SIEMENS

Technical data and characteristics

SIMOTICS

Built-in motors M-1FE2

For SINAMICS S120

Edition 10/2020

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Drive technology
Technical data and characteristics for the 1FE2

Configuration Manual

10/2020
A5E50512075B AB

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indicates that minor personal injury can result if proper precautions are not taken.

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Siemens AG
Digital Industries
Postfach 48 48
90026 NÜRNBERG
GERMANY

Document order number: .
Ⓟ 02/2021 Subject to change

Table of contents

Introduction

1

This part of the Configuration Manual for the SIMOTICS M-1FE2 built-in motor contains the technical data and characteristics.

The technical data and characteristics are divided into synchronous and asynchronous versions.

Technical data and characteristics

2

2.1 Technical data and characteristics for synchronous motors

2.1.1 Technical data for the 1FE2 in the synchronous version

Note

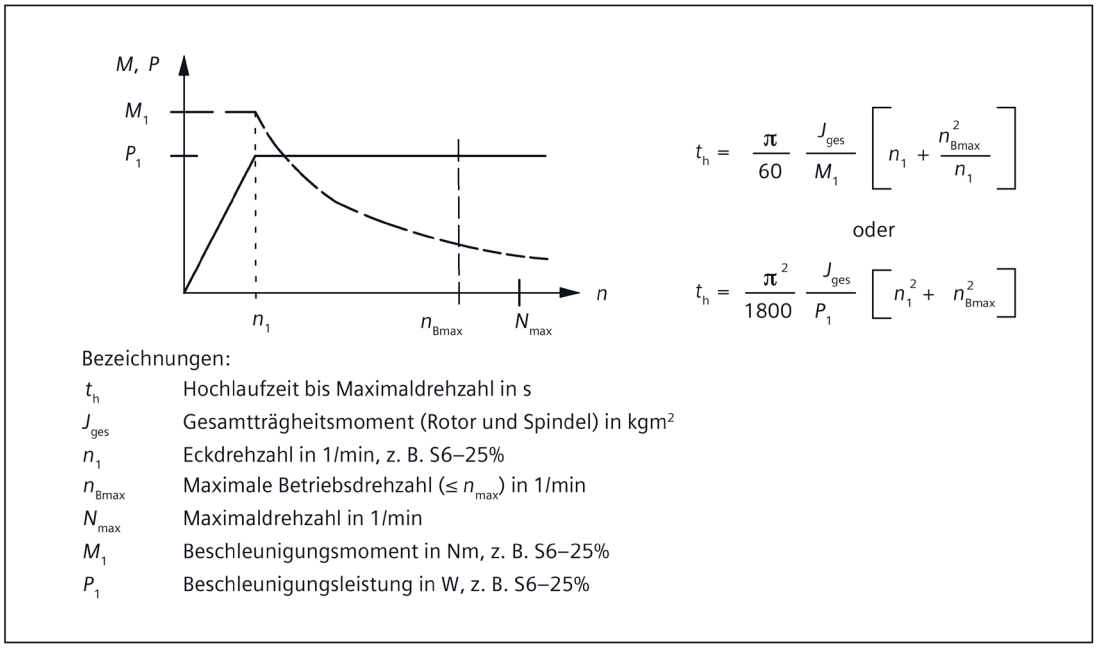
The values specified in the following tables are valid for the synchronous version with water cooling.

Motor article number	Rated torque M_N / Nm			Rated current I_N / A			Maximum current I_{max} [1] / A	Rated speed n_N / rpm	Maximum speed n_{max} / rpm
	S1	S6-40%	S6-25%	S1	S6-40%	S6-25%			
16-pole built-in motors									
1FE2182-8LN□□-□CC1	650	925	1124	73	108	134	156	500	2400
1FE2182-8LH□□-□CC1	640	916	1111	145	214	265	315	1000	4200
1FE2183-8LN□□-□CC1	840	1197	1458	95	140	174	195	500	2400
1FE2183-8LH□□-□CC1	840	1190	1451	189	278	346	390	1000	4200
1FE2184-8LN□□-□CC1	1010	1437	1751	114	168	209	235	500	2400
1FE2184-8LK□□-□CC1	1010	1437	1749	190	280	348	390	800	4010
1FE2184-8LH□□-□CC1	1000	1425	1736	225	333	414	470	1000	4200
1FE2185-8LN□□-□CC1	1180	1646	2012	132	194	242	275	500	2420
1FE2185-8LL□□-□CC1	1180	1665	2031	189	278	346	390	700	3440
1FE2185-8LH□□-□CC1	1160	1653	2011	250	368	457	520	1000	4200
1FE2186-8LN□□-□CC1	1370	1941	2362	154	227	282	315	500	2400
1FE2186-8LM□□-□CC1	1380	1936	2352	192	283	351	390	600	3000
1FE2186-8LH□□-□CC1	1350	1932	2353	290	424	527	590	1000	4200
1FE2187-8LN□□-□CC1	1530	2156	2626	190	280	348	390	500	2670
1FE2187-8LH□□-□CC1	1510	2151	2618	325	479	595	670	1000	4200

[1] The maximum current I_{max} must not be exceeded due to the risk of demagnetization

2.1.2 Calculating the acceleration time based on the torque/power characteristic for the synchronous version

With the following formulas and the values in the table, you can calculate the acceleration time of the motor.



Bezeichnungen:

t_h	Hochlaufzeit bis Maximaldrehzahl in s
J_{ges}	Gesamtträgheitsmoment (Rotor und Spindel) in kgm²
n_1	Eckdrehzahl in 1/min, z. B. S6–25%
n_{Bmax}	Maximale Betriebsdrehzahl ($\leq n_{max}$) in 1/min
N_{max}	Maximaldrehzahl in 1/min
M_1	Beschleunigungsmoment in Nm, z. B. S6–25%
P_1	Beschleunigungsleistung in W, z. B. S6–25%

Figure 2-1 Calculation of the acceleration time_1FE2_SM_MCC

Table 2- 1 Relevant data for calculating the acceleration time

Motor article number	M_1 / Nm	n_1 / rpm	P_1 / KW	n_{max} / rpm
	S6-25%	S6-25%	S6-25%	
1FE2182-8LN□□-□CC1	1124	250	29.4	2400
1FE2182-8LH□□-□CC1	1111	500	58.2	4200
1FE2183-8LN□□-□CC1	1458	250	38.2	2400
1FE2183-8LH□□-□CC1	1451	500	76.0	4200
1FE2184-8LN□□-□CC1	1751	250	45.8	2400
1FE2184-8LK□□-□CC1	1749	400	73.3	4010
1FE2184-8LH□□-□CC1	1736	500	90.9	4200
1FE2185-8LN□□-□CC1	2012	250	52.7	2420
1FE2185-8LL□□-□CC1	2031	350	74.4	3440
1FE2185-8LH□□-□CC1	2011	500	105.3	4200
1FE2186-8LN□□-□CC1	2362	250	61.8	2400
1FE2186-8LM□□-□CC1	2352	300	73.9	3000
1FE2186-8LH□□-□CC1	2353	500	123.2	4200
1FE2187-8LN□□-□CC1	2626	250	68.7	2670
1FE2187-8LH□□-□CC1	2618	500	137.1	4200

2.1.3 Speed and current limitation

Permissible maximum speed when operating on a power unit of a built-in unit

On motors with short-circuit currents > 200 A, the permissible maximum motor speed is n_max_Inv.

You can operate motors with lower short-circuit currents up to n_max by using a VPM.

Permissible maximum speed when operating on two booksize power units in a master-slave network.

To operate the motor in the range > n_max_Inv, connect a VPM to each inverter output.

Current limitation of the 1FE2186-8.H and 1FE2187-8.H when operating the motor on two booksize power units in a master-slave network

On the 1FE2186-8.H and 1FE2187-8.H, the maximum current of the motor is greater than the maximum current that can be provided by using 2 power units (2 x 282A).

Note

The maximum current I_{max} or maximum torque M_{max} given in the data sheets cannot be achieved with two booksize power units

2.1.4 P/n and M/n diagrams for 16-pole built-in motors

Built-in motors must be continually cooled independent of the operating mode.

Note

The characteristic curves and specified values are valid for water cooling and a cast winding design.

Note

Depending on the mechanical design of the motor spindle, various levels of frictional losses occur (e.g. bearing losses, eddy losses, losses at rotary glands).

The level of friction losses is not known to the manufacturer of the built-in motors.

The motor powers and torques specified in this documentation refer to the values that the rotor of the built-in motor transfers to the spindle.

To calculate the net power output at the shaft, subtract the total friction losses from the specified values.

2.1.4.1 1FE2182-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

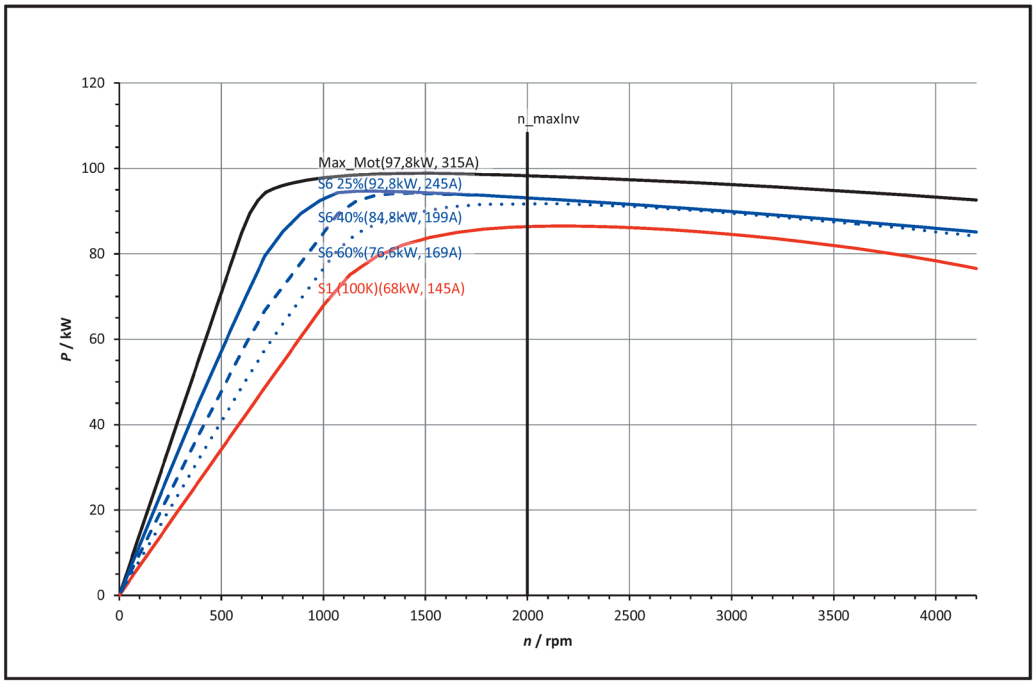
Technical data	Reference	Unit	Value
Configuration data			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	640
Rated power (100 K)	$P_{N(100K)}$	kW	68
Rated current (100 K)	$I_{N(100K)}$	A	145
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	147
Limiting data			
Maximum permissible speed [1]	n_{max}	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	315
Physical constants			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000 rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.048
Rotating field inductance	L_D	mH	1.25
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia [2]	J_{mot}	kgm^2	0.75
Weight [3]	m	kg	110

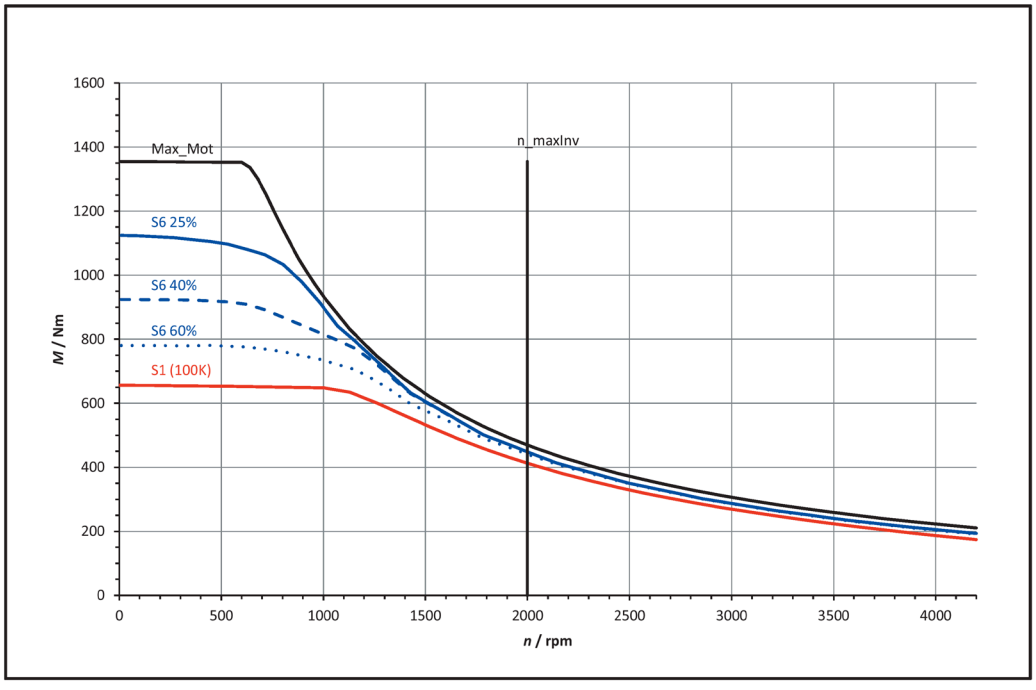
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz.
The data sheet is also valid for: 1FE2182-8LHxx-xAB0, 1FE2182-8LHxx-xAC0, 1FE2182-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-2 PD_1FE2182-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

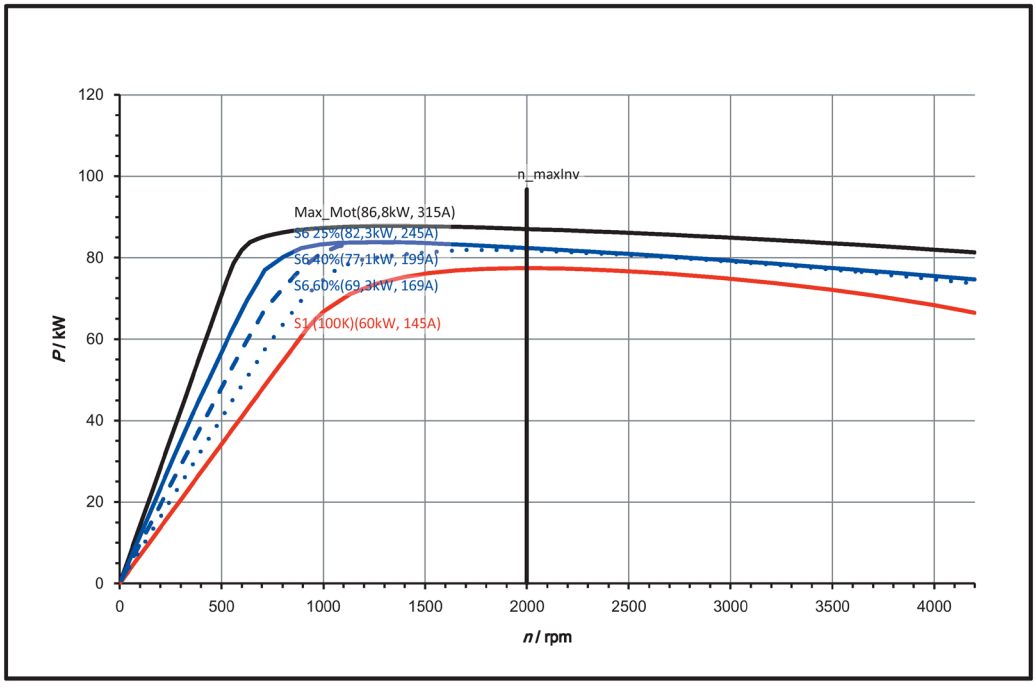
Technical data	Reference	Unit	Value
Configuration data			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	640
Rated power (100 K)	$P_{N(100K)}$	kW	60
Rated current (100 K)	$I_{N(100K)}$	A	145
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	147
Limiting data			
Maximum permissible speed [1]	n_{max}	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	315
Physical constants			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000 rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.048
Rotating field inductance	L_D	mH	1.25
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia [2]	J_{mot}	kgm^2	0.75
Weight [3]	m	kg	110

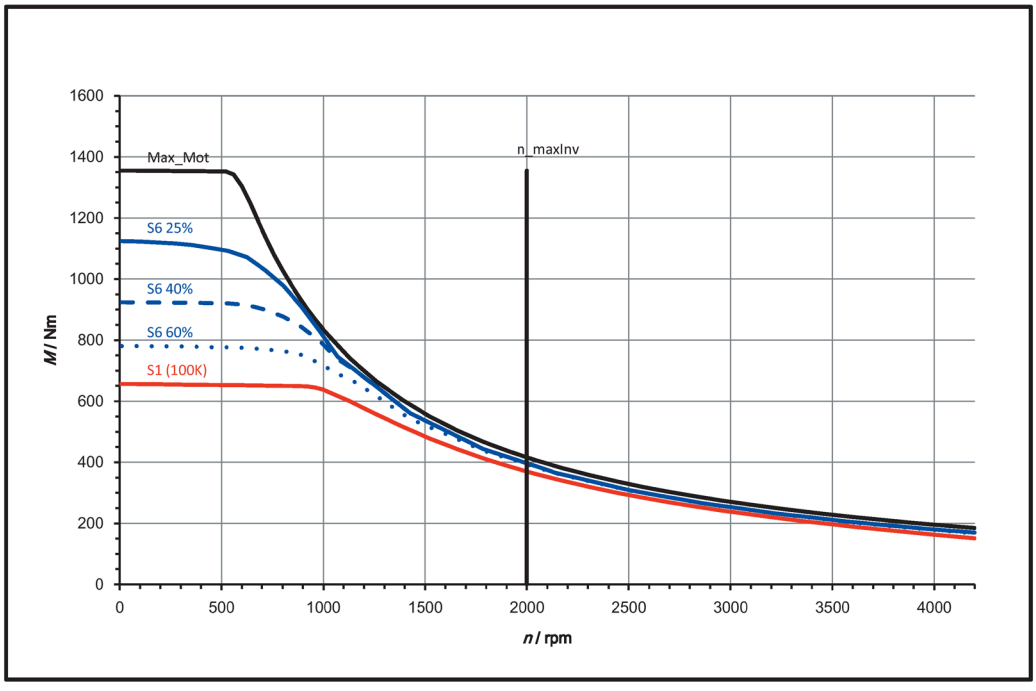
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz.
The data sheet is also valid for: 1FE2182-8LHxx-xAB0, 1FE2182-8LHxx-xAC0, 1FE2182-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$ ($n_{max\ mech}$ = mechanically permissible maximum speed; $n_{max\ VPM}$ = permissible maximum speed when operating with VPM)

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-3 PD_1FE2182-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

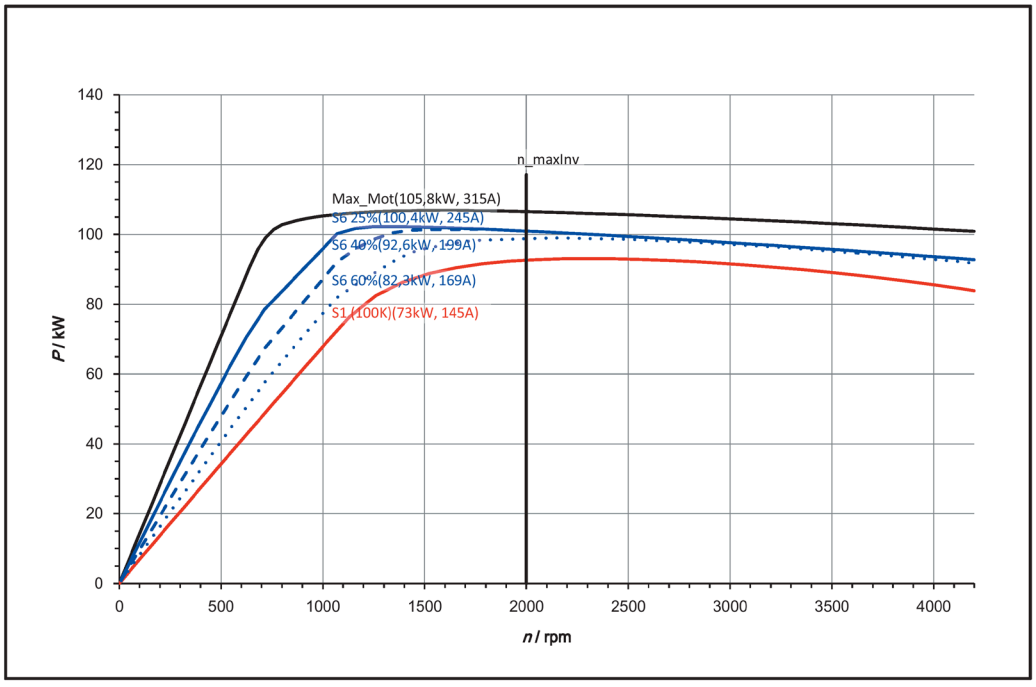
Technical data	Reference	Unit	Value
Configuration data			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	640
Rated power (100 K)	$P_{N(100K)}$	kW	73
Rated current (100 K)	$I_{N(100K)}$	A	145
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	147
Limiting data			
Maximum permissible speed [1]	n_{max}	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	315
Physical constants			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000 rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.048
Rotating field inductance	L_D	mH	1.25
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia [2]	J_{mot}	kgm^2	0.75
Weight [3]	m	kg	110

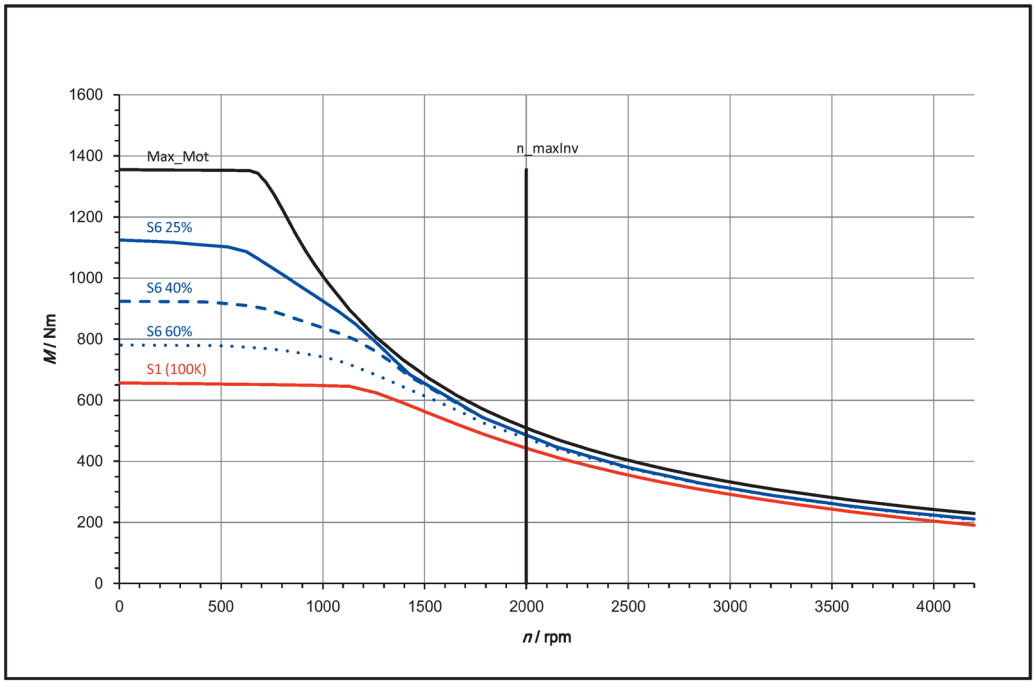
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz.
The data sheet is also valid for: 1FE2182-8LHxx-xAB0, 1FE2182-8LHxx-xAC0, 1FE2182-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$ ($n_{max\ mech}$ = mechanically permissible maximum speed; $n_{max\ VPM}$ = permissible maximum speed when operating with VPM)

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-4 PD_1FE2182-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

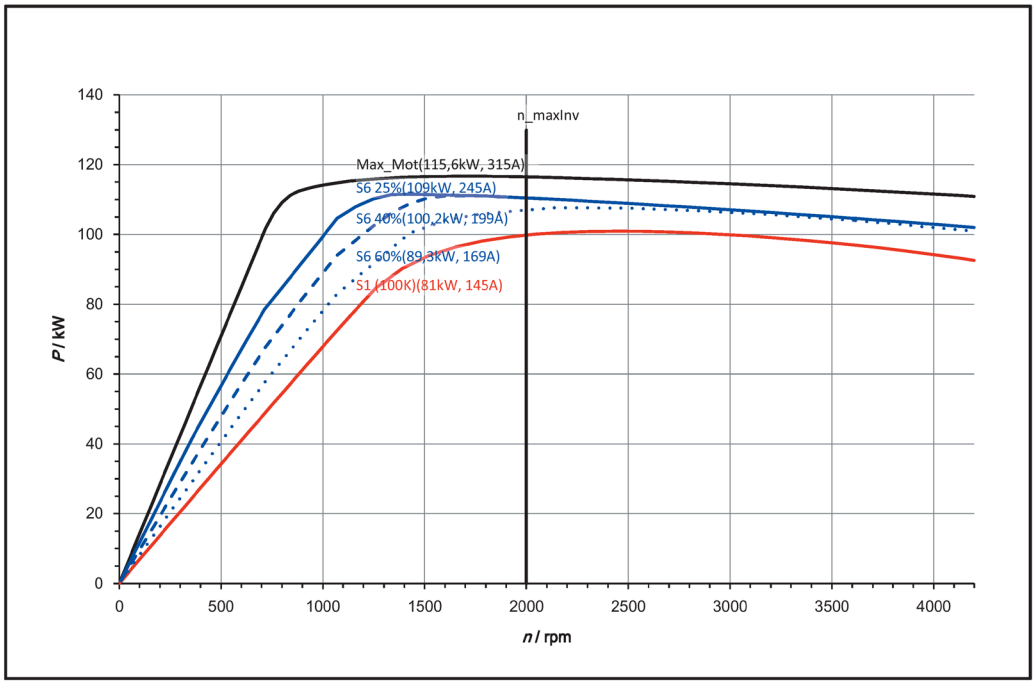
Technical data	Reference	Unit	Value
Configuration data			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	640
Rated power (100 K)	$P_{N(100K)}$	kW	81
Rated current (100 K)	$I_{N(100K)}$	A	145
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	147
Limiting data			
Maximum permissible speed [1]	n_{max}	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	315
Physical constants			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000 rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.048
Rotating field inductance	L_D	mH	1.25
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia [2]	J_{mot}	kgm^2	0.75
Weight [3]	m	kg	110

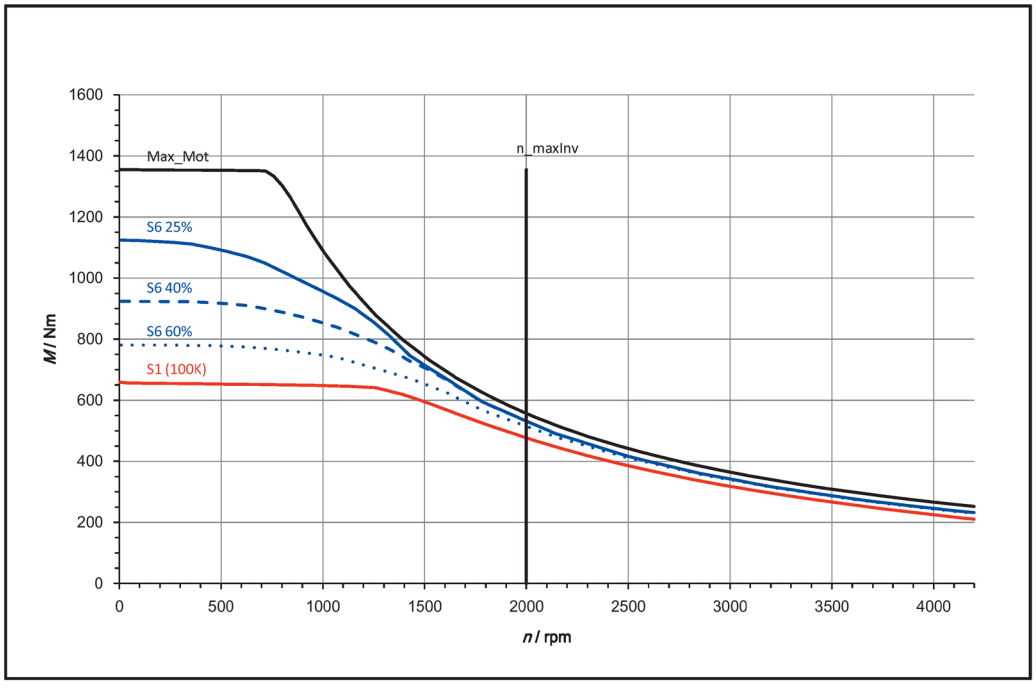
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz.
The data sheet is also valid for: 1FE2182-8LHxx-xAB0, 1FE2182-8LHxx-xAC0, 1FE2182-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$ ($n_{max\ mech}$ = mechanically permissible maximum speed; $n_{max\ VPM}$ = permissible maximum speed when operating with VPM)

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-5 PD_1FE2182-8LHxx-xCC1_Index_a

2.1.4.2 1FE2182-8LNxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

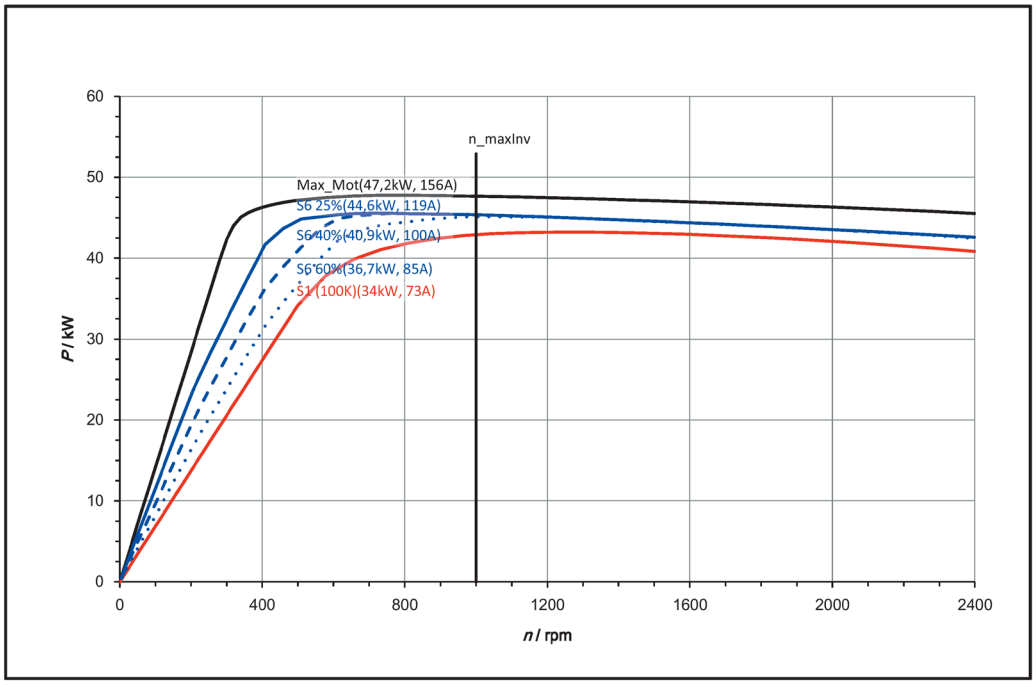
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	500
Rated torque (100 K)	$M_{N(100K)}$	Nm	650
Rated power (100 K)	$P_{N(100K)}$	kW	34
Rated current (100 K)	$I_{N(100K)}$	A	73
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	73
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	156
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.192
Rotating field inductance	L_D	mH	5
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.75
Weight	m_{mot} 3)	kg	110

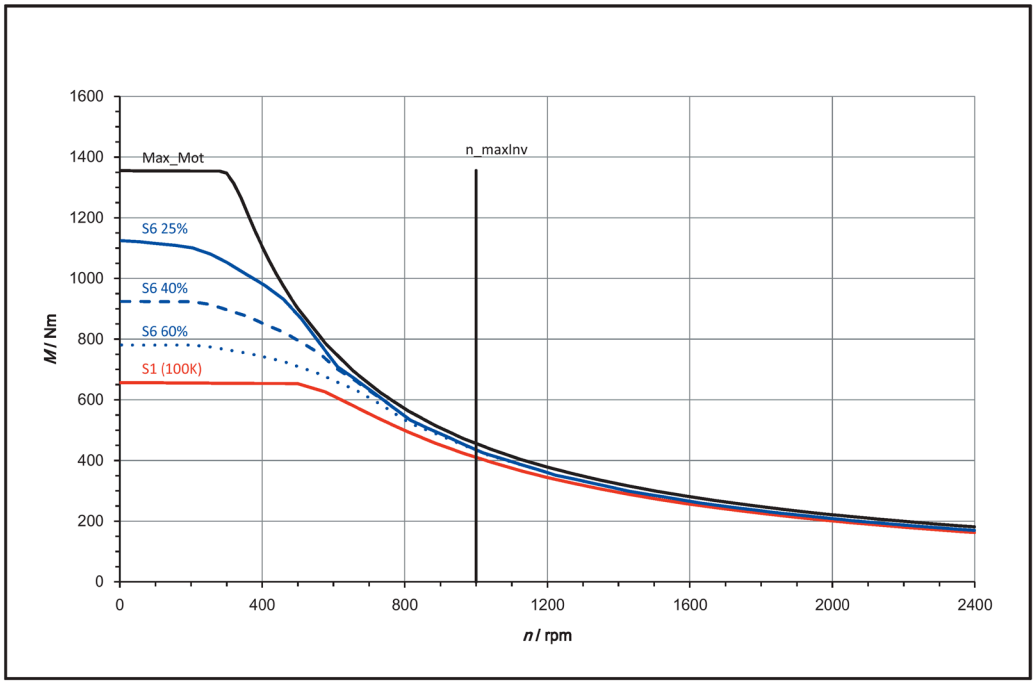
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2182-8LNxx-xAB0, 1FE2182-8LNxx-xAC0, 1FE2182-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-6 PD_1FE2182-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

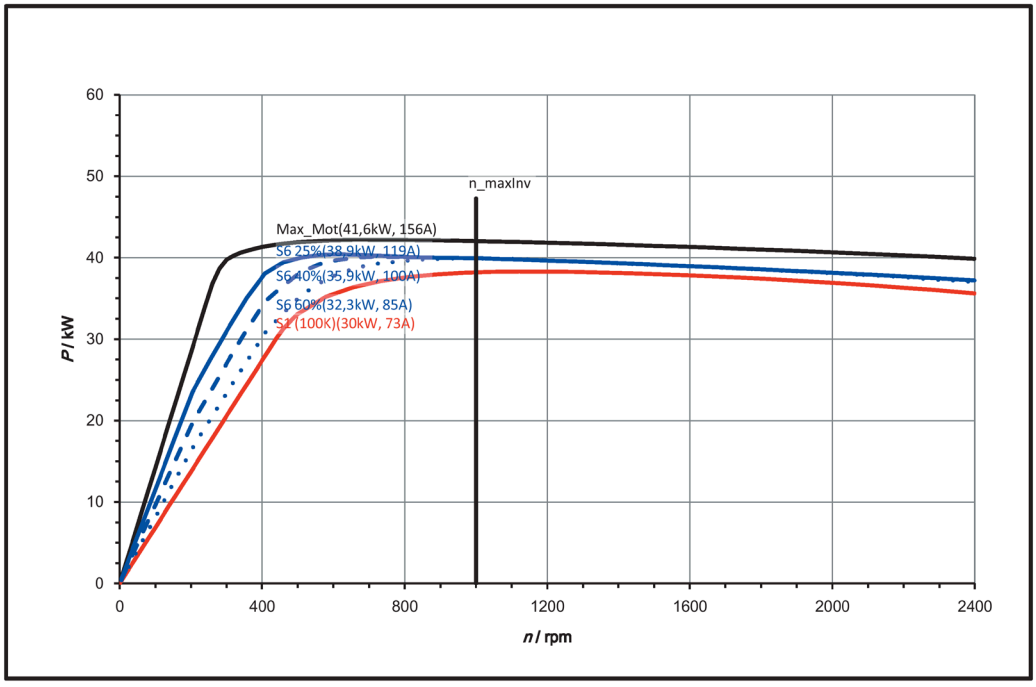
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	440
Rated torque (100 K)	$M_{N(100K)}$	Nm	650
Rated power (100 K)	$P_{N(100K)}$	kW	30
Rated current (100 K)	$I_{N(100K)}$	A	73
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	73
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	156
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.192
Rotating field inductance	L_D	mH	5
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.75
Weight	m_{mot} 3)	kg	110

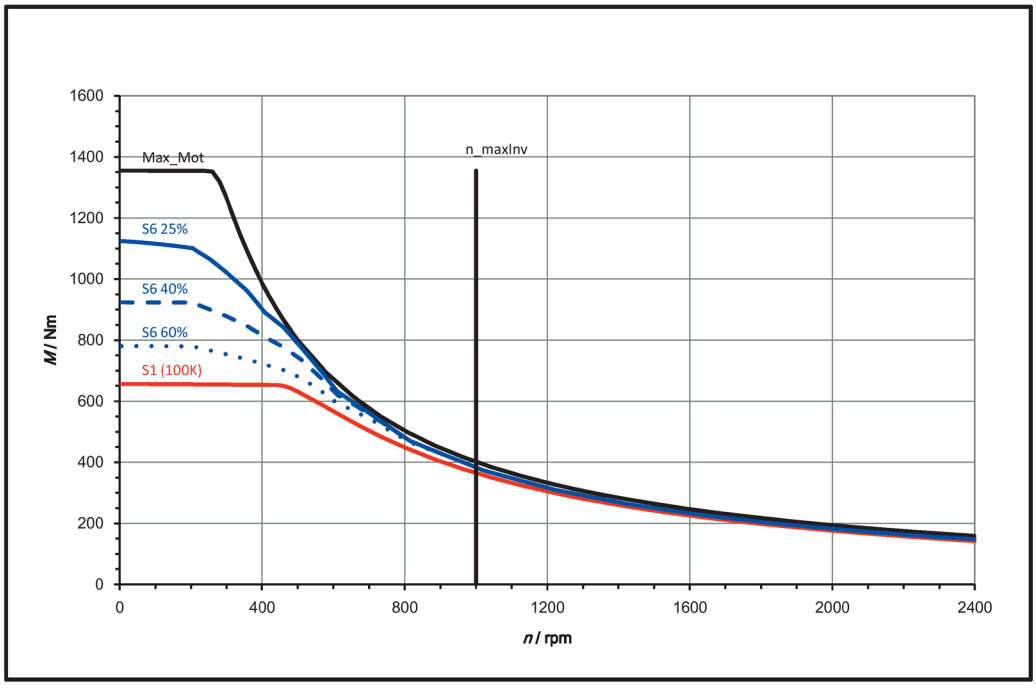
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2182-8LNxx-xAB0, 1FE2182-8LNxx-xAC0, 1FE2182-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-7 PD_1FE2182-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

