynamisk modell!
NX MCD

Mekaniske data
(Dynamikk) 1 **MDIX**

Sizer

Komponenter dimensjoneres i forhold til lastdata



Motor wizard 371/176, Step 5

Basic motor type

Determine optimum motor according to energy requirement / frame size

Only include selectable components

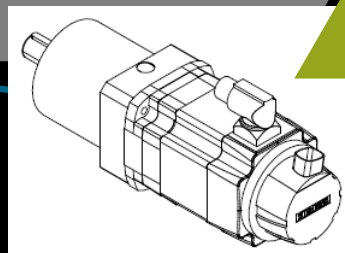
Basic type	Mounted gearbox	Rated	Rated	Rated	Rated
VPK7032-2A	LP070-M01	0.50 kW	0.50 Nm	1.30 A	6000.00 rpm
VPK7032-2A	LP070-M01	0.63 kW	1.00 Nm	1.30 A	6000.00 rpm
VPK7032-2A	LP080-M01	0.38 kW	0.50 Nm	1.40 A	6000.00 rpm
VPK7032-2A	LP070-M01	0.57 kW	0.90 Nm	1.60 A	6000.00 rpm
VPK7042-2A	LP080-M01	0.60 kW	2.00 Nm	1.60 A	2000.00 rpm
VPK7042-2A	LP080-M01	0.60 kW	1.10 Nm	1.70 A	6000.00 rpm
VPK7042-2A	LP080-M01	0.62 kW	2.60 Nm	1.90 A	2000.00 rpm
VPK7042-2A	LP080-M01	0.94 kW	1.50 Nm	2.40 A	6000.00 rpm
VPK7042-2A	LP080-M01	0.94 kW	1.50 Nm	2.50 A	6000.00 rpm
VPK7042-2A	LP120-M01	1.50 kW	7.00 Nm	2.50 A	2000.00 rpm
VPK7060-2A	LP120-M01	1.11 kW	5.30 Nm	2.90 A	2000.00 rpm
VPK7042-2A	LP080-M01	1.23 kW	2.60 Nm	3.30 A	4500.00 rpm
VPK7042-2A	LP120-M01	1.41 kW	3.00 Nm	3.30 A	4500.00 rpm
VPK7044-4CF	LP080-M01	1.16 kW	3.70 Nm	3.40 A	3000.00 rpm
VPK7042-2A	LP080-M01	1.26 kW	2.00 Nm	3.50 A	6000.00 rpm
VPK7060-2A	LP100-M01	1.41 kW	3.00 Nm	3.60 A	4500.00 rpm
VPK7060-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
VPK7060-3HF	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
VPK7063-2A	LP120-M01	1.41 kW	3.00 Nm	3.70 A	4500.00 rpm

Digital Tvilling?
Dynamisk modell!
NX MCD

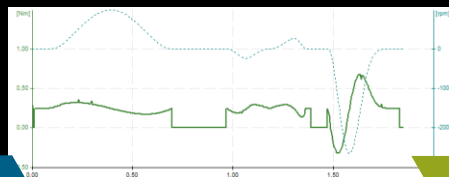
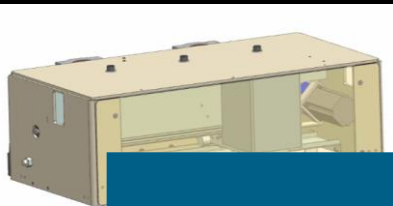
Mekaniske data

Eller via **MDIX**

Sizer



Komponenter sjekkes for plass, nye tregghetsmomenter, vekt og gir utveksling når motor er dimensjonert.



Motor wizard 371/176, Step 3

Basic motor type

Determine optimum motor according to energy requirement / frame size

Only display possible components

Basic type	Mounted gearbox	Rated	Rated	Rated	Rated
1FK7032-2A	LP070-M01	0.50 kW	0.50 Nm	1.30 A	6000.00 rpm
1FK7032-2A	LP070-M01	0.63 kW	1.00 Nm	1.30 A	6000.00 rpm
1FK7032-2A	LP080-M01	0.38 kW	0.60 Nm	1.40 A	6000.00 rpm
1FK7032-2A	LP070-M01	0.57 kW	0.90 Nm	1.60 A	6000.00 rpm
1FK7042-2A	LP080-M01	0.60 kW	2.00 Nm	1.60 A	2000.00 rpm
1FK7042-2A	LP080-M01	0.69 kW	1.10 Nm	1.70 A	6000.00 rpm
1FK7042-2A	LP080-M01	0.82 kW	2.60 Nm	1.90 A	2000.00 rpm
1FK7042-2A	LP080-M01	0.94 kW	1.90 Nm	2.40 A	6000.00 rpm
1FK7042-2A	LP080-M01	0.94 kW	1.90 Nm	2.50 A	6000.00 rpm
1FK7042-2A	LP120-M01	1.50 kW	7.00 Nm	2.50 A	2000.00 rpm
1FK7060-2A	LP120-M01	1.11 kW	5.30 Nm	2.90 A	2000.00 rpm
1FK7042-2A	LP080-M01	1.23 kW	2.60 Nm	3.30 A	4500.00 rpm
1FK7042-2A	LP120-M01	1.41 kW	3.00 Nm	3.30 A	4500.00 rpm
1FK7044-2A	LP080-M01	1.16 kW	3.70 Nm	3.40 A	3000.00 rpm
1FK7044-2A	LP080-M01	1.26 kW	2.00 Nm	3.50 A	6000.00 rpm
1FK7060-2A	LP120-M01	1.41 kW	3.00 Nm	3.60 A	4500.00 rpm
1FK7060-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
1FK7060-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
1FK7063-2A	LP120-M01	1.41 kW	3.00 Nm	3.70 A	4500.00 rpm

6SL3040-1MA01-0AA0	1
6SL3054-0FB10-1BA0	1
6SL3060-4AD00-0AA0	1
6EP1333-3BA10	1
6SL3130-6AE15-0AB1	1
6SL3000-0CE15-0AA0	1
6SL3120-1TE13-0AD0	1
6FX8002-SCS06-1BA0	1
1FK7042-2AC71-1QG0-Z V40	1

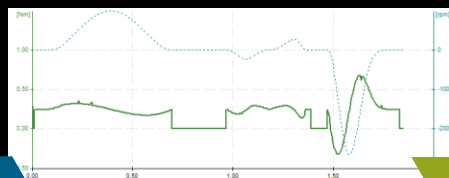
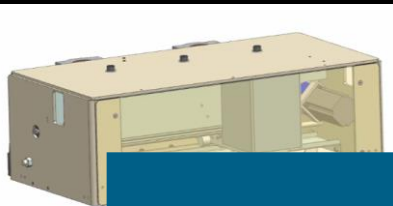
Digital Tvilling?
Dynamisk modell!
NX MCD

Mekaniske data
(Dynamikk) 1 **MDIX**

Sizer

Komponentliste

Første komponentliste vurderes og man er potensielt ett hakk nærmere designfrys.



Motor wizard 371/136, Step 3

Basic motor type

Determine optimum motor according to energy requirement / frame size

Only display possible components

Basic type	Mounted gearbox	Rated	Rated	Rated	Rated
1FK7032-2A	LP070-M01	0.50 kW	0.80 Nm	1.30 A	6000.00 rpm
1FK7032-2A	LP070-M01	0.63 kW	1.00 Nm	1.30 A	6000.00 rpm
1FK7032-2A	LP080-M01	0.38 kW	0.60 Nm	1.40 A	6000.00 rpm
1FK7032-2C	LP070-M01	0.57 kW	0.80 Nm	1.60 A	6000.00 rpm
1FK7042-2A	LP080-M01	0.60 kW	2.00 Nm	1.60 A	2000.00 rpm
1FK7042-2A	LP080-M01	0.60 kW	1.10 Nm	1.70 A	6000.00 rpm
1FK7042-2AF	LP080-M01	0.62 kW	2.60 Nm	1.90 A	2000.00 rpm
1FK7042-2A	LP080-M01	0.94 kW	1.90 Nm	2.40 A	6000.00 rpm
1FK7042-2B	LP080-M01	0.94 kW	1.90 Nm	2.50 A	6000.00 rpm
1FK7042-2A	LP120-M01	1.50 kW	7.00 Nm	2.90 A	2000.00 rpm
1FK7060-2A	LP120-M01	1.11 kW	5.30 Nm	2.90 A	2000.00 rpm
1FK7042-2C	LP080-M01	1.23 kW	2.60 Nm	3.30 A	4500.00 rpm
1FK7042-2A	LP120-M01	1.41 kW	3.00 Nm	3.30 A	4500.00 rpm
1FK7044-4CF	LP080-M01	1.16 kW	3.70 Nm	3.40 A	3000.00 rpm
1FK7042-2C	LP080-M01	1.26 kW	2.00 Nm	3.50 A	6000.00 rpm
1FK7060-2A	LP105-M01	1.41 kW	3.00 Nm	3.60 A	4500.00 rpm
1FK7060-2AF	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
1FK7060-2BF	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000.00 rpm
1FK7063-2B	LP120-M01	1.41 kW	3.00 Nm	3.70 A	4500.00 rpm

6SL3040-1MA01-0AA0	1
6SL3054-0FB10-1BA0	1
6SL3060-4AD00-0AA0	1
6EP1333-3BA10	1
6SL3130-6AE15-0AB1	1
6SL3000-0CE15-0AA0	1
6SL3120-1TE13-0AD0	1
6FX8002-SCS06-1BA0	1
1FK7042-2AC71-1QG0-Z V40	1

Digital Tvilling?
Dynamisk modell!
NX MCD

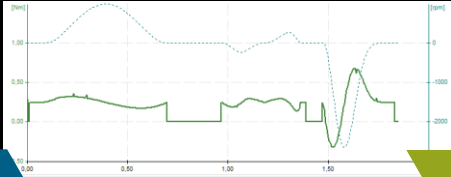
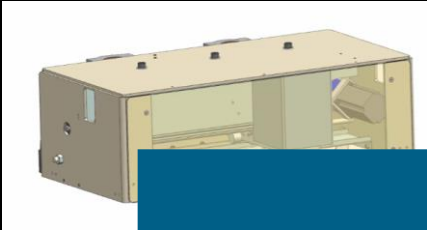
Mekaniske data
(Dynamikk) 1 **MDIX**

Sizer

Komponentliste

24/7

Sizer (Henter in dynamisk profil MDIX)



Motor wizard 371/106 Step 5

Basic motor type

Determine optimum motor according to energy requirement / frame size

Only include selectable components

Basic type	Mounted gearbox	Rated	Rated	Rated	Rated
1FK7032-2A	LP070-M01	0.50 kW	0.50 Nm	1.30 A	6000 1000
1FK7032-2A	LP070-M01	0.63 kW	0.63 Nm	1.30 A	6000 1000
1FK7032-2A	LP080-M01	0.38 kW	0.60 Nm	1.40 A	6000 1000
1FK7032-2A	LP070-M01	0.57 kW	0.90 Nm	1.60 A	6000 1000
1FK7042-2A	LP080-M01	0.60 kW	2.00 Nm	1.60 A	2000 1000
1FK7042-2A	LP080-M01	0.69 kW	1.10 Nm	1.70 A	6000 1000
1FK7042-2A	LP080-M01	0.82 kW	2.60 Nm	1.90 A	2000 1000
1FK7042-2A	LP080-M01	0.94 kW	1.50 Nm	2.40 A	6000 1000
1FK7042-2A	LP080-M01	0.94 kW	1.50 Nm	2.50 A	6000 1000
1FK7042-2A	LP120-M01	1.50 kW	7.00 Nm	2.50 A	2000 1000
1FK7060-2A	LP120-M01	1.11 kW	5.30 Nm	2.90 A	2000 1000
1FK7042-2A	LP080-M01	1.23 kW	2.60 Nm	3.30 A	4500 1000
1FK7042-2A	LP120-M01	1.41 kW	3.00 Nm	3.30 A	4500 1000
1FK7044-2A	LP080-M01	1.16 kW	3.70 Nm	3.40 A	3000 1000
1FK7044-2A	LP080-M01	1.26 kW	2.00 Nm	3.50 A	6000 1000
1FK7060-2A	LP120-M01	1.41 kW	3.00 Nm	3.60 A	4500 1000
1FK7060-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000 1000
1FK7060-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000 1000
1FK7063-2A	LP120-M01	1.41 kW	3.00 Nm	3.70 A	4500 1000

6SL3040-1MA01-0AA0	1
6SL3054-0FB10-1BA0	1
6SL3060-4AD00-0AA0	1
6EP1333-3BA10	1
6SL3130-6AE15-0AB1	1
6SL3000-0CE15-0AA0	1
6SL3120-1TE13-0AD0	1
6FX8002-SCS06-1BA0	1
1FK7042-2AC71-1QG0-Z V40	1

Digital Tvilling?
Dynamisk modell!
NX MCD

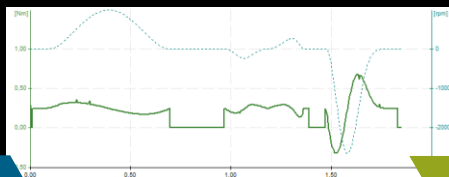
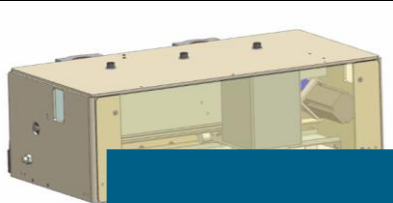
Mekaniske data
(Dynamikk) 1 **MDIX**