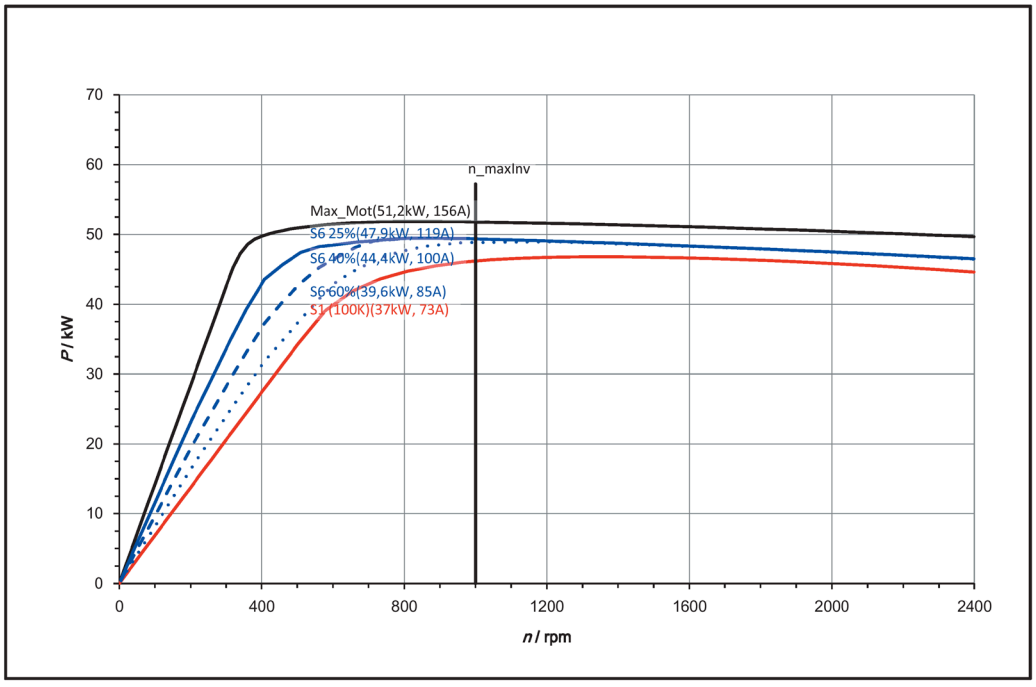
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	540
Rated torque (100 K)	$M_{N(100K)}$	Nm	650
Rated power (100 K)	$P_{N(100K)}$	kW	37
Rated current (100 K)	$I_{N(100K)}$	A	73
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	73
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	156
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.192
Rotating field inductance	L_D	mH	5
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.75
Weight	m_{mot} 3)	kg	110

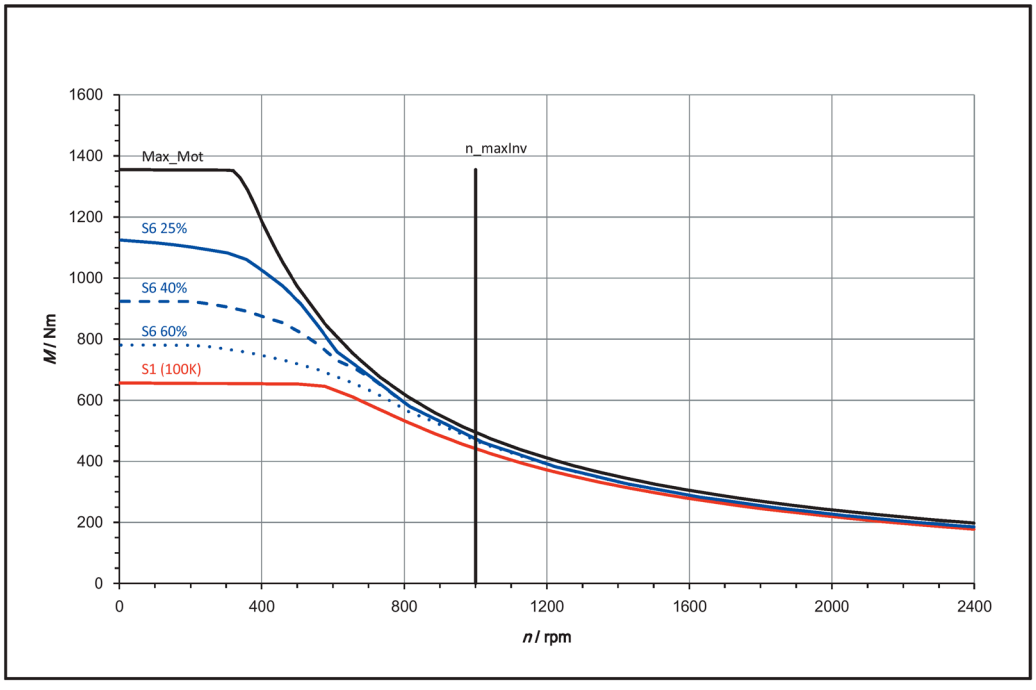
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2182-8LNxx-xAB0, 1FE2182-8LNxx-xAC0, 1FE2182-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-8 PD_1FE2182-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

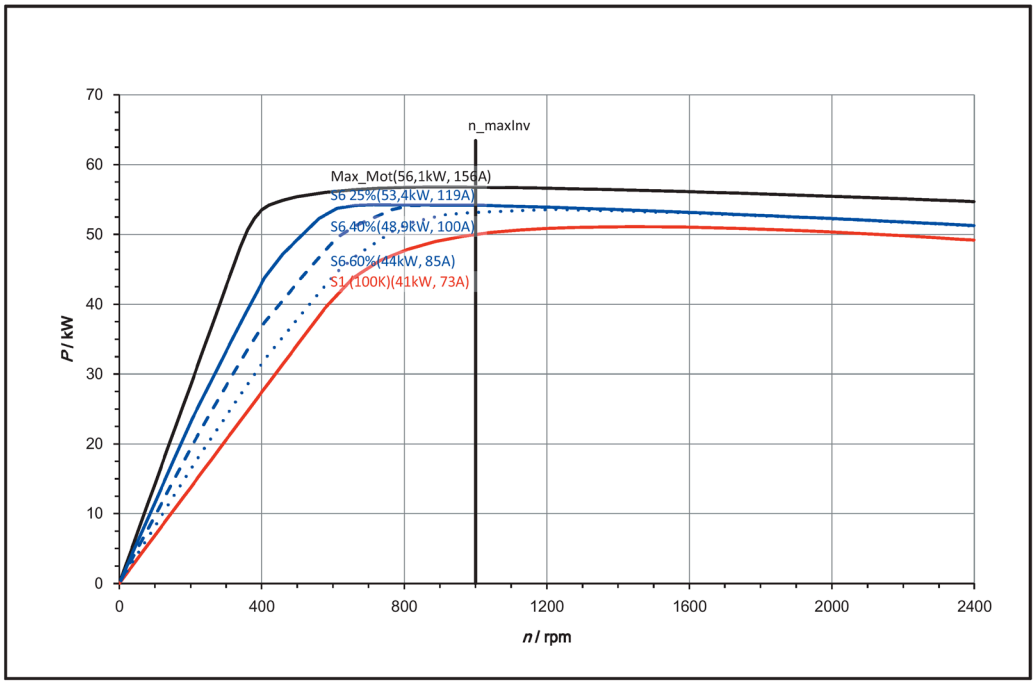
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	650
Rated power (100 K)	$P_{N(100K)}$	kW	41
Rated current (100 K)	$I_{N(100K)}$	A	73
Static torque (100 K)	$M_{0(100K)}$	Nm	650
Stall current (100 K)	$I_{0(100K)}$	A	73
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1350
Maximum current	I_{max}	A	156
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.192
Rotating field inductance	L_D	mH	5
Electrical time constant	T_{el}	ms	26
Mechanical time constant	T_{mech}	ms	5.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.75
Weight	m_{mot} 3)	kg	110

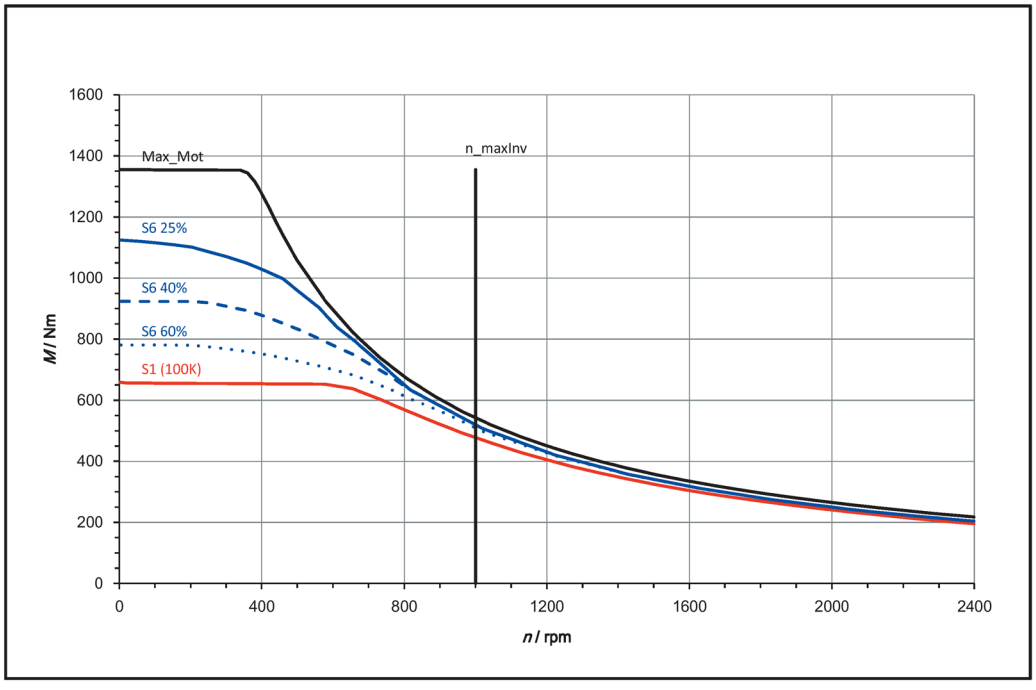
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2182-8LNxx-xAB0, 1FE2182-8LNxx-xAC0, 1FE2182-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-9 PD_1FE2182-8LNxx-xCC1_Index_a

2.1.4.3 1FE2183-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

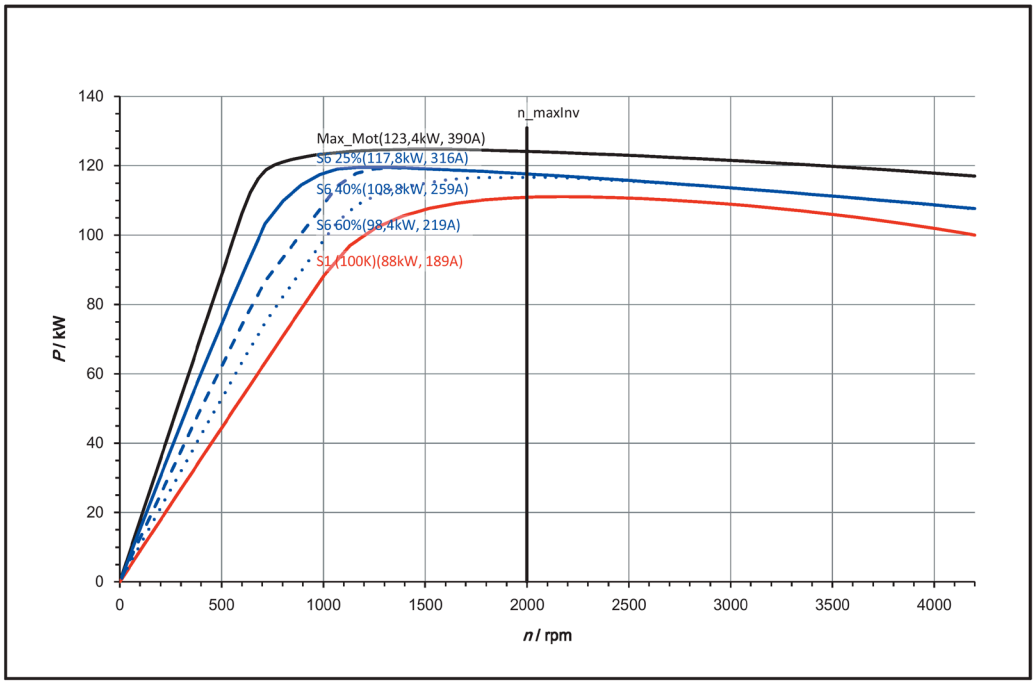
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	88
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0353
Rotating field inductance	L_D	mH	1
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

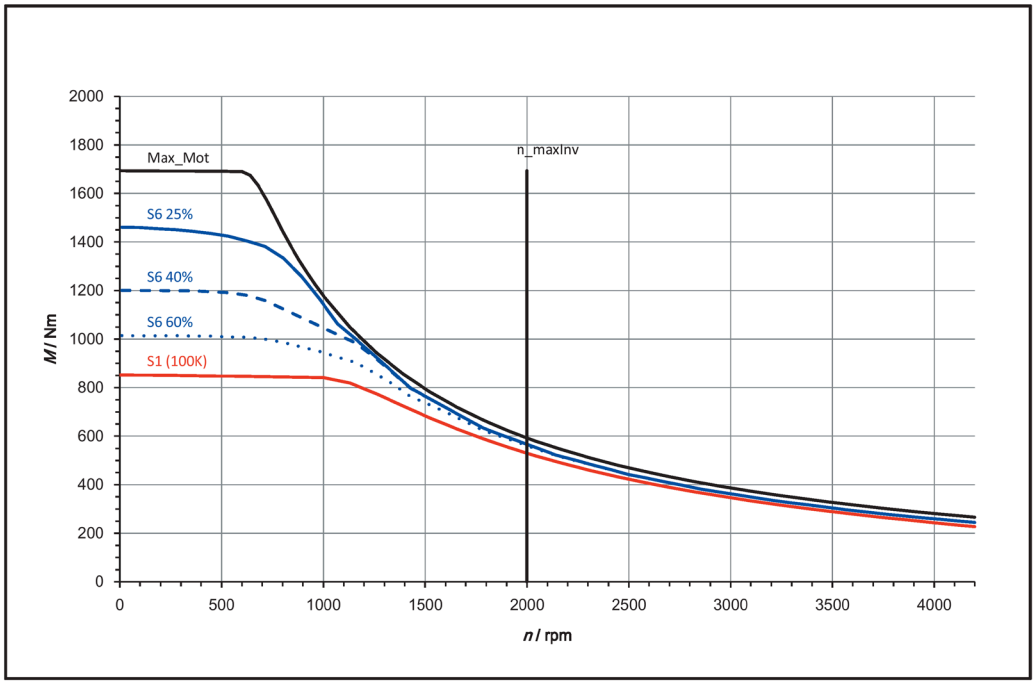
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LHxx-xAB0, 1FE2183-8LHxx-xAC0, 1FE2183-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-10 PD_1FE2183-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

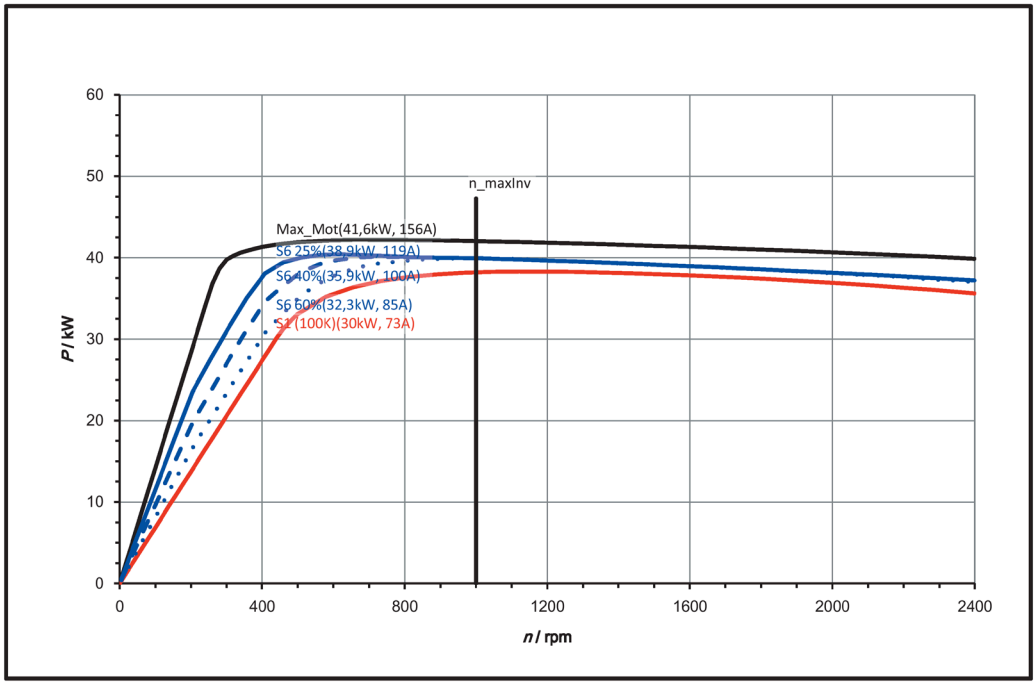
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	78
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0353
Rotating field inductance	L_D	mH	1
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

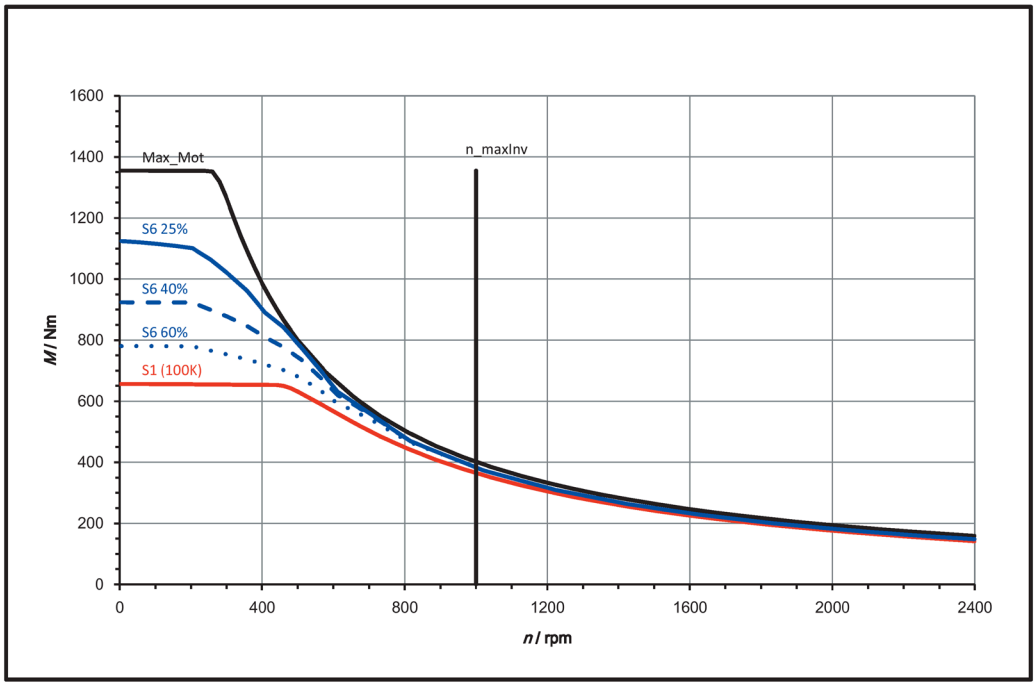
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LHxx-xAB0, 1FE2183-8LHxx-xAC0, 1FE2183-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-11 PD_1FE2183-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

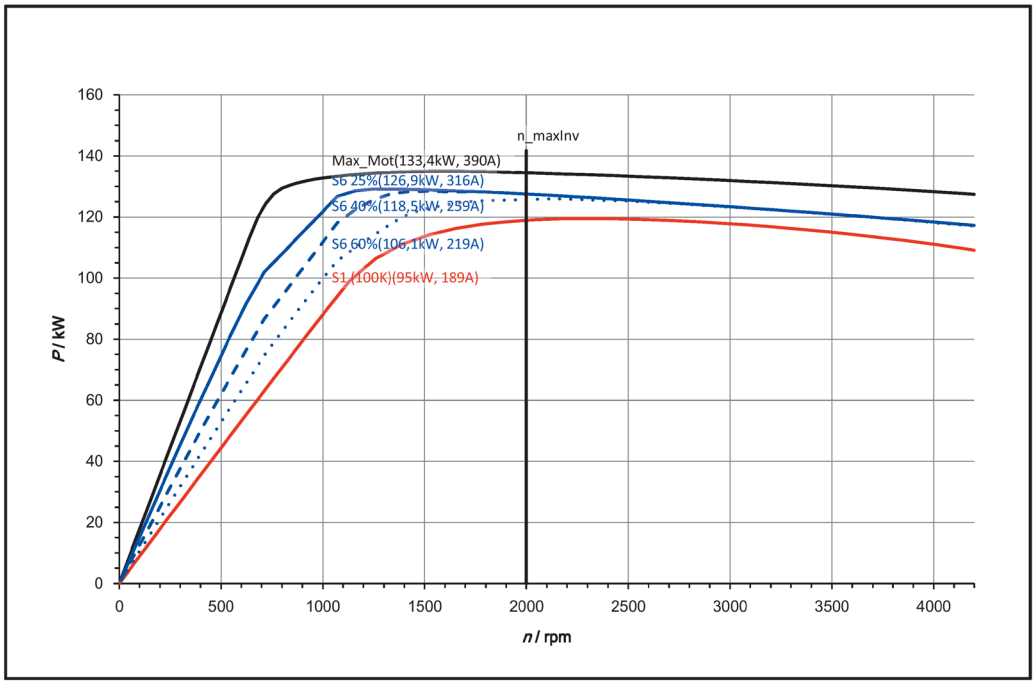
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	95
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0353
Rotating field inductance	L_D	mH	1
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

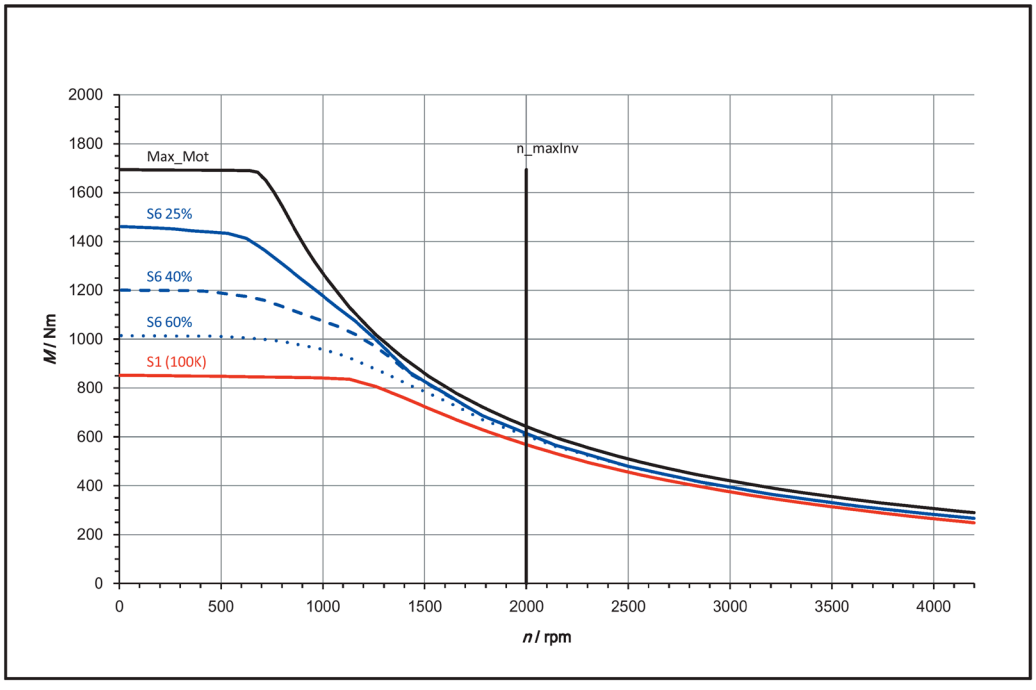
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LHxx-xAB0, 1FE2183-8LHxx-xAC0, 1FE2183-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-12 PD_1FE2183-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

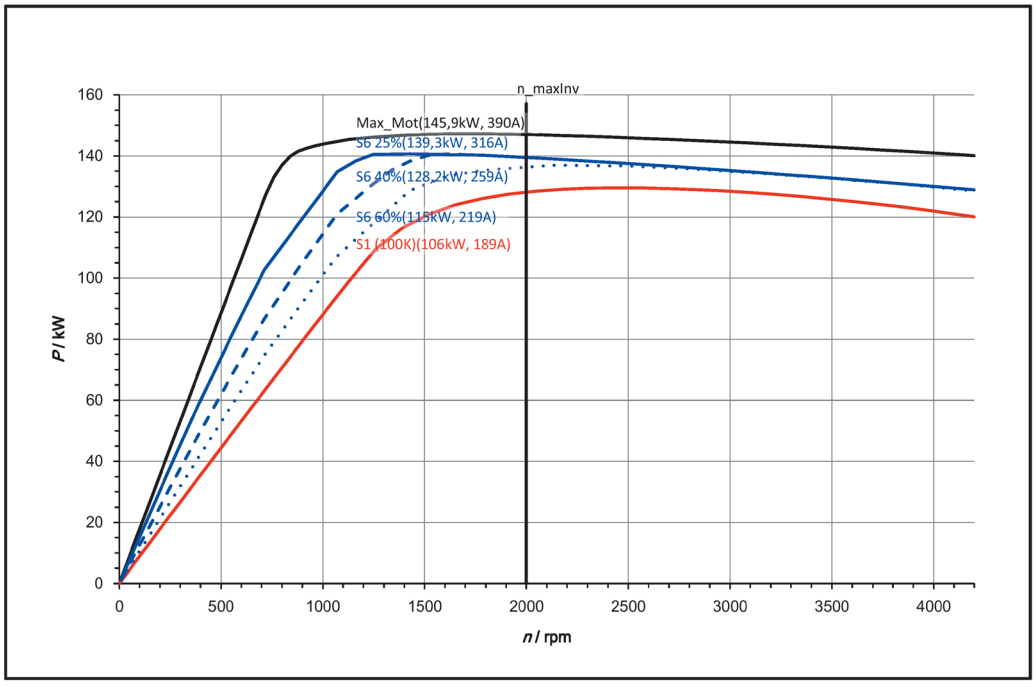
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	106
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0353
Rotating field inductance	L_D	mH	1
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

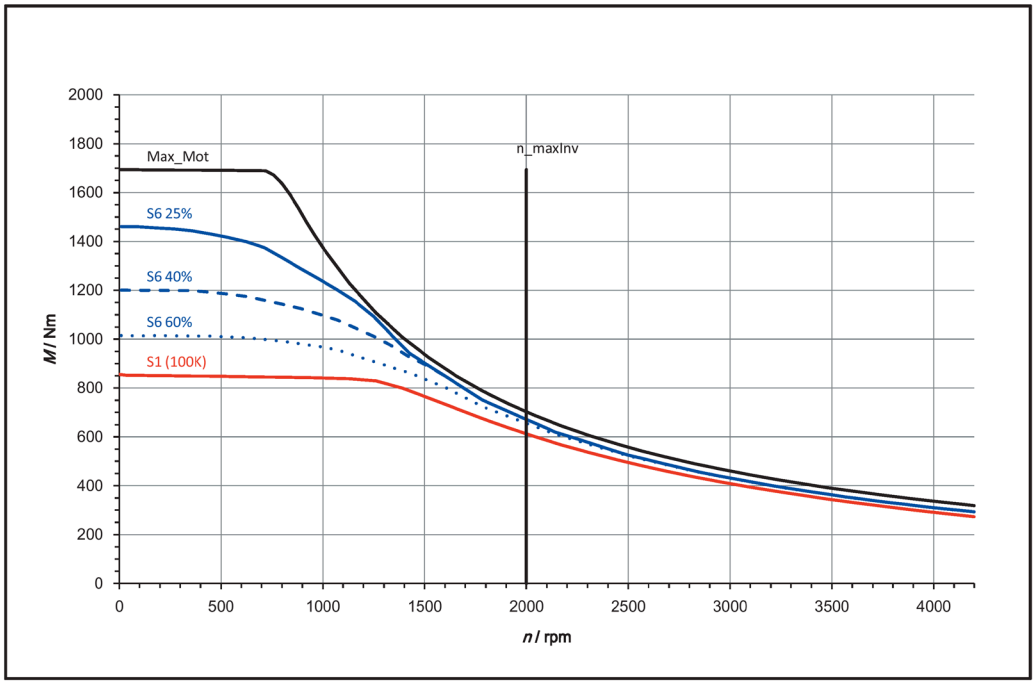
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LHxx-xAB0, 1FE2183-8LHxx-xAC0, 1FE2183-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-13 PD_1FE2183-8LHxx-xCC1_Index_a

2.1.4.4 1FE2183-8LNxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

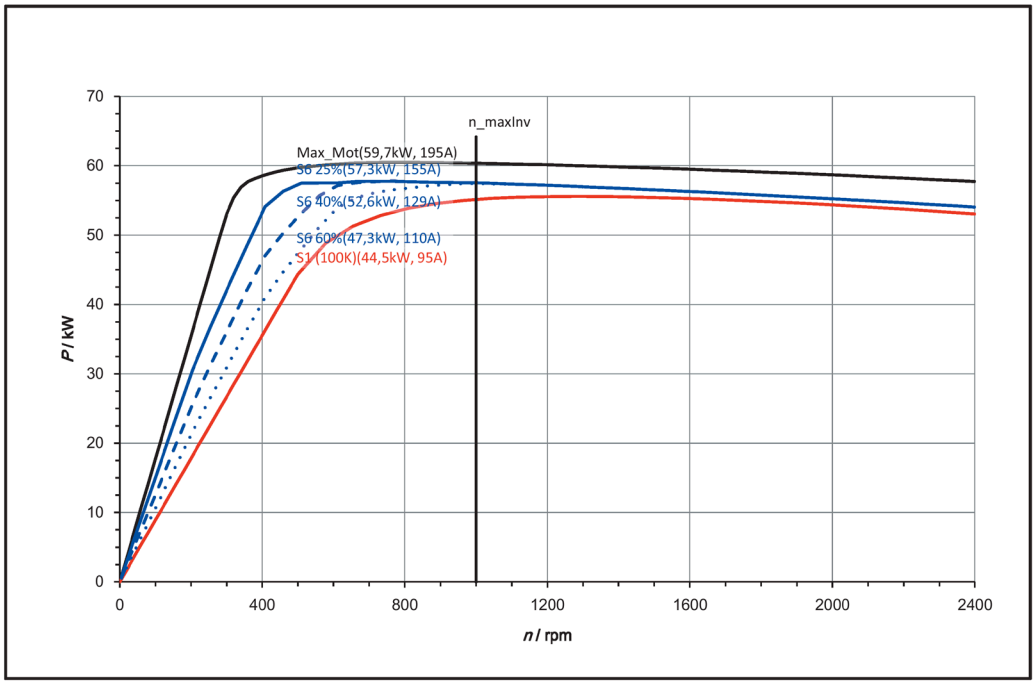
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	500
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	44.5
Rated current (100 K)	$I_{N(100K)}$	A	95
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	95
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	195
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1415
Rotating field inductance	L_D	mH	4
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

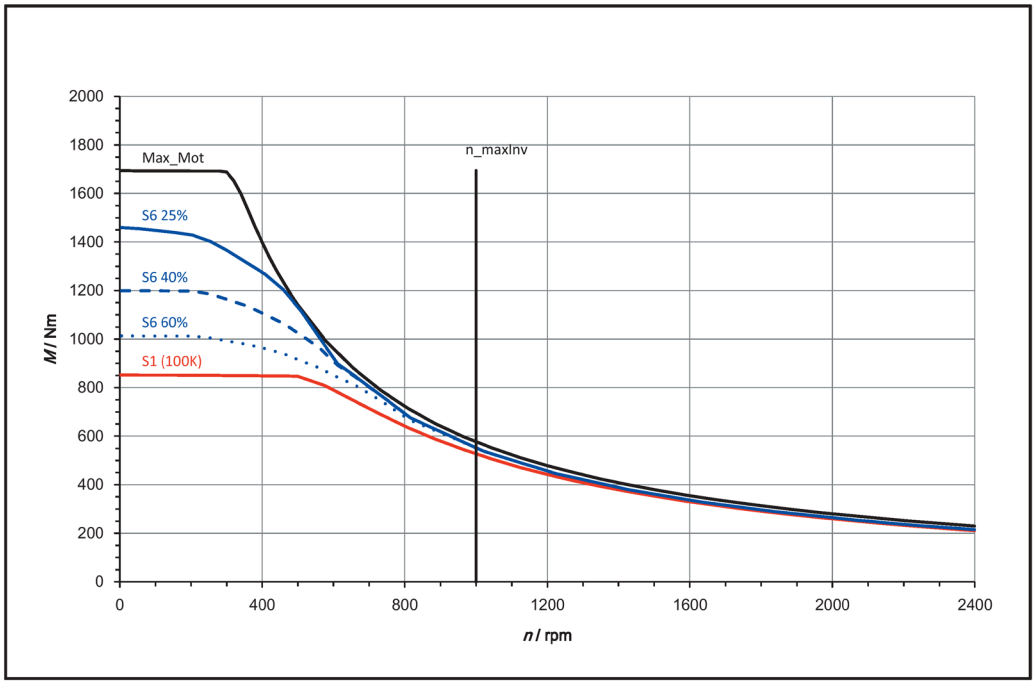
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LNxx-xAB0, 1FE2183-8LNxx-xAC0, 1FE2183-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-14 PD_1FE2183-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

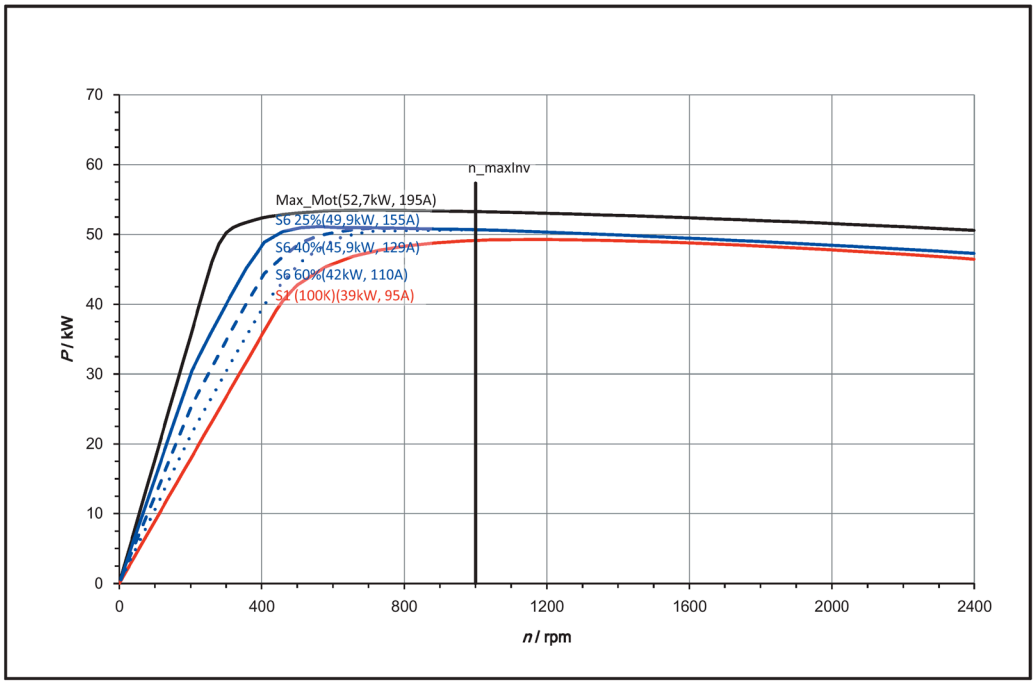
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	440
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	39
Rated current (100 K)	$I_{N(100K)}$	A	95
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	95
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	195
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1415
Rotating field inductance	L_D	mH	4
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

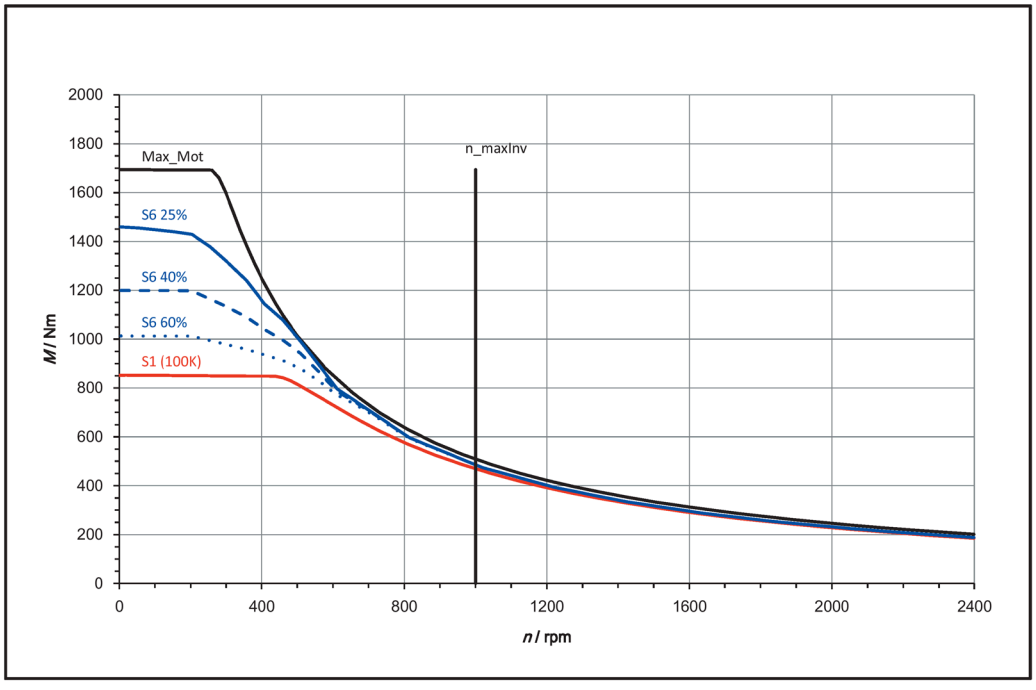
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LNxx-xAB0, 1FE2183-8LNxx-xAC0, 1FE2183-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-15 PD_1FE2183-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

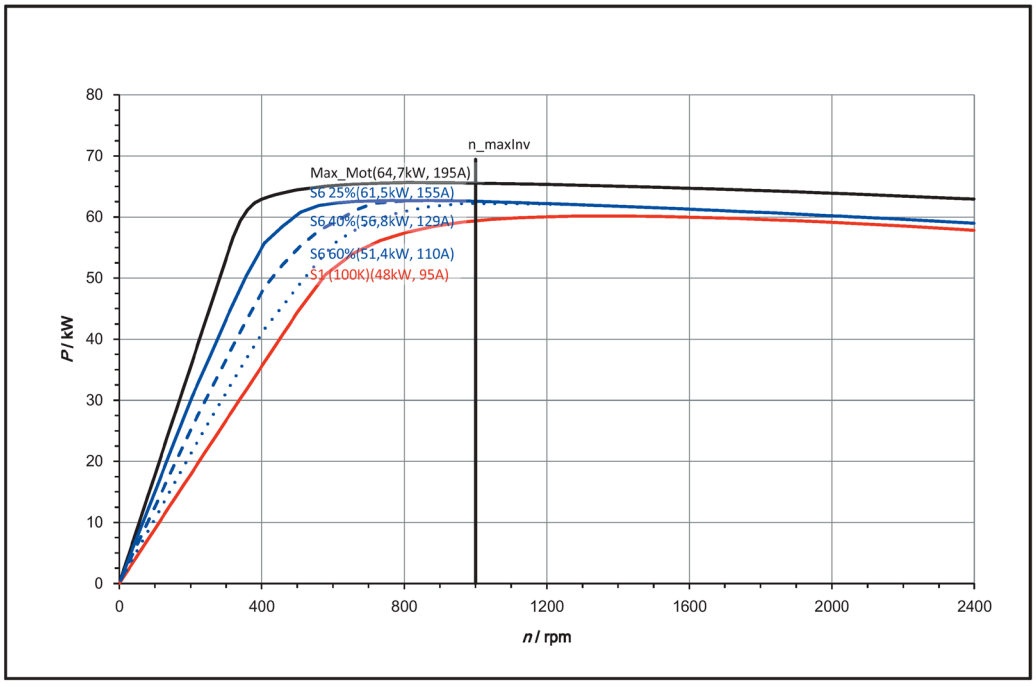
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	540
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	48
Rated current (100 K)	$I_{N(100K)}$	A	95
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	95
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	195
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1415
Rotating field inductance	L_D	mH	4
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LHxx-xAB0, 1FE2183-8LHxx-xAC0, 1FE2183-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)