Sizer

Komponentliste

24/7

Kostnader sjekkes.
evt. Ny mekanisk runde



Motor wizard 371/136, Step 5

Basic motor type

Determine optimum motor according to energy requirement / frame size

Only include selectable components

Basic type	Mounted gearbox	Rated	Rated	Rated	Rated
1FK7032-2A	LP070-M01	0.50 kW	0.50 Nm	1.30 A	6000 RPM
1FK7032-2A	LP070-M01	0.63 kW	0.63 Nm	1.50 A	6000 RPM
1FK7032-2A	LP080-M01	0.38 kW	0.38 Nm	1.40 A	6000 RPM
1FK7032-2A	LP070-M01	0.57 kW	0.50 Nm	1.60 A	6000 RPM
1FK7042-2A	LP080-M01	0.60 kW	2.00 Nm	1.60 A	2000 RPM
1FK7042-2A	LP080-M01	0.69 kW	1.10 Nm	1.70 A	6000 RPM
1FK7042-2A	LP080-M01	0.82 kW	2.60 Nm	1.90 A	2000 RPM
1FK7042-2A	LP080-M01	0.94 kW	1.50 Nm	2.40 A	6000 RPM
1FK7042-2A	LP120-M01	1.50 kW	7.00 Nm	2.50 A	2000 RPM
1FK7060-2A	LP120-M01	1.11 kW	5.30 Nm	2.90 A	2000 RPM
1FK7042-2A	LP080-M01	1.23 kW	2.60 Nm	3.30 A	4500 RPM
1FK7042-2A	LP120-M01	1.41 kW	3.00 Nm	3.30 A	4500 RPM
1FK7044-2A	LP080-M01	1.16 kW	3.70 Nm	3.40 A	3000 RPM
1FK7044-2A	LP080-M01	1.26 kW	2.00 Nm	3.50 A	6000 RPM
1FK7062-2A	LP100-M01	1.41 kW	3.00 Nm	3.60 A	4500 RPM
1FK7062-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000 RPM
1FK7062-2A	LP120-M01	1.48 kW	4.70 Nm	3.70 A	3000 RPM
1FK7062-2A	LP120-M01	1.41 kW	3.00 Nm	3.70 A	4500 RPM

6SL3040-1MA01-0AA0	1
6SL3054-0FB10-1BA0	1
6SL3060-4AD00-0AA0	1
6EP1333-3BA10	1
6SL3130-6AE15-0AB1	1
6SL3000-0CE15-0AA0	1
6SL3120-1TE13-0AD0	1
6FX8002-SCS06-1BA0	1
1FK7042-2AC71-1QG0-Z V40	1

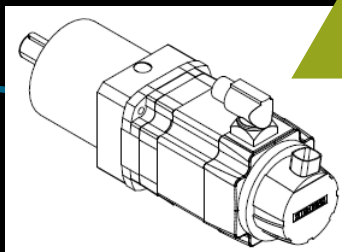
Digital Tvilling?
Dynamisk modell!
NX MCD

Mekaniske data
(Dynamikk) 1 **MDX**

Sizer

Komponentliste

24/7



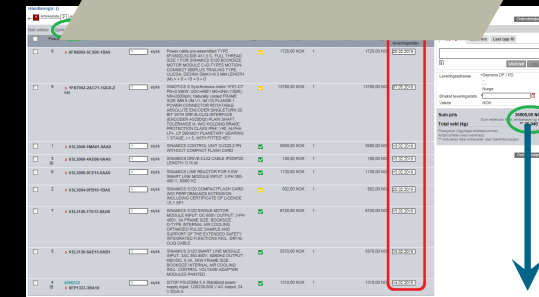
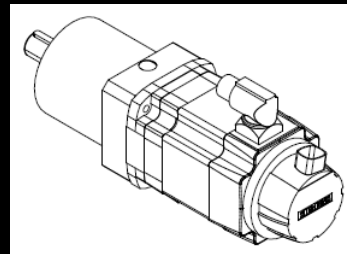
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1	6SL3040-1MA01-0AA0	1	PCU	1275.00	1275.00
2	6SL3054-0FB10-1BA0	1	PSU	1190.00	1190.00
3	6SL3060-4AD00-0AA0	1	PSU	1190.00	1190.00
4	6EP1333-3BA10	1	PSU	850.00	850.00
5	6SL3130-6AE15-0AB1	1	PSU	5075.00	5075.00
6	6SL3000-0CE15-0AA0	1	PSU	1190.00	1190.00
7	6SL3120-1TE13-0AD0	1	PSU	1190.00	1190.00
8	6FX8002-SCS06-1BA0	1	PSU	1190.00	1190.00
9	1FK7042-2AC71-1QG0-Z V40	1	Motor	1190.00	1190.00

Kostnader sjekkes.
evt. Ny mekanisk runde

6SL3040-1MA01-0AA0	1
6SL3054-0FB10-1BA0	1
6SL3060-4AD00-0AA0	1
6EP1333-3BA10	1
6SL3130-6AE15-0AB1	1
6SL3000-0CE15-0AA0	1
6SL3120-1TE13-0AD0	1
6FX8002-SCS06-1BA0	1
1FK7042-2AC71-1QG0-Z V40	1

Komponentliste

24/7



CxData + manueller
DT-konfigurator

www.siemens.com/DTconfigurator

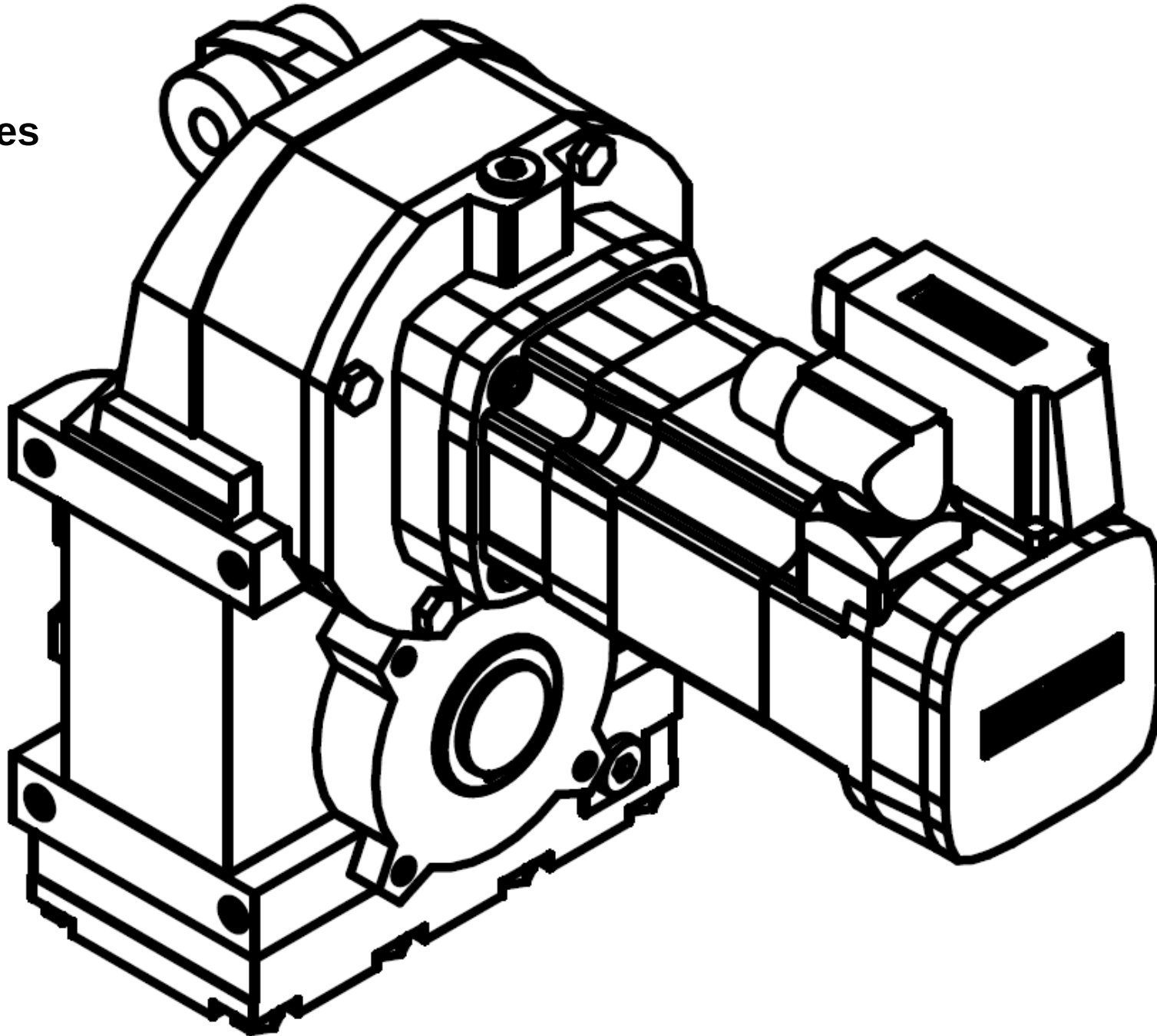
Sizer Live demo!

Last ned gratis

www.siemens.com/SIZER

1FG1 med
Parallelshaft ønskes
brukt for dagens
Sizer for drift av
transportbånd

SIEMENS
Ingenuity for life



*1FG1 med Parallelshaft

Planen er å se om man finner en egnet 1FG1 parallell shaft motor/gir kombo.

Fordeler med denne montert i M1 posisjon med torq-arm og hul aksling er at den er meget enkel og rimelig å montere. Man trer girkassen inn på akslingen til driftsvalsen, oljespeilet i girkassen vil da ligge lavt i forhold til simringer og motor og gir en fornuftig installasjon.

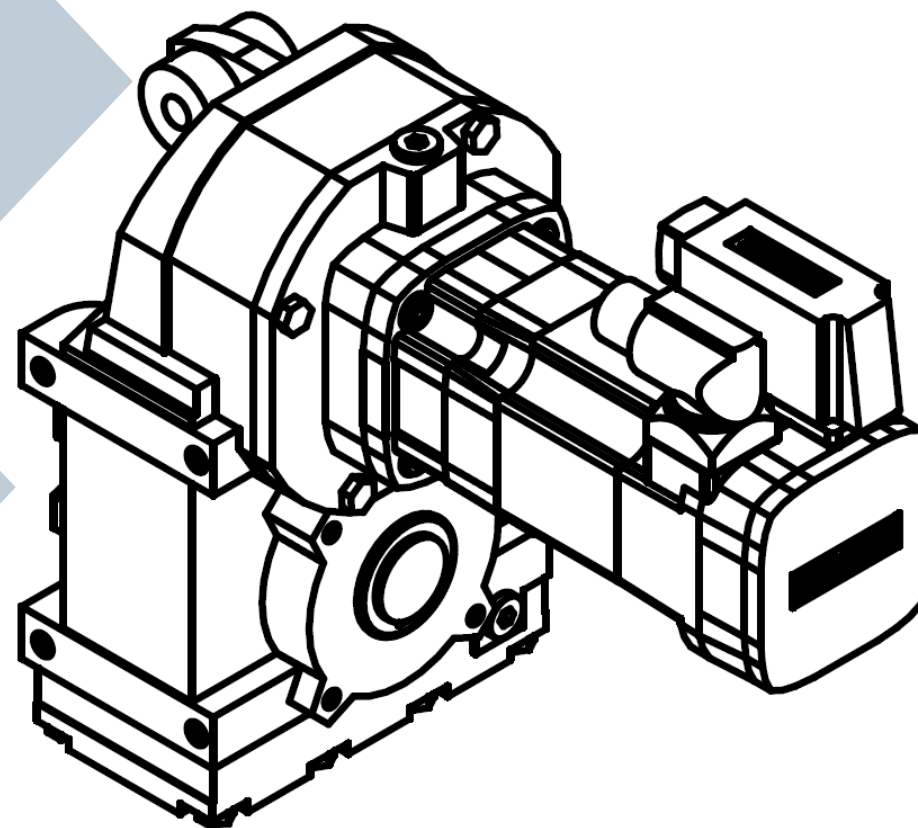
Montering blir enkel grunnet momentarmen. Girkassen flyter med på akslingen og eliminerer sjangsen for skjevmontering med påfølgende lagerstress/skader.

+

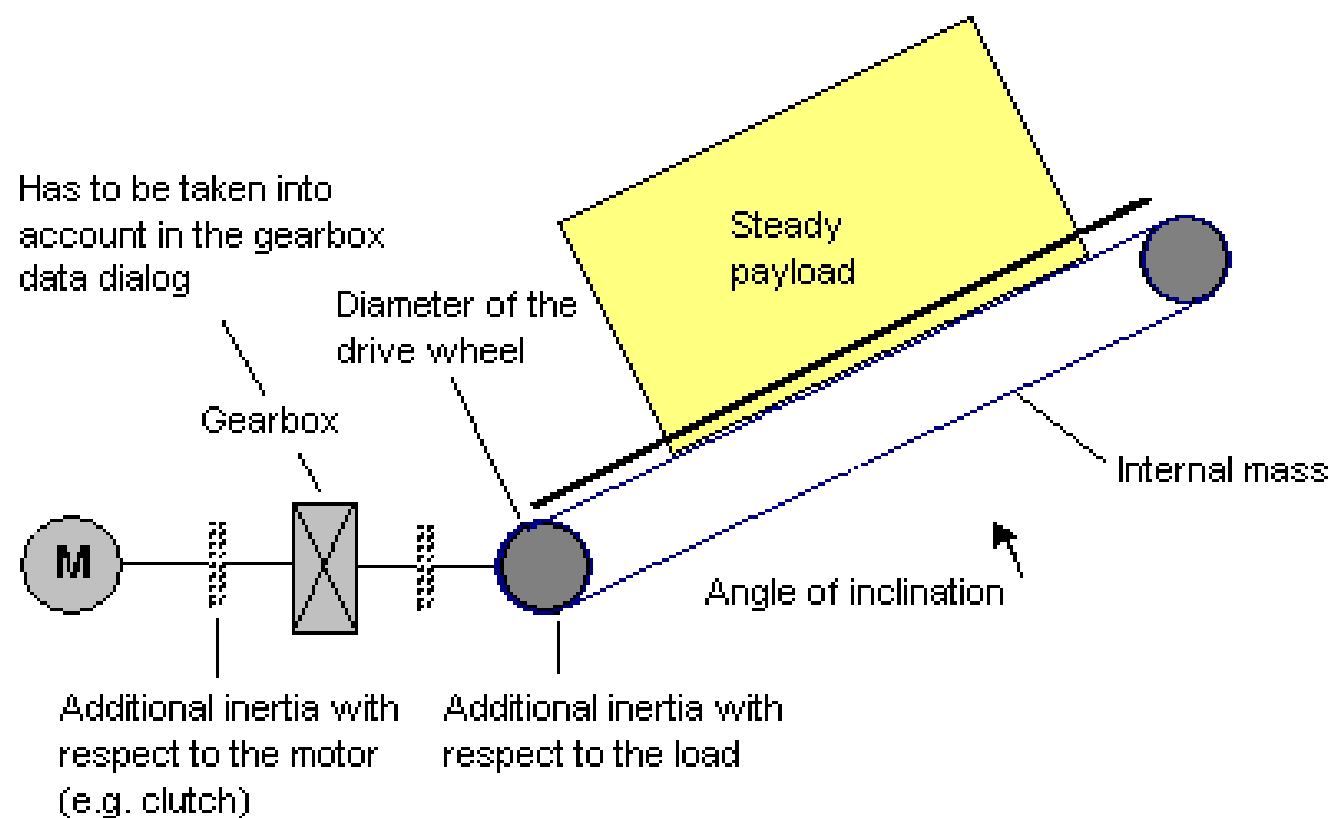
Praktisk, rimelig, enkelt å montere, enkel konstruksjon, lite maskinering, solid.

Momentarm

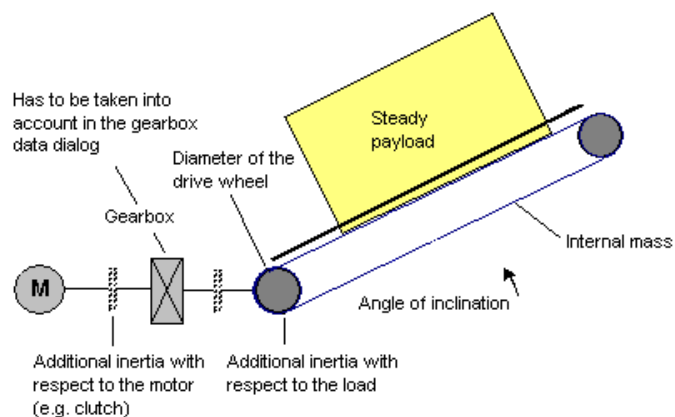
Hulaksling



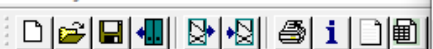
Vi parameteriserer først transportbåndet
i et mekanisk system



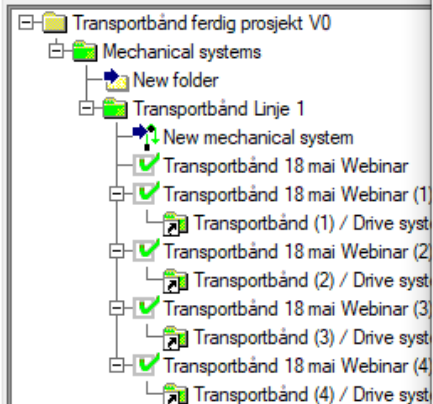
~~Mechanical system: Transportbånd 18 mai Webinar (1)~~
~~Type: Travel drive in converter operation~~



Name	Unit	Application values
Masses		
Steady payload	kg »	0,000
Internal mass	kg »	10,000
Counterweight	kg »	0,000
Weight compensation	N »	0,000
Moments of inertia		
Additional inertia in relation to the load	kg m ² »	0,289027
Additional inertia in relation to the motor	kg m ² »	0,000000
Mechanics		
Diameter of the drive wheel	mm »	200,000
Angle of inclination	deg »	10,0
Gantry structure (2 drives)		☐
– Share of moving load		
Friction		
Friction torque	Nm »	0,00
Efficiency of the mechanical system		0,900
Type of travel resistance		Specific coefficient of friction
– Specific coefficient of friction		0,0000
– Shaft diameter		
– Lever arm of the rolling friction (selection)		
– Lever arm of the rolling friction (input)		
– Coefficient of friction of bearing (selection)		
– Coefficient of friction of bearing (input)		
– Coefficient of friction of the track guide (selection)		
– Coefficient of friction of the track guide (input)		
– Friction force / weight		
Ratio of external/motor moment of inertia		
Black display up to		10,00
Yellow display up to		30,00
Beyond this dimensionable		☒



Partial view:



Mechanical system

Enter traversing profiles

Input of the traversing profiles ☒ as trapez./triangular curves ☐ as individual trav. sections

☒ Allow for friction by means of control at standstill

☐ Allow for mechanical limit values

☐ Allow for rounding

☐ Jerk limitation

☐ Use mechanical limit values as default values

☐ Rounding time

Recommendation for jerk

Set recommendation as limit value

Velocity

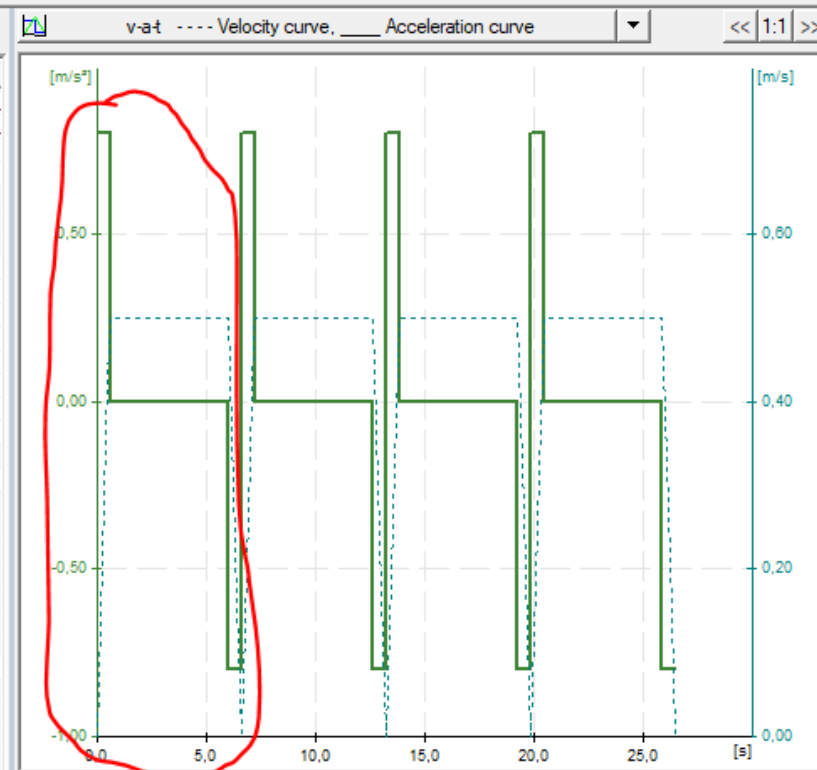
Acceleration

Jerk

Cycle: 26,50000 s

Rapid traverse estimation

		Section 1	Section 2	Section 3	Section 4
Entries		s, v, ab, av -> t	s, v, ab, ...	s, v, ab, ...	s, v, ab, ...
Direction		Forward, up	Forward, ...	Forward, ...	Forward, ...
Default values					
Traversing distance	m »	3,000000	3,000000	3,000000	3,000000
Travel time	s »				
Acceleration time	s »				
Deceleration time	s »				
Pause time	s »				
Velocity	m/s »	0,500	0,500	0,500	0,500
Acceleration	m/s ² »	0,80000	0,80000	0,80000	0,80000
Deceleration	m/s ² »	0,80000	0,80000	0,80000	0,80000
Load values					
Additional force	N »				
Additional mass	kg »	100,000	200,000	300,000	0,000
Additional only for constan...		☐	☐	☐	☐
Brake during pause		☐	☐	☐	☐
Attained values					
Max. velocity	m/s »	0,500	0,500	0,500	0,500
Max. acceleration	m/s ² »	0,80000	0,80000	0,80000	0,80000
Max. deceleration	m/s ² »	0,80000	0,80000	0,80000	0,80000
Travel time	s »	6,62500	6,62500	6,62500	6,62500
~ Acceleration	s »	0,62500	0,62500	0,62500	0,62500
~ Constant speed	s »	5,37500	5,37500	5,37500	5,37500
~ Deceleration	s »	0,62500	0,62500	0,62500	0,62500
Jerk limitation					
Max. accel. jerk	m/s ³ »				
Max. decel. jerk	m/s ³ »				
Max. acceleration	m/s ² »				
Max. deceleration	m/s ² »				



< Back

Next >

Finish

Cancel

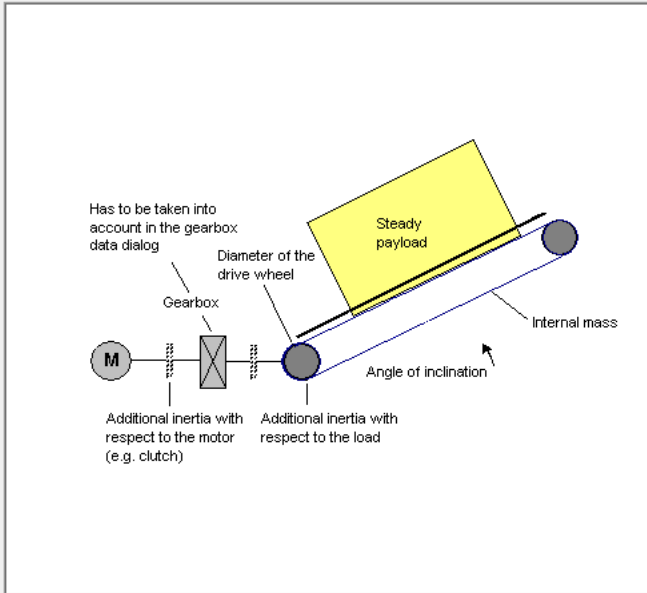
Help

Help

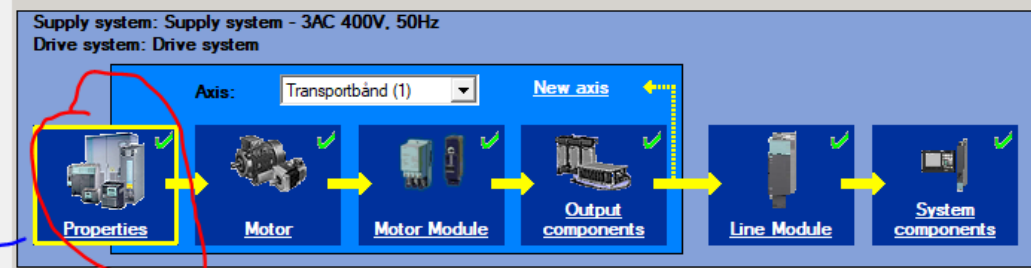
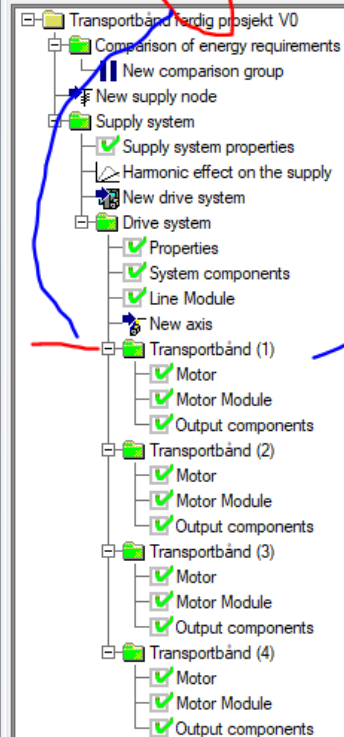
Close

Enter mechanical data

Mechanical system: Transportbånd 18 mai Webinar
Type: Travel drive in converter operation



Name	Unit	Application values
Masses		
Steady payload	kg »	0,000
Internal mass	kg »	10,000
Counterweight	kg »	0,000
Weight compensation	N »	0,000
Moments of inertia		
Additional inertia in relation to the load	kg m² »	0,289027
Additional inertia in relation to the motor	kg m² »	0,000000
Mechanics		
Diameter of the drive wheel	mm »	200,000
Angle of inclination	deg »	10,0
Gantry structure (2 drives)		☐
Friction		
Friction torque	Nm »	0,00
Efficiency of the mechanical system		0,900
Type of travel resistance		Specific coefficient of friction
- Specific coefficient of friction		0,0000
- Chain diameter	mm »	
- Lever arm of the rolling friction (selection)		
- Lever arm of the rolling friction (input)	mm »	
- Coefficient of friction of bearing (selection)		
- Coefficient of friction of bearing (input)		
- Coefficient of friction of the track guide (selection)		
- Coefficient of friction of the track guide (input)		
- External force / weight	N/A »	
Ratio of external/motor moment of inertia		
Black display up to		10,00
Yellow display up to		30,00
Beyond this dimensionable		☒



Properties

SINAMICS S DC/AC, Smart Line Module (unregulated DC li...

Drive system properties

Select drive system properties

Drive system

Drive system

In supply node

Supply system - 3AC 400V, 50Hz

 Filter (Standard)

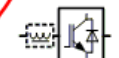
- Drive system -



Multi-axis converter



Basic Line Module



Smart Line Module



Active Line Module

Built-in unit version / distributed (S120M)

internal cooling

Axis

Designation: Transportband (1)

TLA/TLG/TPQ/TL...	SIMOTICS SD TLE5	SIMOTICS XP TMB1	IFT/IFK	STZUM
-------------------	------------------	------------------	---------	-------



1FG1



1FN



1FW



Third-party motor



1FE1

~~Load type~~

Description
1. Introduction
2. Background
3. Methodology
4. Results
5. Conclusion
6. References
7. Appendix
8. Index
9. Glossary
10. Summary
11. Abstract
12. Keywords
13. References
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33. Keywords
34. References
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83. References
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87. Summary
88. Abstract
89. Keywords
90. References
91. Appendix
92. Index
93. Glossary
94. Summary
95. Abstract
96. Keywords

Mechanical system
Simple motor selection

Free speed characteristic on the mechanical system
Use with rated data without load specification

Se

SINAMICS Safety Integrated Basic Functions

Mechanical system:

Travel drive, Transportband 18 mai Webinar (1) / T

Transportbånd ferdig prosjekt V0 - SIZER for Siemens Drives - [Workflow]

Project Edit Paste View Tools Window Help

Partial view:

Transportbånd ferdig prosjekt V0

- Comparison of energy requirements
- New comparison group
- New supply node
- Supply system
 - Supply system properties
 - Hammonic effect on the supply
 - New drive system
 - Drive system
 - Properties
 - System components
 - Line Module
 - New axis
 - Transportbånd (1)
 - Motor
 - Motor Module
 - Output components
 - Transportbånd (2)
 - Motor
 - Motor Module
 - Output components
 - Transportbånd (3)
 - Motor
 - Motor Module
 - Output components
 - Transportbånd (4)
 - Motor
 - Motor Module
 - Output components

Supply system: Supply system - 3AC 400V, 50Hz
Drive system: Drive system

Axis: Transportbånd (1) New axis

Properties Motor Motor Module Output components Line Module System components

Ambient conditions 1000 m, 40 °C, F/100K
Mechanical system Travel drive, Transportbånd 18 mai Webinar (1) / Transport...
Motor 1FG1301-5PC26-2DC2
Options No

Motor wizard 1FG1 Step 1

Gearbox data

	Additional gearbox 1	Additional gearbox 2	Mounted gearbox
Type	None	None	Parallel shaft ge...
Gear ratio input/output			
Gearbox moment of inertia	kg m ² »		
η Gearbox efficiency			
Mounting position			
d0 Diameter of driving wheel, input	mm »		
d1 Diameter of driving wheel, output	mm »		
b Width of driving wheels	mm »		
p Density of driving wheels (selection)			
p Density of driving wheels (input)	kg/dm ³ »		
m Mass of belt/chain	kg »		

Load cycle data

Power data

Basic type specifications

Basic motor type

Motor check

Press F1 to open Help display.