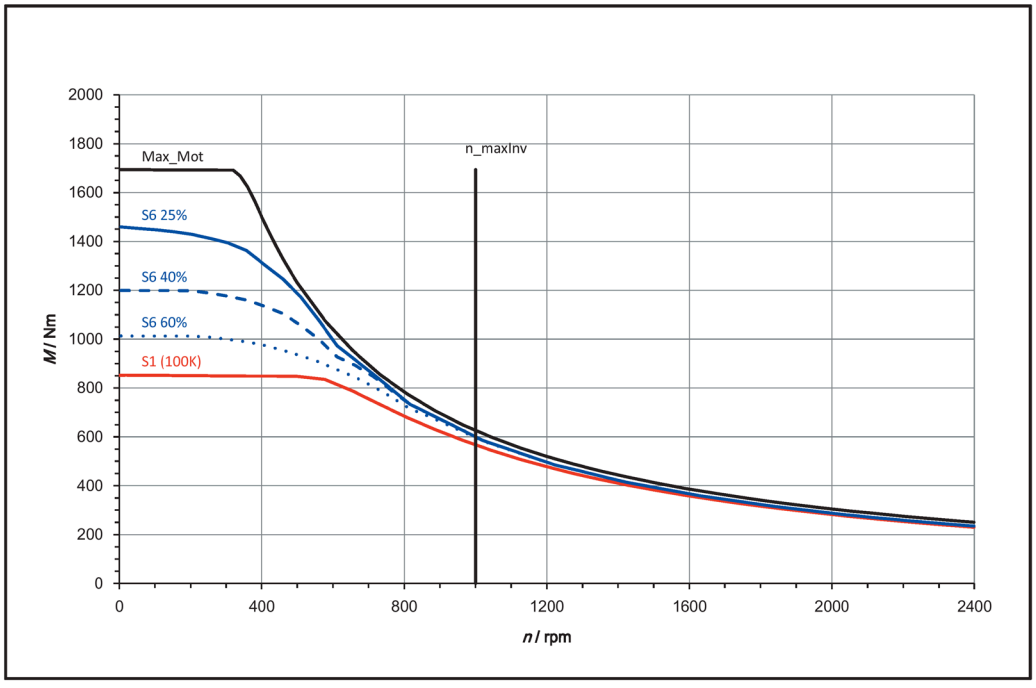


Figure 2-16 PD_1FE2183-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

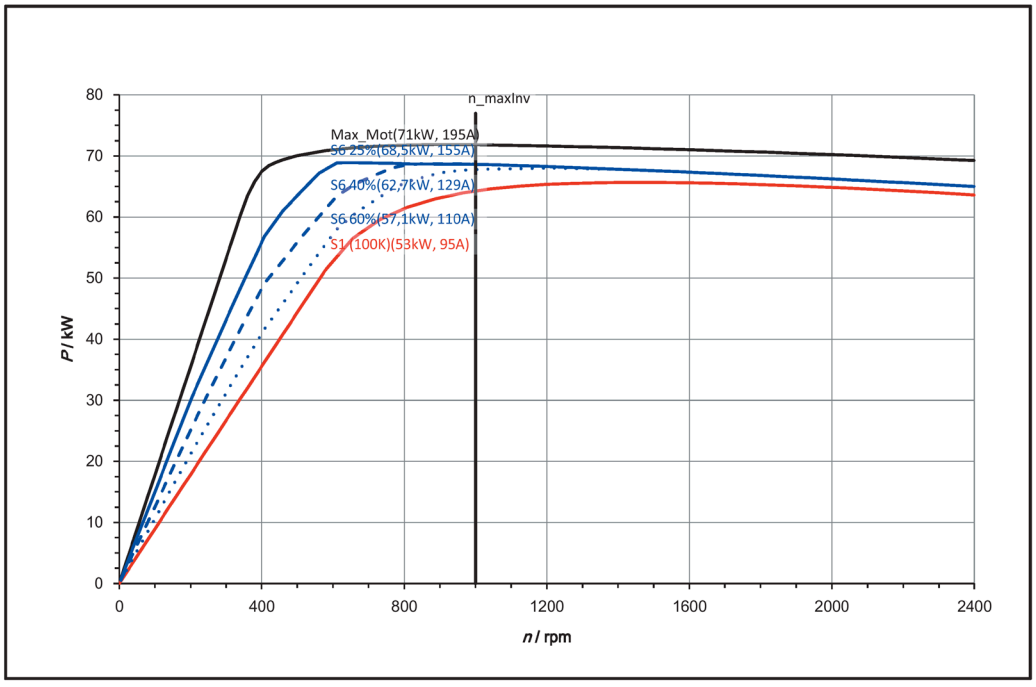
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	840
Rated power (100 K)	$P_{N(100K)}$	kW	53
Rated current (100 K)	$I_{N(100K)}$	A	95
Static torque (100 K)	$M_{0(100K)}$	Nm	850
Stall current (100 K)	$I_{0(100K)}$	A	95
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	1690
Maximum current	I_{max}	A	195
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1415
Rotating field inductance	L_D	mH	4
Electrical time constant	T_{el}	ms	28
Mechanical time constant	T_{mech}	ms	4.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	0.9
Weight	m_{mot} 3)	kg	130

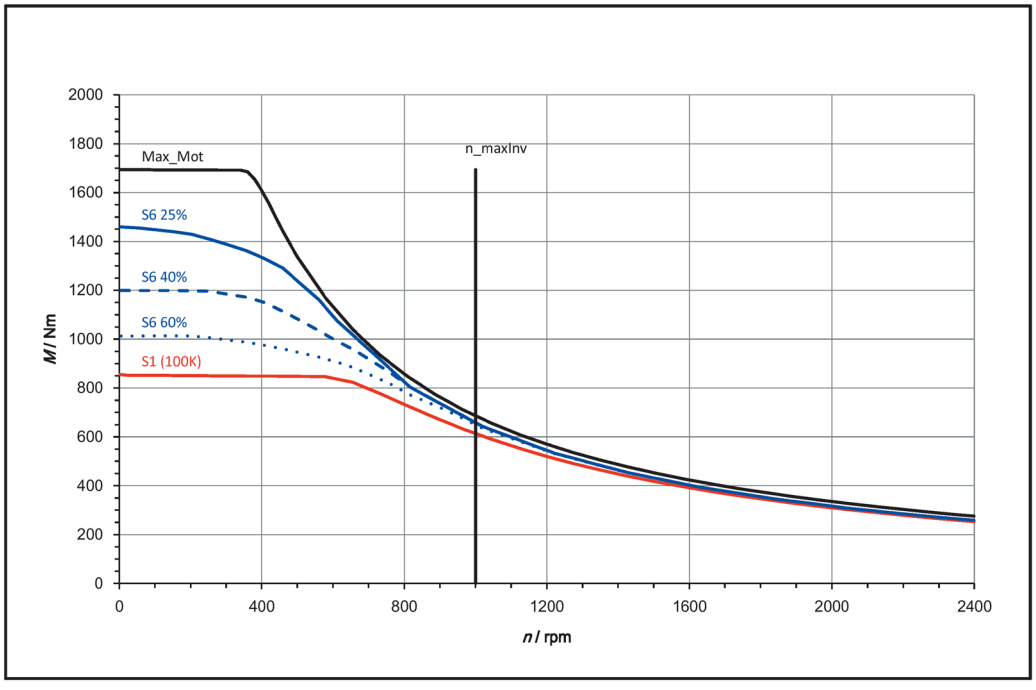
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2183-8LNxx-xAB0, 1FE2183-8LNxx-xAC0, 1FE2183-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-17 PD_1FE2183-8LNxx-xCC1_Index_a

2.1.4.5 1FE2184-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

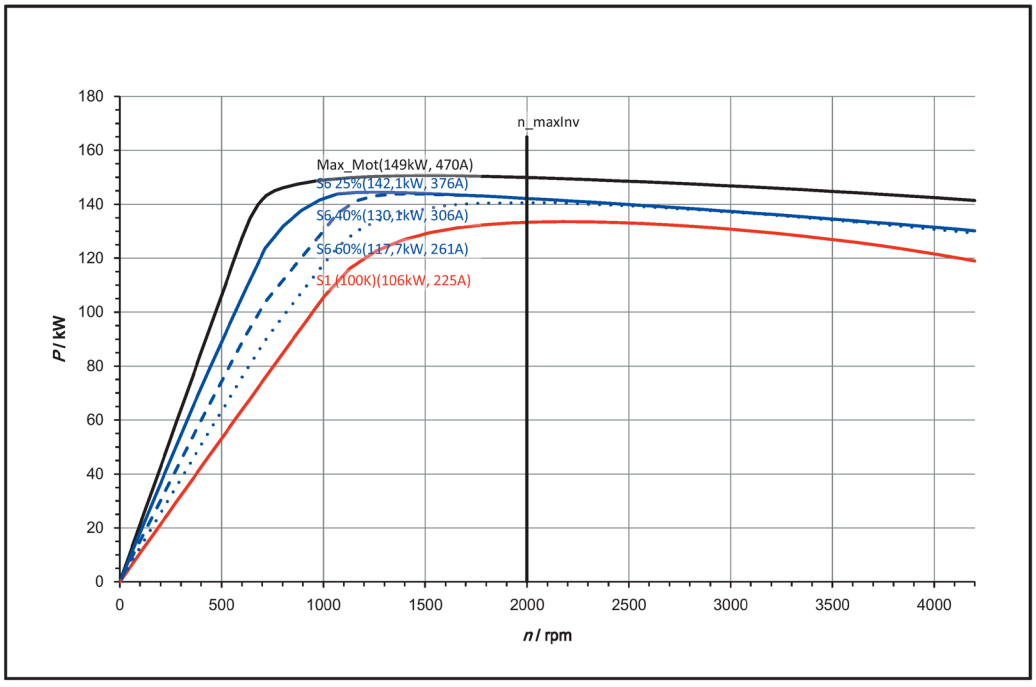
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	106
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm²	1.05
Weight	m_{mot} 3)	kg	150

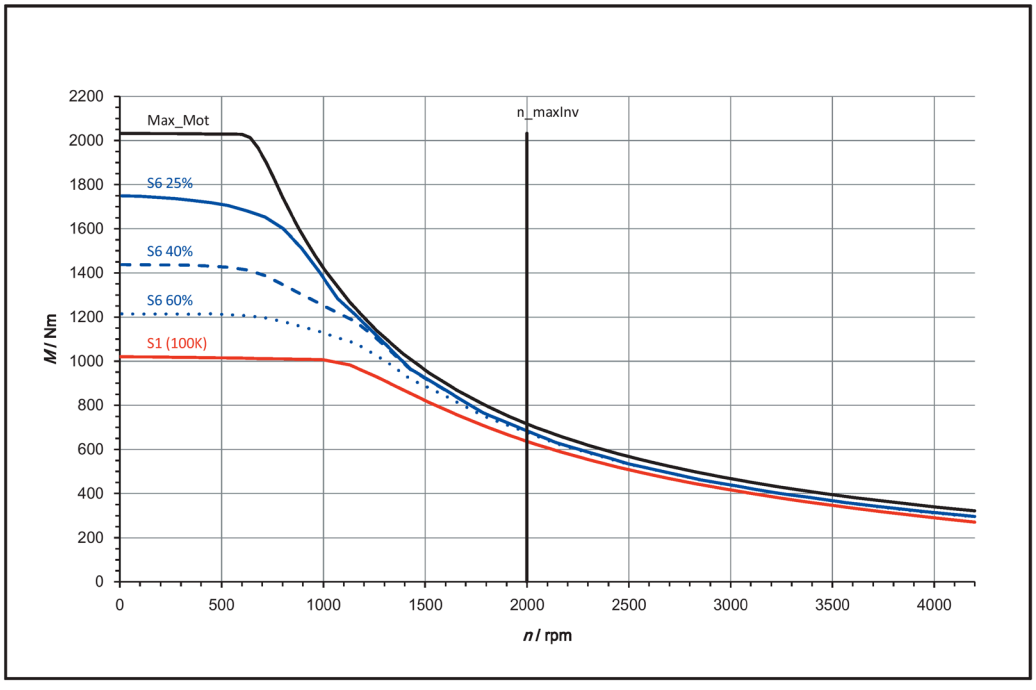
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-18 PD_1FE2184-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

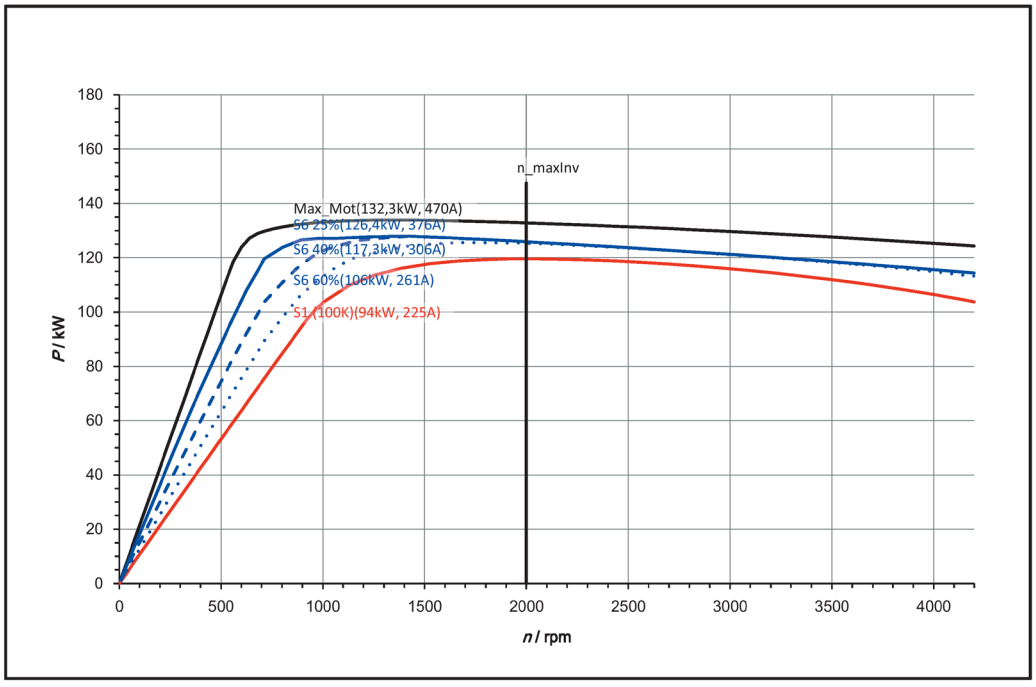
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	94
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

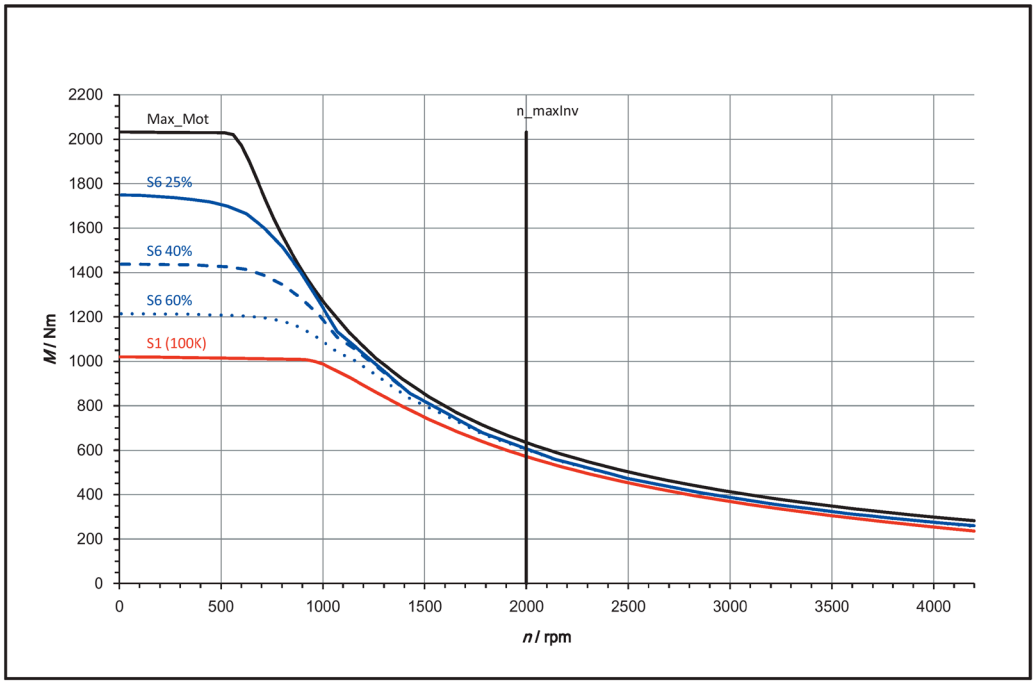
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-19 PD_1FE2184-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

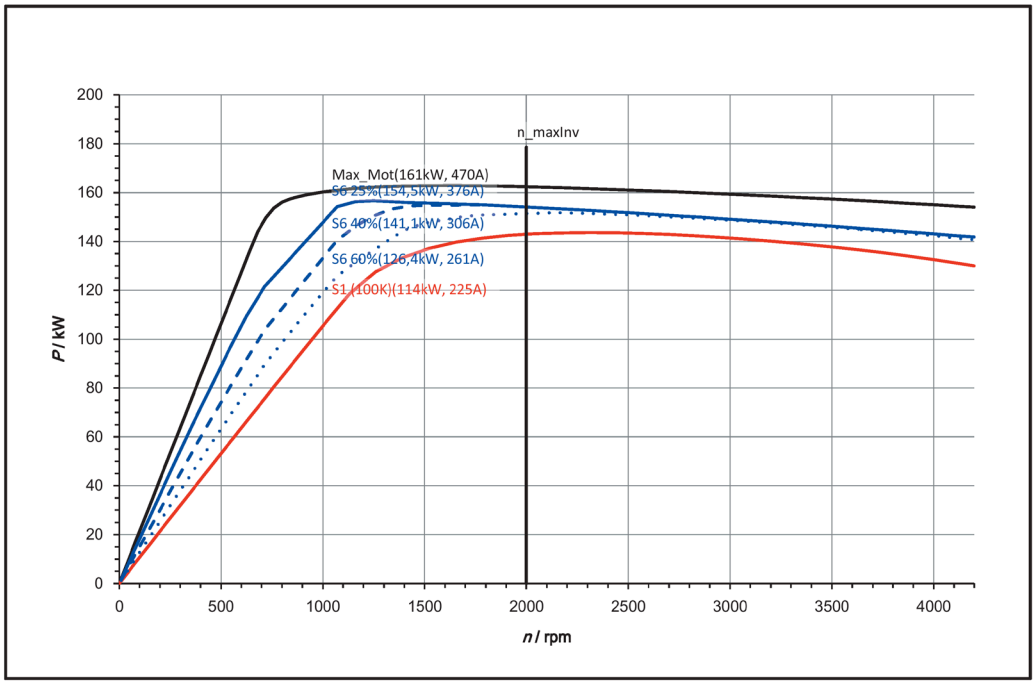
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	114
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

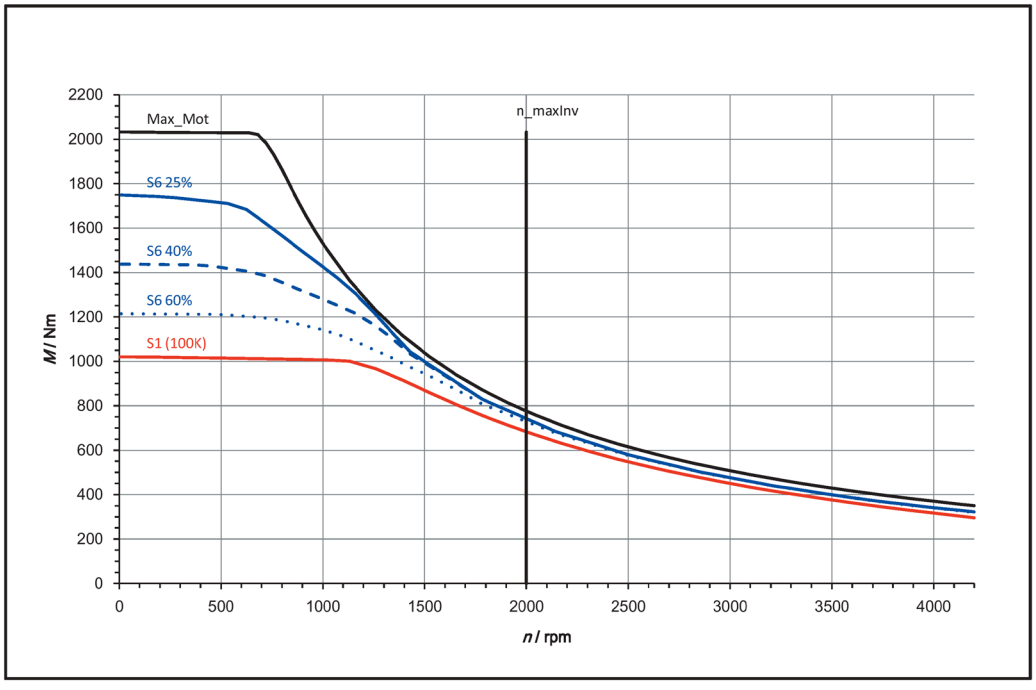
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-20 PD_1FE2184-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

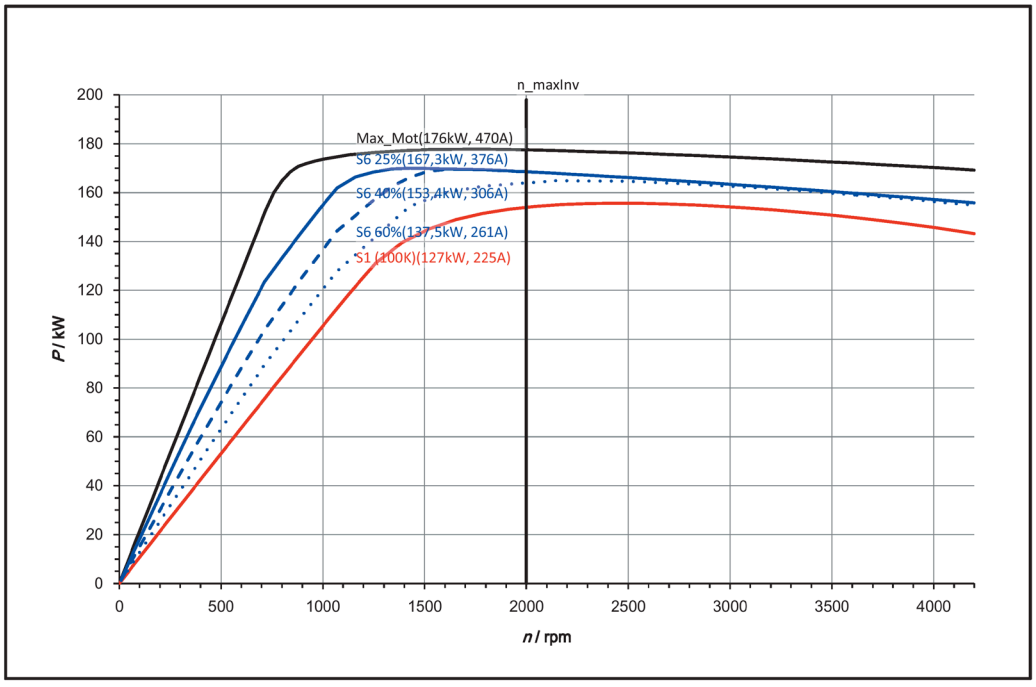
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	127
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

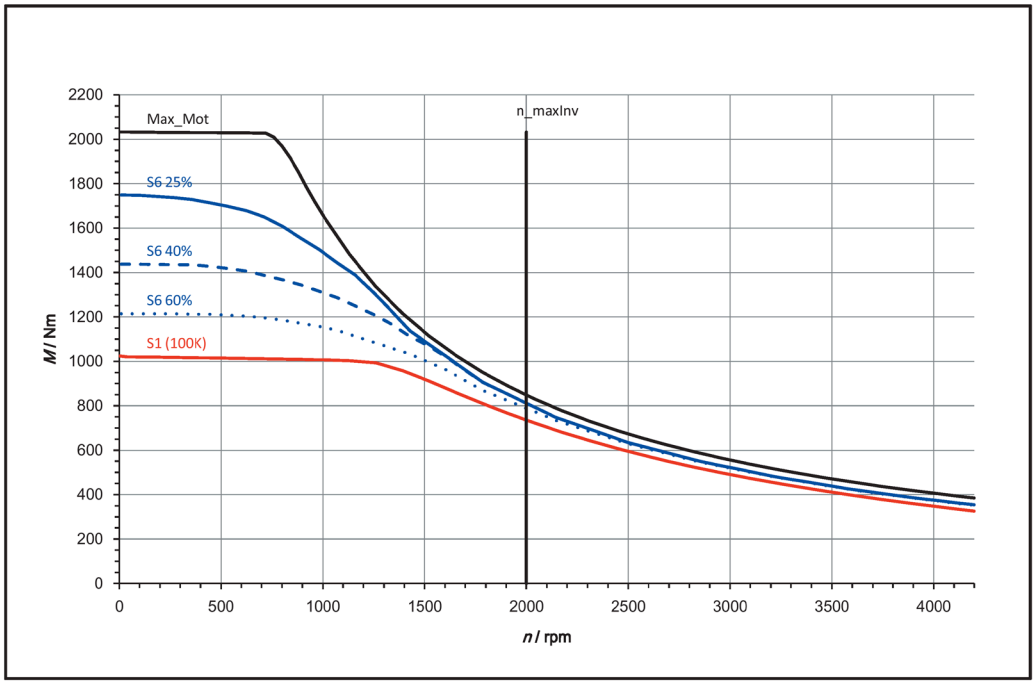
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-21 PD_1FE2184-8LHxx-xCC1_Index_a

2.1.4.6 1FE2184-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

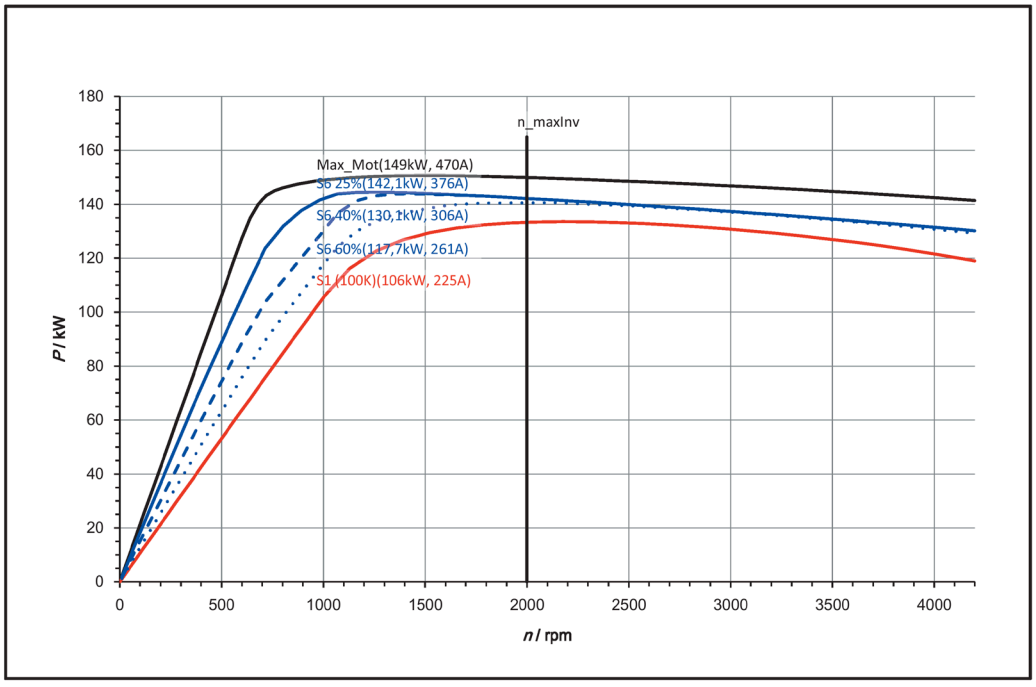
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	106
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

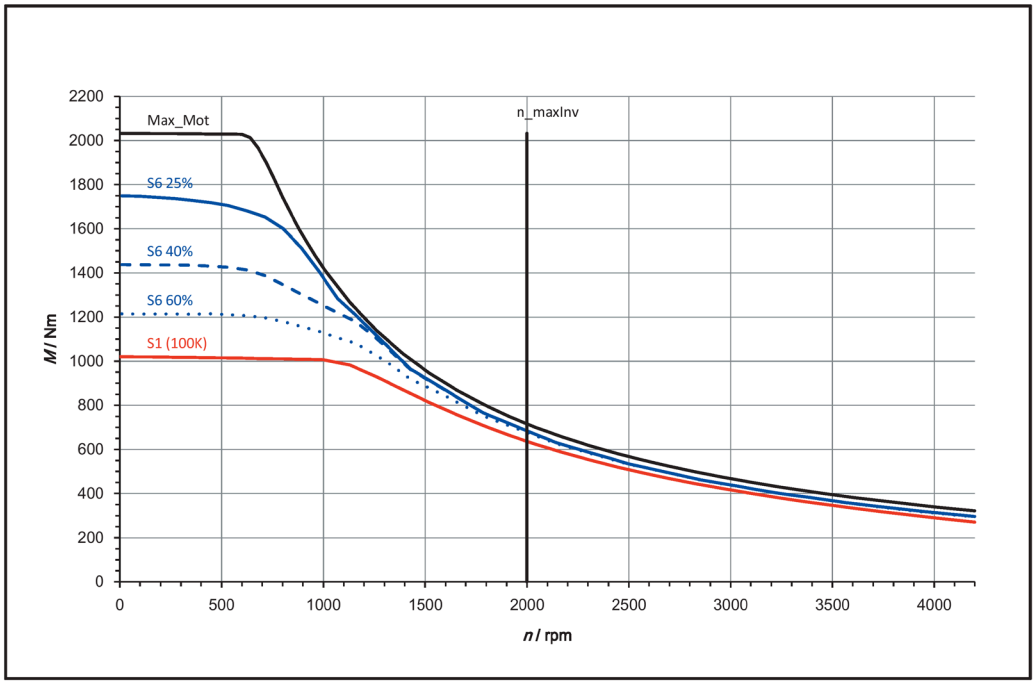
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-22 PD_1FE2184-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

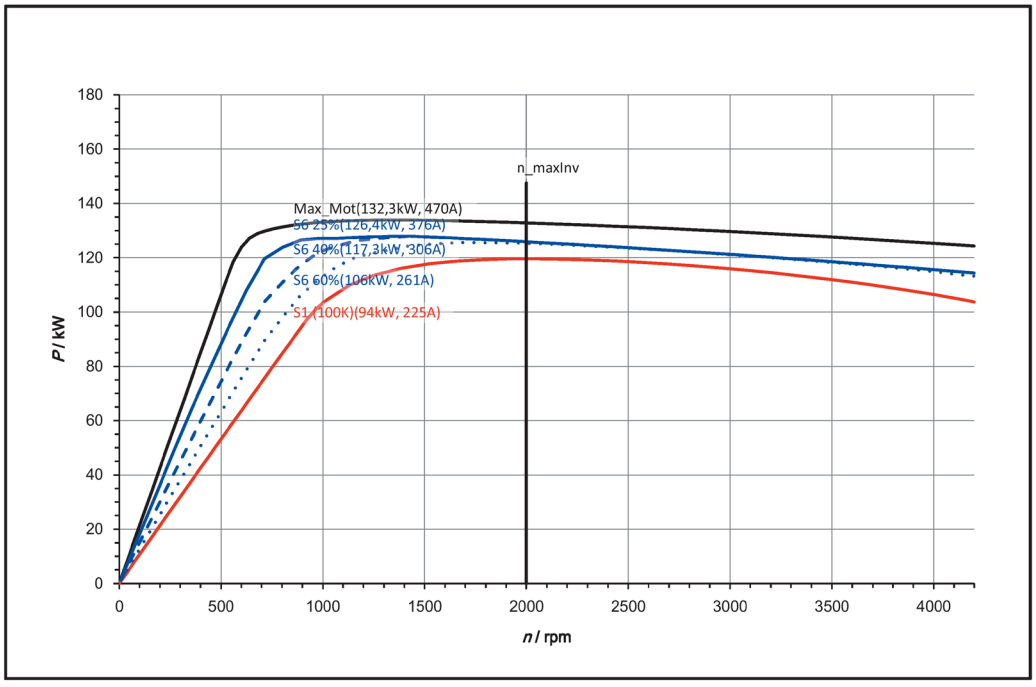
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	94
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

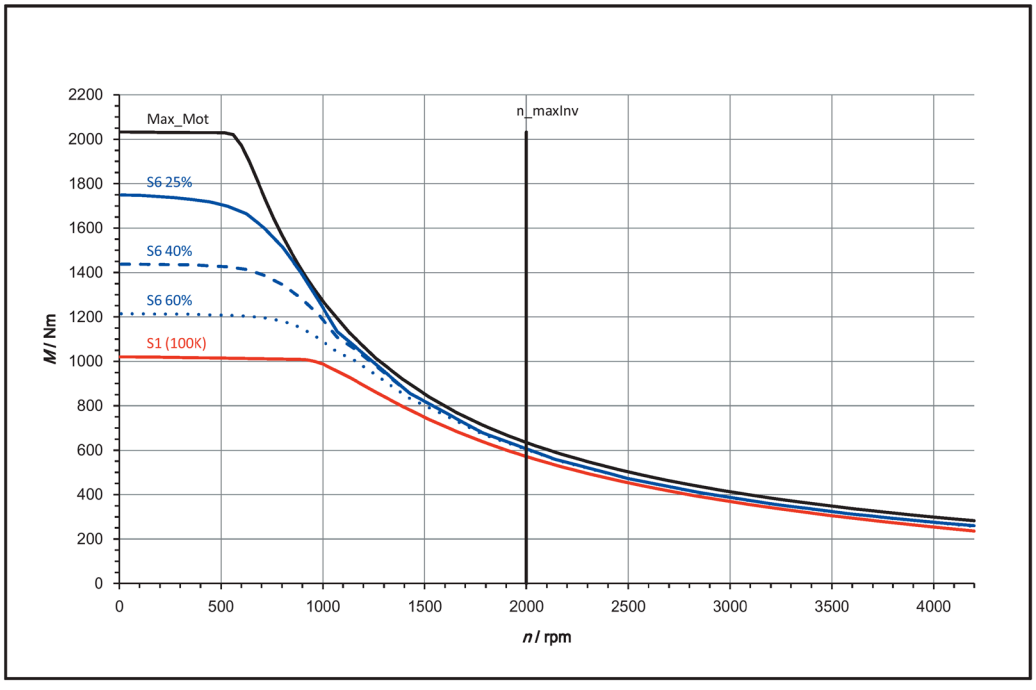
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-23 PD_1FE2184-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

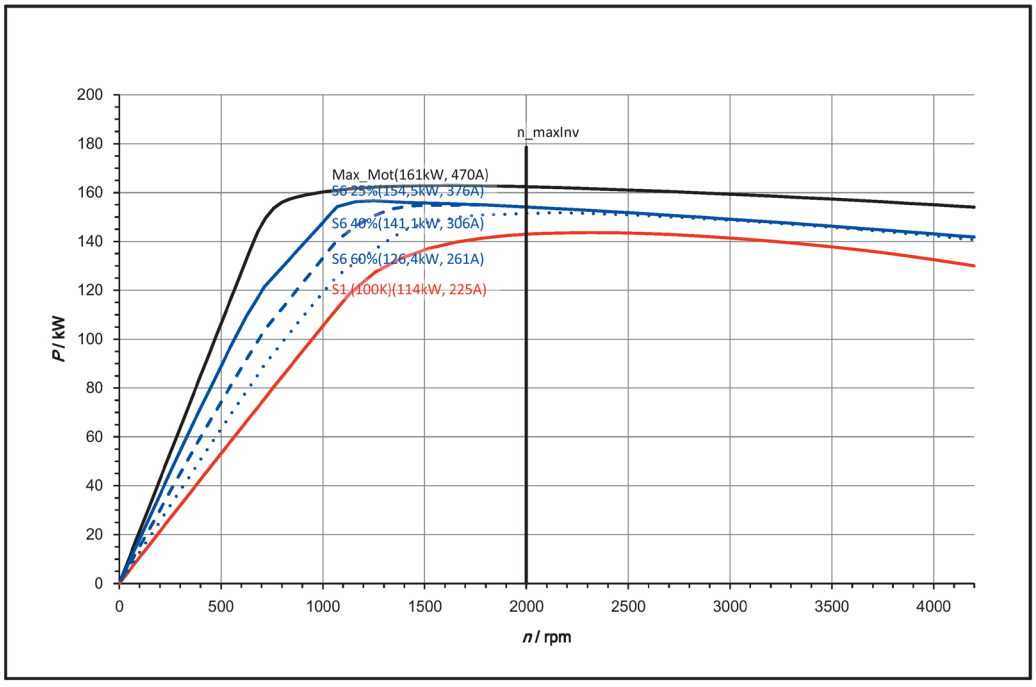
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	114
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

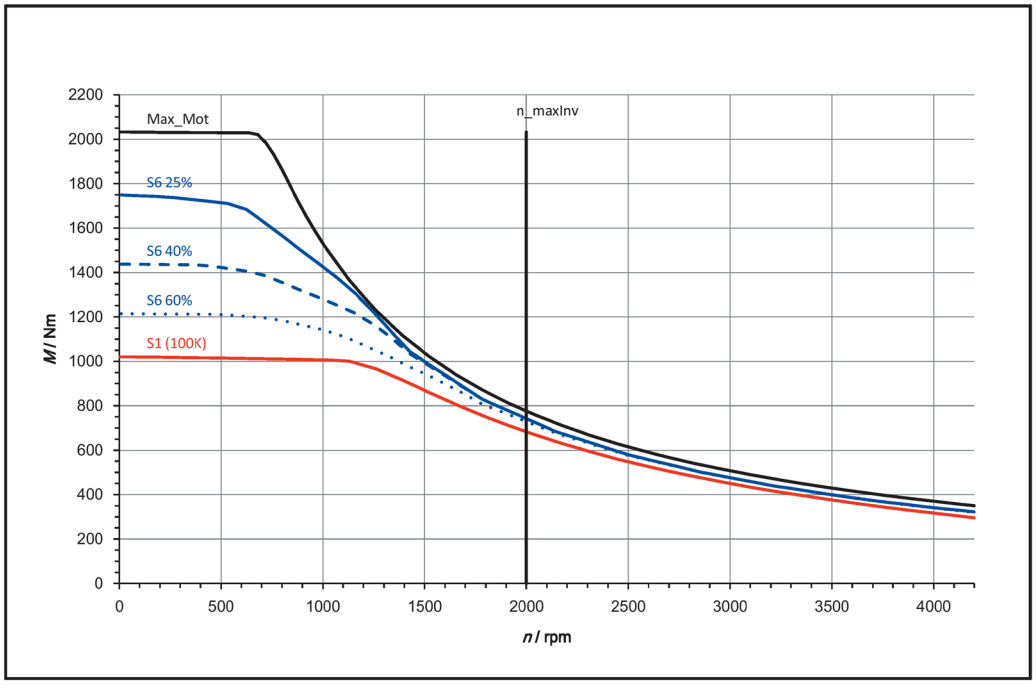
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-24 PD_1FE2184-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