SIEMENS
Ingenuity for life

Legg merke til hastighet og moment her

Gearbox data

Load cycle data

The data in the table does not take any rounding into account.

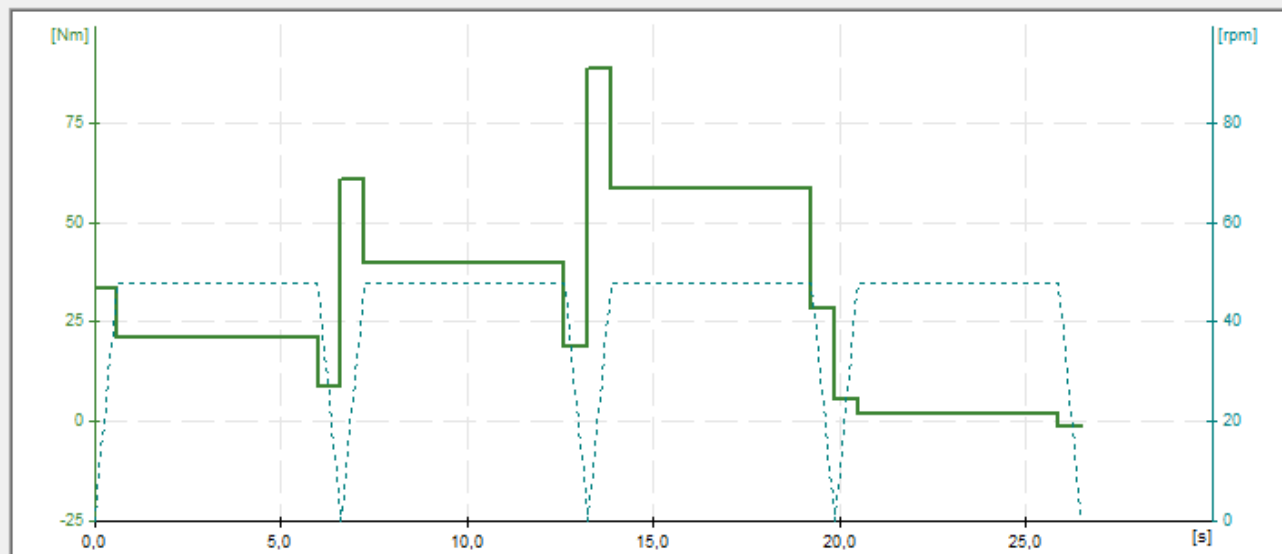
	Type	Duration [s]	n-end [rpm]	Startup torque [Nm]	End torque [Nm]	Holding brake
1		0,62500	47,75	33,16	33,16	No
2		5,37500	47,75	20,81	20,81	No
3		0,62500	0,00	8,47	8,47	No
4		0,62500	47,75	60,97	60,97	No
5		5,37500	47,75	39,73	39,73	No
6		0,62500	0,00	18,50	18,50	No
7		0,62500	47,75	88,78	88,78	No
8		5,37500	47,75	58,66	58,66	No
9		0,62500	0,00	28,53	28,53	No
10		0,62500	47,75	5,35	5,35	No
11		5,37500	47,75	1,89	1,89	No
12		0,62500	0,00	-1,27	-1,27	No

Power data

Basic type
specifications

Basic motor type

Motor check



— Load torque curve

---- Load speed curve

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Ingenuity for life

Her ser du last og
hastighetsprofilen motoren
og giret må håndtere

< Back

Next >

Accept

Cancel

Help

Power data

Load data in relation to the gearbox output shaft (without consideration of the motor and gearbox moment of inertia):

Peak values:

Max. required torque: 88,78 Nm

Max. required speed: 47,75 rpm

Mean values:

Effective torque: 55,15 Nm

Effective speed: 43,24 rpm

Safety options for the motor dimensioning:

Thermal utilization: %

Utilization of the max. possible torque: %

Safety options for the gearbox dimensioning:

Utilization of the constant torque: %

Utilization of the peak torque: %

Entries are valid for the shaft

	1st radial force	2nd radial force
Force [N]	0,00	0,00
Angle of attack [deg]	0,00	0,00
Distance to shaft shoulder [mm]	0	0

	1st axial force	2nd axial force
Force [N]	0,00	0,00
Angle of attack [deg]	0,00	0,00
Distance to shaft shoulder [mm]	0	0
Radial lever arm [mm]	0	0

< Back Next > Accept Cancel Help

Krav til applikasjonen gan føre til at man bør
Redusere tallene her.

(Temperatur,
økt levetid, eller annet,)

Da vi har planer om å velge en
girkasseløsning med hulaksling
som flyter på akslingen og momentet holdes
igjen med momentarm, velger vi ingenting her

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Ingenuity for life

Du må velge her.

Motor check

Motor: ✓ 1FG1301-5PC26-2DC2-Z D01 + N23 + K08

 Optimize traversing profiles

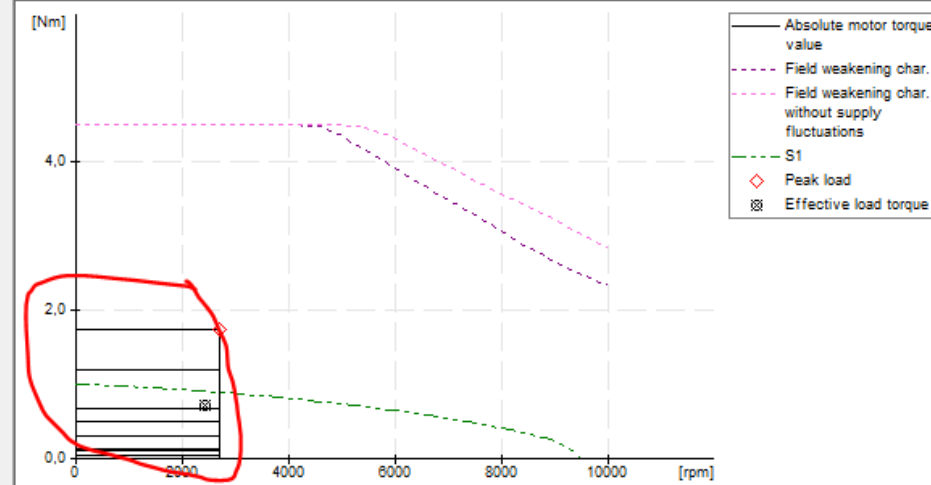
On the motor shaft:

Load data

Mean speed	2453,27 rpm
Effective load torque	0,74 Nm
Load current	1,11 A
Maximum current	2,66 A
Maximum speed	2708,82 rpm
Average electrical power	0,18 kW

Utilization

Thermal utilization	80,3 %
Utilization of the max. possible torque	38,9 %
External moment of inertia / motor moment of inertia	14,09
Load speed / rated speed	0,41



Motorsjekk OK!

On the gearbox output shaft:

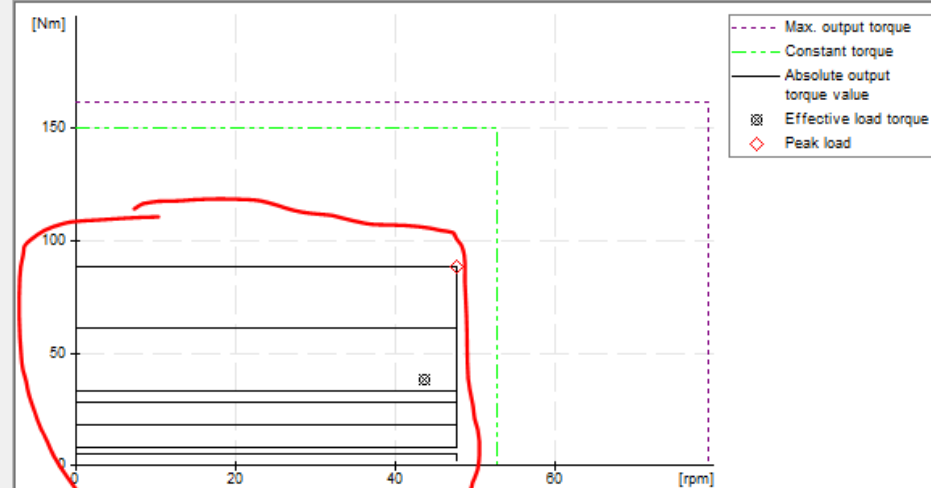
Load data

Mean speed	43,24 rpm
Effective load torque	55,15 Nm
Maximum speed	47,75 rpm
Maximum torque	88,78 Nm
Gear ratio	56,730

Utilization

Torque utilization	36,8 %
Utilization of the max. possible torque	54,8 %
Utilization of emergency stop torque	0,0 %

Display: Motoring



Girsjekk OK!

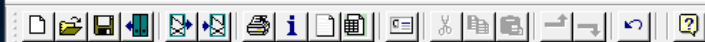
< Back

Next >

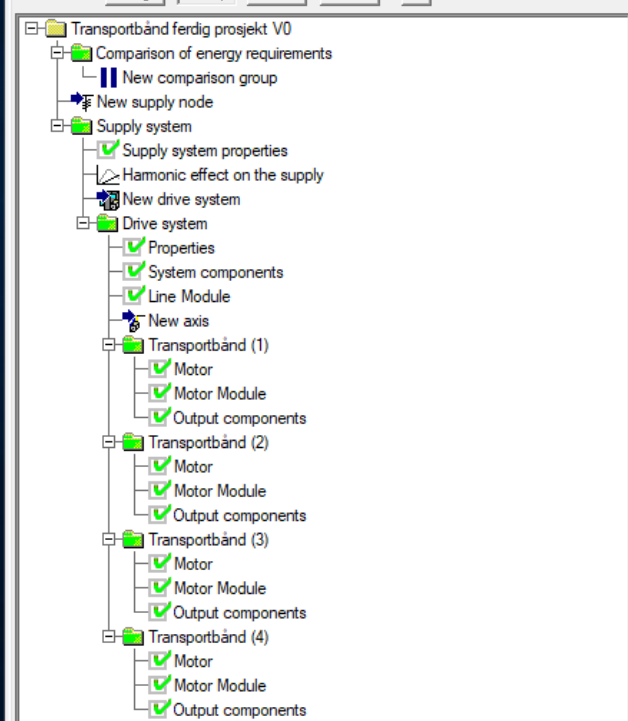
Finish

Cancel

Help

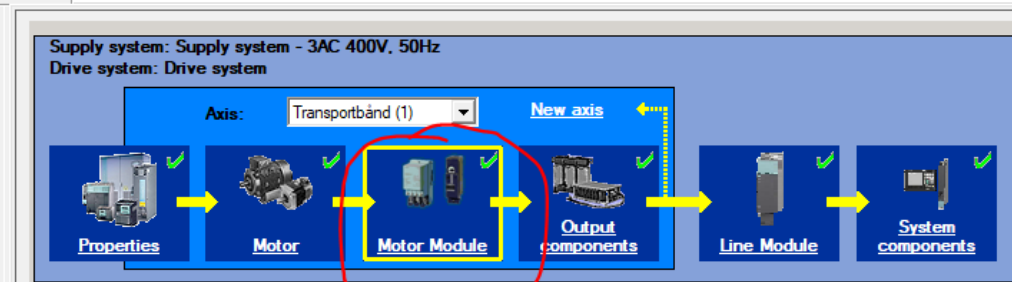


Partial view:



Project Results

Press F1 to open Help display.



Drive system

- Ambient conditions
- Motor Module
- Accessories

SINAMICS S DC/AC
40 °C, 1000 m
6SL3420-2TE11-7AA1
No

Motor Module

Select Motor Module

☒ Required continuous current: 1,11 A ≤ available current

☒ Required peak current: 2,66 A ≤ available peak current

☒ Pulse frequency: 4,00 kHz

Number connected in parallel: 1

☒ Avoid a reduction of the IGBT service life (for chassis modules only)

☒ Check of the varying load capability at low output frequencies (only for Chassis Modules)

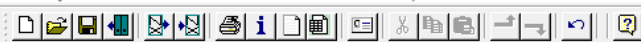
☒ Only display selectable components

Order designation	Type	Version	Rated current	Peak current	Available current	Available peak current	Pt
✓ 6SL3420-2TE11-7AA1	Double	Booksize compact	1 * 1,70 A	5,10 A	1,70 A	5,10 A	4,
✓ 6SL3120-1TE13-0AD0	Single	Booksize D-type	1 * 3,00 A	9,00 A	3,00 A	9,00 A	4,
✓ 6SL3120-2TE13-0AD0	Double	Booksize D-type	1 * 3,00 A	9,00 A	3,00 A	9,00 A	4,
✓ 6SL3420-1TE13-0AA1	Single	Booksize compact	1 * 3,00 A	9,00 A	3,00 A	9,00 A	4,
✓ 6SL3420-2TE13-0AA1	Double	Booksize compact	1 * 3,00 A	9,00 A	3,00 A	9,00 A	4,
✓ 6SL3120-1TE15-0AD0	Single	Booksize D-type	1 * 5,00 A	15,00 A	5,00 A	15,00 A	4,
✓ 6SL3120-2TE15-0AD0	Double	Booksize D-type	1 * 5,00 A	15,00 A	5,00 A	15,00 A	4,
✓ 6SL3420-1TE15-0AA1	Single	Booksize compact	1 * 5,00 A	15,00 A	5,00 A	15,00 A	4, ✓

When changing the Motor Module, an assigned Double Motor Module is also changed if possible, otherwise the connection is cancelled.