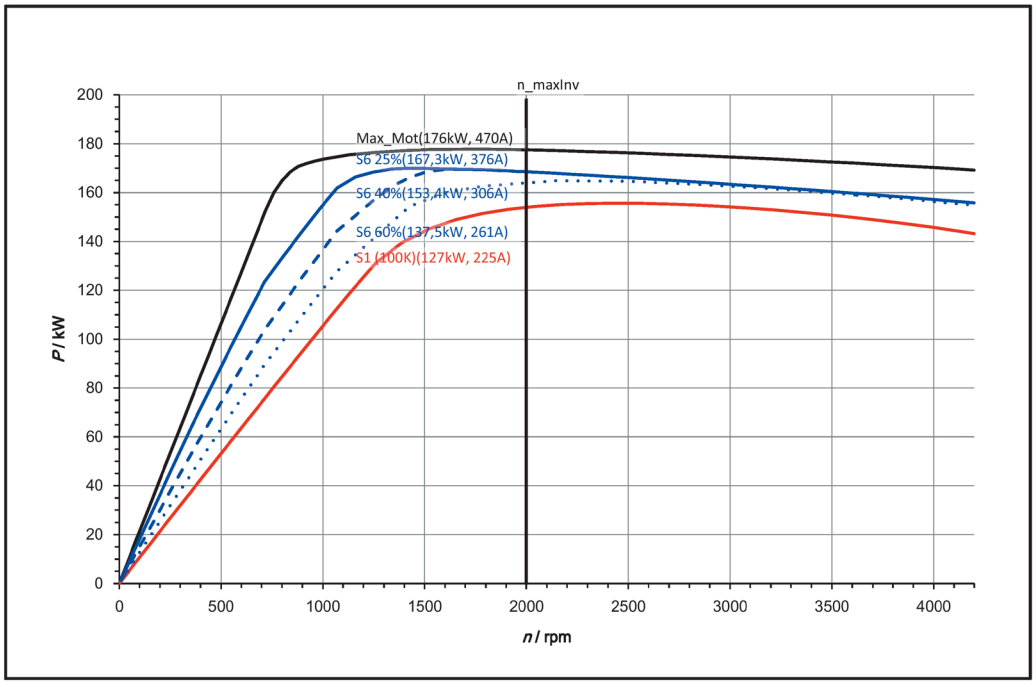
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	1000
Rated power (100 K)	$P_{N(100K)}$	kW	127
Rated current (100 K)	$I_{N(100K)}$	A	225
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	230
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	2000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	470
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.48
Voltage constant (at 20 °C)	k_E	V/1000rpm	294
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0281
Rotating field inductance	L_D	mH	0.85
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

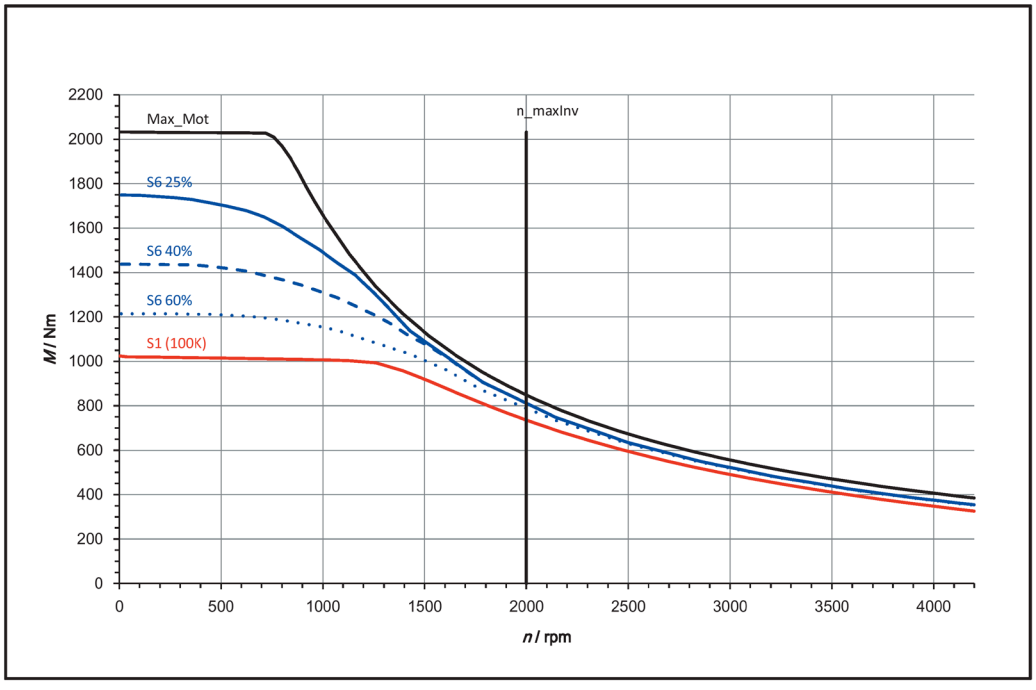
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LHxx-xAB0, 1FE2184-8LHxx-xAC0, 1FE2184-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-25 PD_1FE2184-8LHxx-xCC1_Index_a

2.1.4.7 1FE2184-8LKxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

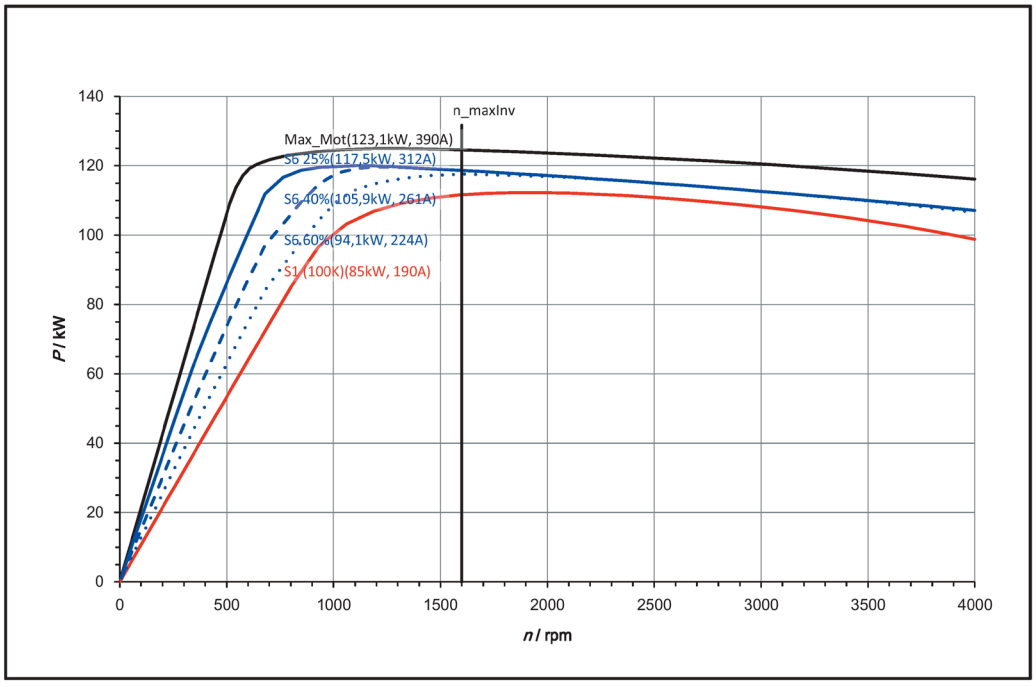
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	800
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	85
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4010
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1600
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	5.35
Voltage constant (at 20 °C)	k_E	V/1000rpm	352
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0402
Rotating field inductance	L_D	mH	1.2
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

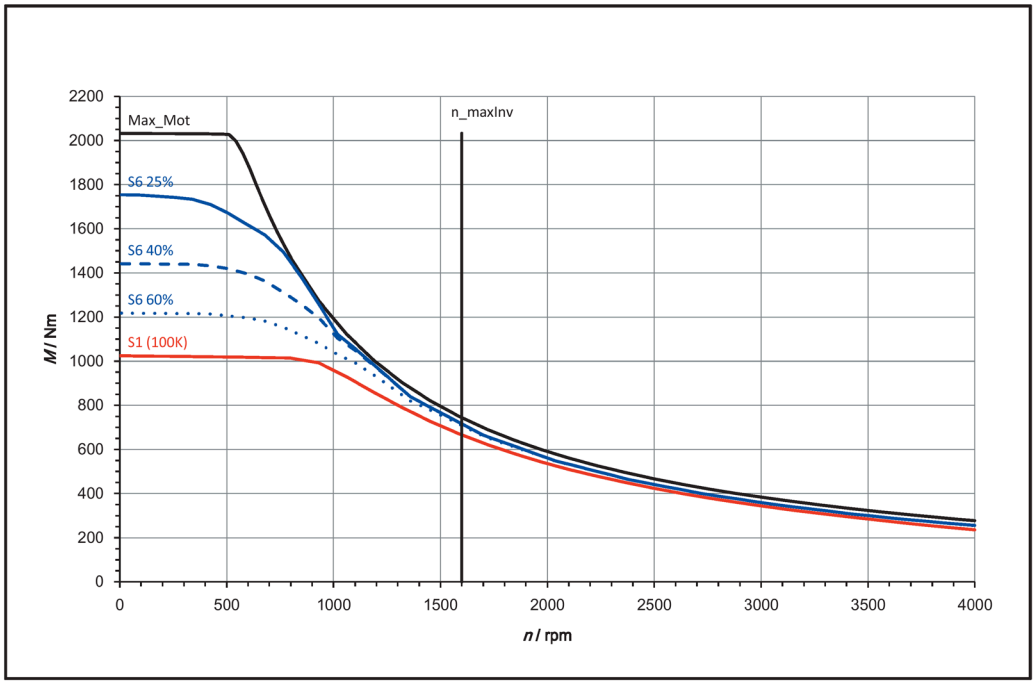
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LKxx-xAB0, 1FE2184-8LKxx-xAC0, 1FE2184-8LKxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-26 PD_1FE2184-8LKxx-xCC1_Index_--_

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

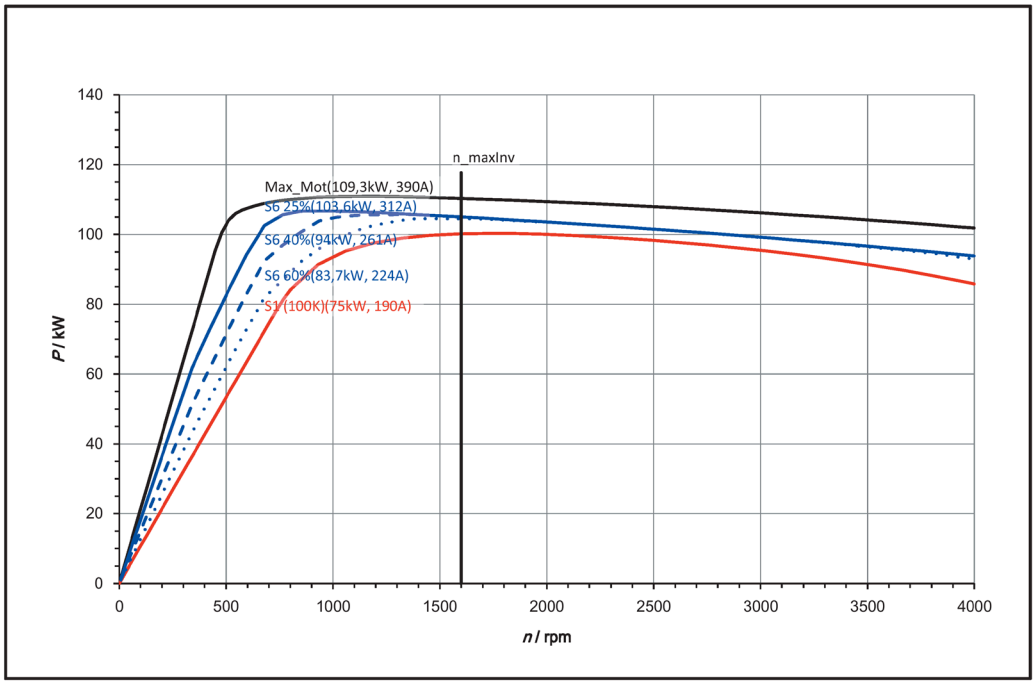
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	710
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	75
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4010
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1600
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	5.35
Voltage constant (at 20 °C)	k_E	V/1000rpm	352
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0402
Rotating field inductance	L_D	mH	1.2
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

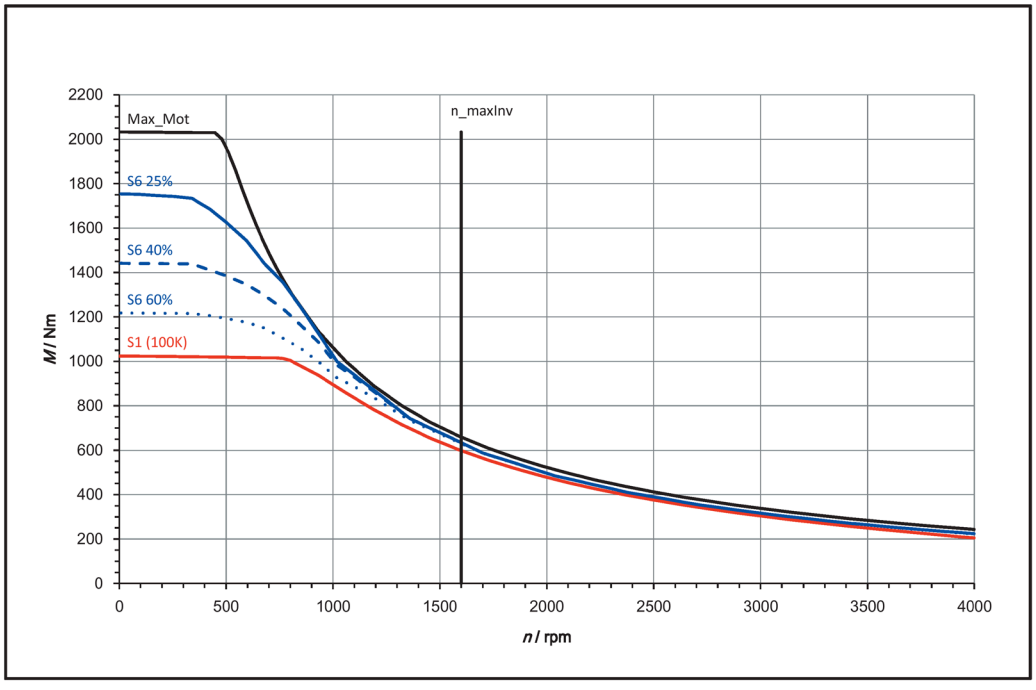
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LKxx-xAB0, 1FE2184-8LKxx-xAC0, 1FE2184-8LKxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-27 PD_1FE2184-8LKxx-xCC1_Index_--

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

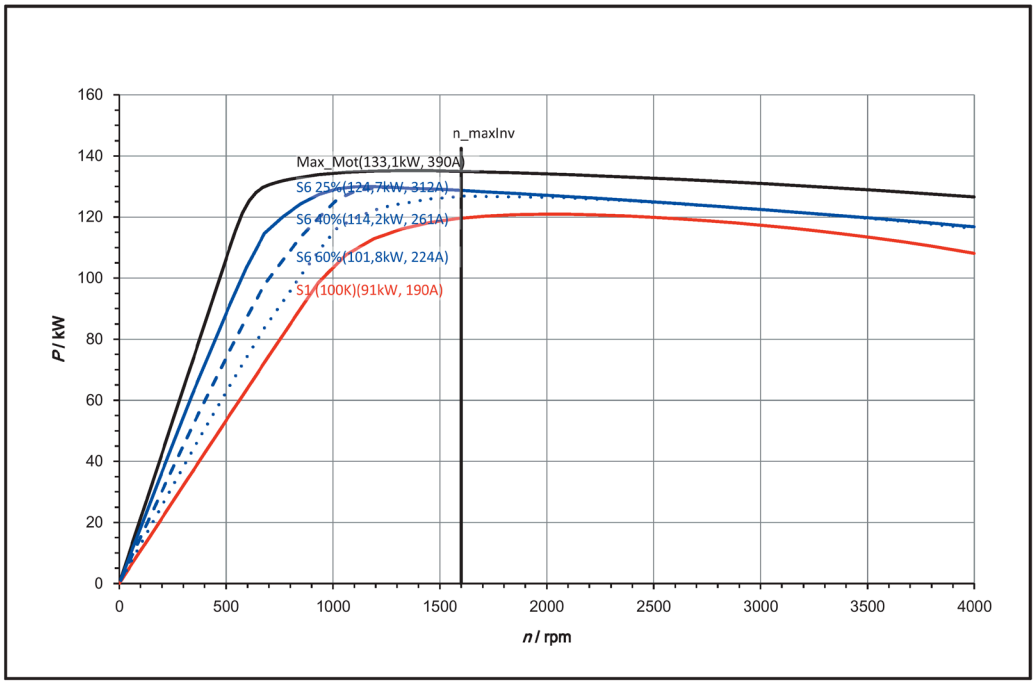
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	860
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	91
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4010
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1600
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	5.35
Voltage constant (at 20 °C)	k_E	V/1000rpm	352
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0402
Rotating field inductance	L_D	mH	1.2
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

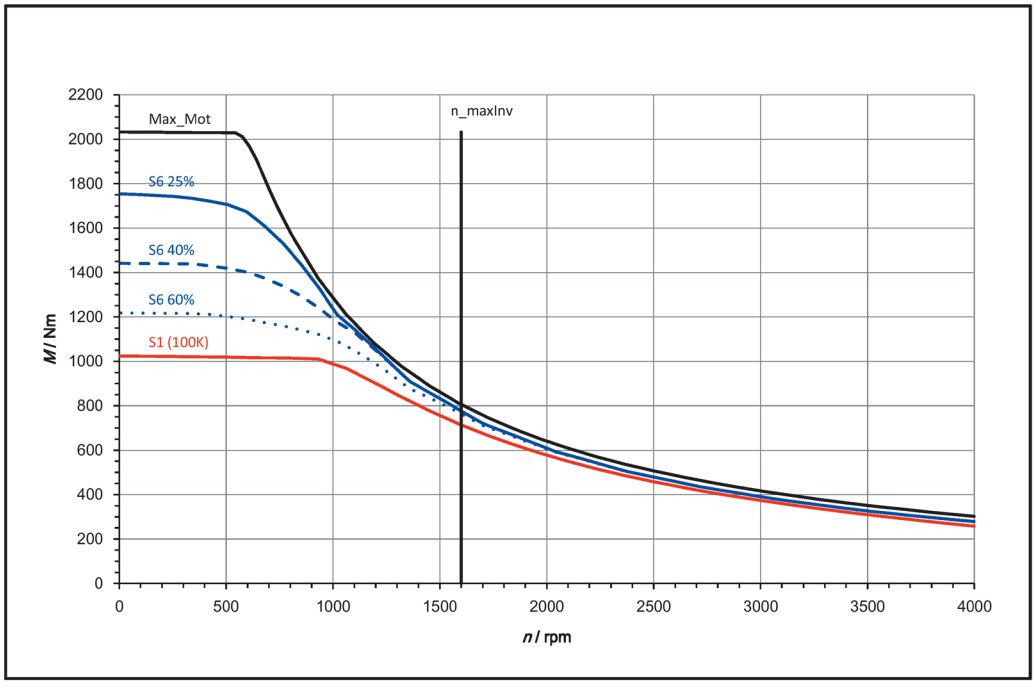
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LKxx-xAB0, 1FE2184-8LKxx-xAC0, 1FE2184-8LKxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-28 PD_1FE2184-8LKxx-xCC1_Index_--_

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

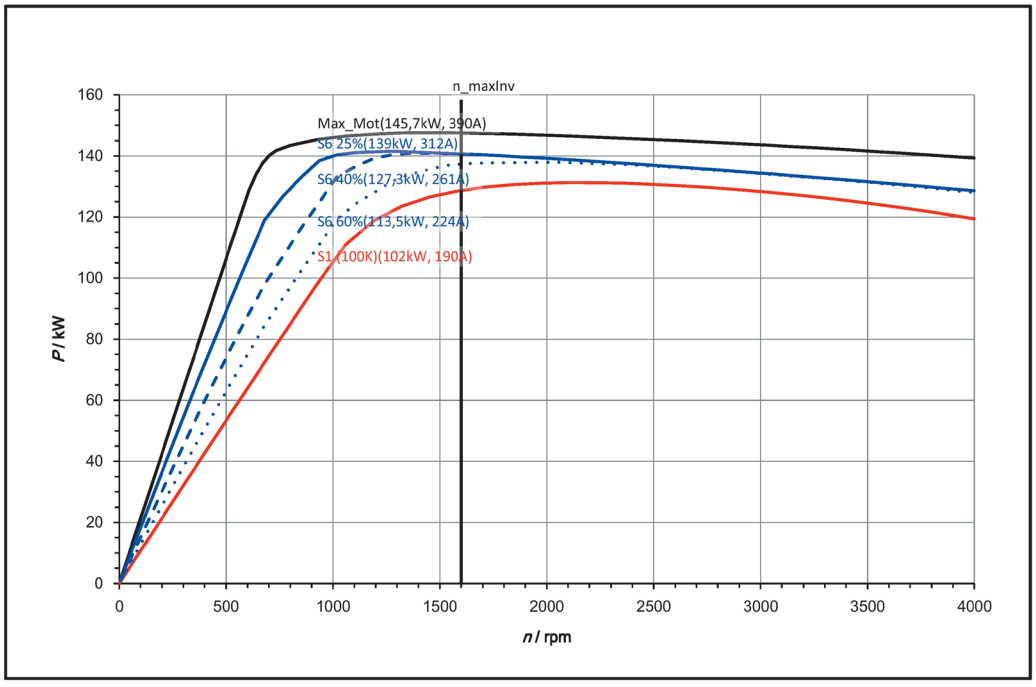
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	960
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	102
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4010
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1600
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	5.35
Voltage constant (at 20 °C)	k_E	V/1000rpm	352
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0402
Rotating field inductance	L_D	mH	1.2
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

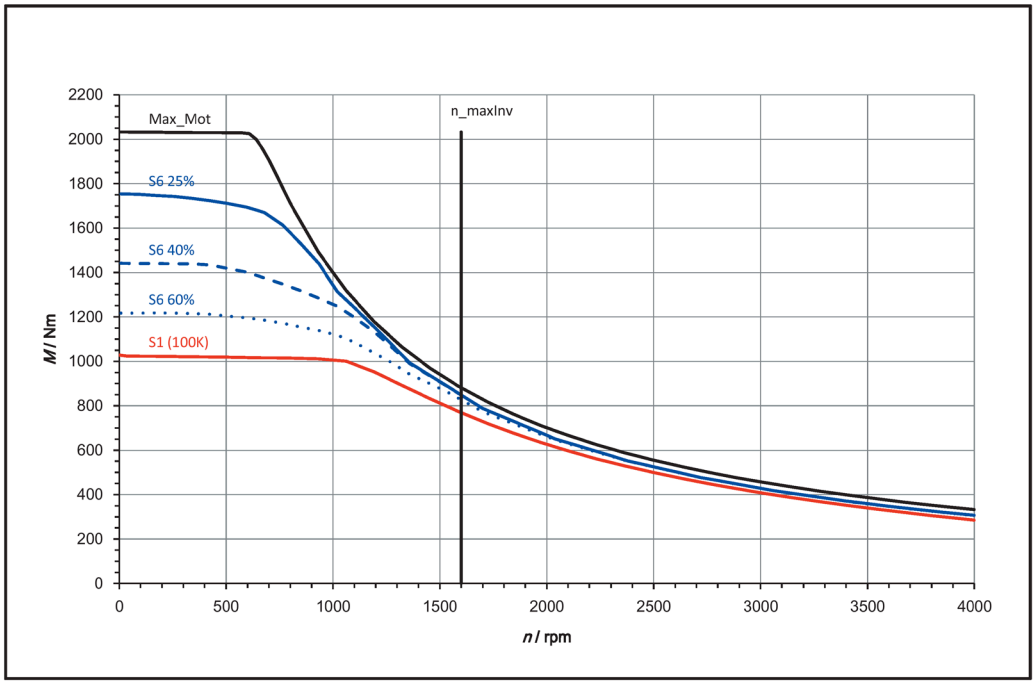
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LKxx-xAB0, 1FE2184-8LKxx-xAC0, 1FE2184-8LKxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-29 PD_1FE2184-8LKxx-xCC1_Index_--_

2.1.4.8 1FE2184-8LNxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

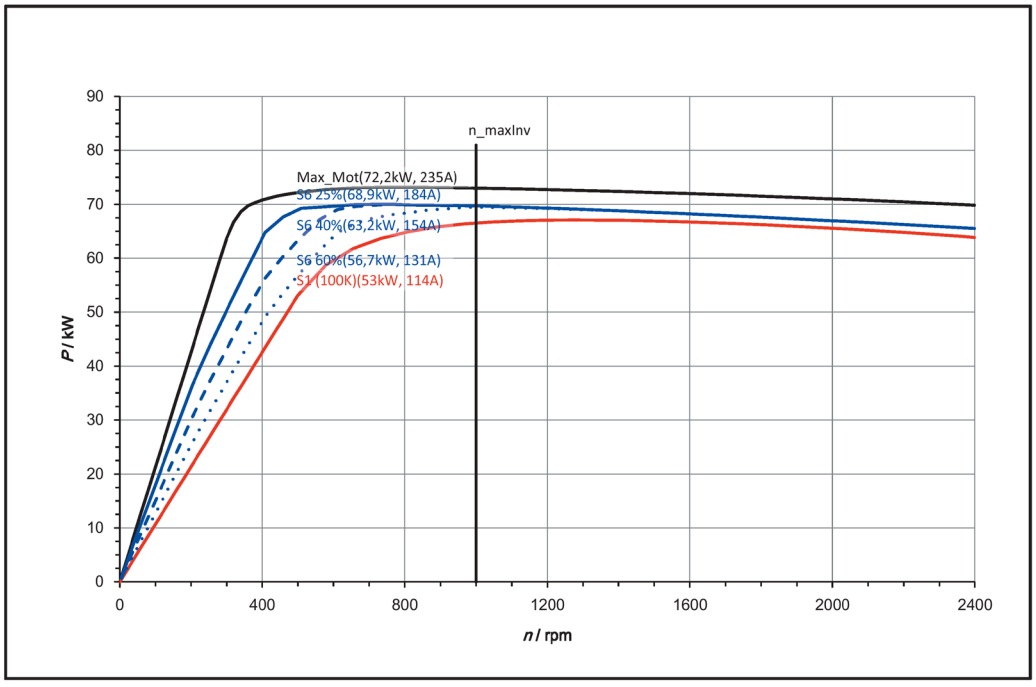
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	500
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	53
Rated current (100 K)	$I_{N(100K)}$	A	114
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	114
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	235
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1125
Rotating field inductance	L_D	mH	3.3
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

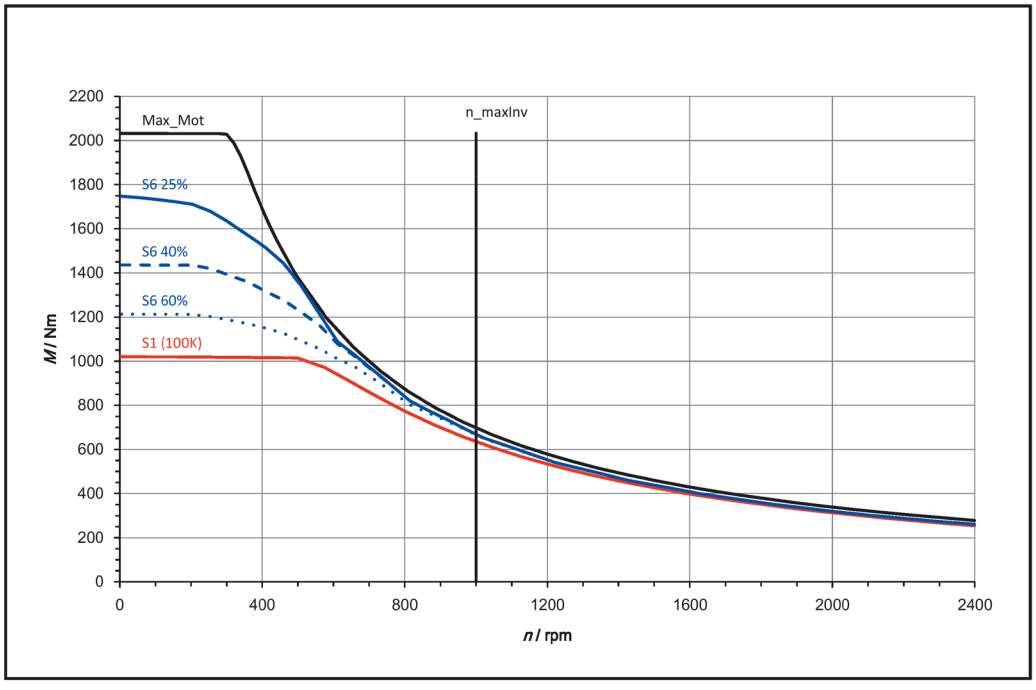
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LNxx-xAB0, 1FE2184-8LNxx-xAC0, 1FE2184-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-30 PD_1FE2184-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

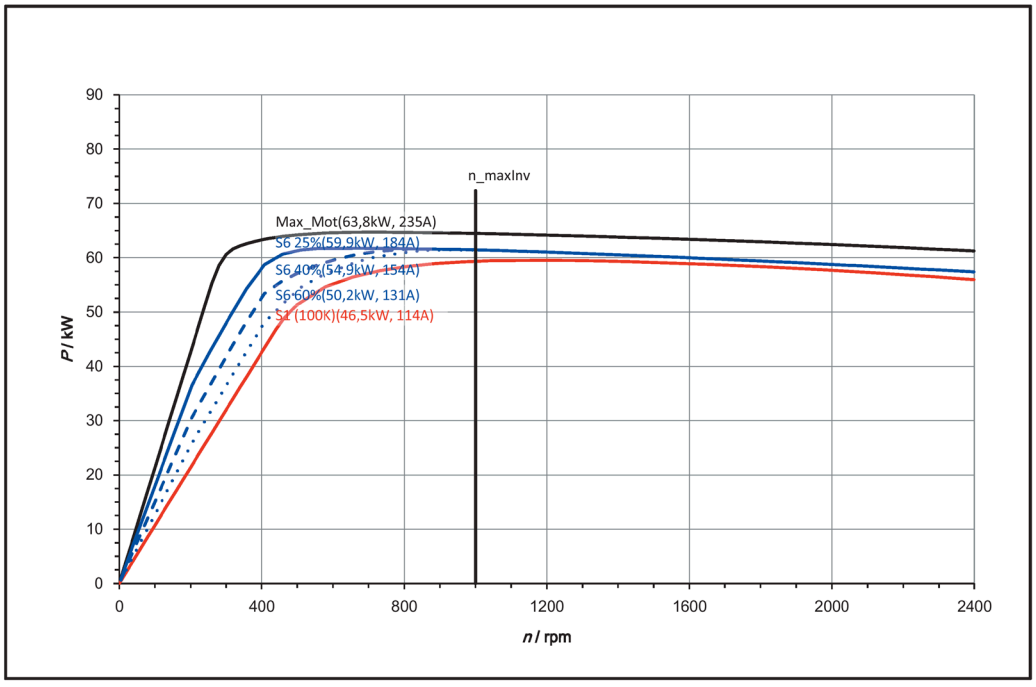
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	440
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	46.5
Rated current (100 K)	$I_{N(100K)}$	A	114
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	114
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	235
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1125
Rotating field inductance	L_D	mH	3.3
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

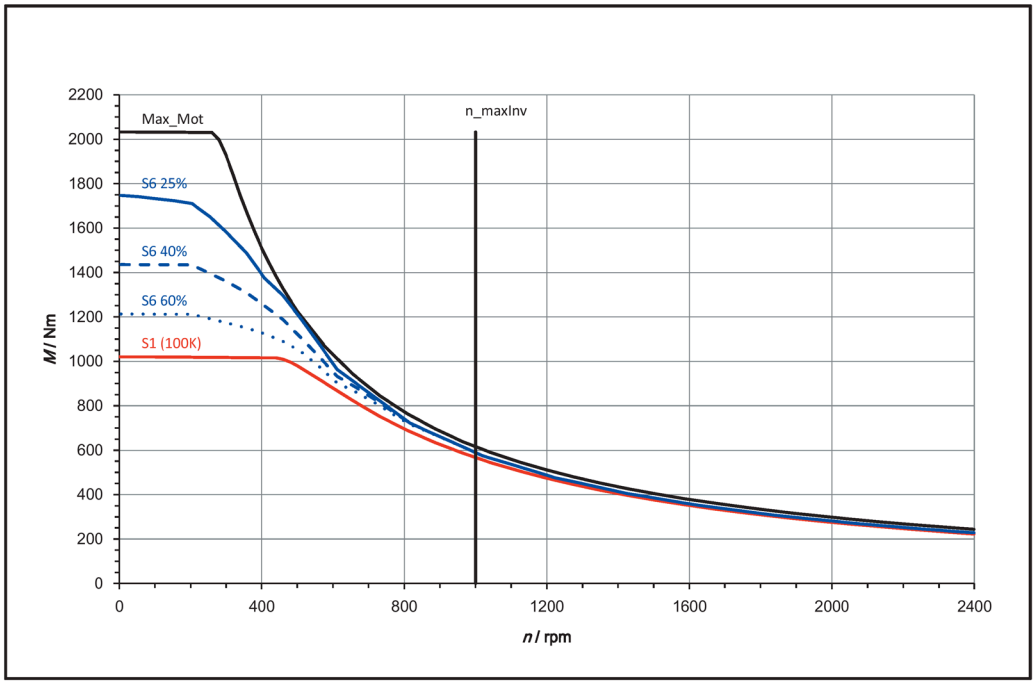
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LNxx-xAB0, 1FE2184-8LNxx-xAC0, 1FE2184-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-31 PD_1FE2184-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

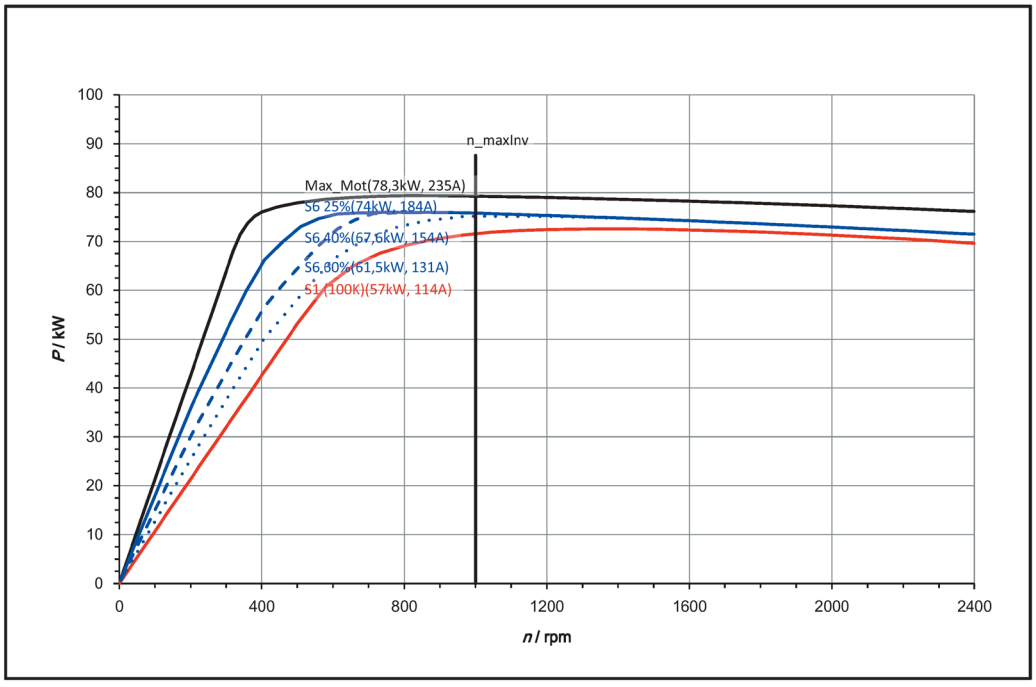
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	540
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	57
Rated current (100 K)	$I_{N(100K)}$	A	114
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	114
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	235
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1125
Rotating field inductance	L_D	mH	3.3
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

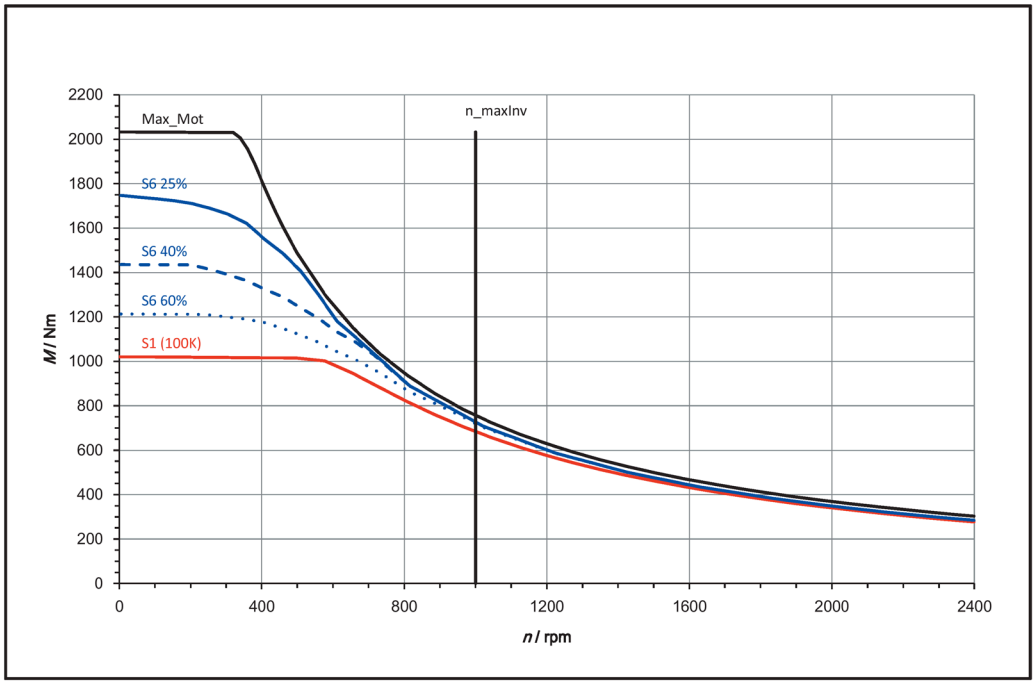
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LNxx-xAB0, 1FE2184-8LNxx-xAC0, 1FE2184-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-32 PD_1FE2184-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

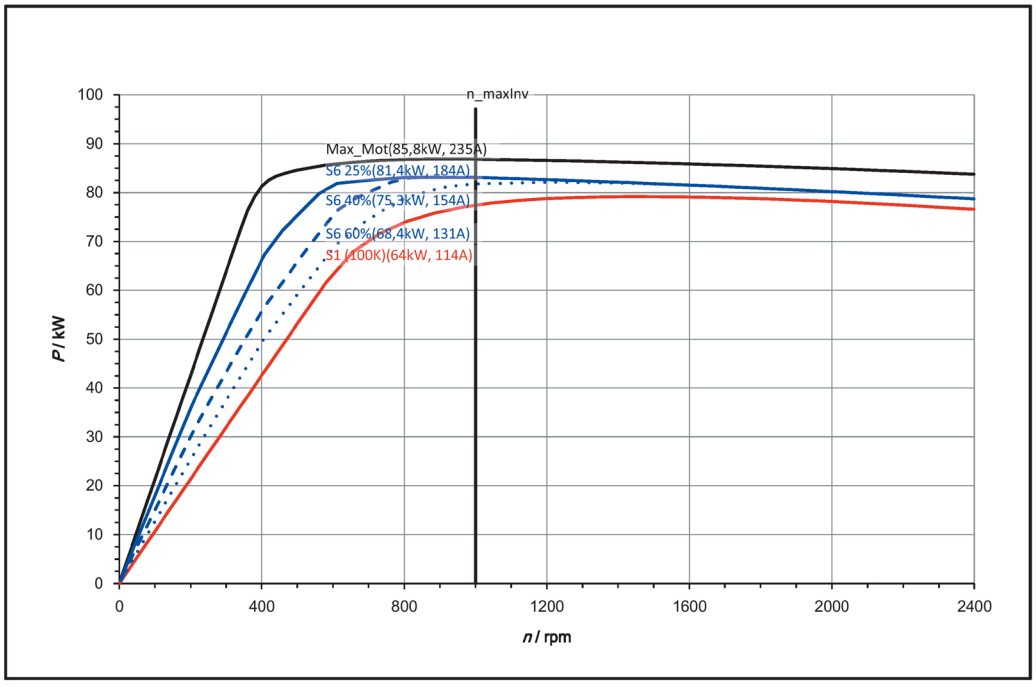
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	1010
Rated power (100 K)	$P_{N(100K)}$	kW	64
Rated current (100 K)	$I_{N(100K)}$	A	114
Static torque (100 K)	$M_{0(100K)}$	Nm	1020
Stall current (100 K)	$I_{0(100K)}$	A	114
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2000
Maximum current	I_{max}	A	235
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.1125
Rotating field inductance	L_D	mH	3.3
Electrical time constant	T_{el}	ms	30
Mechanical time constant	T_{mech}	ms	4.4
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.05
Weight	m_{mot} 3)	kg	150

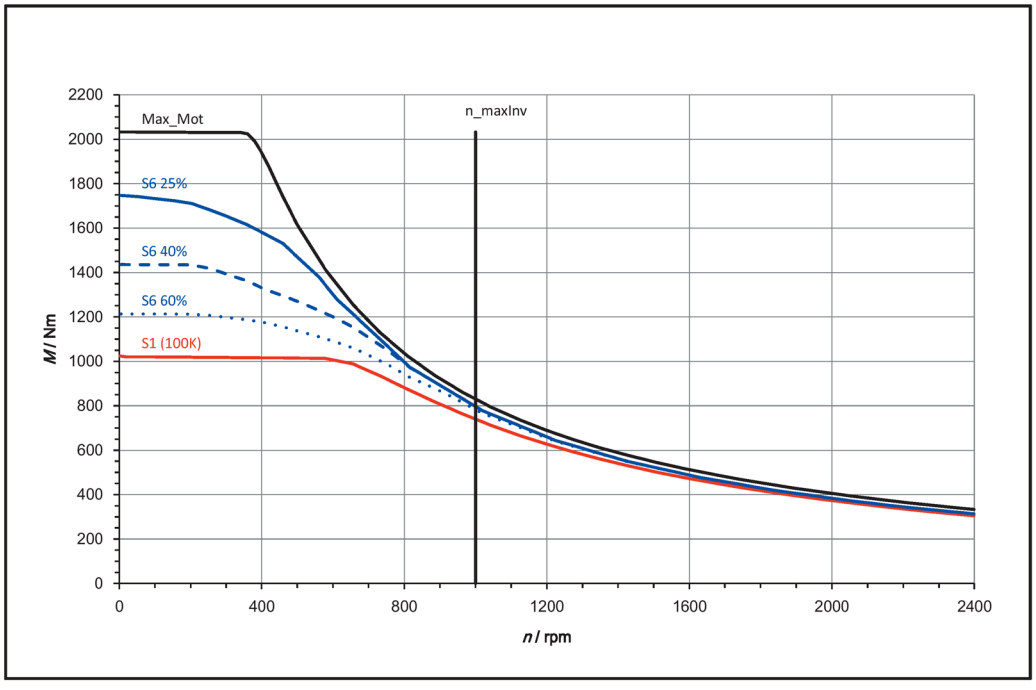
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2184-8LNxx-xAB0, 1FE2184-8LNxx-xAC0, 1FE2184-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-33 PD_1FE2184-8LNxx-xCC1_Index_a

2.1.4.9 1FE2185-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

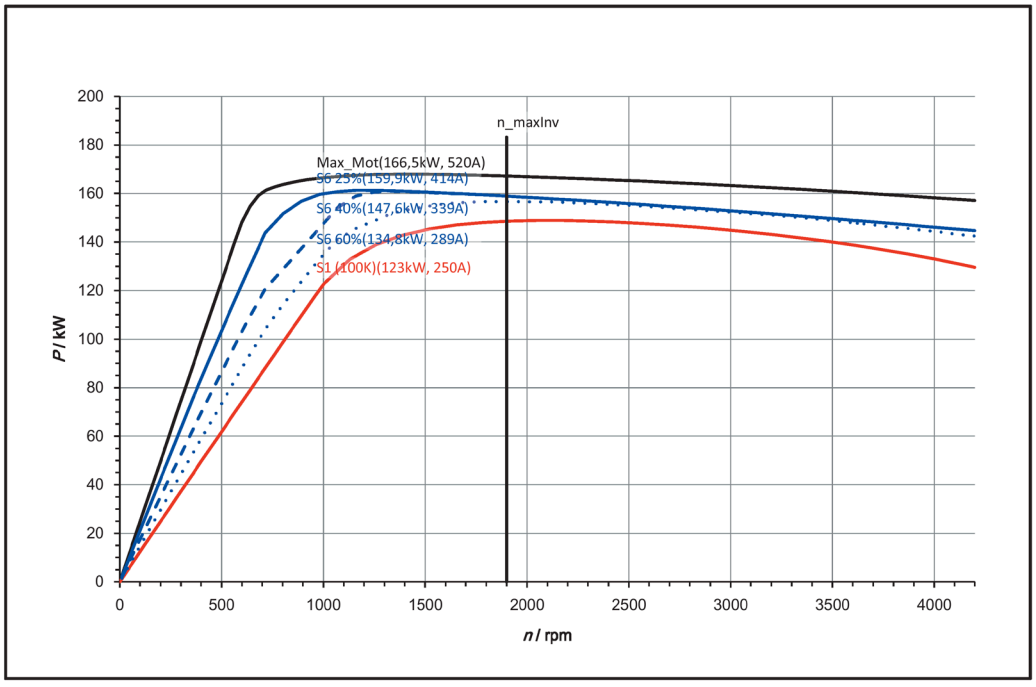
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	1170
Rated power (100 K)	$P_{N(100K)}$	kW	123
Rated current (100 K)	$I_{N(100K)}$	A	250
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	255
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	520
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0254
Rotating field inductance	L_D	mH	0.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm²	1.2
Weight	m_{mot} 3)	kg	170

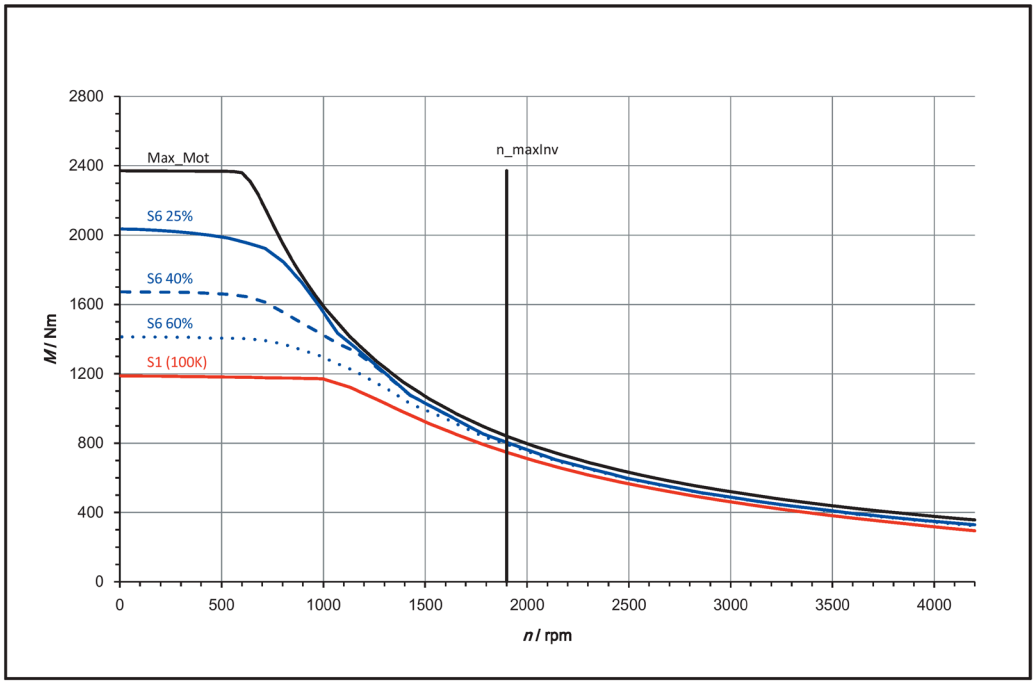
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LLxx-xAB0, 1FE2185-8LLxx-xAC0, 1FE2185-8LLxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-34 PD_1FE2185-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

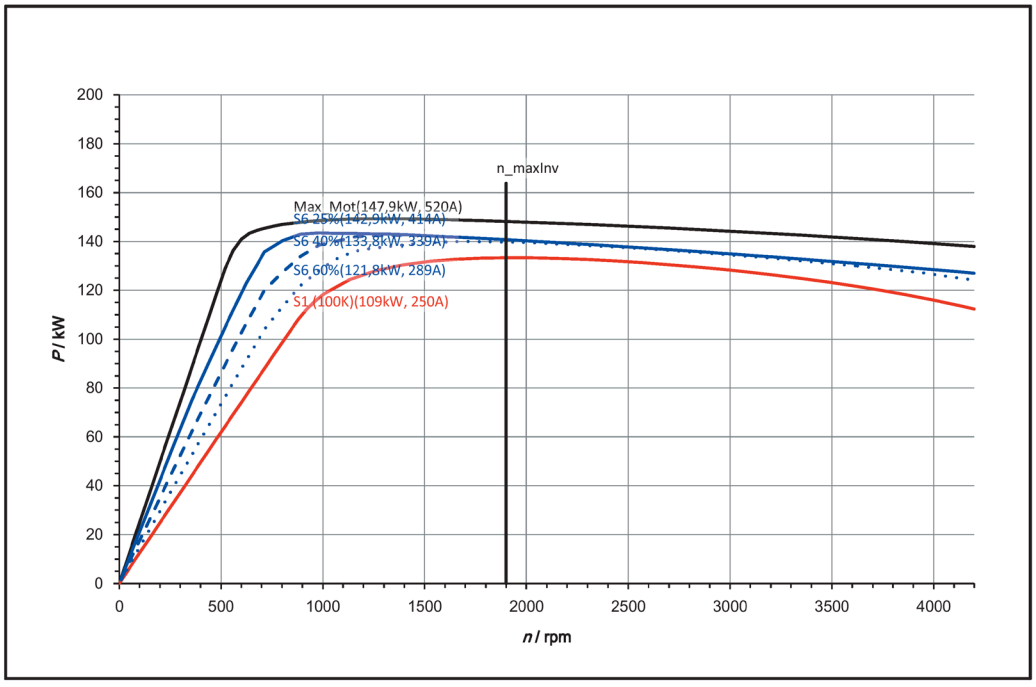
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	1170
Rated power (100 K)	$P_{N(100K)}$	kW	109
Rated current (100 K)	$I_{N(100K)}$	A	250
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	255
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	520
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0254
Rotating field inductance	L_D	mH	0.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

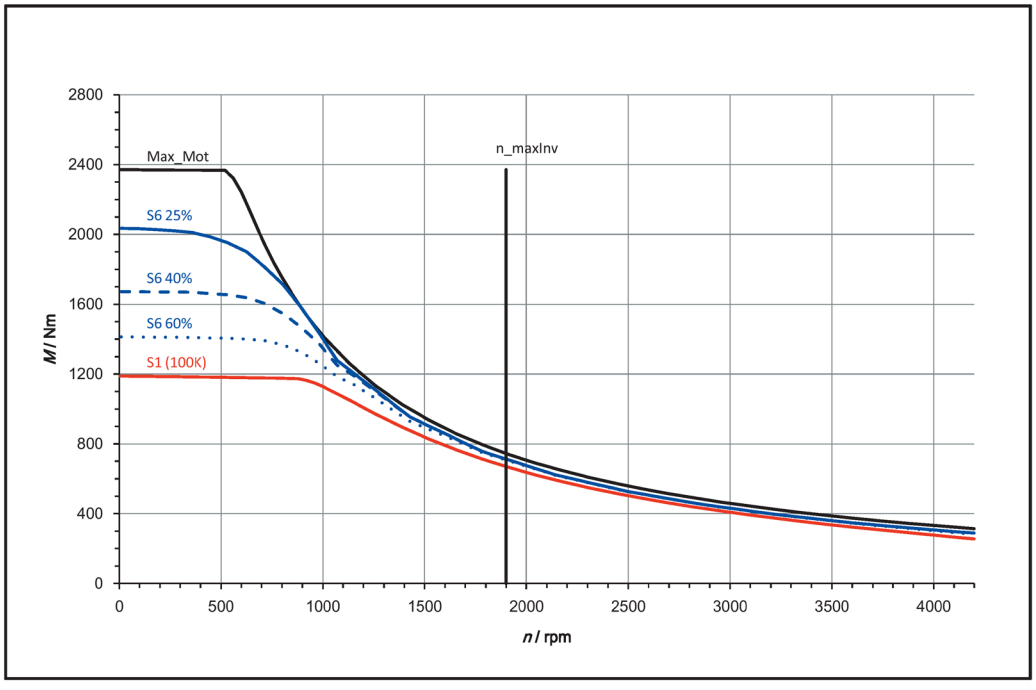
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LHxx-xAB0, 1FE2185-8LHxx-xAC0, 1FE2185-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-35 PD_1FE2185-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

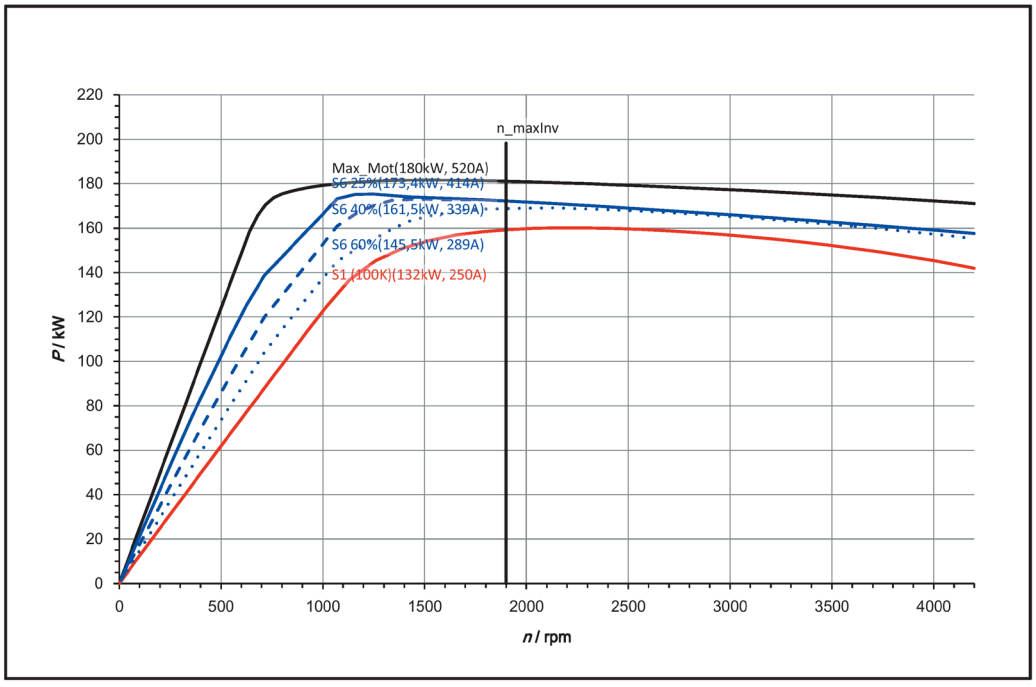
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	1170
Rated power (100 K)	$P_{N(100K)}$	kW	132
Rated current (100 K)	$I_{N(100K)}$	A	250
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	255
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	520
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0254
Rotating field inductance	L_D	mH	0.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

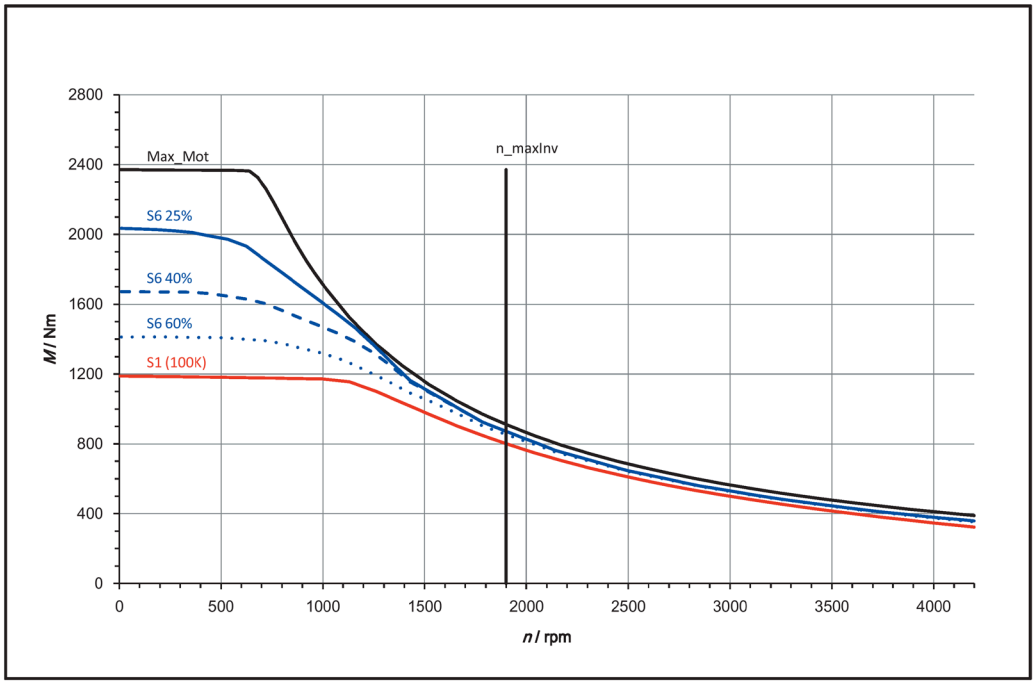
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LHxx-xAB0, 1FE2185-8LHxx-xAC0, 1FE2185-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-36 PD_1FE2185-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

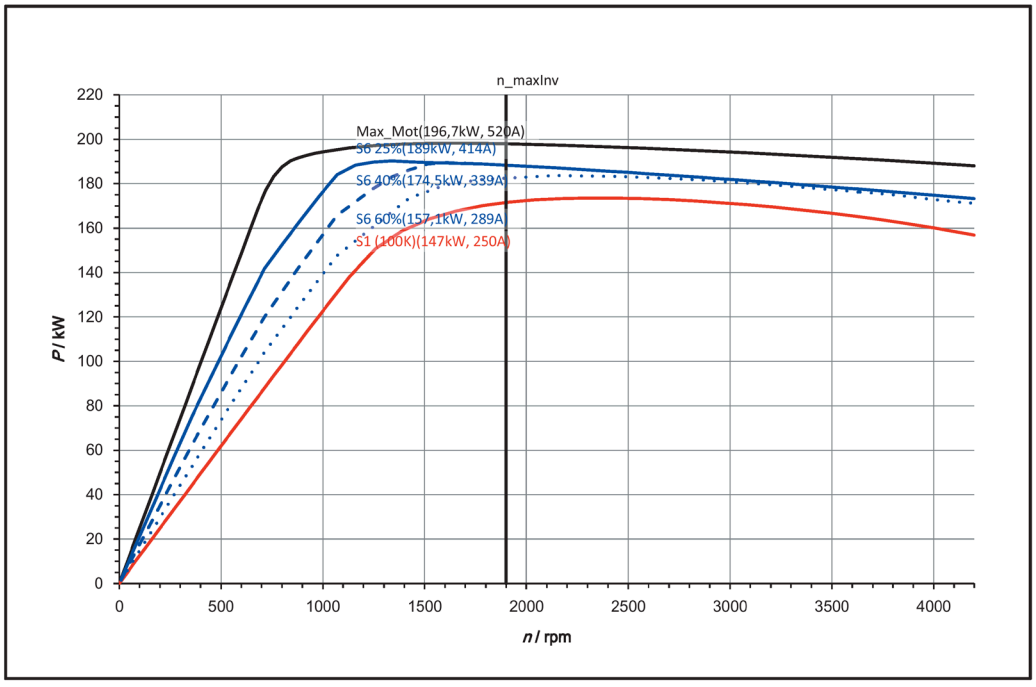
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	1170
Rated power (100 K)	$P_{N(100K)}$	kW	147
Rated current (100 K)	$I_{N(100K)}$	A	250
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	255
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	520
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0254
Rotating field inductance	L_D	mH	0.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

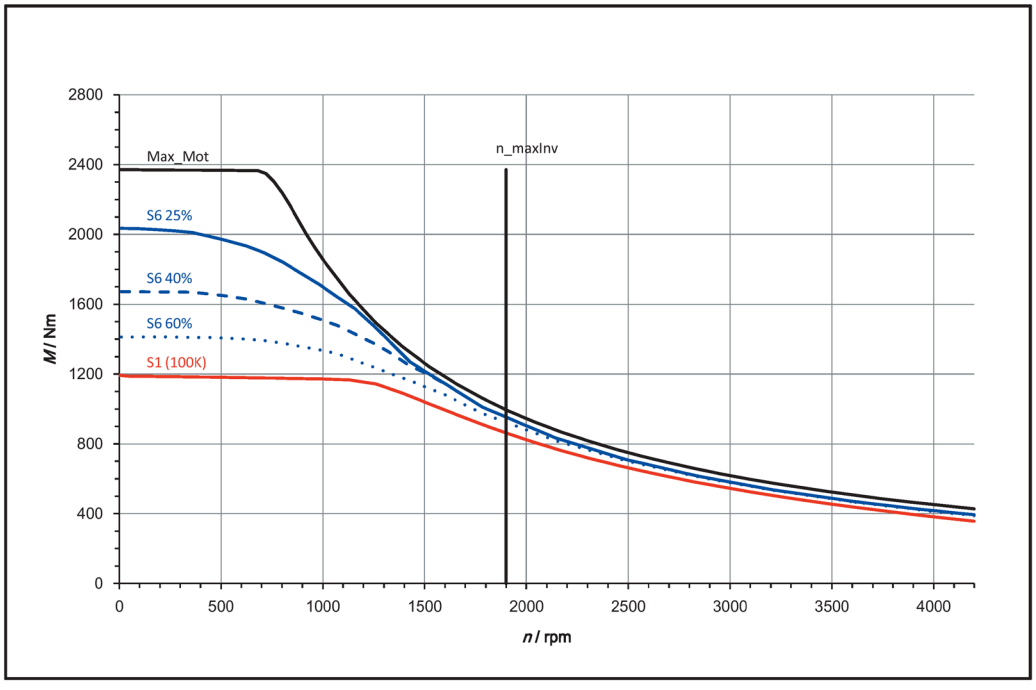
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LHxx-xAB0, 1FE2185-8LHxx-xAC0, 1FE2185-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-37 PD_1FE2185-8LHxx-xCC1_Index_a

2.1.4.10 1FE2185-8LLxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

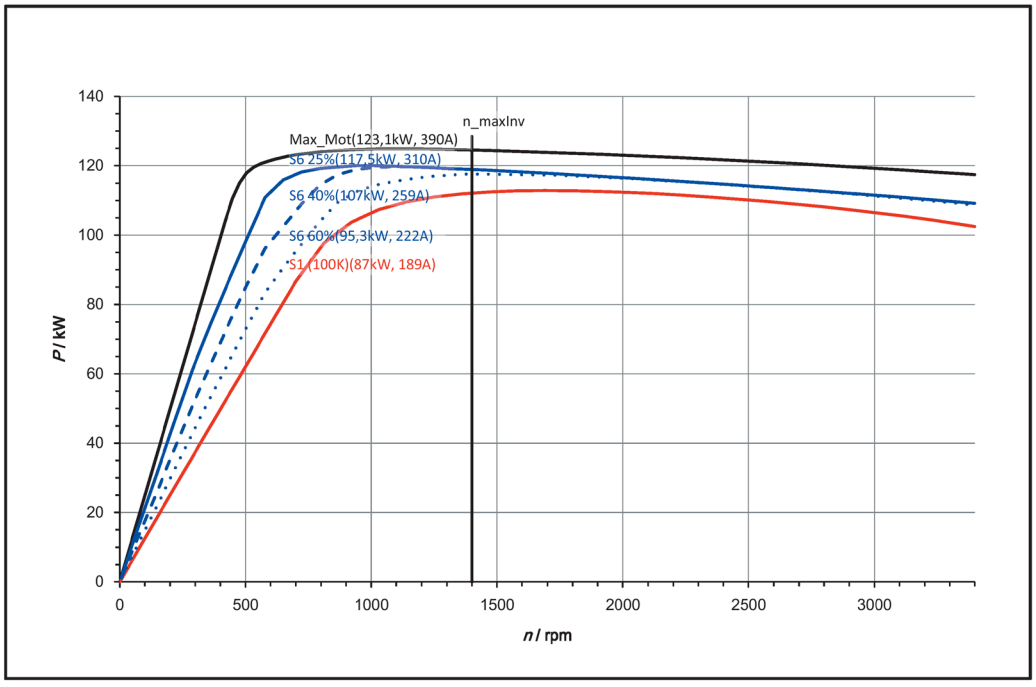
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	700
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	87
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	1190
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3440
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1400
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	6.25
Voltage constant (at 20 °C)	k_E	V/1000rpm	411
Winding resistance (at 20 °C)	R_{ph}	Ω	0.045
Rotating field inductance	L_D	mH	1.4
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm²	1.2
Weight	m_{mot} 3)	kg	170

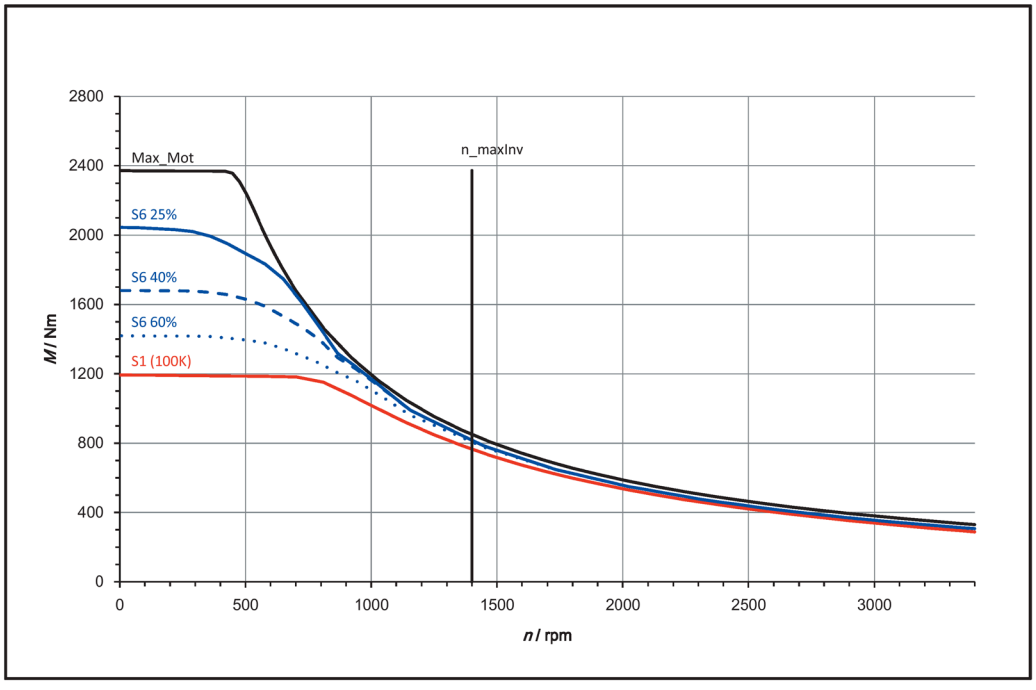
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LLxx-xAB0, 1FE2185-8LLxx-xAC0, 1FE2185-8LLxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-38 PD_1FE2185-8LLxx-xCC1_Index_--_

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

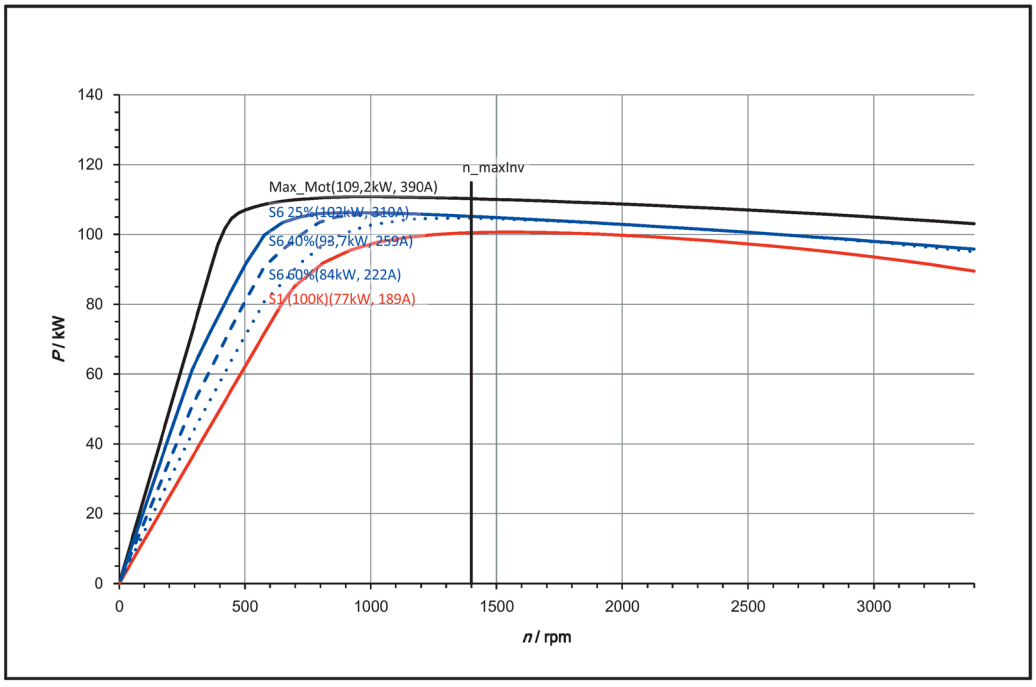
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	620
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	77
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	1190
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3440
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1400
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	6.25
Voltage constant (at 20 °C)	k_E	V/1000rpm	411
Winding resistance (at 20 °C)	R_{ph}	Ω	0.045
Rotating field inductance	L_D	mH	1.4
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

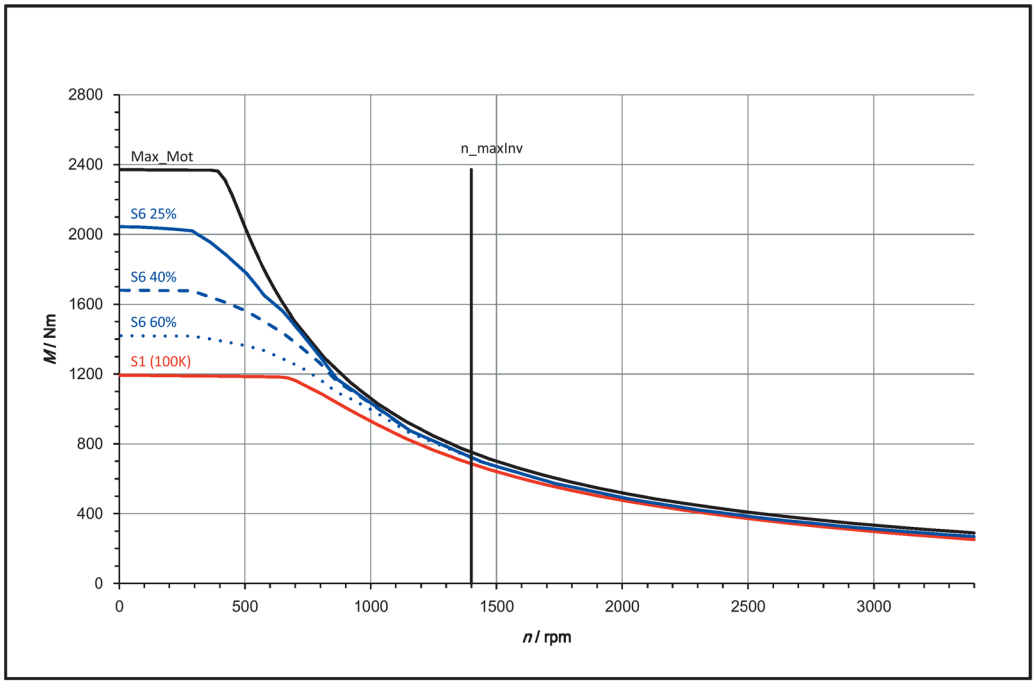
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LLxx-xAB0, 1FE2185-8LLxx-xAC0, 1FE2185-8LLxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-39 PD_1FE2185-8LLxx-xCC1_Index_--

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

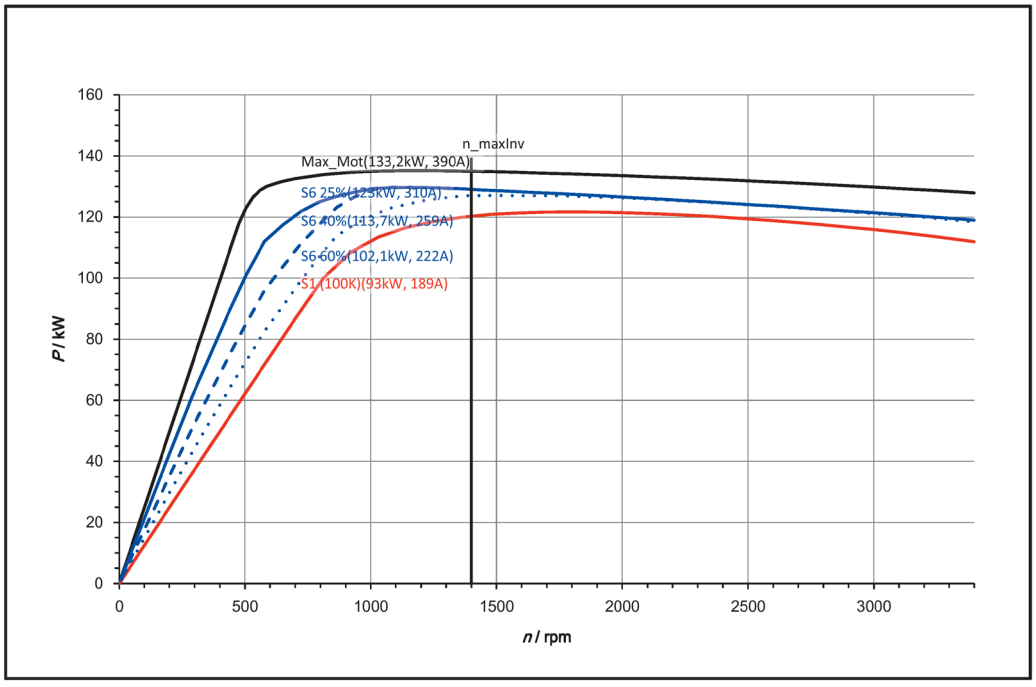
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	750
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	93
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	1190
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3440
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1400
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	6.25
Voltage constant (at 20 °C)	k_E	V/1000rpm	411
Winding resistance (at 20 °C)	R_{ph}	Ω	0.045
Rotating field inductance	L_D	mH	1.4
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

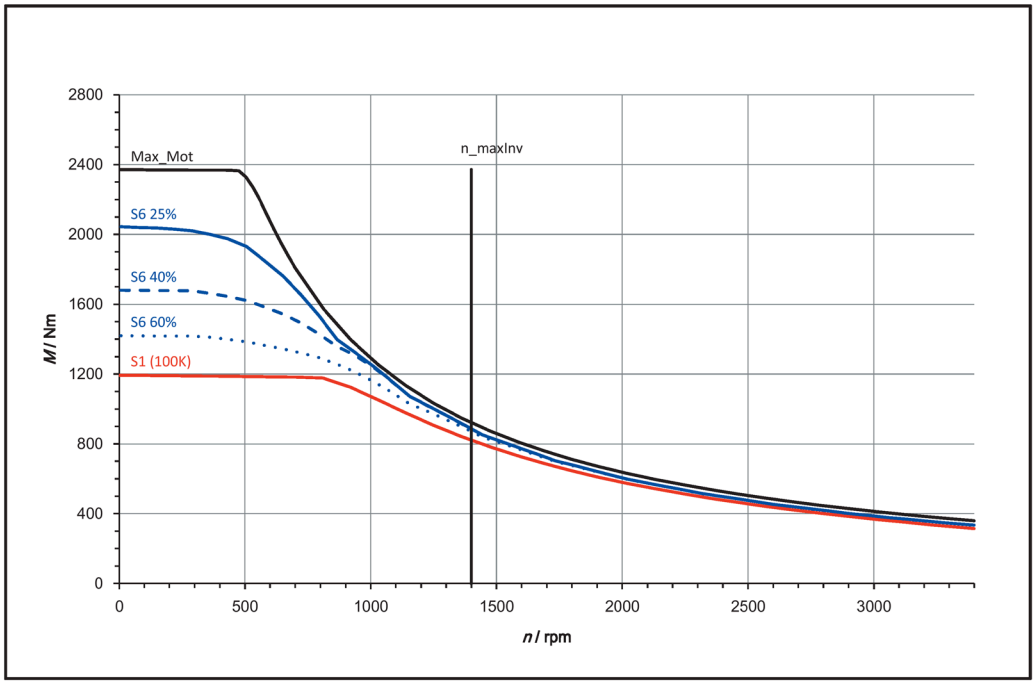
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LLxx-xAB0, 1FE2185-8LLxx-xAC0, 1FE2185-8LLxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-40 PD_1FE2185-8LLxx-xCC1_Index_--_

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

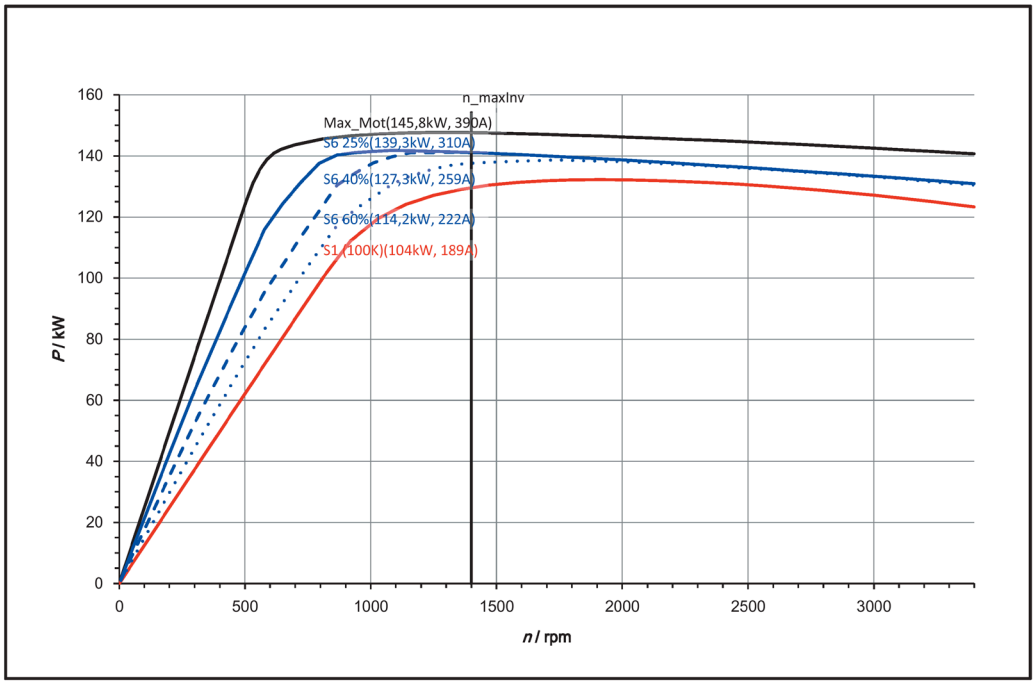
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	840
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	104
Rated current (100 K)	$I_{N(100K)}$	A	189
Static torque (100 K)	$M_{0(100K)}$	Nm	1190
Stall current (100 K)	$I_{0(100K)}$	A	190
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3440
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1400
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	6.25
Voltage constant (at 20 °C)	k_E	V/1000rpm	411
Winding resistance (at 20 °C)	R_{ph}	Ω	0.045
Rotating field inductance	L_D	mH	1.4
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