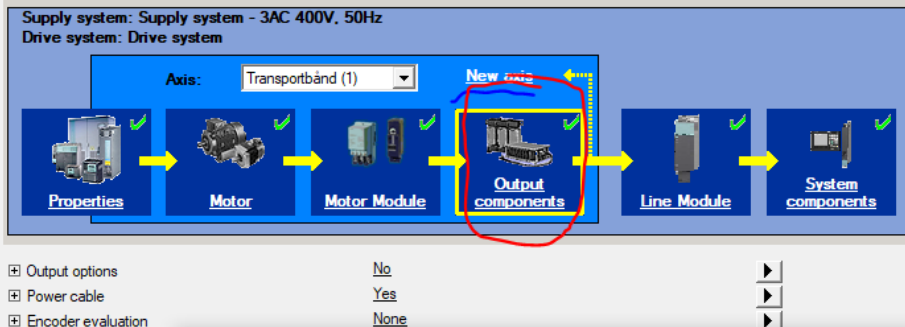
OK Double Motor Modules Info Cancel Help

MENS
nunity for life



Partial view:

- Transportbånd ferdig prosjekt V0
 - Comparison of energy requirements
 - New comparison group
 - New supply node
 - Supply system
 - Supply system properties
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 - Transportbånd (2)
 - Motor
 - Motor Module
 - Output components
 - Transportbånd (3)
 - Motor
 - Motor Module
 - Output components
 - Transportbånd (4)
 - Motor
 - Motor Module
 - Output components



Power cable

Select power cable

Motor

Rated current per Motor Module: 1,70 A
RMS current per Motor Module: 1,11 A

The minimum cable cross-section that is offered is matched to the determined "rms current" of the power unit / Motor Module with laying method C or single laying. Select a correspondingly larger cross-section for a higher current loading.

Ambient temp. [°C]	Cable type	Laying meth. C acc. to	Cross-section
40	MOTION-CONNECT 500 with brake cable, c	DIN EN 60204-1	1 * 4x1,5 mm² (15,20 A)

Connection	Length [m]	Drum [m]	Order designation
Basic cable	10,0		6FX5002-5DG10-1BA0
no extension			
no extension			

Total length: 10,00 m
Maximum permissible length: 50,00 m

Options for power connector
0 Mounting flange
0 High-frequency clamp

With cables connected in parallel, the quantity times the number of cables is taken into account.

External fan

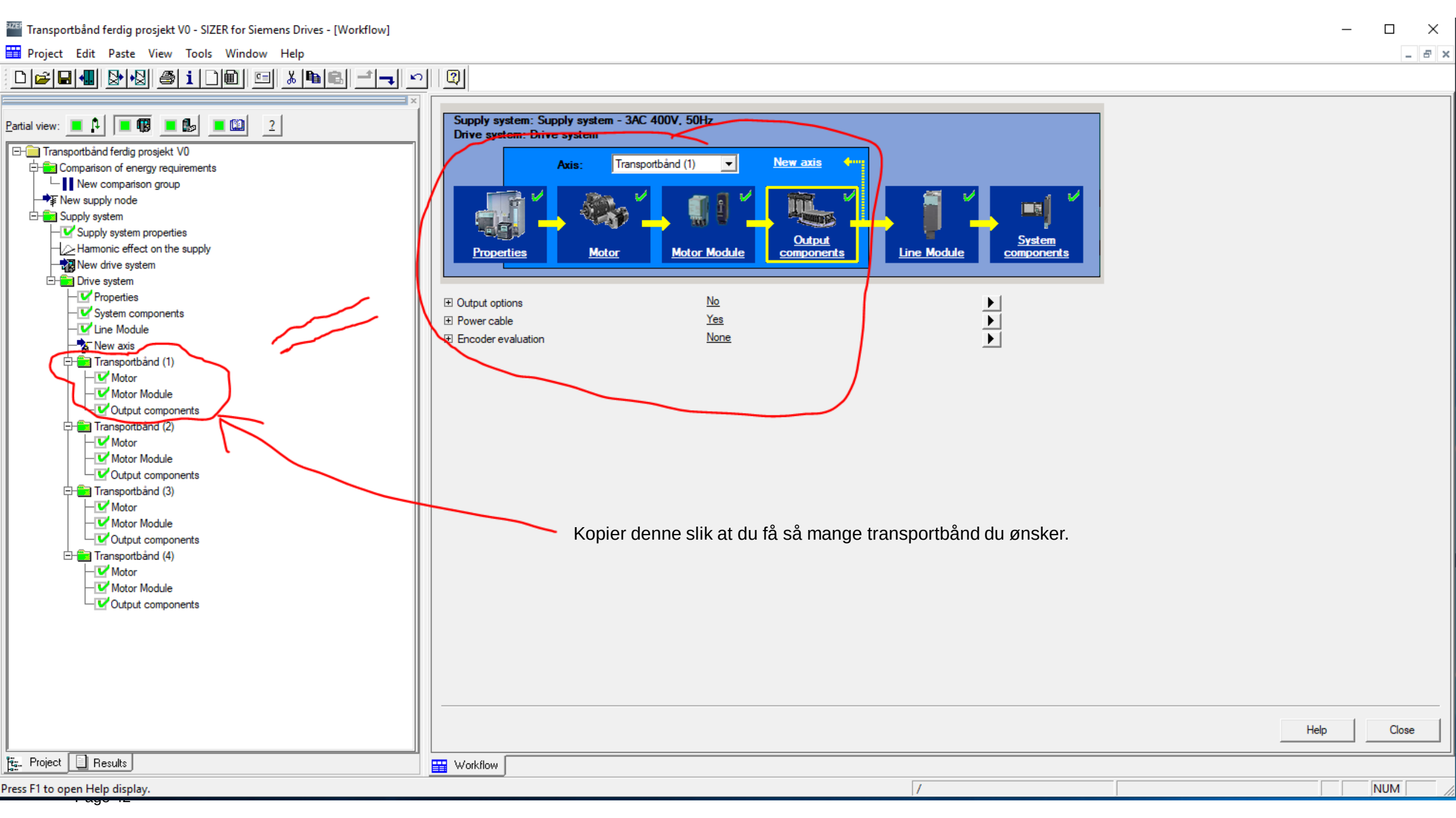
Cable type Cross-section

OK Cancel Help

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Velg her 500 motorkabel
Med eller uten brem
For kabelkanal (500)
Eller kabelkjede (800)

Velg her kabellende



Sizer

Transportbånd ferdig projekt V0 - SIZER for Siemens Drives - [Workflow]

Project Edit Paste View Tools Window Help

Partial view:

Transportbånd ferdig projekt V0

- Comparison of energy requirements
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 - Motor Module
 - Output components
 - Transportbånd (3)
 - Motor
 - Motor Module
 - Output components
 - Transportbånd (4)
 - Motor
 - Motor Module
 - Output components

Supply system: Supply system - 3AC 400V, 50Hz

Drive system: Drive system

Axis: Transportbånd (1) New axis

Properties

Motor

Motor Module

Output components

Line Module

System components

Drive system

SINAMICS S DC/AC

40 °C, 1000 m

Yes

0,33 kW, 2,73 kW

Click here to dimension distributed modules

6SL3130-6AE15-0AB1

No

Help

Close

Project

Results

Workflow

Press F1 to open Help display.

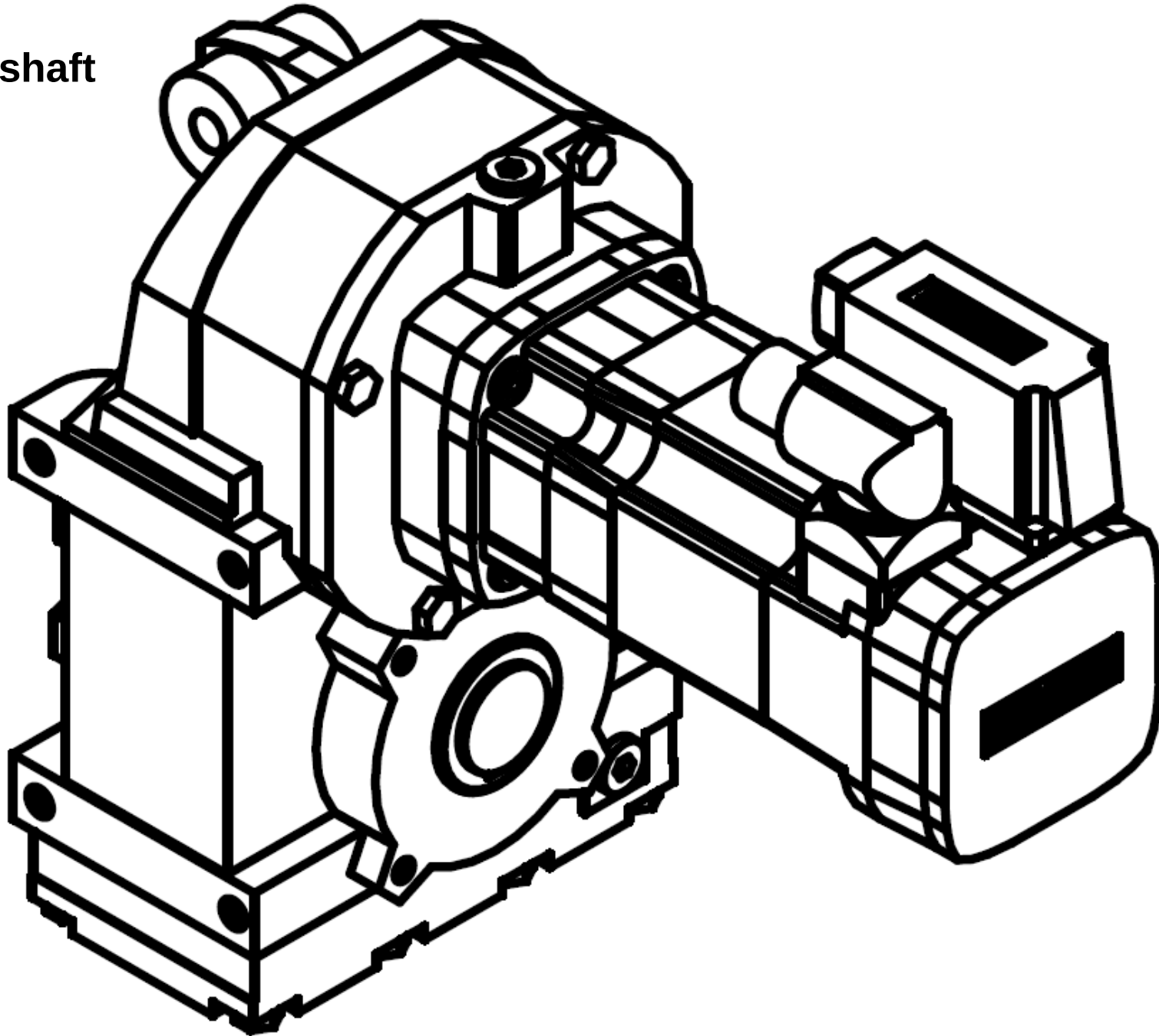
NUM

Velg herfra Line Module og så System components.

Se på Sizer video for Kuleskrue eller ta kontakt med Siemens for videre konfigurering

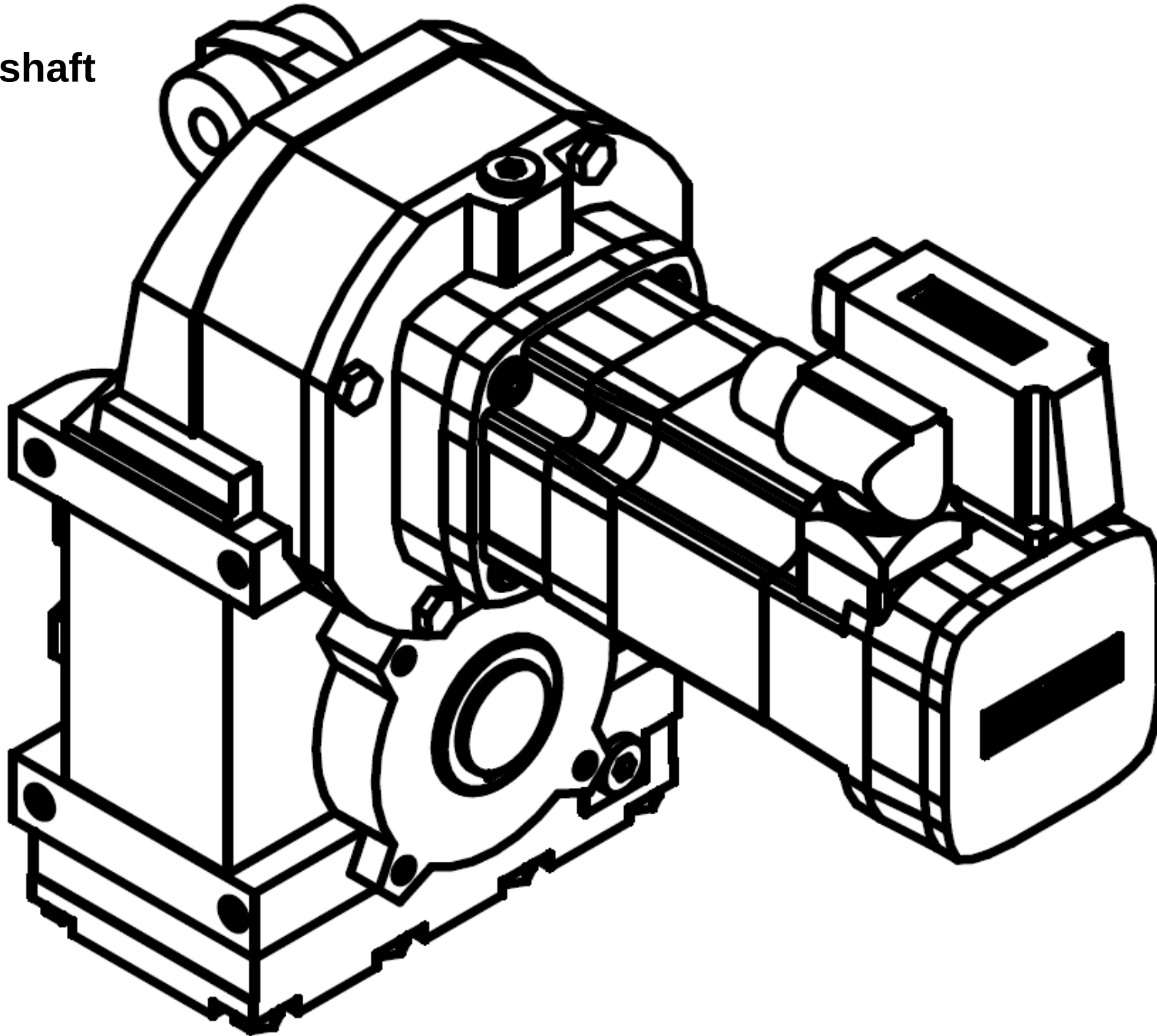
1FG1 med Parallelshaft

SIEMENS
Ingenuity for life



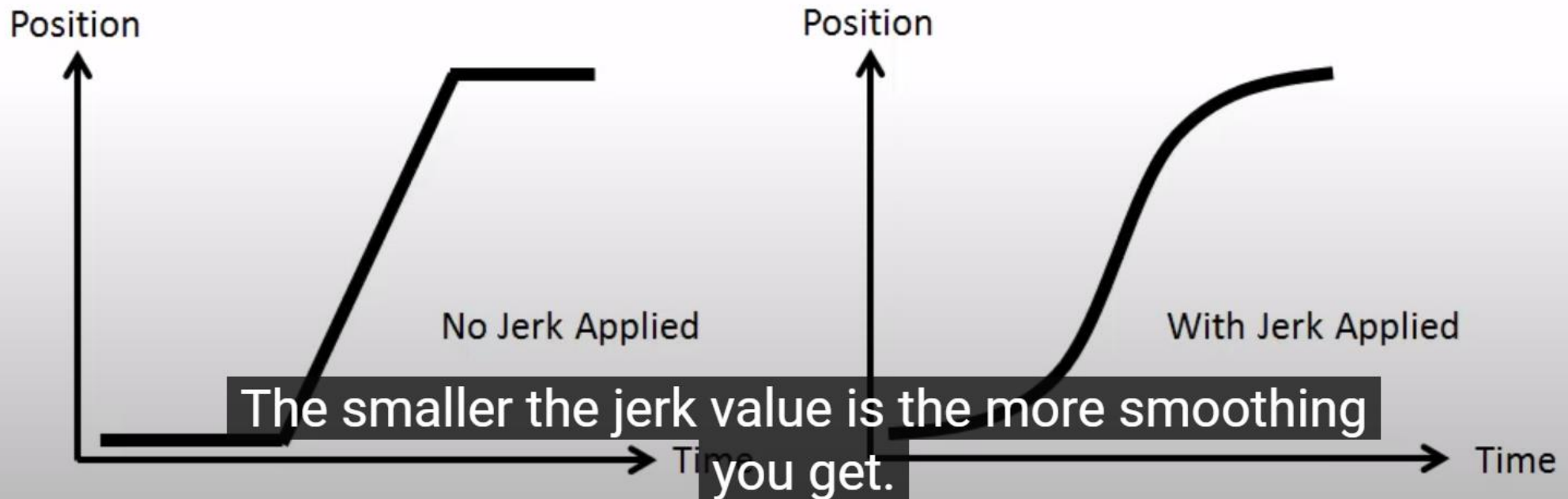
1FG1 med Parallelshaft

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Ingenuity for life



What is Jerk?

Position	X	
Velocity	$V = \Delta x / \Delta t$	1st derivative of position
Acceleration	$a = \Delta v / \Delta t$	2 nd derivative of position
Jerk	$j = \Delta a / \Delta t$	3 rd derivative of position



Praktisk håndtering av produktlist i 24/7

Komponentliste fra Sizer Legges inn I 24/7

SIEMENS

Lagre automatisk Innovation Days NX MCD MDIX demo_Parts list.xls - Kompatibilitetsmodus - Excel Stenmark, Lars Roenning (RC-NO DF MC)															
FilHjemSett innSideoppsettFormlerDataSe gjennomVisningHjelpFortell meg hva du vil gjøre															
UtklippstavleKlipp utLim innKopierKopier format Courier New9A^ABryt tekstStandardBetinget formateringFormater som tabellCellestilerSett innSlettFormatAutosummerFyllFjernSorter og filterSøk etter og merk SkriptJusteringTallStilerCellerRedigering															
B4: '6SL3040-1MA01-0AA0'															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	
1	Pos.	Article number	Customer article number	MFN	Quantity	Options	Additional text	Article description							
2															
3								Drive system / Supply system, S120 stand-alone							
4	10	6SL3040-1MA01-0AA0			1			Control Unit CU320-2 PN							
5	20	6SL3054-0FB10-1BA0			1			Basic							
6	30	6SL3060-4AD00-0AA0			1			DRIVE-CLiQ cable; DRIVE-CLiQ cable (in fixed lengths) IP20/IP20 (fixed mounting); 0,16 m							
7	40	6EP1333-3BA10			1			SITOP modular 5,00 A							
8															
9								Drive system / Supply system							
10	50	6SL3130-6AE15-0AB1			1			Smart Line Module; 5,00 kW							
11	60	6SL3000-0CE15-0AA0			1			Line choke							
12															
13								Axis / Drive system / Supply system							
14	70	6SL3120-1TE13-0AD0			1			Single Motor Module; 3,00 A							
15	80	6FX8002-5CS06-1BA0			1			Motor supply cable; MOTION-CONNECT 800PLUS without brake cable, full thread (trailing-type) S120 C/D types; 10,0 m							
16	90	1FK7042-2AC71-1QG0-Z			1	V40		Synchronous servo motor (feed motor) 1FT/1FK; 0,60 kW; Shaft height 48 mm							
17															
18						Legend									
							! NOTICE								
							The selection of a brake does not result in the calculation of								
Parts list for 24_7 Control cabinet Motors and distributed comp. External cable Software Miscellan ...															

Komponentliste fra Sizer Legges inn I 24/7

SIEMENS

Lagre automatisk

Innovation Days NX MCD MDIX demo_Parts list.xls - Kompatibilitetsmodus - Excel

Stenmark, Lars Roenning (RC-NO DF MC)

FilHjemSett innSideoppsettFormlerDataSe gjennomVisningHjelpFortell meg hva du vil gjøre

Klipp utKopierKopier format

Courier New9A^A

F^KU

Bryt tekst

Standard

Betinget formateringFormater som tabellCellestiler

Sett innSlettFormat

AutosummerFyllFjern

Sorter og filterSøk etter og merk

UtklippstavleSkriftJusteringTallStilerCellerRedigering

B3

'6SL3040-1MA01-0AA0

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1																	
2																	
3		6SL3040-1MA01-0AA0	1														
4		6SL3054-0FB10-1BA0	1														
5		6SL3060-4AD00-0AA0	1														
6		6EP1333-3BA10	1														
7		6SL3130-6AE15-0AB1	1														
8		6SL3000-0CE15-0AA0	1														
9		6SL3120-1TE13-0AD0	1														
10		6FX8002-5CS06-1BA0	1														
11		1FK7042-2AC71-1QG0-Z V40	1														
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	

Parts listfor 24_7Control cabinetMotors and distributed comp.External cableSoftwareMiscellan ...

Klar

Antall: 18100 %

Komponentliste fra Sizer Legges inn I 24/7

Lars Rønning Stenmark (Siemens...)> Logg ut

Menyoversikt

TilbudServiceoversiktOrdreoversiktAdministrasjon

Ordredetaljer >

Legg til artikler

Klipp og limSkriv innLast opp fil

Sum Ø
oppris le

i

Utvid feltLegg til

Leveringsadresse

Siemens DF / PD
--
Norge

Ønsket leveringsdato

Valuta

NOK

Sum pris

Pris på forespørsel

Sum eksklusiv frakt, emballasje og mva.

Total vekt (kg)

** 0,000 kg

Posisjoner (Ugyldige artikkelnummer,
Antall artikler med merknad)

0 (0, 0)

** inkluderer ikke ordrerader uten fraktinformasjon

Ordredetaljer >

KopierKopier format

Utklippstavle

Skrift

'6SL3040-1MA01-0AA0

A	B	C	D
	6SL3040-1MA01-0AA0	1	
	6SL3054-0FB10-1BA0	1	
	6SL3060-4AD00-0AA0	1	
	6EP1333-3BA10	1	
	6SL3130-6AE15-0AB1	1	
	6SL3000-0CE15-0AA0	1	
	6SL3120-1TE13-0AD0	1	
	6FX8002-5CS06-1BA0	1	
	1FK7042-2AC71-1QG0-Z V40	1	

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Page 50

Slett artikler ☐ Sjekk lagerstatus ☐ Søk Valg for handlevogn Handlevogn administrasjon Prosjektnummer Teknisk informasjon										
☐	Pos.no	Artikkelnummer	Antall	Beskrivelse	Lagerstatus	Listepris	Prisenh	Rabatt	Sum nettopp	Ønsket leveringsdato
☐	8	> 6FX8002-5CS06-1BA0	1	stykk	Power cable pre-assembled TYPE 6FX8002-5CS06 4X1,5 C, FULL THREAD SIZE 1 FOR SINAMICS S120 BOOKSIZE MOTOR MODULE C-/D-TYPES MOTION-CONNECT 800PLUS TRAILING TYPE, UL/CSA, DESINA DMAX=9.5 MM LENGTH (M) = + 0 + 10 + 0 + 0	✓	1728,00 NOK	1	1728,00 NOK	20.02.2019
☐	9	> 1FK7042-2AC71-1QG0-Z V40	1	stykk	SIMOTICS S Synchronous motor 1FK7-CT PN=0.59kW; UDC=600V M0=3Nm (100K); NN=2000rpm; Naturally cooled FRAME SIZE IMB 5 (IM V1, IM V3) FLANGE 1 POWER CONNECTOR ROTATABLE ABSOLUTE ENCODER SINGLETURN 20 BIT WITH DRIVE-CLIQ INTERFACE (ENCODER AS20DQI) PLAIN SHAFT, TOLERANCE N; W/O HOLDING BRAKE PROTECTION CLASS IP64; V40: ALPHA LP+, LP 090-MO1 PLANETARY GEARING 1 STAGE, I = 5, WITH FITTED KEY	✓	13780,00 NOK	1	13780,00 NOK	07.05.2019
☐	1	> 6SL3040-1MA01-0AA0	1	stykk	SINAMICS CONTROL UNIT CU320-2 PN WITHOUT COMPACT FLASH CARD	✓	5680,00 NOK	1	5680,00 NOK	18.02.2019
☐	3	> 6SL3060-4AD00-0AA0	1	stykk	SINAMICS DRIVE-CLIQ CABLE IP20/IP20 LENGTH: 0.16 M	✓	180,00 NOK	1	180,00 NOK	15.02.2019
☐	6	> 6SL3000-0CE15-0AA0	1	stykk	SINAMICS LINE REACTOR FOR 5 KW SMART LINE MODULE INPUT: 3-PH 380-480 V, 50/60 HZ	✓	1130,00 NOK	1	1130,00 NOK	15.02.2019
☐	2	> 6SL3054-0FB10-1BA0	1	stykk	SINAMICS S120 COMPACTFLASH CARD W/O PERFORMANCE EXTENSION INCLUDING CERTIFICATE OF LICENCE V5.1 SP1	✓	802,00 NOK	1	802,00 NOK	20.02.2019
☐	7	> 6SL3120-1TE13-0AD0	1	stykk	SINAMICS S120 SINGLE MOTOR MODULE INPUT: DC 600V OUTPUT: 3-PH 400V, 3A FRAME SIZE: BOOKSIZE D-TYPE INTERNAL AIR COOLING OPTIMIZED PULSE SAMPLE AND SUPPORT OF THE EXTENDED SAFETY INTEGRATED FUNCTIONS INCL. DRIVE-CLIQ CABLE	✓	6720,00 NOK	1	6720,00 NOK	15.02.2019
☐	5	> 6SL3130-6AE15-0AB1	1	stykk	SINAMICS S120 SMART LINE MODULE INPUT: 3AC 380-480V, 50/60HZ OUTPUT: 600VDC, 8.3A, 5KW FRAME SIZE: BOOKSIZE INTERNAL AIR COOLING INCL. CONTROL VOLTAGE ADAPTER MODULES PAINTED	✓	5570,00 NOK	1	5570,00 NOK	15.02.2019
☐	4	4505332 > 6EP1333-3BA10	1	stykk	SITOP PSU200M 5 A Stabilized power supply input: 120/230-500 V AC output: 24 V DC/5 A	✓	1310,00 NOK	1	1310,00 NOK	14.02.2019

Legg til artikler

Klipp og lim

Skriv inn

Last opp fil

i

Utvid felt

Legg til

Leveringsadresse

Siemens DF / PD

Norge

Ønsket leveringsdato

Valuta

NOK

Sum pris

Sum eksklusiv frakt, emballasje og mva.

Total vekt (kg)

36900,00 NOK

** 26,940 kg

Posisjoner (Ugyldige artikkelnummer,
Antall artikler med merknad)
** inkluderer ikke ordrerader uten fraktinformasjon

Evt. Hente tegninger fra DT-Configurator.’
(Eller Sizer eller 24/7, eller CAD creator)

1FK7042-2AC71-1QG0-Z V40



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SIEMENS

Home > Direct input (order number) > SIMOTICS S-1FK7 synchronous motors

Article No.: 1FK7042-2AC71-1QG0-Z V40

Your price: on request

List price: on request

Standard delivery time: 55 day(s)

The configuration is complete. You can order this product.