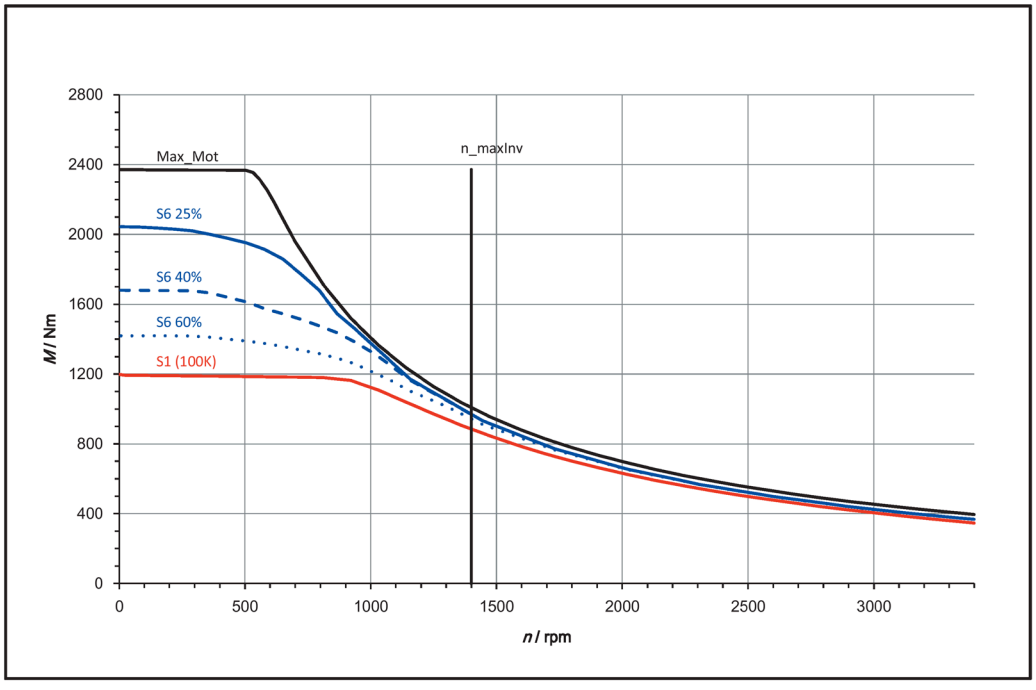
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LLxx-xAB0, 1FE2185-8LLxx-xAC0, 1FE2185-8LLxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-41 PD_1FE2185-8LLxx-xCC1_Index_--_

2.1.4.11 1FE2185-8LNxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

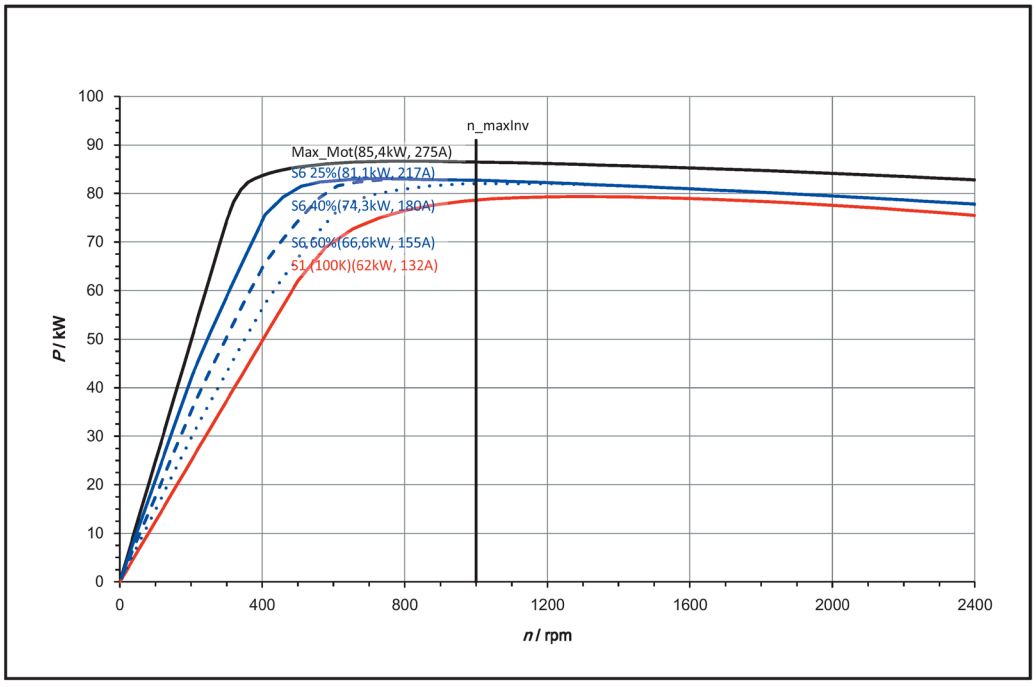
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	500
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	62
Rated current (100 K)	$I_{N(100K)}$	A	132
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	132
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2420
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	275
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.9
Voltage constant (at 20 °C)	k_E	V/1000rpm	580
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0905
Rotating field inductance	L_D	mH	2.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

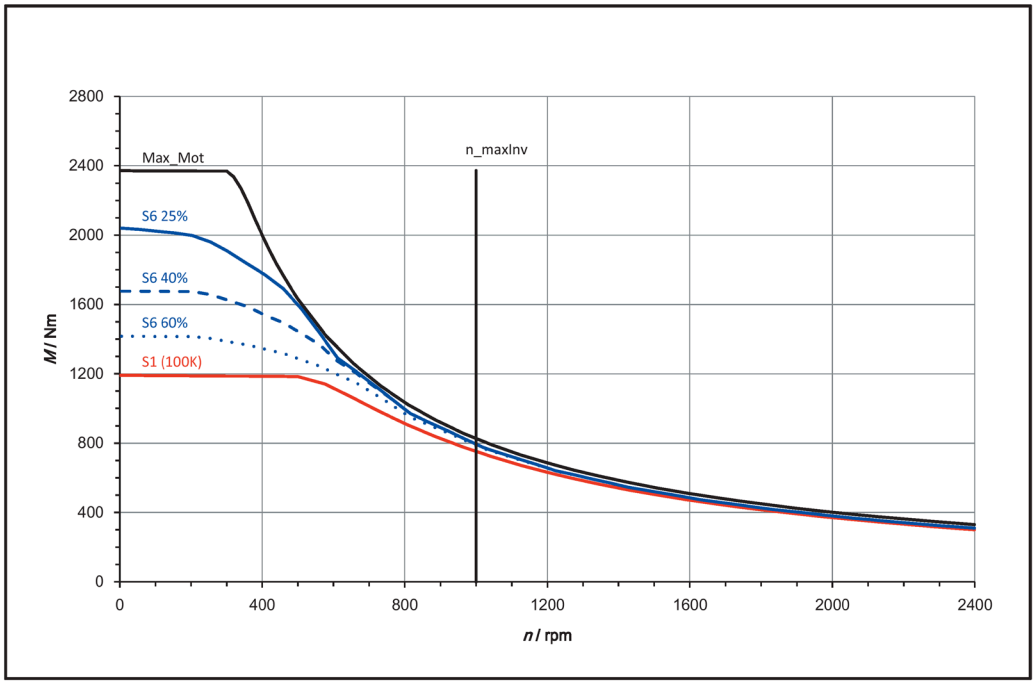
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LNxx-xAB0, 1FE2185-8LNxx-xAC0, 1FE2185-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-42 PD_1FE2185-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

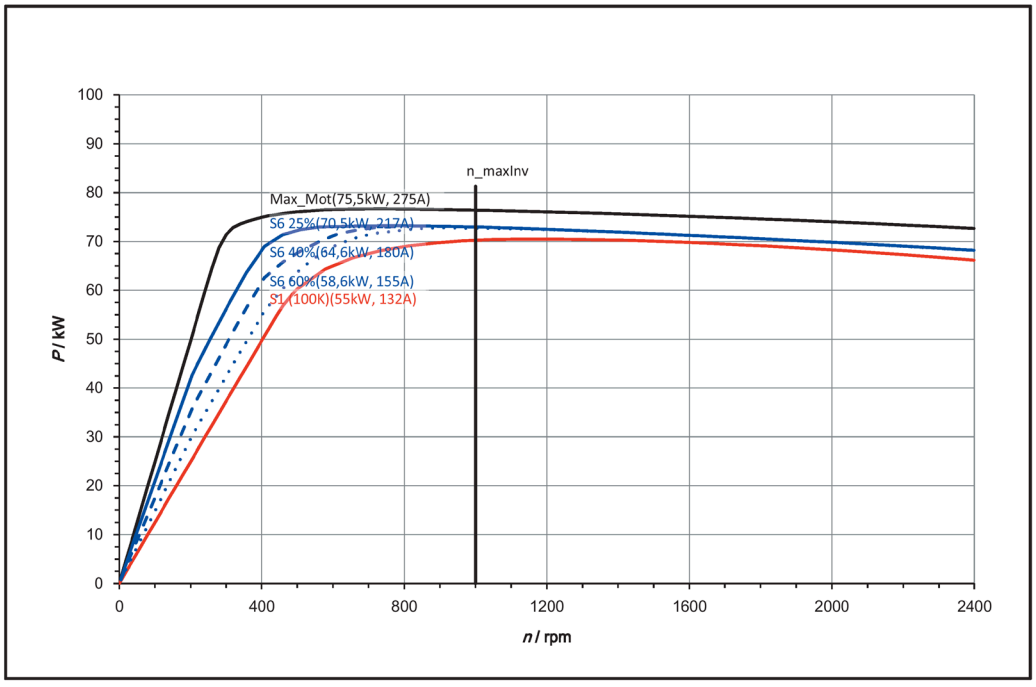
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	440
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	55
Rated current (100 K)	$I_{N(100K)}$	A	132
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	132
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2420
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	275
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.9
Voltage constant (at 20 °C)	k_E	V/1000rpm	580
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0905
Rotating field inductance	L_D	mH	2.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

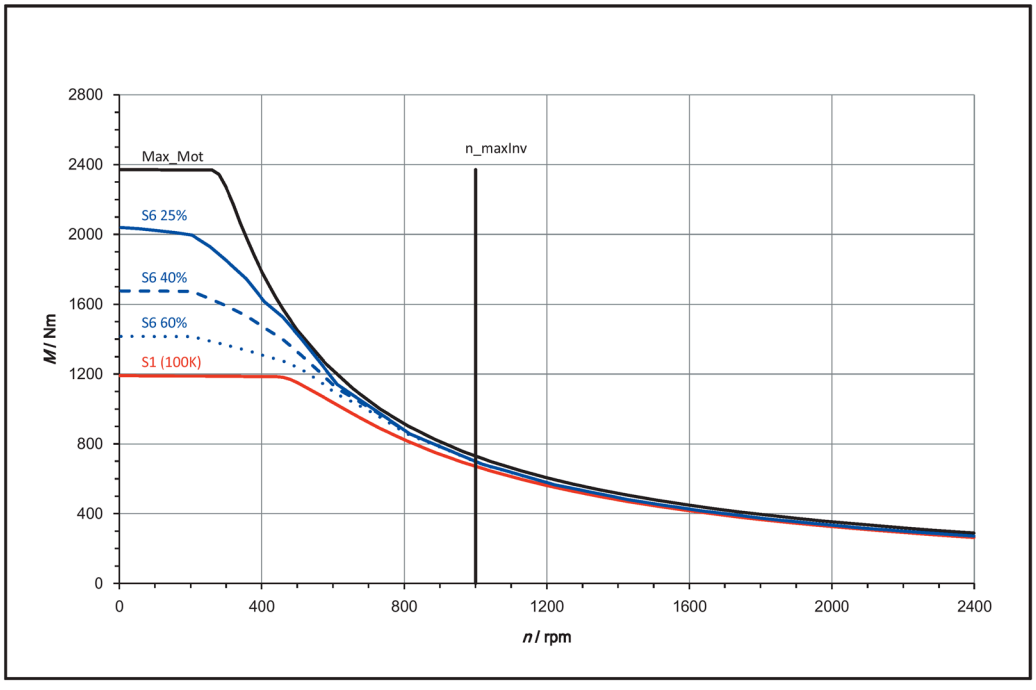
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LNxx-xAB0, 1FE2185-8LNxx-xAC0, 1FE2185-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-43 PD_1FE2185-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

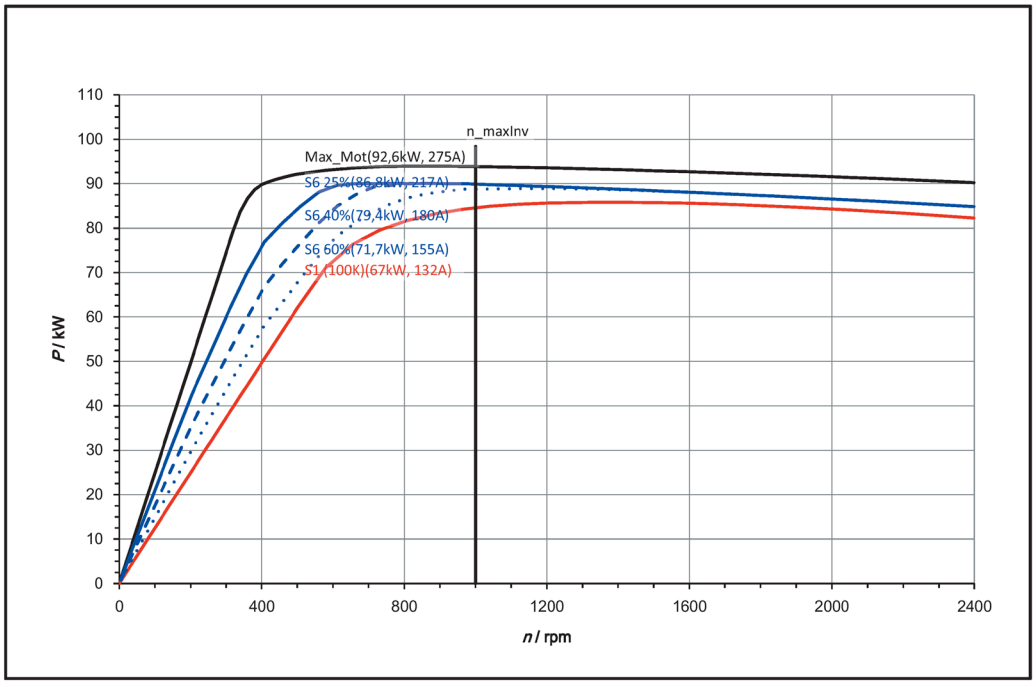
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	540
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	67
Rated current (100 K)	$I_{N(100K)}$	A	132
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	132
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2420
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	275
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.9
Voltage constant (at 20 °C)	k_E	V/1000rpm	580
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0905
Rotating field inductance	L_D	mH	2.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

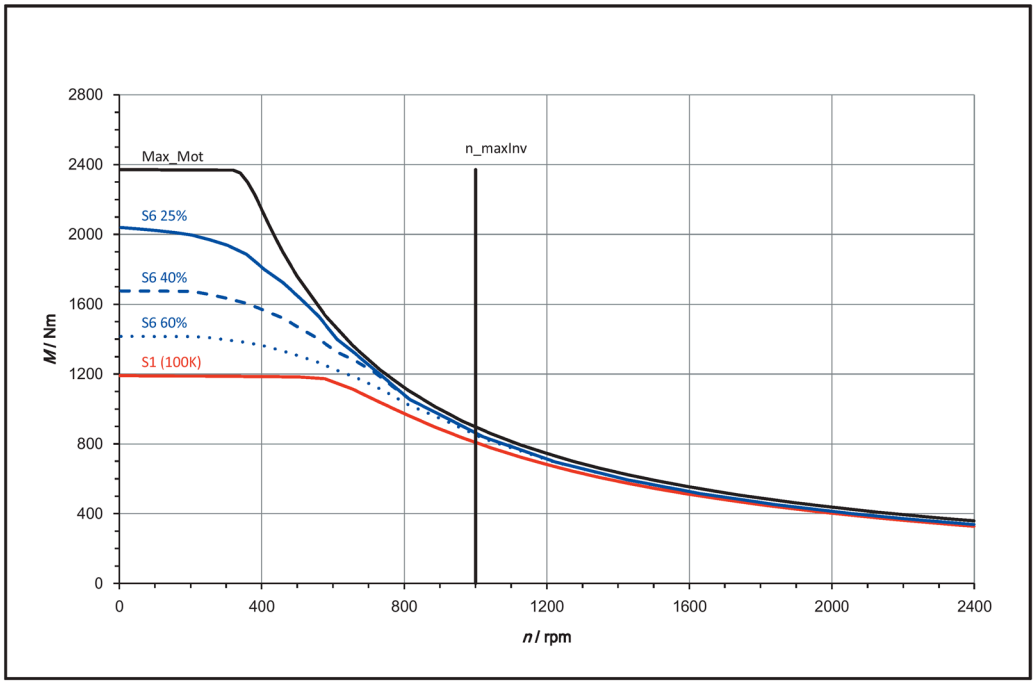
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LNxx-xAB0, 1FE2185-8LNxx-xAC0, 1FE2185-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-44 PD_1FE2185-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

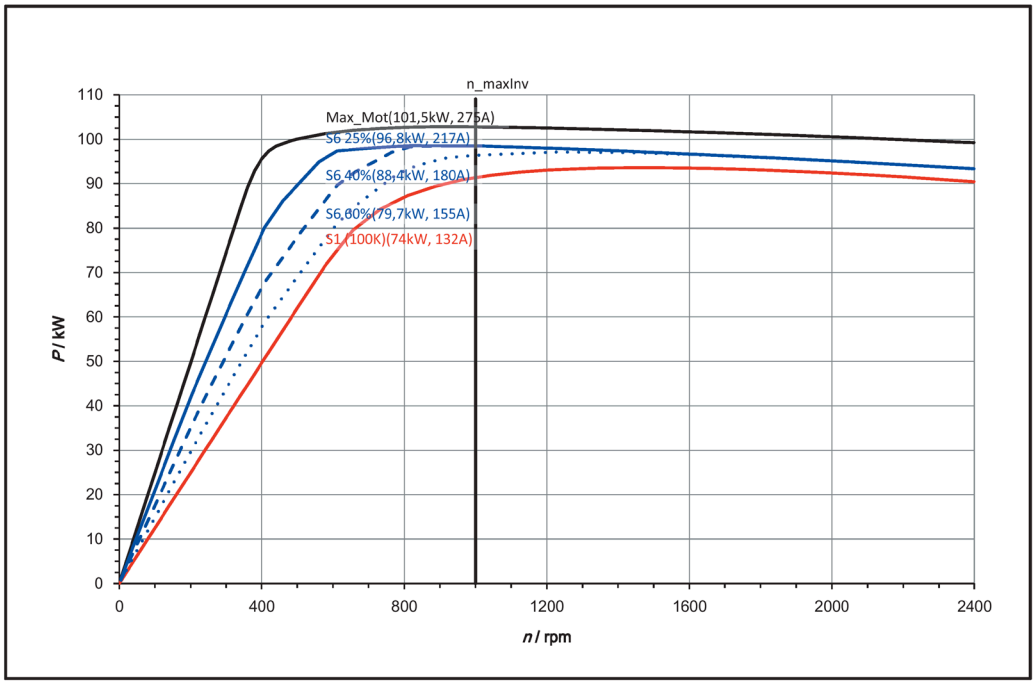
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	1180
Rated power (100 K)	$P_{N(100K)}$	kW	74
Rated current (100 K)	$I_{N(100K)}$	A	132
Static torque (100 K)	$M_{0(100K)}$	Nm	1180
Stall current (100 K)	$I_{0(100K)}$	A	132
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2420
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2350
Maximum current	I_{max}	A	275
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.9
Voltage constant (at 20 °C)	k_E	V/1000rpm	580
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0905
Rotating field inductance	L_D	mH	2.8
Electrical time constant	T_{el}	ms	31
Mechanical time constant	T_{mech}	ms	4.1
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.2
Weight	m_{mot} 3)	kg	170

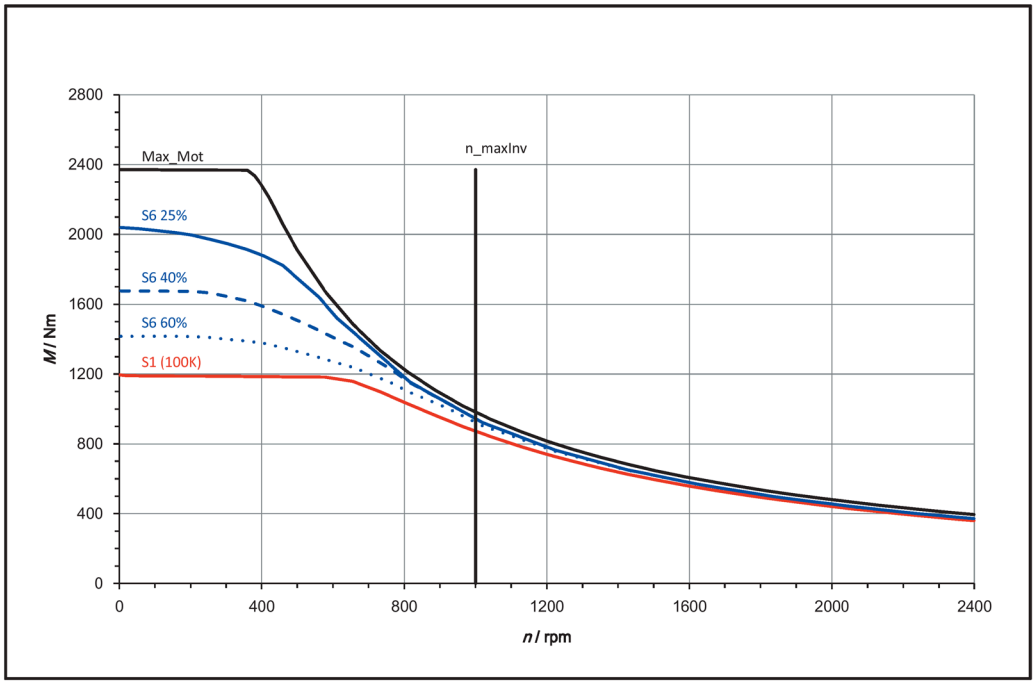
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2185-8LNxx-xAB0, 1FE2185-8LNxx-xAC0, 1FE2185-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-45 PD_1FE2185-8LNxx-xCC1_Index_a

2.1.4.12 1FE2186-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

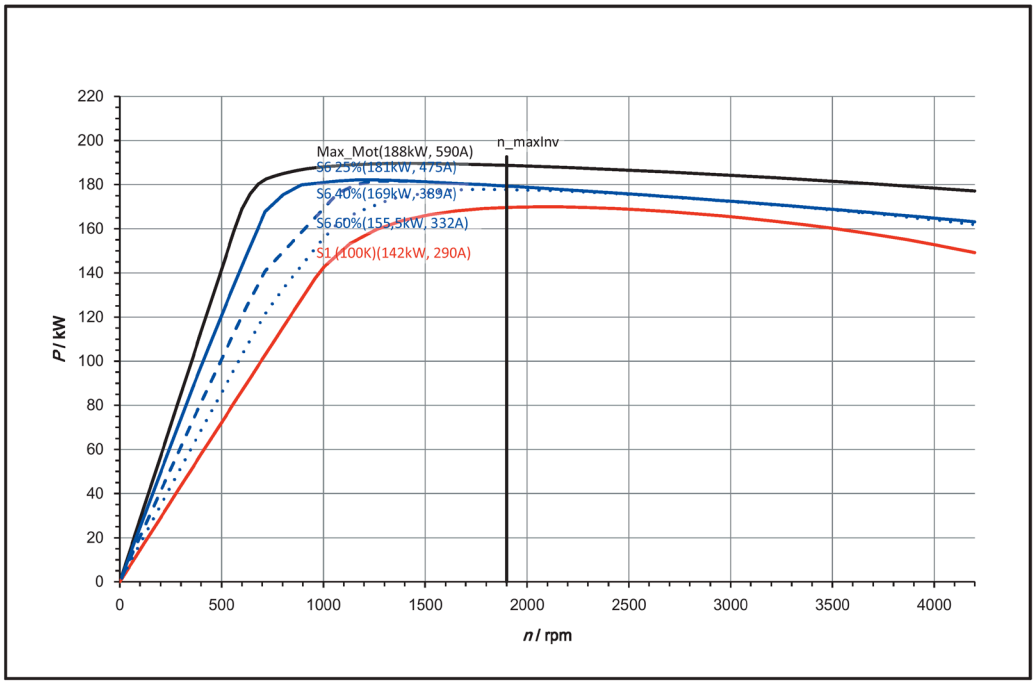
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	1360
Rated power (100 K)	$P_{N(100K)}$	kW	142
Rated current (100 K)	$I_{N(100K)}$	A	290
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	290
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	590
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.77
Voltage constant (at 20 °C)	k_E	V/1000rpm	313
Winding resistance (at 20 °C)	R_{ph}	Ω	0.022
Rotating field inductance	L_D	mH	0.7
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

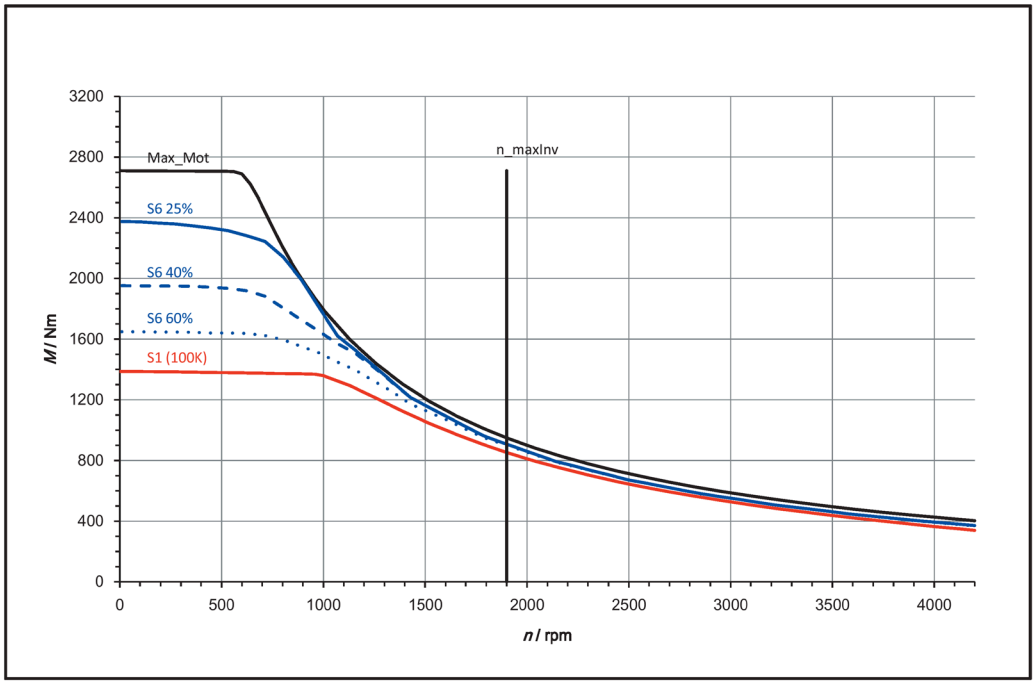
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LHxx-xAB0, 1FE2186-8LHxx-xAC0, 1FE2186-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-46 PD_1FE2186-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

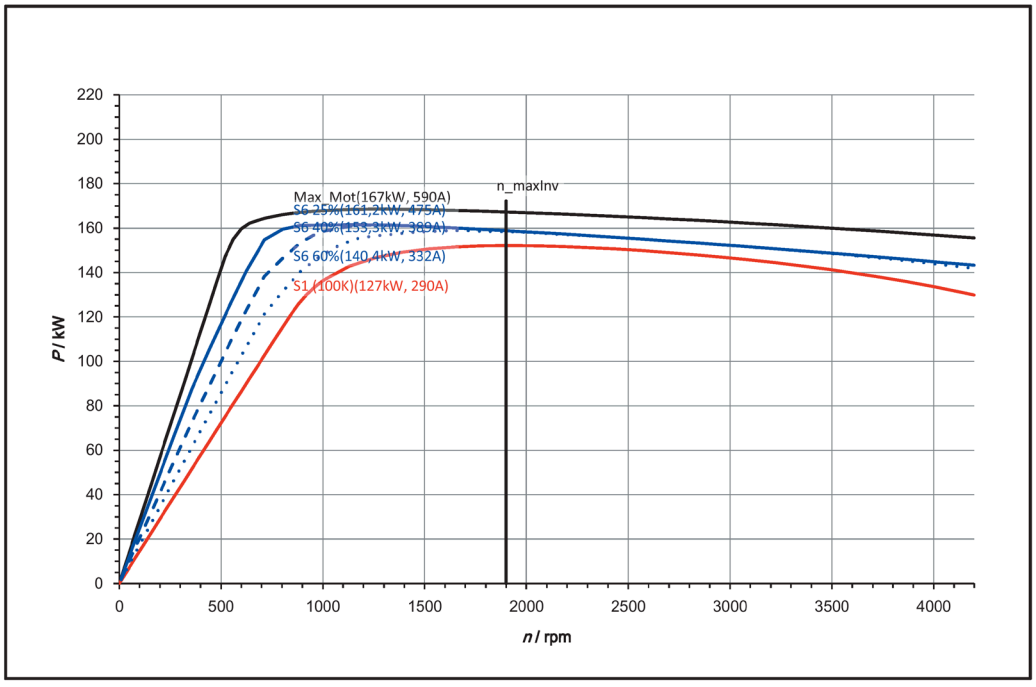
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	1360
Rated power (100 K)	$P_{N(100K)}$	kW	127
Rated current (100 K)	$I_{N(100K)}$	A	290
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	290
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	590
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.77
Voltage constant (at 20 °C)	k_E	V/1000rpm	313
Winding resistance (at 20 °C)	R_{ph}	Ω	0.022
Rotating field inductance	L_D	mH	0.7
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

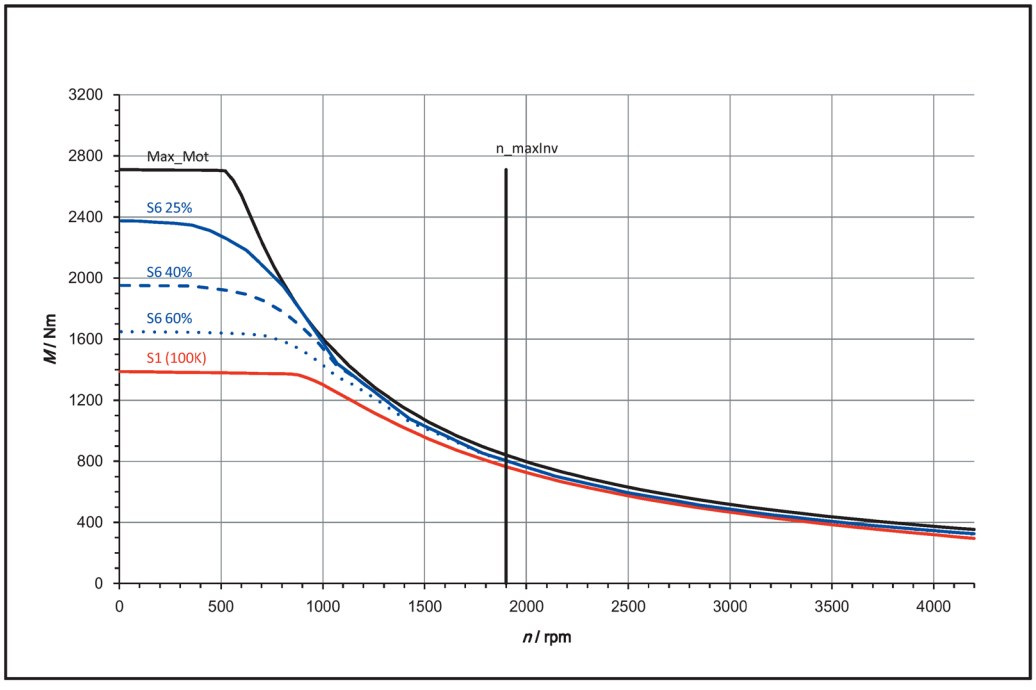
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LHxx-xAB0, 1FE2186-8LHxx-xAC0, 1FE2186-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-47 PD_1FE2186-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

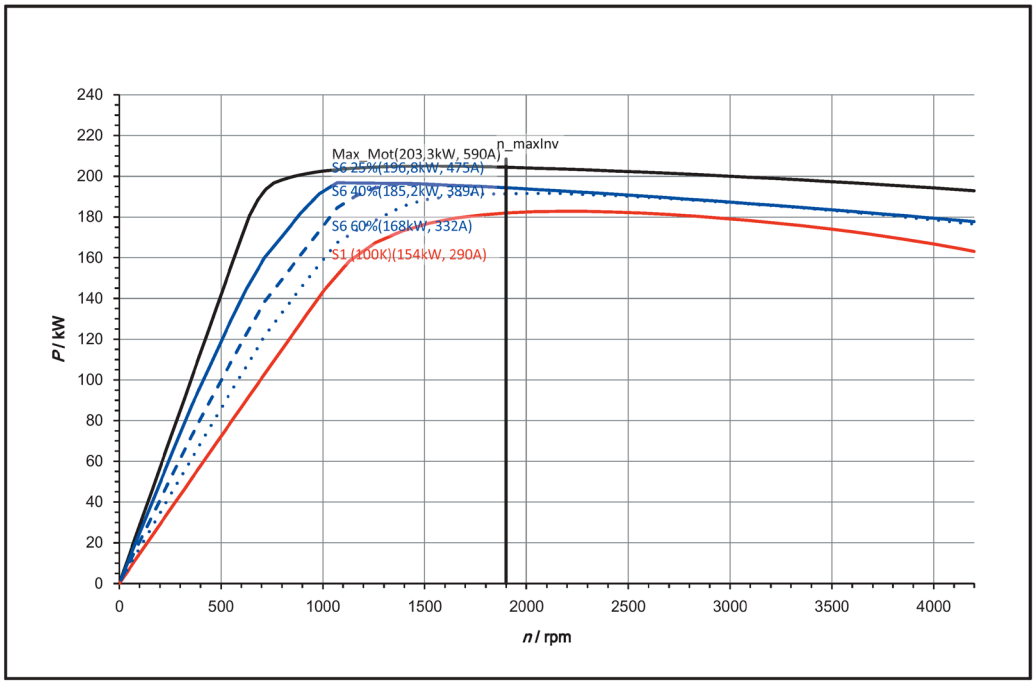
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	1360
Rated power (100 K)	$P_{N(100K)}$	kW	154
Rated current (100 K)	$I_{N(100K)}$	A	290
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	290
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	590
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.77
Voltage constant (at 20 °C)	k_E	V/1000rpm	313
Winding resistance (at 20 °C)	R_{ph}	Ω	0.022
Rotating field inductance	L_D	mH	0.7
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

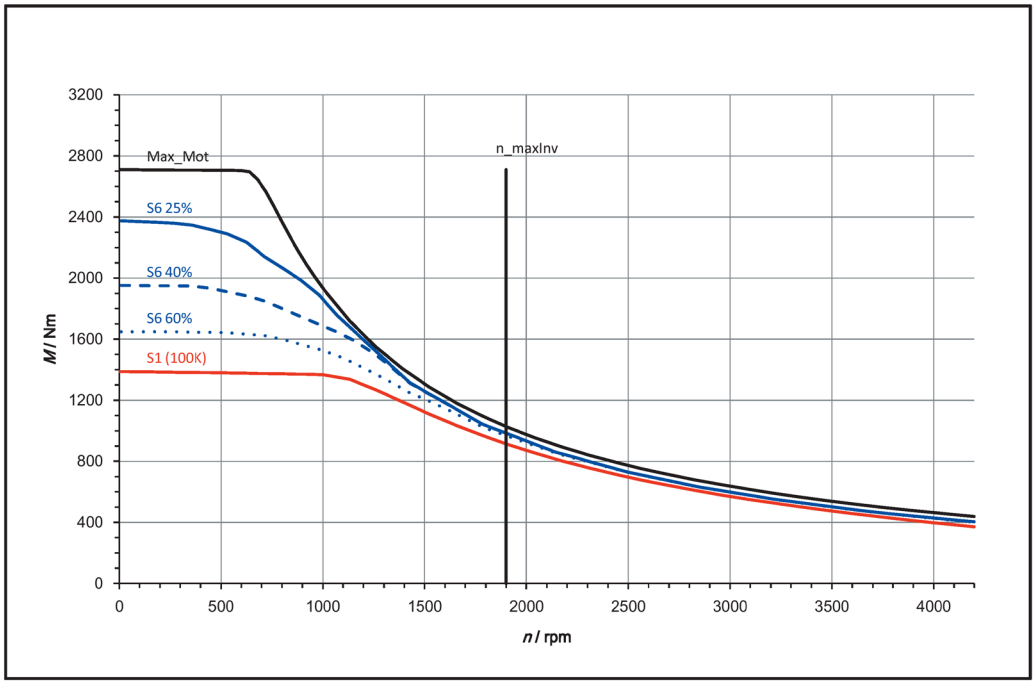
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LHxx-xAB0, 1FE2186-8LHxx-xAC0, 1FE2186-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-48 PD_1FE2186-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

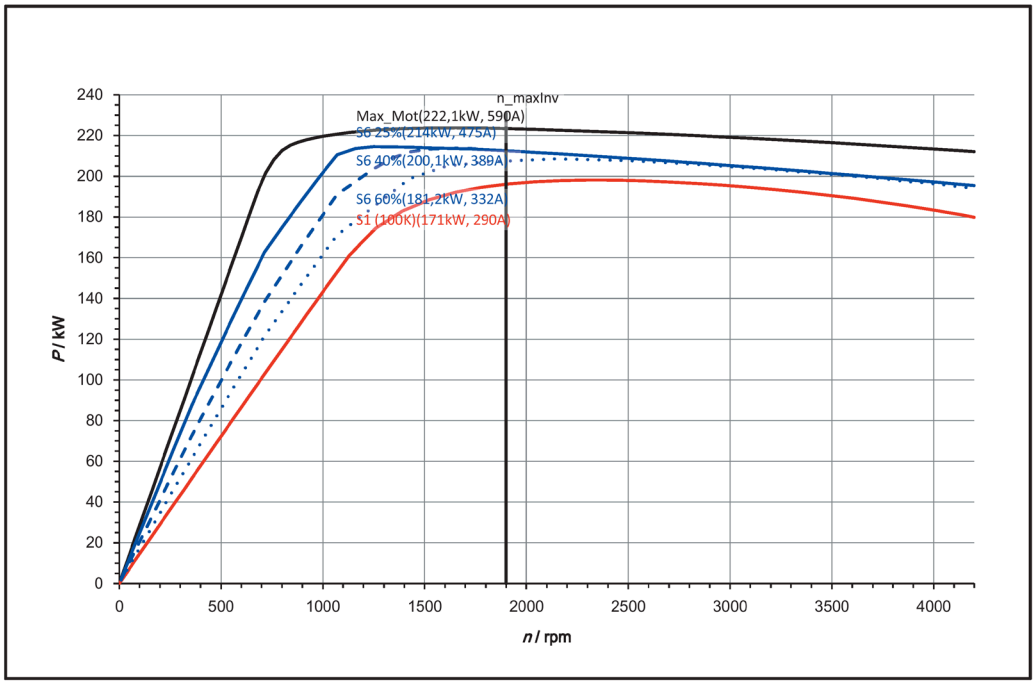
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	1360
Rated power (100 K)	$P_{N(100K)}$	kW	171
Rated current (100 K)	$I_{N(100K)}$	A	290
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	290
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	590
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.77
Voltage constant (at 20 °C)	k_E	V/1000rpm	313
Winding resistance (at 20 °C)	R_{ph}	Ω	0.022
Rotating field inductance	L_D	mH	0.7
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