Filter (e.g. "power", ...)

Selection

Planetary gearbox

Options

CAD

Servomotor without gearbox: mechanical interface

Article No. Selection	Shaft height SH nominal exact [mm]	Centering edge ZR Diameter [mm]	Hole circle LK [mm]	Shaft extension DxL Standard Alternative
1FK701x (i)	20 20	30	46	8x18
1FK702x (i)	28 27.5	40	63	9x20
1FK703x (i)	36 36	60	75	14x30 11x23
1FK704x (i)	48 48	80	100	19x40 14x30
1FK706x (i)	63 63	110	130	24x50 19x40
1FK708x (i)	80 77.5	130	165	32x58 24x50
1FK710x (i)	100 96	180	215	38x80 32x58

Converter system

Converter / voltage level

Line Module

S110 / S120 400 ... 480V 3AC

ALM 400 V

Selection

Encoder system

Minimum shaft height

Type of cooling

Static torque

Maximum (temporary) speed

48

Natural cooling

0 ≤ ≤ 4,750 rpm

Drive-CLiQ

Device version

Resolution

Encoder

Yes

Incremental/ absolute encoder Singleturn / res

average: 20 bit, DRIVE-CLiQ

Encoder AS20DQI: absolute encoder single-tu

Documents

Reset configuration

+ Add product

Cancel

100 %

Browser address bar: <https://mall.industry.siemens.com/spice/portal/portal?SESSIONID=vi2yuuubjcp4cjvwqirixu5r>

Search bar: Søk...

Navigation bar: Fil Rediger Vis Favoritter Verktøy Hjelp

Siemens Intranet - Siemen... TIA Selection Tool cloud - ... PMD Intranet - Homepage Velkommen - Nettportale...

SIEMENS

Additional actions List of products Support Language

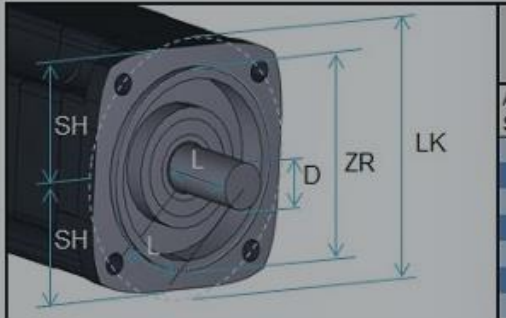
Home > Direct input (order number) > SIMOTICS S-1FK7 synchronous motors

Article No.: 1FK7042-2AC71-1QG0-Z V40

Your price: on request
List price: on request
Standard delivery time: 55 day(s)

The configuration is complete. You can order this product.

Selection Planetary gearbox Options CAD



Converter system
Converter / voltage level
Line Module

Selection
Minimum shaft height
Type of cooling
Static torque
Maximum (temporary) speed

Encoder

Documentation and reporting

Project data for the datasheet

Download selection of document types

- ☐ Datasheets (PDF)
- ☐ Dimension drawings (PDF)
- ☐ Dimension drawings (DXF)
- ☐ 3D PDF
- ☐ 3D STEP
- ☐ Characteristic curves

Selection of download format

☐ All in a ZIP file ☐ All in a single PDF file ☐ All in a single RTF file

Start generation

Component documentation

- ☐ SIMOTICS S-1FK7 (1FK7042-2AC71-1QG0-Z V40)
- ☐ Datasheet (PDF)
- ☐ Datasheet (RTF)
- ☐ Motor characteristics (PDF)
- ☐ Dim draw PDF (takes approx 1 min)
- ☐ Dim draw DXF (takes approx 1 min)
- ☐ 3D PDF (takes approx 1 min)
- ☐ 3D STEP (takes approx 1 min)
- ☒ CAD display and download

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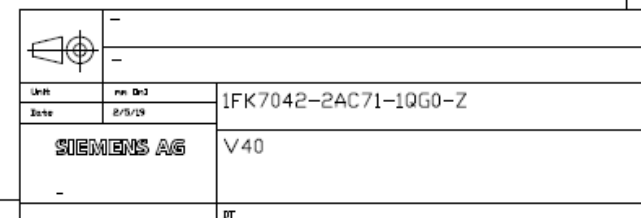
11x23
14x30
19x40
24x50
32x58

Incremental/ absolute encoder Singleturn / res
average: 20 bit, DRIVE-CLiQ
Encoder AS20DQI: absolute encoder single-tui

Documents Reset configuration + Add product Cancel

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 Contado como secreto industrial. Nos reservamos todos los derechos
 Reservados como secreto empresarial. Reservados todos os direitos





Lars.Stenmark@siemens.com

Annen praktisk info

Oversikt GMC

Typisk bruk av drives.

Continuous motion

Basic Medium High

Dis

High

SIMATIC / SIMOTION

+

SINAMICS

SIMOTICS GP, SD, FD **V20**

SIMOGEAR 1FG1 **G120x**

SIMOTICS 1PH8 **G120D**

SIMOTICS S 1FK7, 1FT7 **G110M**

V90

SIMOTICS T 1FW3, 1FW6 **S210**

SIMOTICS L 1FN3 **S120**

Praktisk info: Nyttige linker for MC

Linker/oversikt:

Link til Dokumenter

Link til Konfiguratorer.

Sizer

Tilbud: kundesenter.industri.no@siemens.com

Logistikk: logistikk.industri.no@siemens.com

Support: support.industri.no@siemens.com /
<https://support.industry.siemens.com/cs/products?mfnc=ps&lc=en-NO>

Fakturerbare tjenester -
Engineeringshjelp/Feltassistanse:
systemservise.no@siemens.com

Support tlf: 815 365 24

Reservedeler

The screenshot shows the Siemens Industry Mall website in a web browser. The URL is <https://mall.industry.siemens.com/goos/WelcomePage.aspx?regionUrl=/no&language=no>. The page features the Siemens logo and 'INDUSTRY MALL' branding. A navigation menu at the top includes 'Startside', 'English', 'Kontakt', and 'Hjelp'. A secondary menu contains 'Produktkatalog', 'Handlevogn', 'Tilbud', 'Serviceoversikt', 'Ordreoversikt', and 'Administrasjon'. The 'Serviceoversikt' menu is highlighted with a red circle, and its sub-menu is visible, showing 'Masterdataforrester', 'Reservedeler & Tjenester', 'Lisensoversikt', and 'Software Update Service'. A red arrow points from the 'Reservedeler & Tjenester' sub-item to a red text box containing the message: 'Siemens har februar om'. Below the navigation menu, there is a section for 'Vennligst endre passord' (Please change password) with a red warning message: 'Kjære kunde, vennligst oppdater passordet ditt i Nettportalen sendt ut en mail til berørte brukere om at innloggingsn passordene ikke oppdateres. Dette er for å ivareta sikkerheten. Link til å be om nytt passord'. A red circle highlights this message. The left sidebar contains a 'Produktkatalog' dropdown menu with categories like 'Drive technology', 'Automation technology', 'Energy', 'Building Technologies', 'Low-Voltage controls and distribution', and 'Safety Systems - Safety Integrated'. The right sidebar features 'Webinarer' with images and text: 'Benytt sjansen til å lære'. The bottom of the page shows a zoom level of 100%.

CAX data.

<https://mall.industry.siemens.com/mall/no/no/Catalog/Configurators>



https://mall.industry.siemens.com/mall/no/no/Catalog/Configurators

Produktkatalog

Konfiguratorer

Oversikt over tilgjengelige konfiguratorer

Her finner du alle konfiguratorer som er tilgjengelige i Netportalen 24/7 sammen med oppstartsalternativer og beskrivelser av hver enkelt konfigurator.

☐ Åpne alle produktkategorier

☒ Drive technology

> Drives Technology Configurator

Product configurators

- > Guided Motor Selection
- > Guided Inverter Selection

Motors

IEC low-voltage motors for line and inverter operation inclusive explosion proof motors

- > SIMOTICS GP/SD/XP - 1LE1/1MB1
- > SIMOTICS SD next generation 1LE5
- > SIMOTICS GP - 1LE10 (polechange)
- > SIMOTICS N-compact
- > SIMOTICS XP - 1MD5 (Ex d)
- > CHEMSTAR - 1PS1/1PS5
- > SIMOTICS XP - 1MA (Ex e)
- > SIMOTICS DP - 1PC13 EN12101-3
- > SIMOTICS DP - Steelplant

Browser address bar: <https://mall.industry.siemens.com/spice/portal/portal?SESSIONID=achw1wrplvcrnt1sirrf1s>

Product details - Nettportalen ... Ny fane Configurator

File Rediger Vis Favoritter Verktøy Hjelp

TIA Selection Tool cloud ... TIA Selection Tool cloud ... PMD Intranet - Homepage

Additional actions Support Language

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Drives Technology Configurator List of products

1LE1503-2BB23-4

1 Select Type of Product 2 Select Category

Motors Converters Systems and other components

List of products

☐ Remove Duplicate Expand / Collapse More...

Products to cart

Projectdata Documents for product list

+ ☐ 1 6SL3210-1PH21-4UL0

Configure

all documents for position

The shown prices are always total customer prices.

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https://mall.industry.siemens.com

mall.industry.siemens.com/spice/pcmplus/app/

Apper

Andre bokmerker

SIEMENS

Ingenuity for life

Additional actions

List of products

Support

Language



Direct input (order number) / SINAMICS S120

6SL3130-7TE21-6AA4

on request
List price

on request
Your price

25 day(s)
Standard delivery time

7.20 kg
Weight

PM300: Active product
Product lifecycle

✓ The configuration is complete. You can order this product.

Filter (e.g. "power", ...)

Selection

CAD

KB version: 1.191

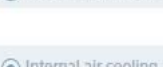
Product brand name

SINAMICS S120

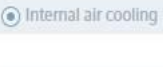
Line Modules and line-side components



Active Line Module in booksize format



Internal air cooling



Rated feed/feedback power Prated

16 kW

Documents

Reset configuration

+ Add product

Cancel

https://mall.industry.siemens.com x +

mall.industry.siemens.com/spice/pcmplus/app/

Apper

SIEMENS
Ingenuity for life

Additional actions List of products Support Language

Direct input (order number) / SINAMICS S120

6SL3130-7TE21-6AA4

7.20 kg Weight PM300: Active product Product lifecycle

Filter (e.g. "power", ...)

KB version: 1.191

The configuration is complete. You can order this product.

Selection CAD

Product brand name

Line Modules and line-side components

Documentation and reporting

Choose languages for the data sheet English / 2

Project data for the datasheet

Download selection of document types

- ☐ Dimension drawings (PDF)
- ☐ Dimension drawings (DXF)
- ☐ 3D PDF
- ☐ 3D STEP
- ☐ EPLAN Macros

Selection of download format

☒ All in a ZIP file ☐ All in a single PDF file ☐ All in a single RTF file

Start generation

Component documentation

- ☒ SINAMICS S120 Active Line Module Booksize 3AC 380-400V / DC 600V 27A (6SL3130-7TE21-6AA4)
 - ☒ Dim draw PDF (takes approx 1 min)
 - ☒ Dim draw DXF (takes approx 1 min)
 - ☒ 3D STEP (takes approx 1 min)
 - ☒ 3D PDF (takes approx 1 min)
 - ☒ EPLAN Macro
 - CAD display and download

© Siemens AG | Application information

Documents Reset configuration + Add product Cancel

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Praktisk info: Nyttige linker for MC

<https://intranet.for.siemens.com/cms/032/en/business/products/Pages/DI-MC-Catalogs.aspx>

Nyheter

Oversikt FY20

New Product Launches & Innovations



**SINAMICS S210 &
SIMOTICS S-1FK2**



**SINAMICS G120X
"Infrastructure"-Drive**



**SINAMICS S120 Chassis-2 &
Cabinet Modules-2**



**SINAMICS G115D
"Intralogistics"-Drive**



SIMATIC MICRO-DRIVE

Value-add Topics & SINAMICS Applications



**Startdrive & TIA Portal V16
SINAMICS Webserver**



**Safety Integrated
PROFINET**



**Applications: Basic, Advanced,
Technological**

Partner Management & Sales Support



Siemens Partner Program



Drive System Enhancement



**SIZER & TIA Selection Tool
DT Configurator**



**Consequent Migrations:
MM4, PM240, G110**

SINAMICS



Connect

Digitalization @ GMC

Mind



Apps

S210 Komplet 50W..7kW

SIEMENS
Ingenuity for life



G120X også med 3AC-230V

Voltage / Power Range

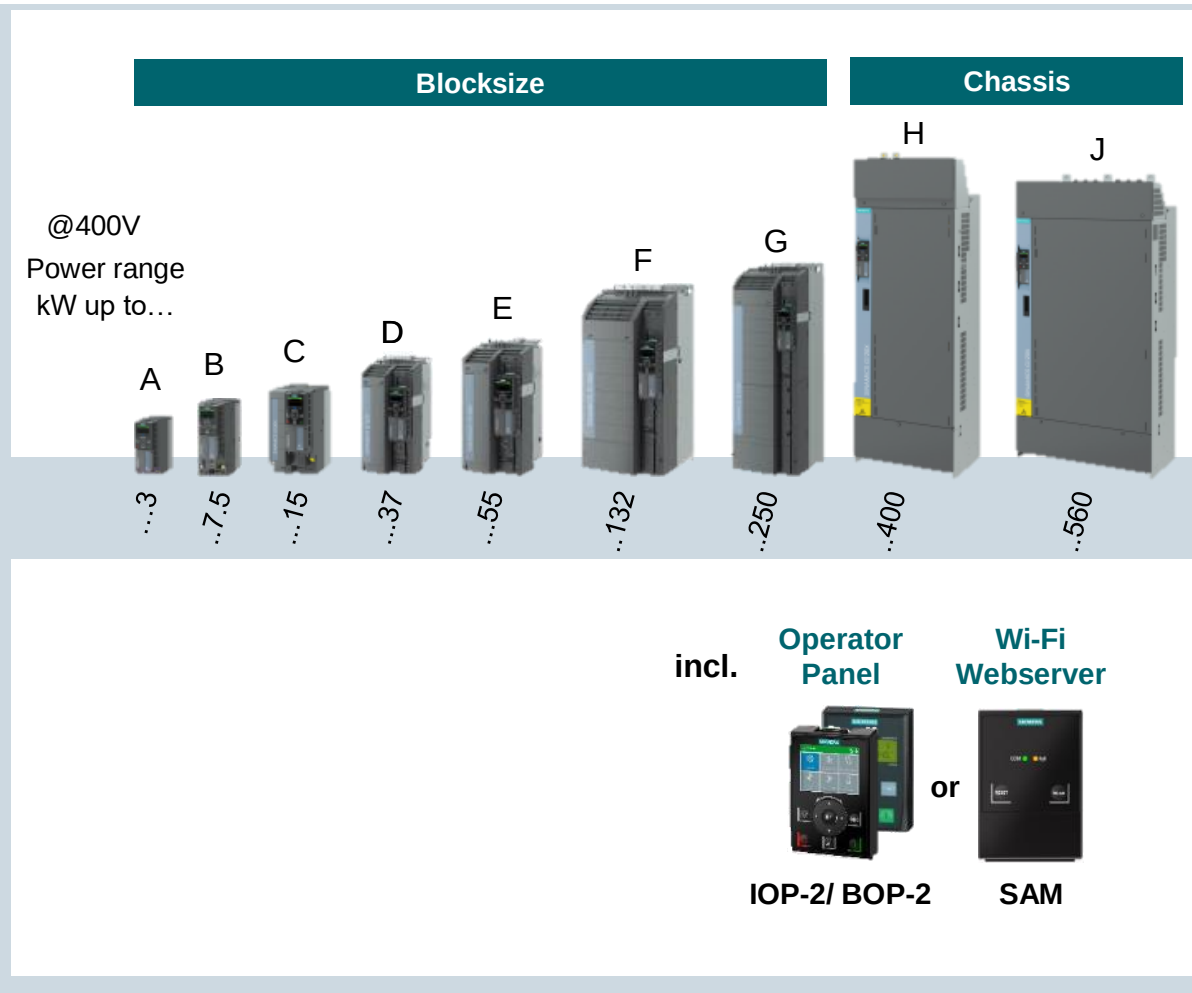
3AC200 – 230V
(0.75 – 55 kW /
1 – 75 HP)

3AC380 – 480V
(0.75 – 560 kW /
1 – 700 HP)

3AC500 – 690V
(3 – 630 kW /
4 – 700 HP)

**IP20 /IP21 kit^{1,2}/
IP20 Push Through
kit²**

UL open type
Power:
0.75 – 560 kW
(630kW @ 690V)
1 – 700 HP



Options

SD card

IP21 roof
top kit

IP20 / UL open
push through kit

I/O ext. module

Filter B

Passive
harmonic filter

Choke

Sinus filter
du/dt filter

¹ Wall mounted w/o cabinet in lockable electrical room

² IP21 kit/ IP20 PT-kit FS A-G as an orderable option

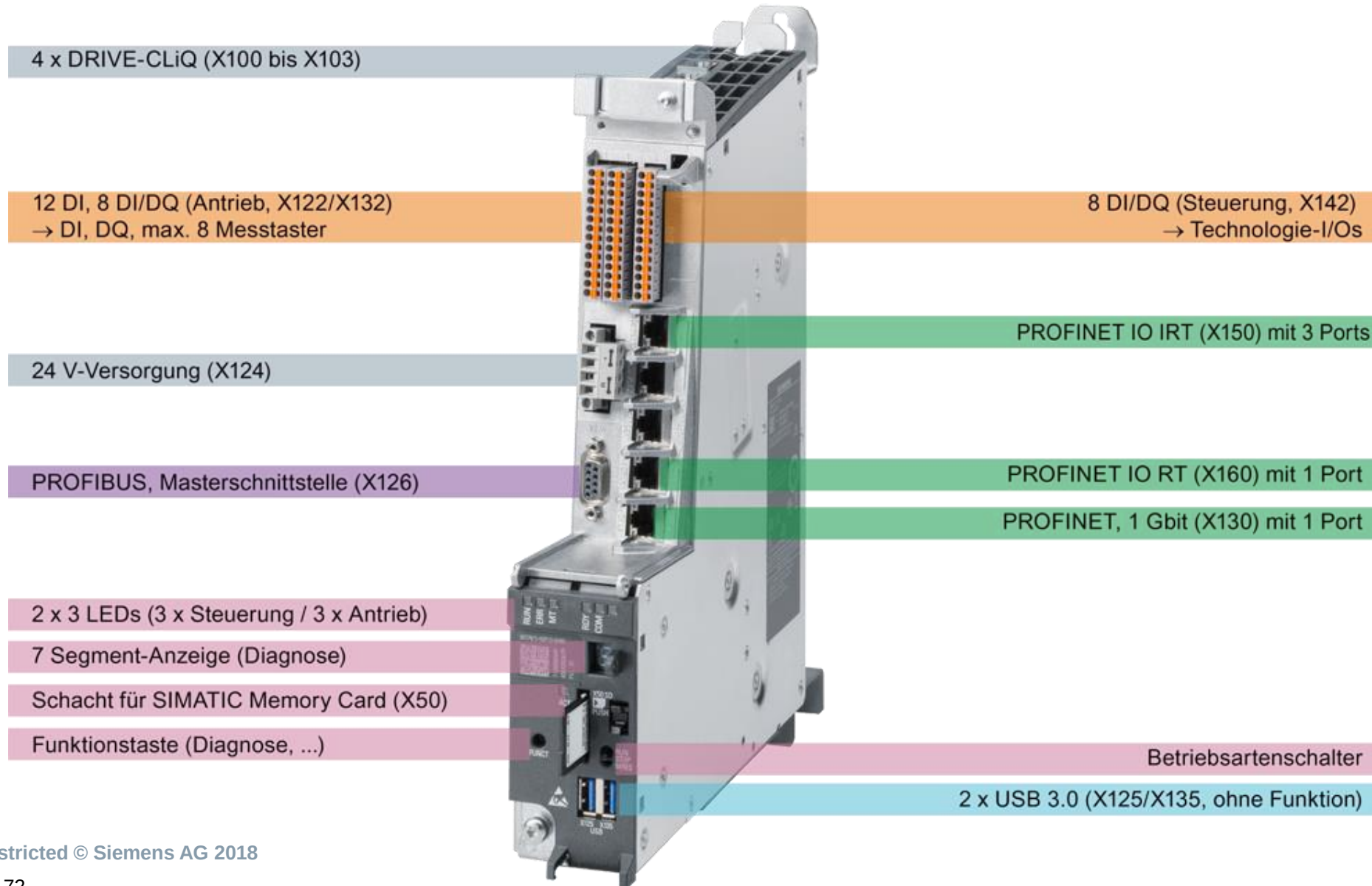
SAM: Smart Access Module
IOP: Intelligent Operator Panel

SIMATIC CPU 1504D TF & CPU 1507D TF / Handling V2.0 / Cross PLC synchronous operation



Feature / Function	Benefit
• Compact & Close-to-Drive SIMATIC controller Portfolio extension optimized for production machines: CPU 1504D TF and CPU 1507D TF	▶ Motion Control PLC, drive control and technology I/Os in one device for compact & high performance multi-axis machines
• Extensive connection options for communication, HMI and peripherals	▶ Complete machine control close to the drive incl. reduced assembly and programming efforts
• Control of kinematics with up to 4 interpolating axes incl. synchronization to moved belts	▶ Simple programming of pick & place, assembly or handling tasks based on PLCopen
• Cross PLC synchronous operation incl. Trace functions	▶ Synchronized movements over several CPUs allow modular automation concepts incl. extensive diagnostics
• Universal functionality & programming from S7-1500 to S7-1500 T-CPU	▶ Seamless extension of the motion control functionality of a standard CPU in TIA Portal
• Fail-safe CPU with extended motion control functions incl. safe monitoring of movements	▶ Automation, Motion Control and Safety Solutions with one CPU

Drive Controller for S120



Drive Controller for S120



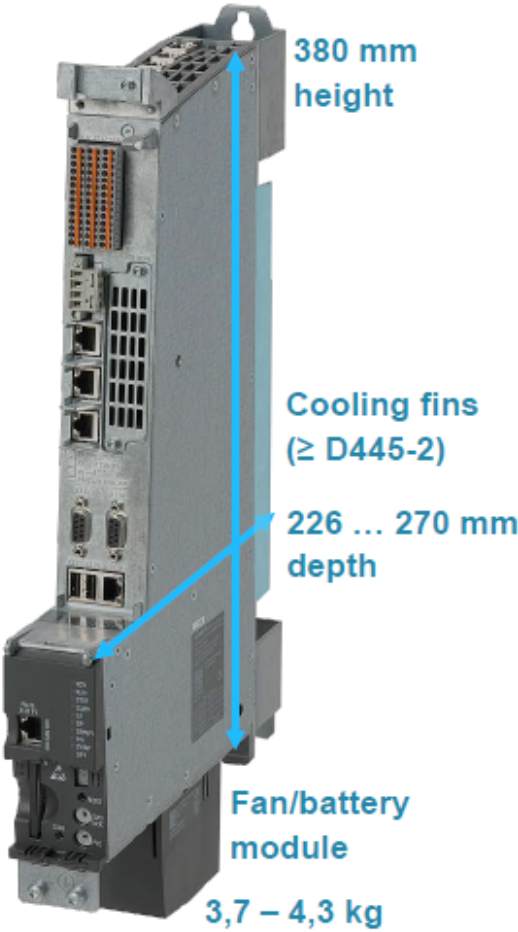
Typiske applikasjoner for Drive Controller S120

- Multi-akse (eks , print, papirkutting)
- High-performance og korte syklustider.
Pakkemaskiner, generell håndtering uten start og stop.
- Kompakte maskiner, integrasjon av HMI, kommunikasjon som PLS og Drive.
- Safety integrated også for multi-axis Safe Kinematics with CPU 1507D TF₁)



SIMOTION D

SIMATIC Drive Controller



Booksize Compact

Battery-free / fanless

Failsafe PLC

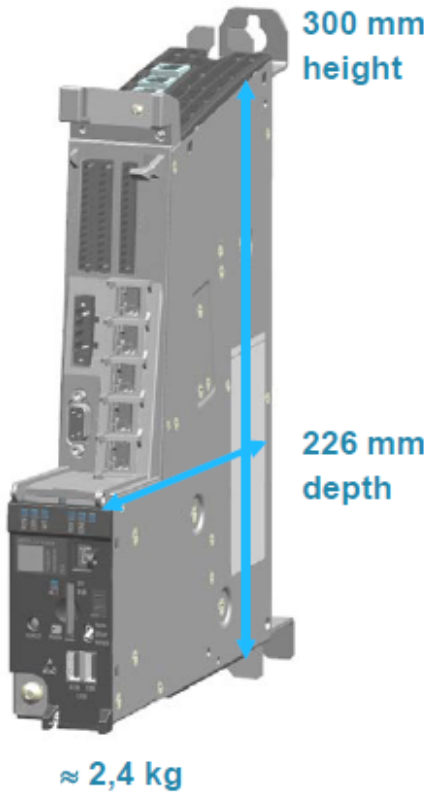
innovative technology I/Os

Decoupling of PLC and Drive
→ **ES + FW separately upgradeable**

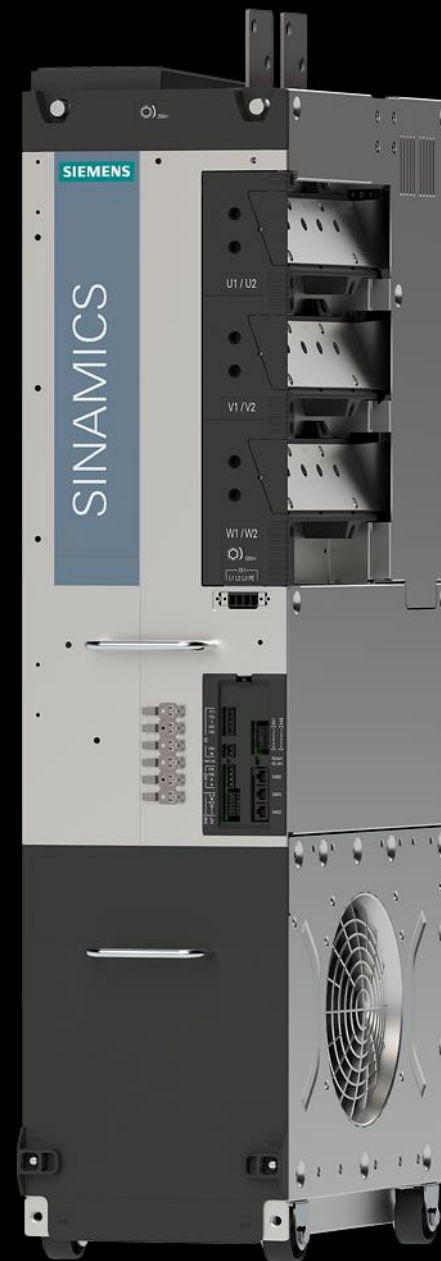
prepared for Multi-functional Platform¹⁾

Drive Engineering: Startdrive

no CX32-2 / no option slot with CBE30-2



Nyheter i porteføljen S120 Chassis-2



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Ingenuity for life



Feature/Function

Innovated mechanical design

- smaller dimensions
- improved cooling system
- standard terminals

Innovated electrical design

- increased standard pulse frequency
- Minimized derating at lower frequencies (< 10Hz)
- higher overload capability

Compatibility

- electrical
- mechanical

Standardized, type-tested units

- comprehensive option package for adaptation to customer requirements
- chassis devices can be subsequently installed in the plant or system

Benefit

- easy to install in cabinets
- reduced space requirement
- higher reliability
- reduced engineering/installation efforts
- cost effective
- competitive dimensioning of applications with high dynamic/lower speed
- higher operation reliability even under challenging operating environment
- long lifetime
- can be simply integrated into existing MASTERDRIVES/ SINAMICS systems
- highest quality standards and optimized heat dissipation
- guaranteed reliability
- simple handling while installing

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Thank you for your attention.



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