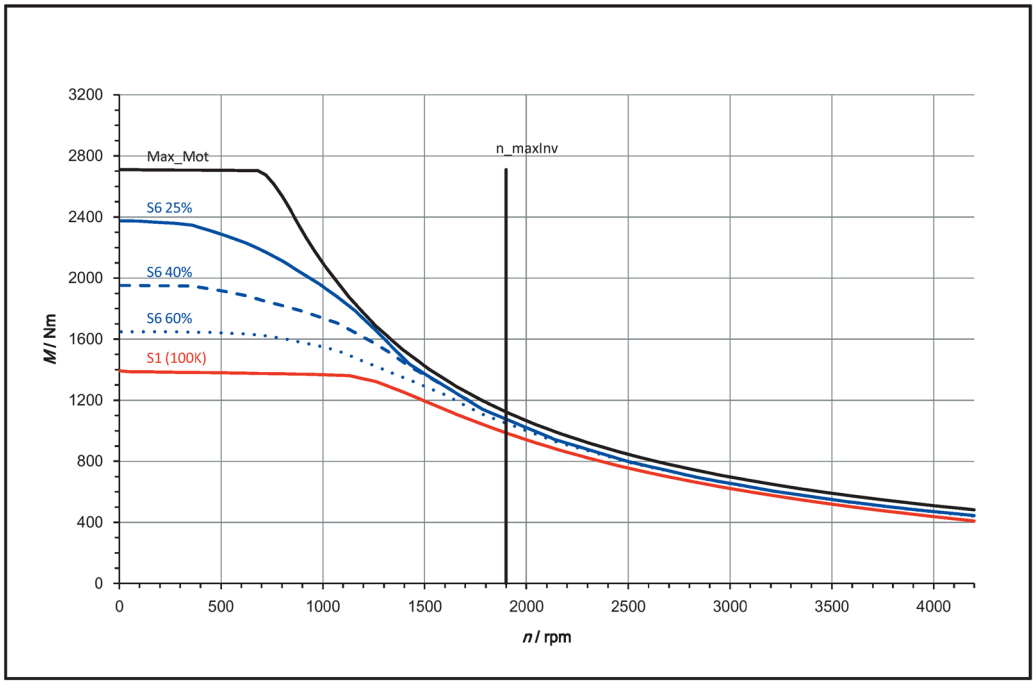
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LHxx-xAB0, 1FE2186-8LHxx-xAC0, 1FE2186-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-49 PD_1FE2186-8LHxx-xCC1_Index_a

2.1.4.13 1FE2186-8LMxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

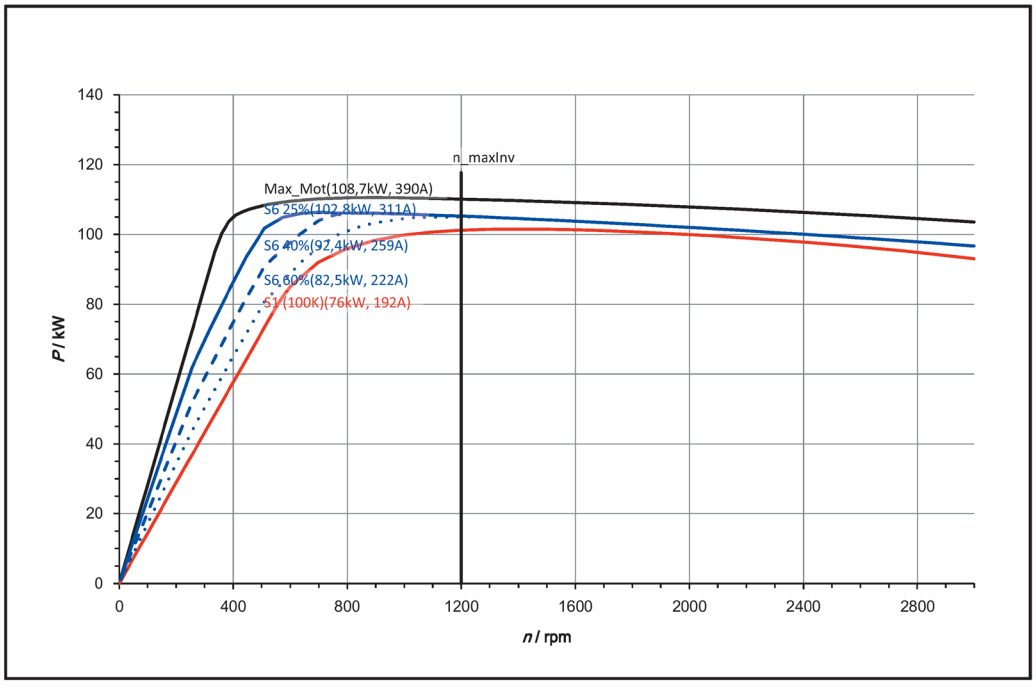
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	86
Rated current (100 K)	$I_{N(100K)}$	A	192
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	193
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3000
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1200
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	7.15
Voltage constant (at 20 °C)	k_E	V/1000rpm	470
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0498
Rotating field inductance	L_D	mH	1.6
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm²	1.35
Weight	m_{mot} 3)	kg	190

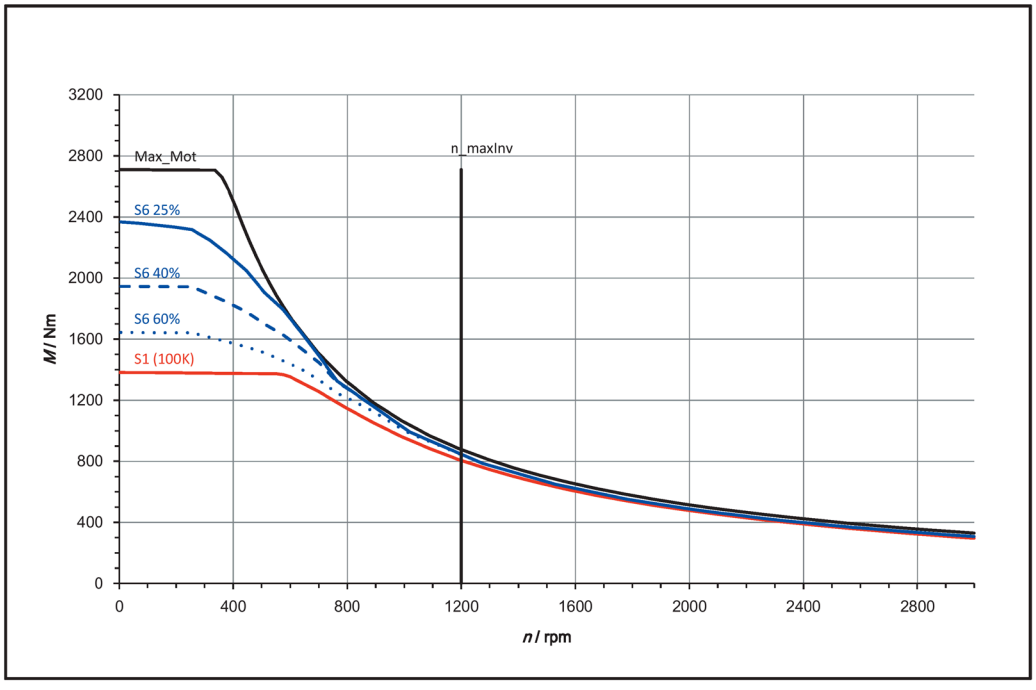
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LMxx-xAB0, 1FE2186-8LMxx-xAC0, 1FE2186-8LMxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-50 PD_1FE2186-8LMxx-xCC1_Index_--

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

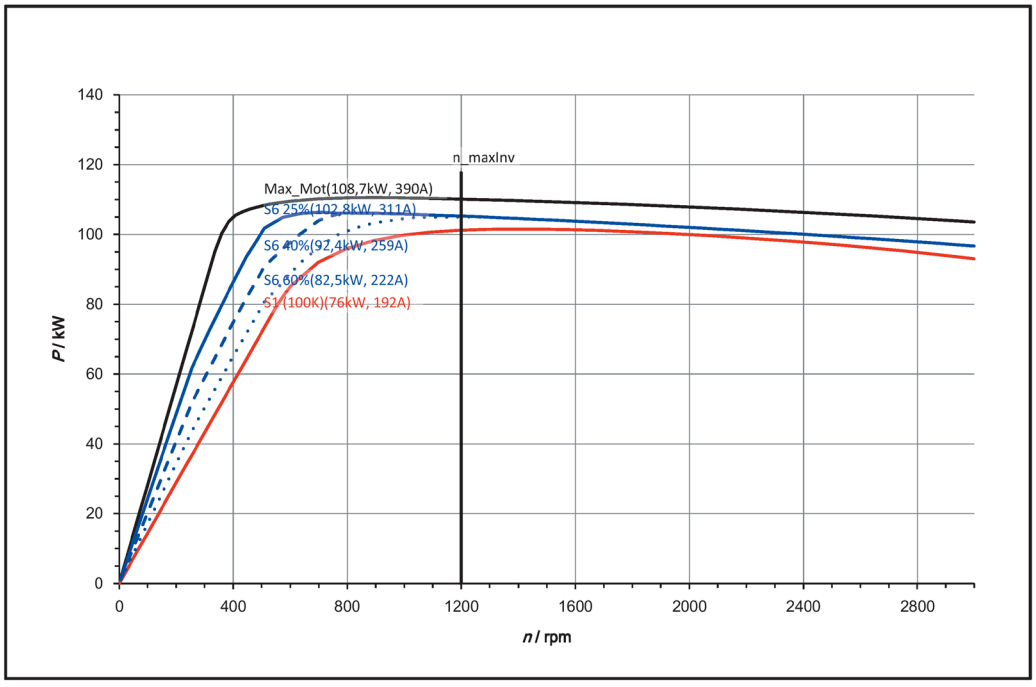
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	530
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	76
Rated current (100 K)	$I_{N(100K)}$	A	192
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	193
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3000
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1200
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	7.15
Voltage constant (at 20 °C)	k_E	V/1000rpm	470
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0498
Rotating field inductance	L_D	mH	1.6
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

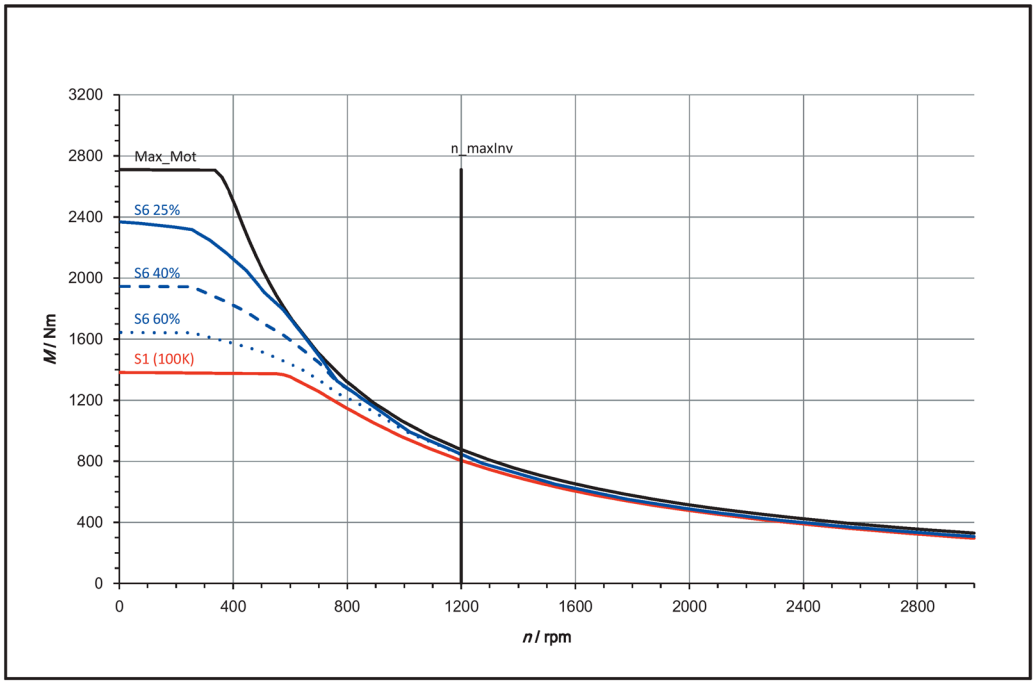
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LMxx-xAB0, 1FE2186-8LMxx-xAC0, 1FE2186-8LMxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[------] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-51 PD_1FE2186-8LMxx-xCC1_Index_--

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

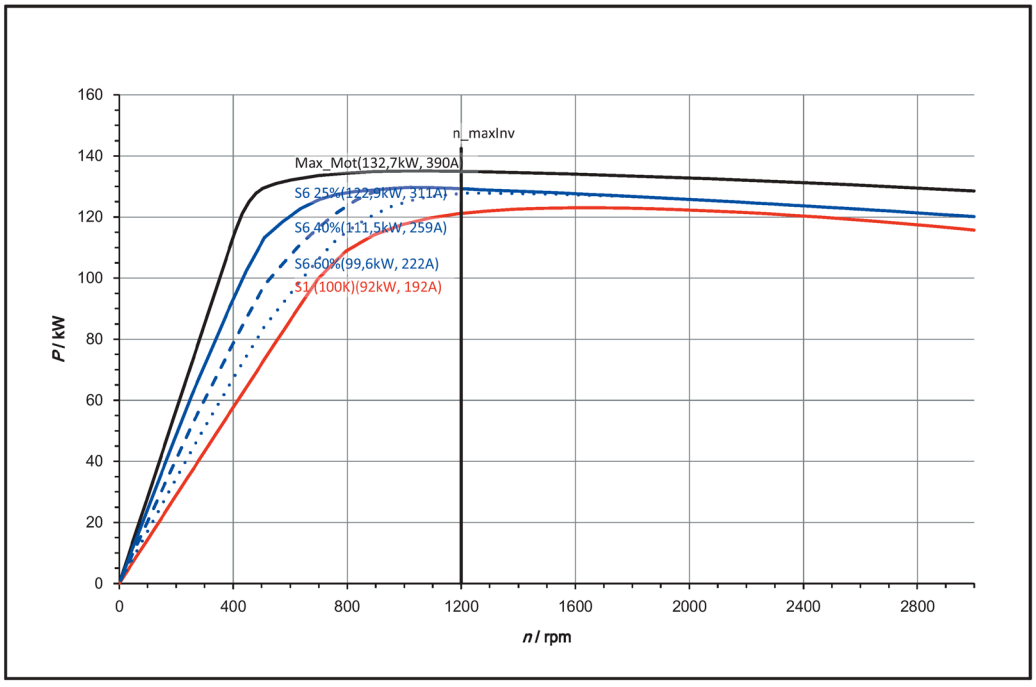
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	640
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	92
Rated current (100 K)	$I_{N(100K)}$	A	192
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	193
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3000
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1200
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	7.15
Voltage constant (at 20 °C)	k_E	V/1000rpm	470
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0498
Rotating field inductance	L_D	mH	1.6
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

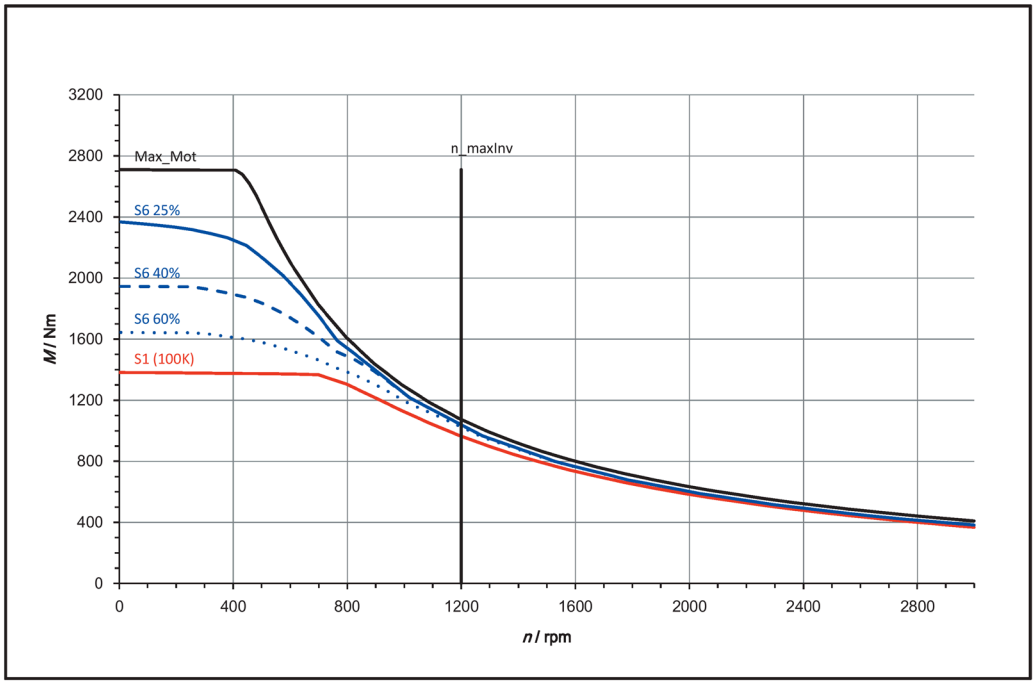
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LMxx-xAB0, 1FE2186-8LMxx-xAC0, 1FE2186-8LMxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-52 PD_1FE2186-8LMxx-xCC1_Index_--

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

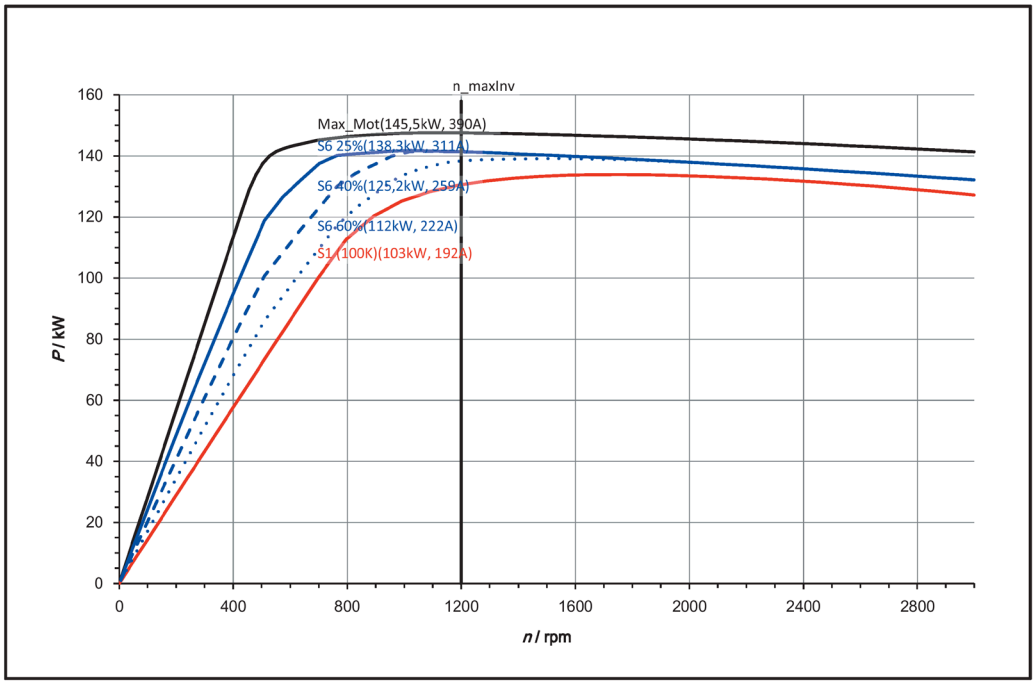
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	720
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	103
Rated current (100 K)	$I_{N(100K)}$	A	192
Static torque (100 K)	$M_{0(100K)}$	Nm	1380
Stall current (100 K)	$I_{0(100K)}$	A	193
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	3000
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1200
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	7.15
Voltage constant (at 20 °C)	k_E	V/1000rpm	470
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0498
Rotating field inductance	L_D	mH	1.6
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

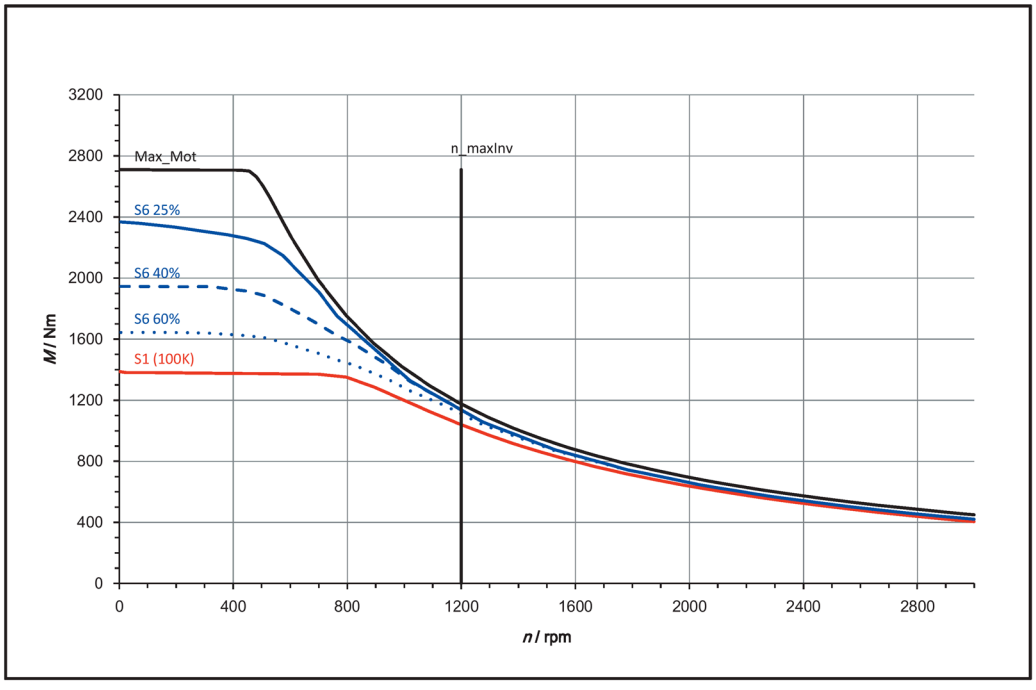
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LMxx-xAB0, 1FE2186-8LMxx-xAC0, 1FE2186-8LMxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-53 PD_1FE2186-8LMxx-xCC1_Index_--

2.1.4.14 1FE2186-8LNxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

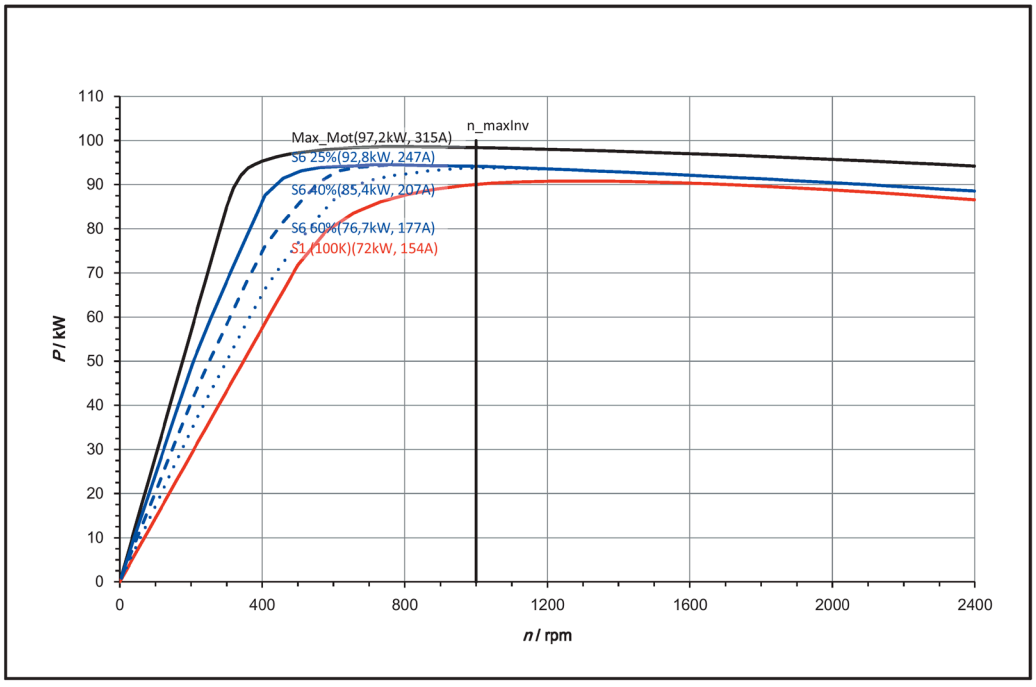
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	500
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	72
Rated current (100 K)	$I_{N(100K)}$	A	154
Static torque (100 K)	$M_{0(100K)}$	Nm	1370
Stall current (100 K)	$I_{0(100K)}$	A	154
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	315
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.078
Rotating field inductance	L_D	mH	2.5
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

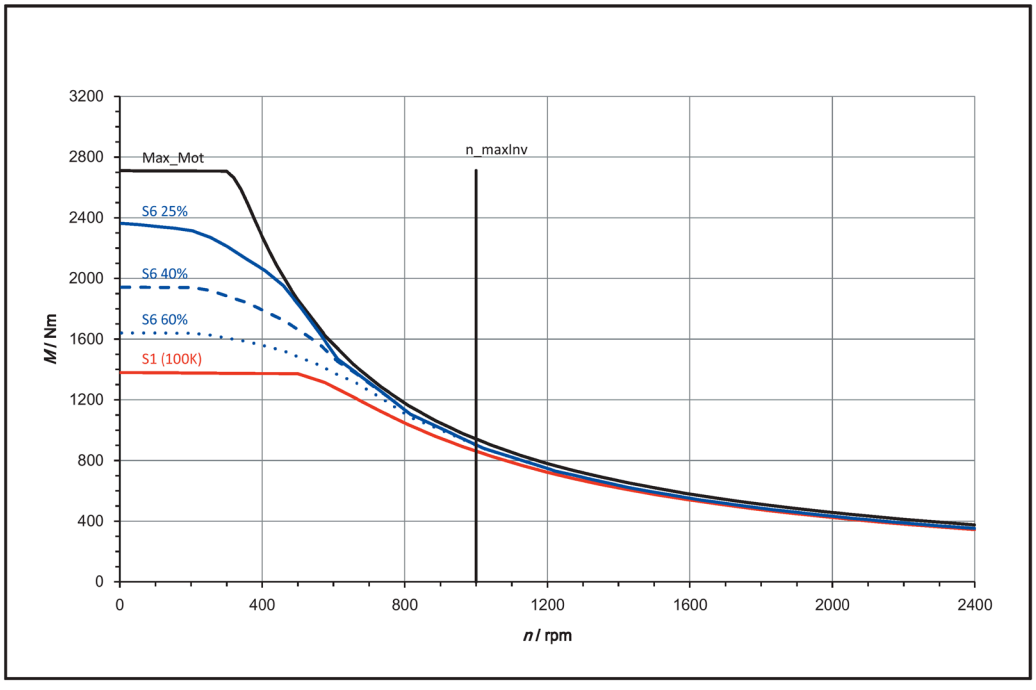
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LNxx-xAB0, 1FE2186-8LNxx-xAC0, 1FE2186-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-54 PD_1FE2186-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

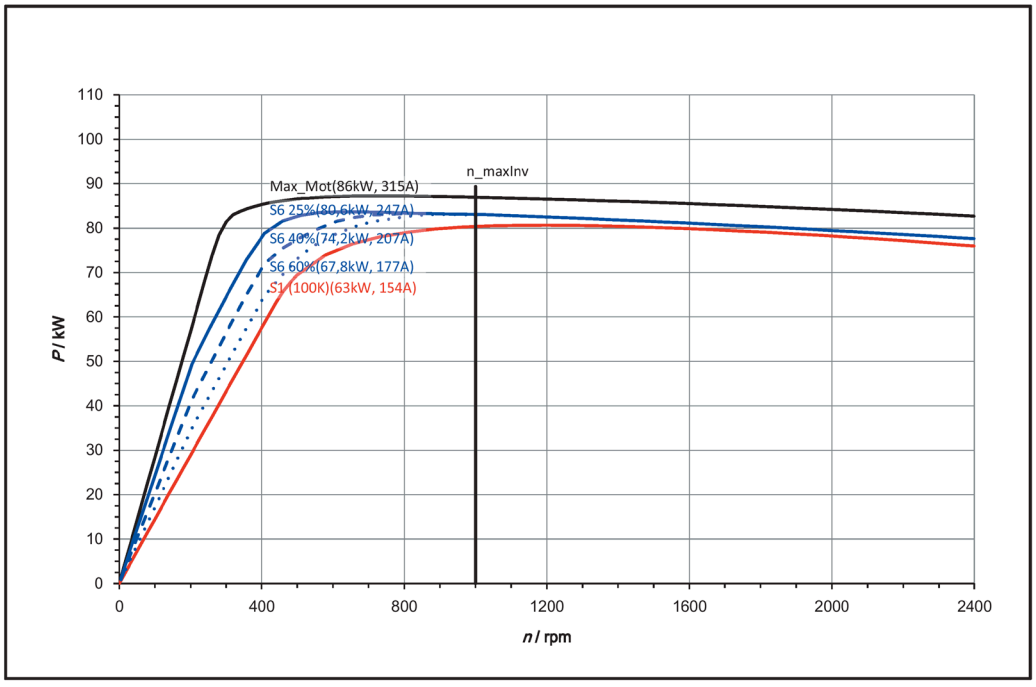
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	440
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	63
Rated current (100 K)	$I_{N(100K)}$	A	154
Static torque (100 K)	$M_{0(100K)}$	Nm	1370
Stall current (100 K)	$I_{0(100K)}$	A	154
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	315
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.078
Rotating field inductance	L_D	mH	2.5
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

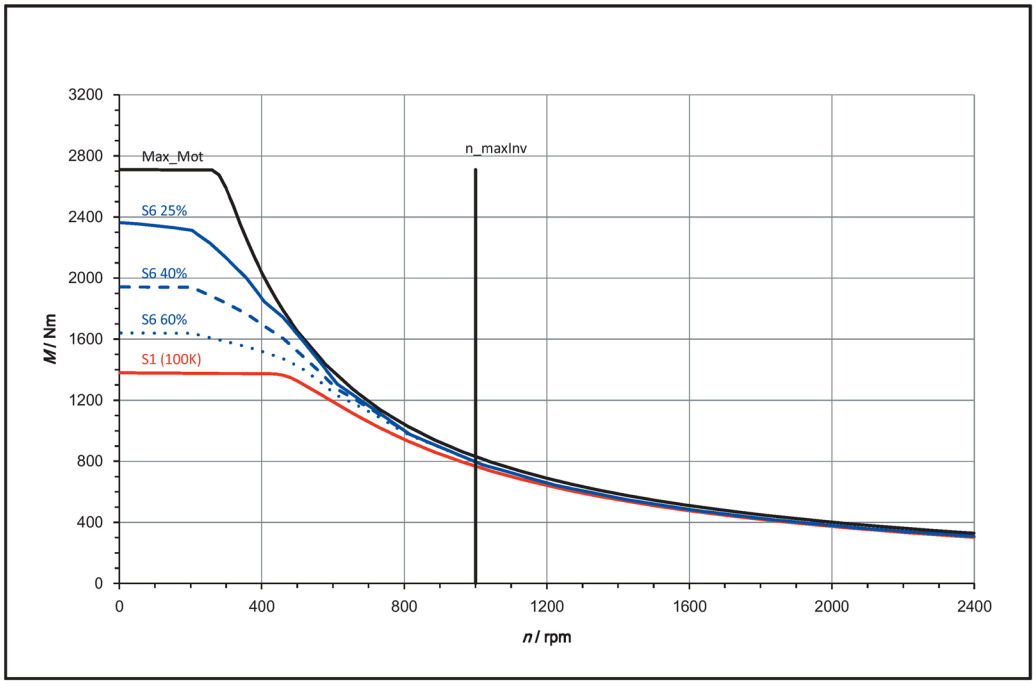
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LNxx-xAB0, 1FE2186-8LNxx-xAC0, 1FE2186-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-55 PD_1FE2186-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

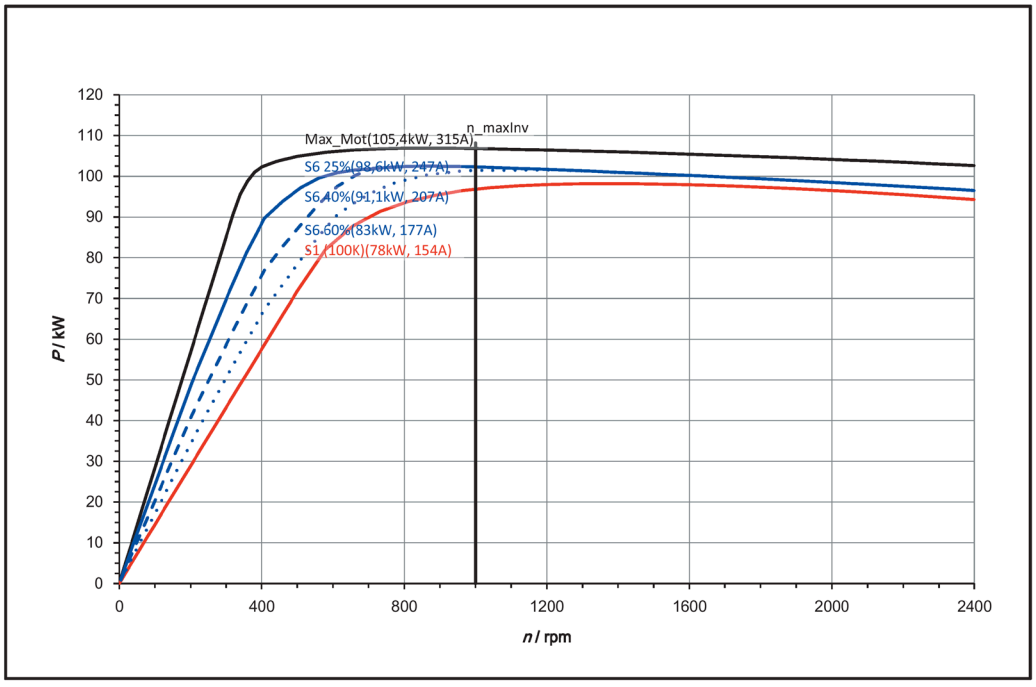
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	540
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	78
Rated current (100 K)	$I_{N(100K)}$	A	154
Static torque (100 K)	$M_{0(100K)}$	Nm	1370
Stall current (100 K)	$I_{0(100K)}$	A	154
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	315
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.078
Rotating field inductance	L_D	mH	2.5
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

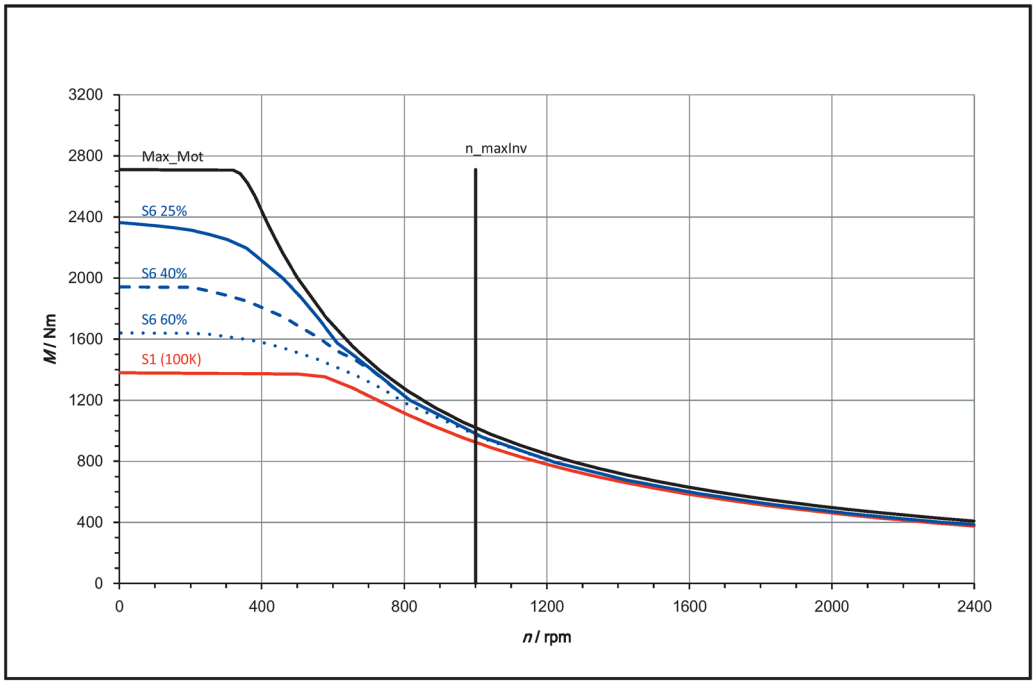
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LNxx-xAB0, 1FE2186-8LNxx-xAC0, 1FE2186-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-56 PD_1FE2186-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

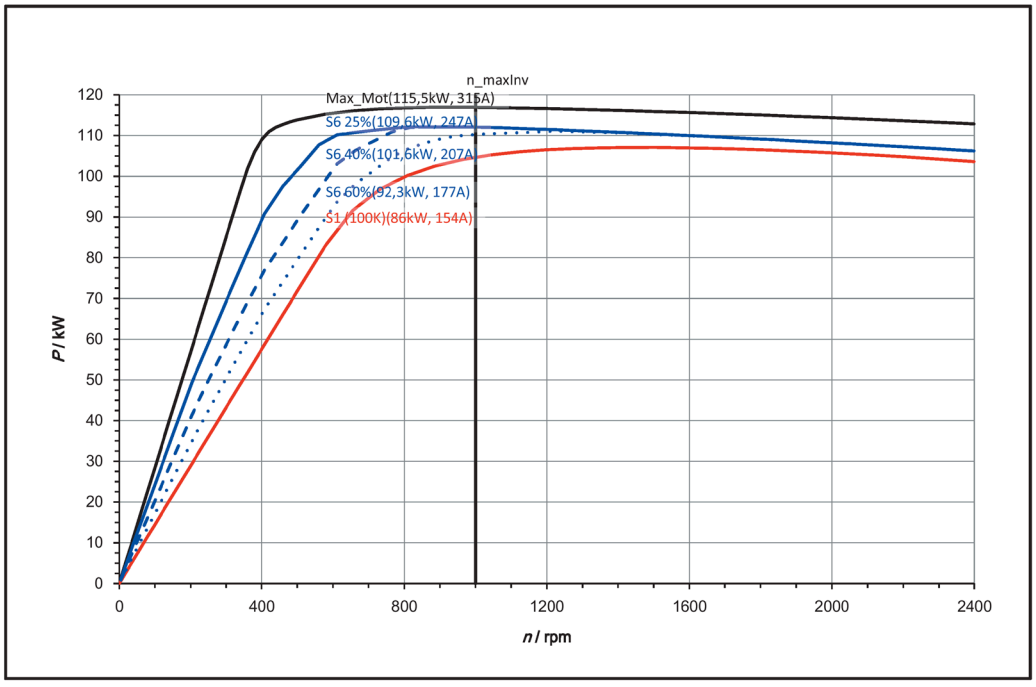
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	1370
Rated power (100 K)	$P_{N(100K)}$	kW	86
Rated current (100 K)	$I_{N(100K)}$	A	154
Static torque (100 K)	$M_{0(100K)}$	Nm	1370
Stall current (100 K)	$I_{0(100K)}$	A	154
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2400
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1000
Maximum torque	M_{max}	Nm	2700
Maximum current	I_{max}	A	315
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.95
Voltage constant (at 20 °C)	k_E	V/1000rpm	585
Winding resistance (at 20 °C)	R_{ph}	Ω	0.078
Rotating field inductance	L_D	mH	2.5
Electrical time constant	T_{el}	ms	32
Mechanical time constant	T_{mech}	ms	3.9
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.35
Weight	m_{mot} 3)	kg	190

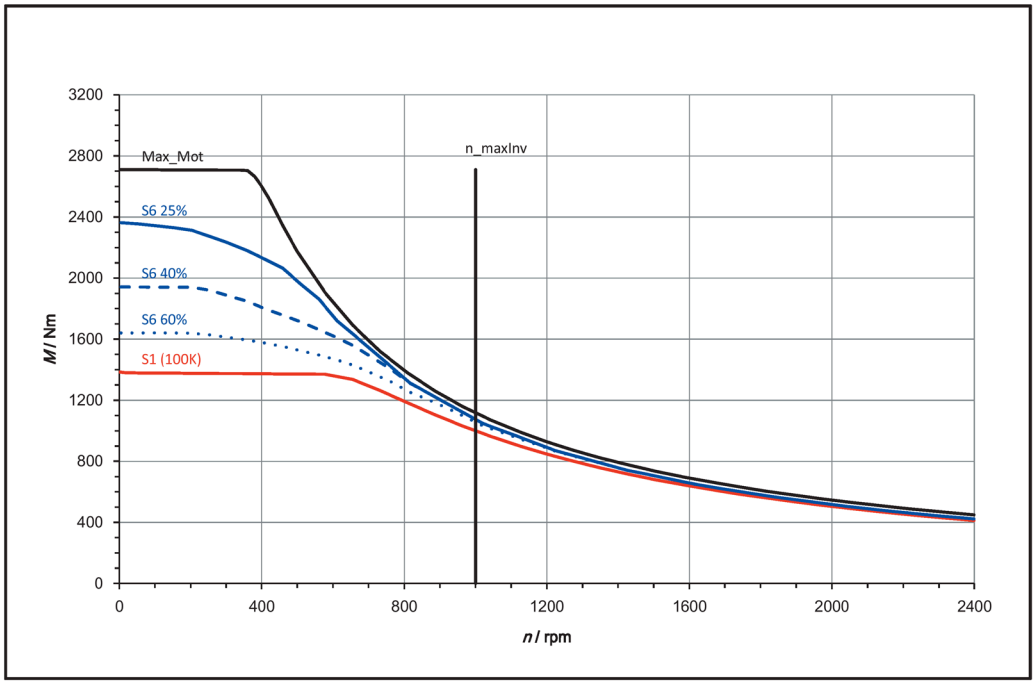
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2186-8LNxx-xAB0, 1FE2186-8LNxx-xAC0, 1FE2186-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-57 PD_1FE2186-8LNxx-xCC1_Index_a

2.1.4.15 1FE2187-8LHxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

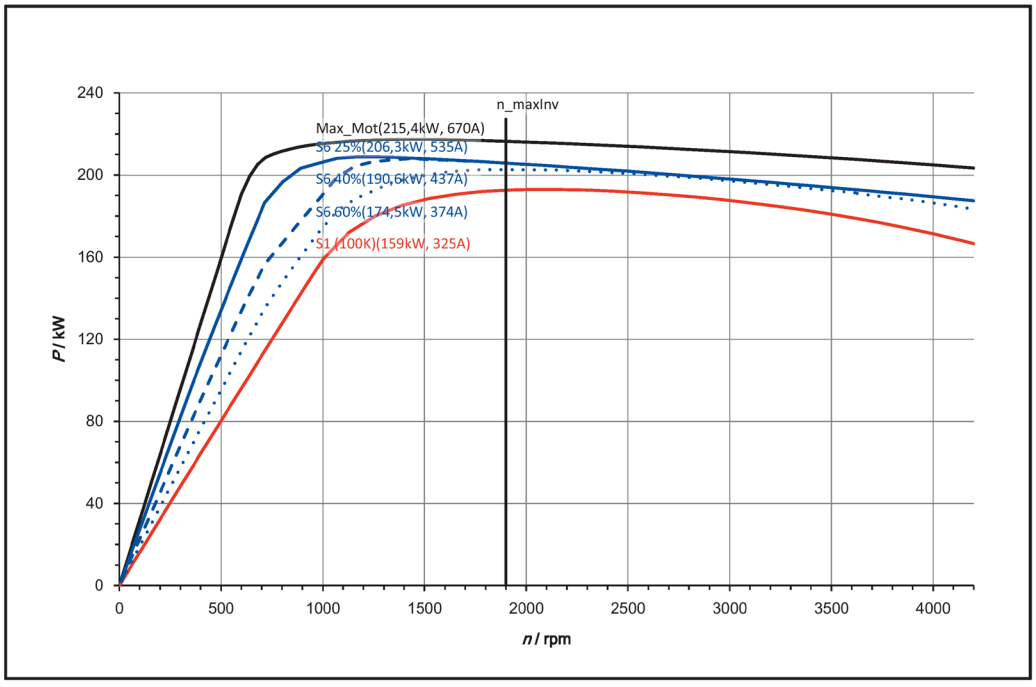
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1000
Rated torque (100 K)	$M_{N(100K)}$	Nm	1510
Rated power (100 K)	$P_{N(100K)}$	kW	159
Rated current (100 K)	$I_{N(100K)}$	A	325
Static torque (100 K)	$M_{0(100K)}$	Nm	1540
Stall current (100 K)	$I_{0(100K)}$	A	330
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	670
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0185
Rotating field inductance	L_D	mH	0.6
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

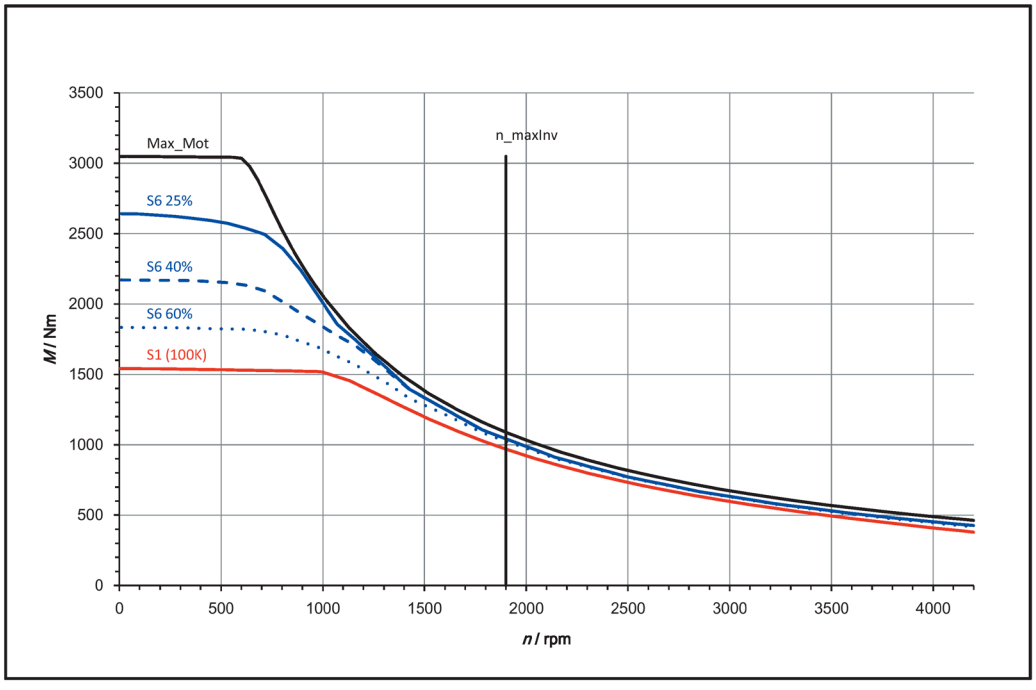
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LHxx-xAB0, 1FE2187-8LHxx-xAC0, 1FE2187-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-58 PD_1FE2187-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

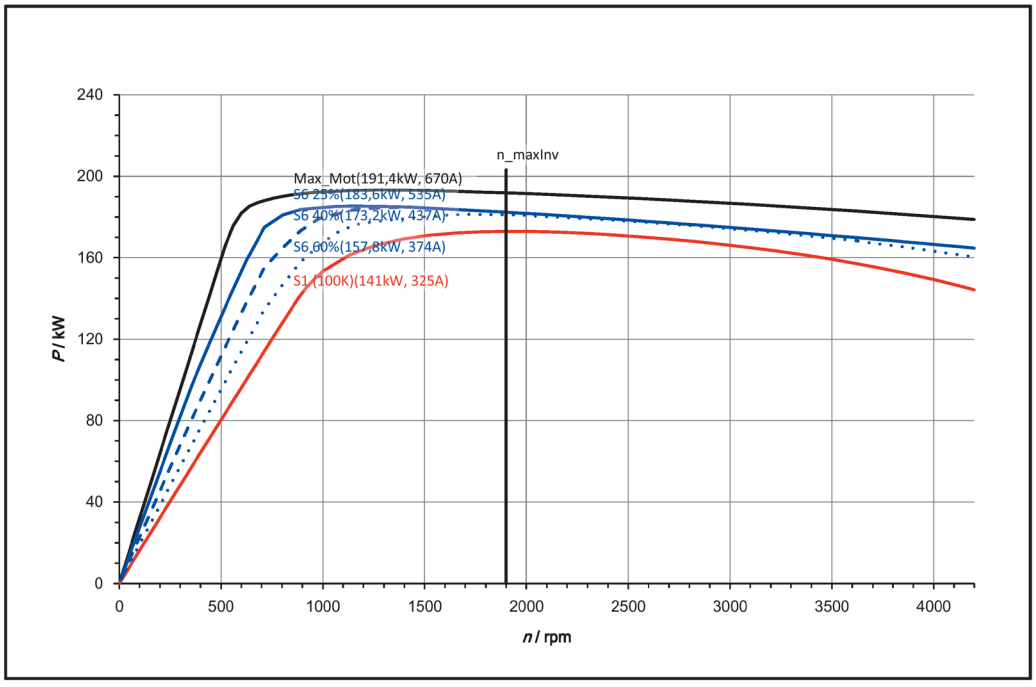
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	890
Rated torque (100 K)	$M_{N(100K)}$	Nm	1510
Rated power (100 K)	$P_{N(100K)}$	kW	141
Rated current (100 K)	$I_{N(100K)}$	A	325
Static torque (100 K)	$M_{0(100K)}$	Nm	1540
Stall current (100 K)	$I_{0(100K)}$	A	330
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	670
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0185
Rotating field inductance	L_D	mH	0.6
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

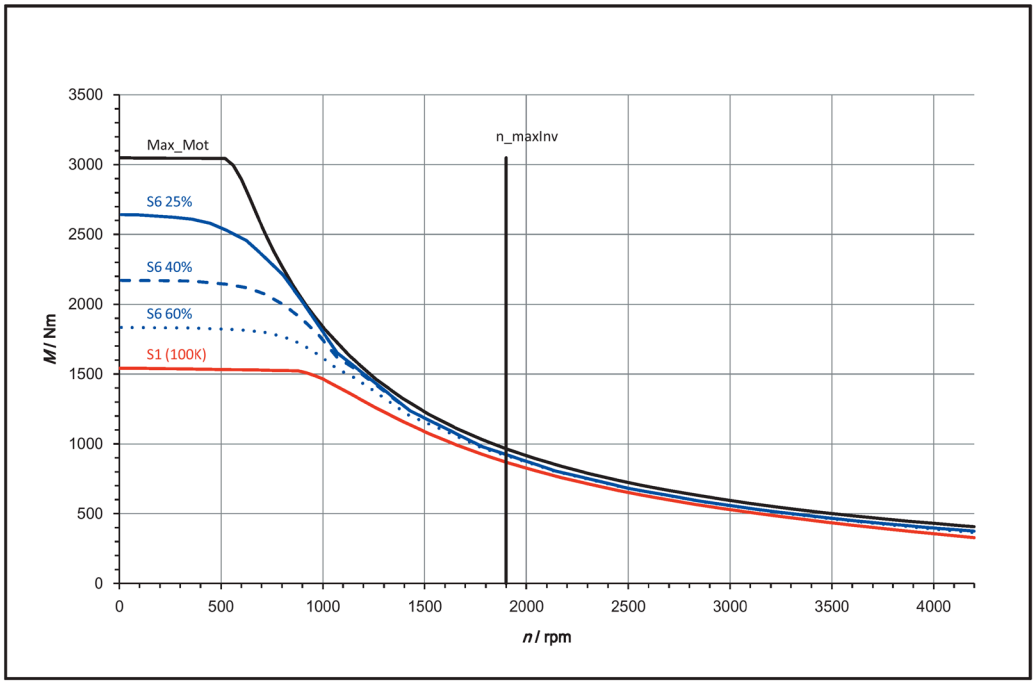
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LHxx-xAB0, 1FE2187-8LHxx-xAC0, 1FE2187-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[------] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-59 PD_1FE2187-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

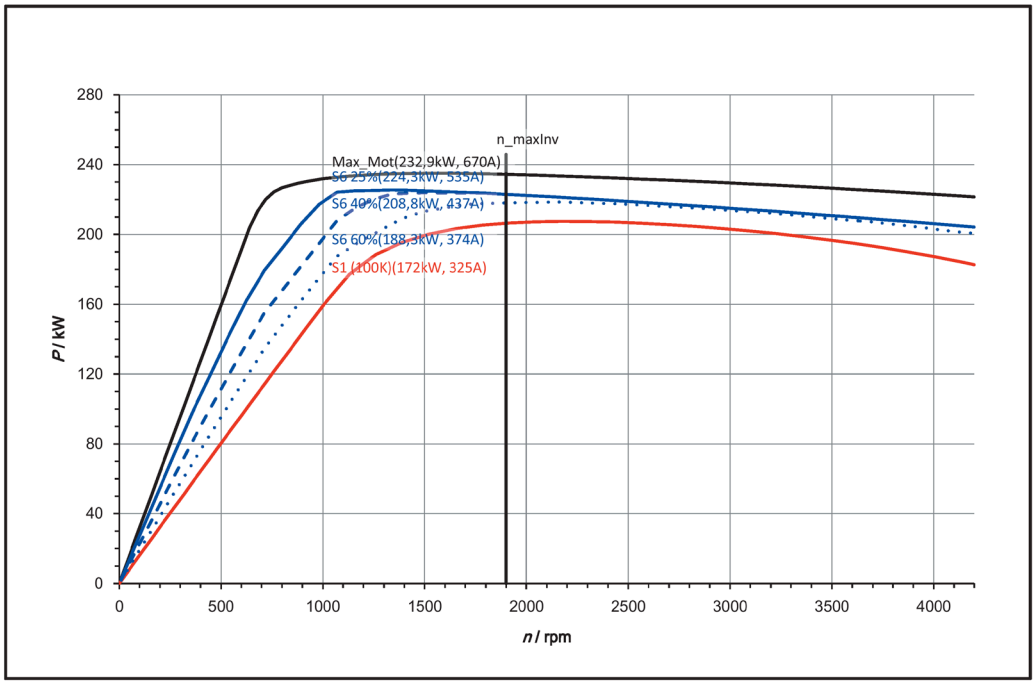
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1080
Rated torque (100 K)	$M_{N(100K)}$	Nm	1510
Rated power (100 K)	$P_{N(100K)}$	kW	172
Rated current (100 K)	$I_{N(100K)}$	A	325
Static torque (100 K)	$M_{0(100K)}$	Nm	1540
Stall current (100 K)	$I_{0(100K)}$	A	330
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	670
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0185
Rotating field inductance	L_D	mH	0.6
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

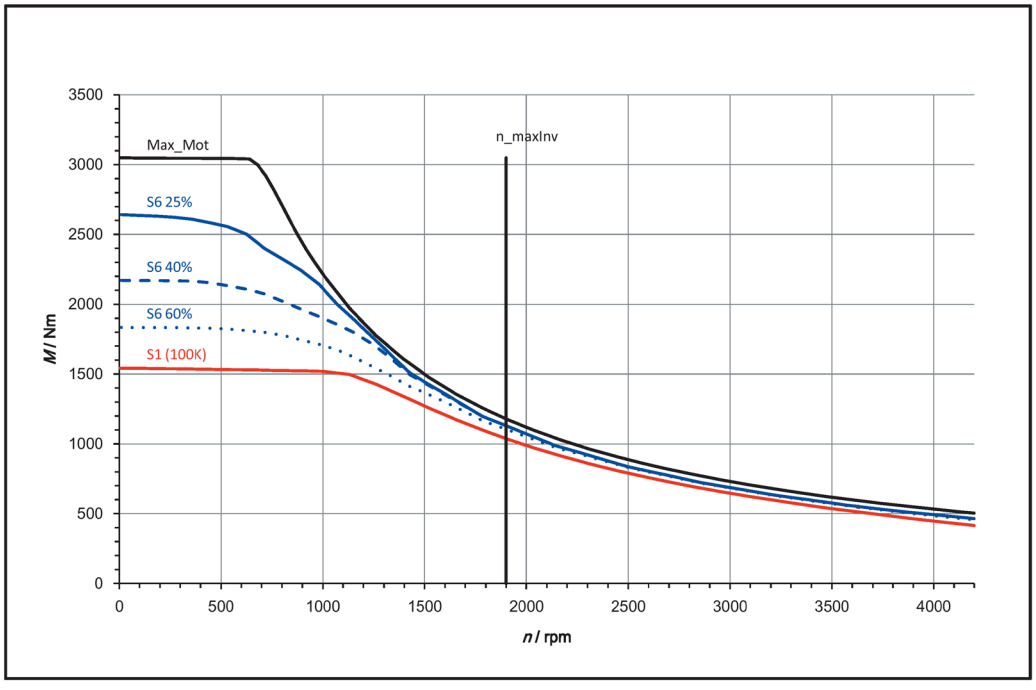
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LHxx-xAB0, 1FE2187-8LHxx-xAC0, 1FE2187-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-60 PD_1FE2187-8LHxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

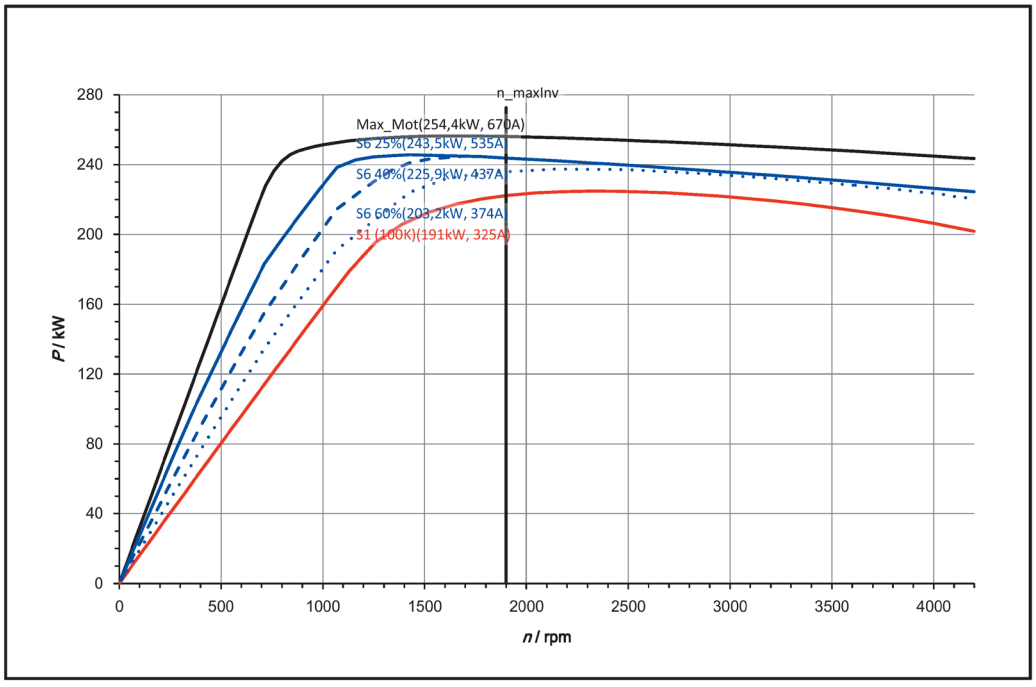
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	1200
Rated torque (100 K)	$M_{N(100K)}$	Nm	1510
Rated power (100 K)	$P_{N(100K)}$	kW	191
Rated current (100 K)	$I_{N(100K)}$	A	325
Static torque (100 K)	$M_{0(100K)}$	Nm	1540
Stall current (100 K)	$I_{0(100K)}$	A	330
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	4200
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1900
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	670
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	4.7
Voltage constant (at 20 °C)	k_E	V/1000rpm	308
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0185
Rotating field inductance	L_D	mH	0.6
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.7
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

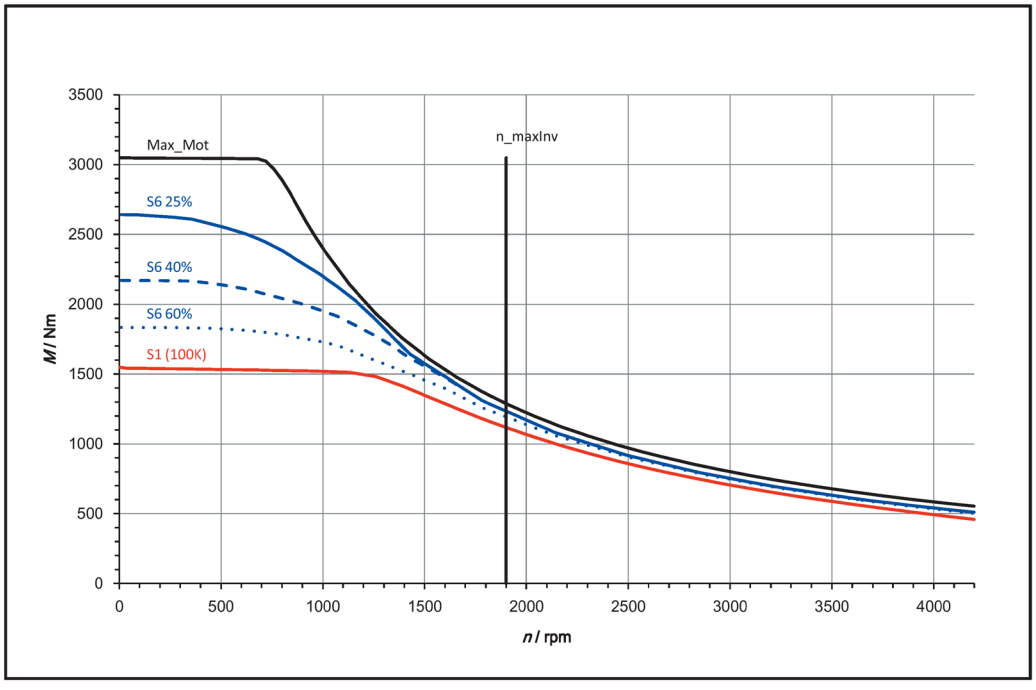
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LHxx-xAB0, 1FE2187-8LHxx-xAC0, 1FE2187-8LHxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-61 PD_1FE2187-8LHxx-xCC1_Index_a

2.1.4.16 1FE2187-8LNxx-xCC1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

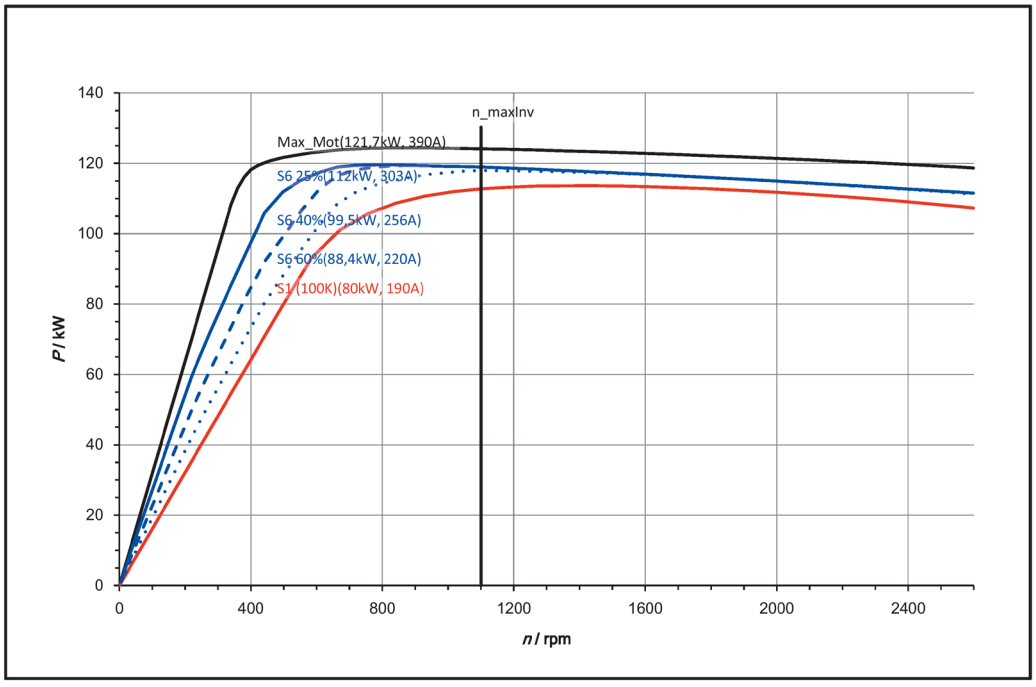
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	500
Rated torque (100 K)	$M_{N(100K)}$	Nm	1530
Rated power (100 K)	$P_{N(100K)}$	kW	80
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1530
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2670
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1100
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.05
Voltage constant (at 20 °C)	k_E	V/1000rpm	530
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0545
Rotating field inductance	L_D	mH	1.8
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

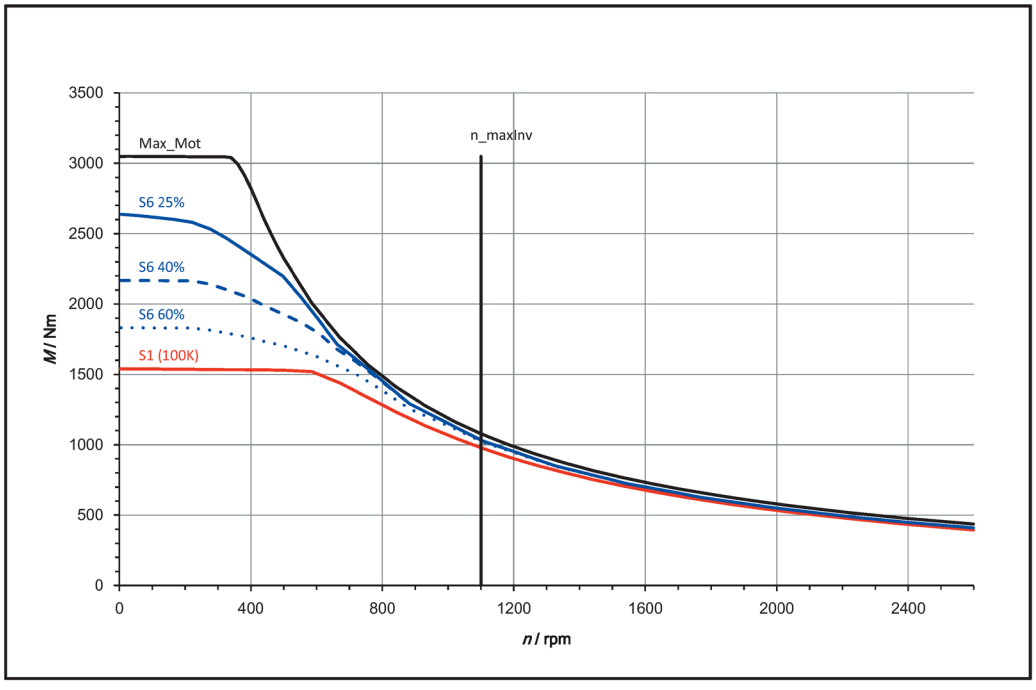
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LNxx-xAB0, 1FE2187-8LNxx-xAC0, 1FE2187-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 400 V (600 V DC)

Figure 2-62 PD_1FE2187-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

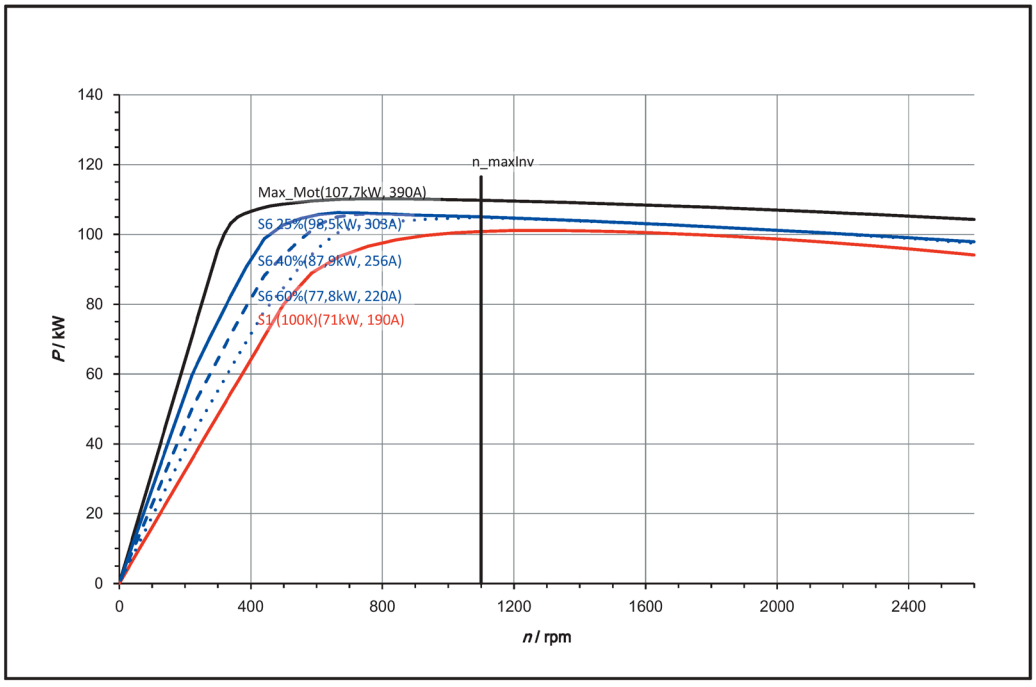
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	440
Rated torque (100 K)	$M_{N(100K)}$	Nm	1530
Rated power (100 K)	$P_{N(100K)}$	kW	71
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1530
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2670
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1100
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.05
Voltage constant (at 20 °C)	k_E	V/1000rpm	530
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0545
Rotating field inductance	L_D	mH	1.8
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

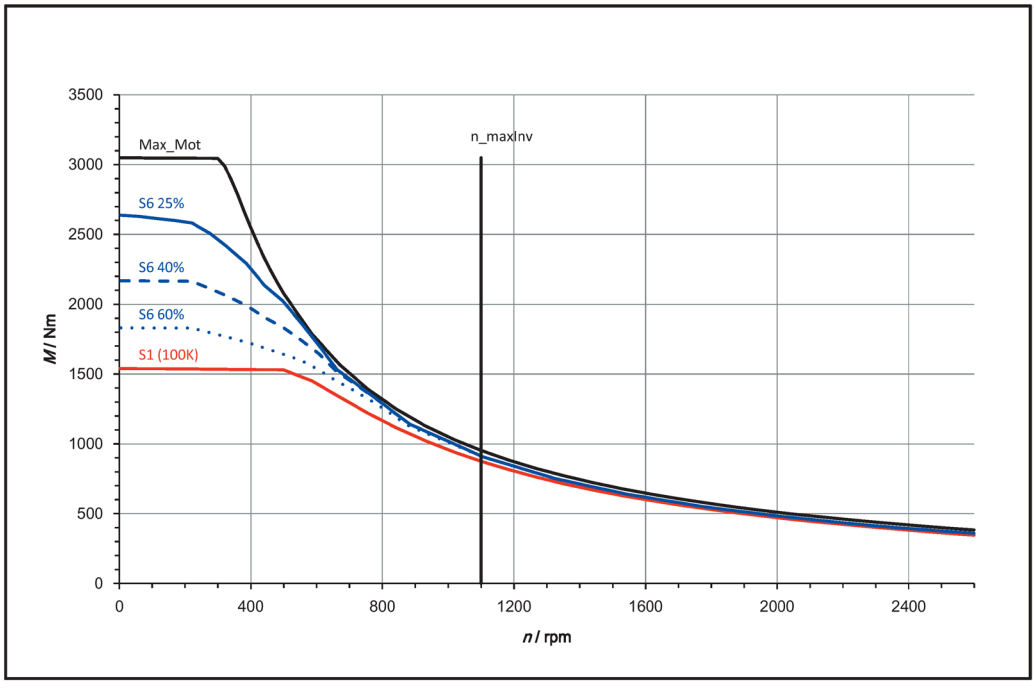
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LNxx-xAB0, 1FE2187-8LNxx-xAC0, 1FE2187-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[- - - - - -] SINAMICS BLM/SLM 400 V (540 V DC)

Figure 2-63 PD_1FE2187-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

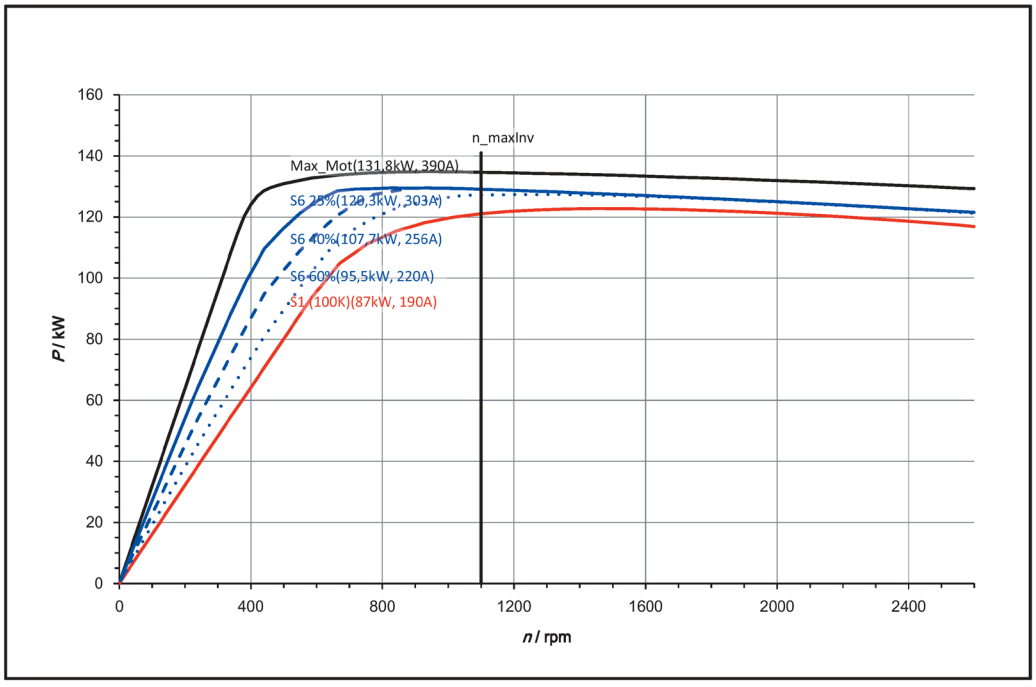
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	540
Rated torque (100 K)	$M_{N(100K)}$	Nm	1530
Rated power (100 K)	$P_{N(100K)}$	kW	87
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1530
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2670
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1100
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.05
Voltage constant (at 20 °C)	k_E	V/1000rpm	530
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0545
Rotating field inductance	L_D	mH	1.8
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

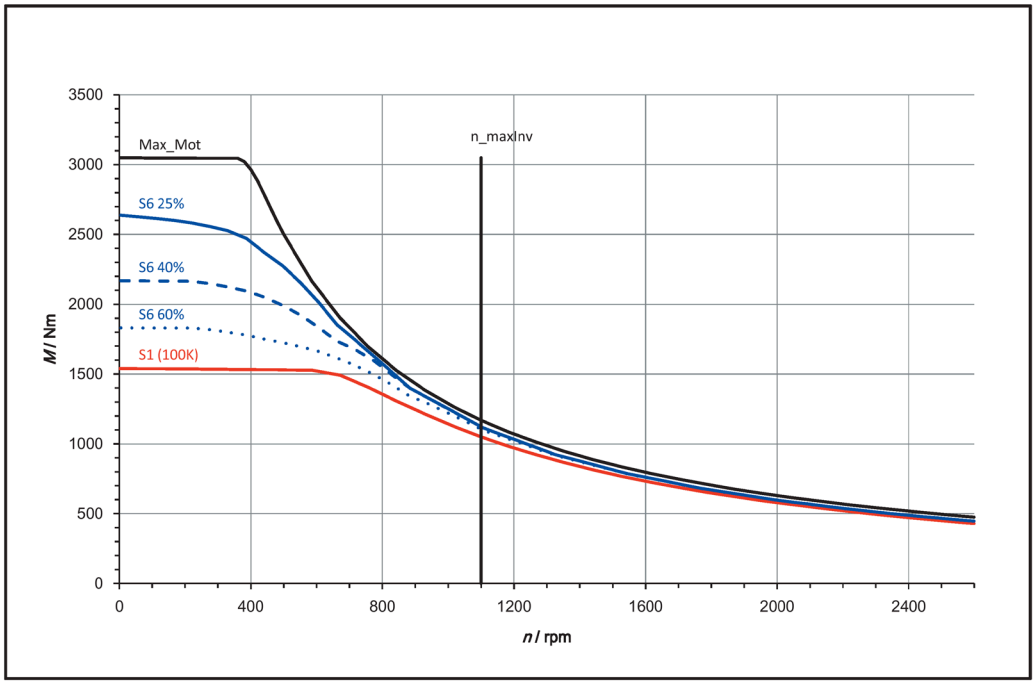
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LNxx-xAB0, 1FE2187-8LNxx-xAC0, 1FE2187-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[– – – – – –] SINAMICS BLM/SLM 480 V (650 V DC)

Figure 2-64 PD_1FE2187-8LNxx-xCC1_Index_a

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

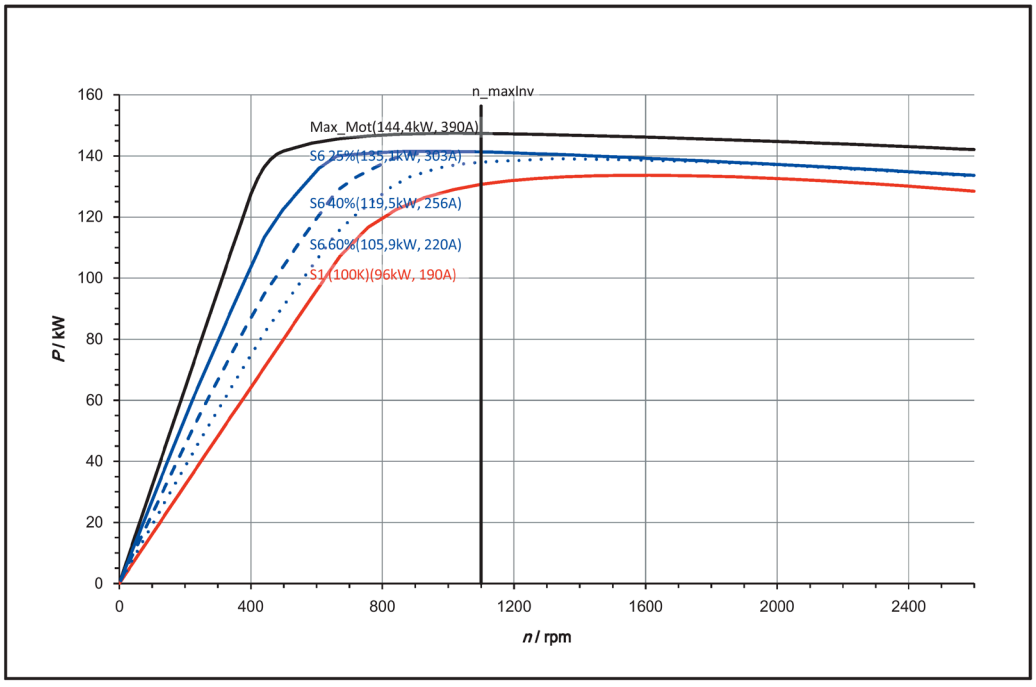
Technical data	Abbreviation	Unit	Value
Configuration data:			
Rated speed	n_N	rpm	600
Rated torque (100 K)	$M_{N(100K)}$	Nm	1530
Rated power (100 K)	$P_{N(100K)}$	kW	96
Rated current (100 K)	$I_{N(100K)}$	A	190
Static torque (100 K)	$M_{0(100K)}$	Nm	1530
Stall current (100 K)	$I_{0(100K)}$	A	191
Limit data:			
Max. permissible speed	n_{max} 1)	rpm	2670
Max. permissible speed (inverter)	$n_{max\ Inv}$	rpm	1100
Maximum torque	M_{max}	Nm	3000
Maximum current	I_{max}	A	390
Motor data:			
Number of poles	2p		16
Torque constant (100 K)	k_T	Nm/A	8.05
Voltage constant (at 20 °C)	k_E	V/1000rpm	530
Winding resistance (at 20 °C)	R_{ph}	Ω	0.0545
Rotating field inductance	L_D	mH	1.8
Electrical time constant	T_{el}	ms	33
Mechanical time constant	T_{mech}	ms	3.8
Thermal time constant	T_{th}	min	4
Moment of inertia	J_{mot} 2)	kgm^2	1.49
Weight	m_{mot} 3)	kg	210

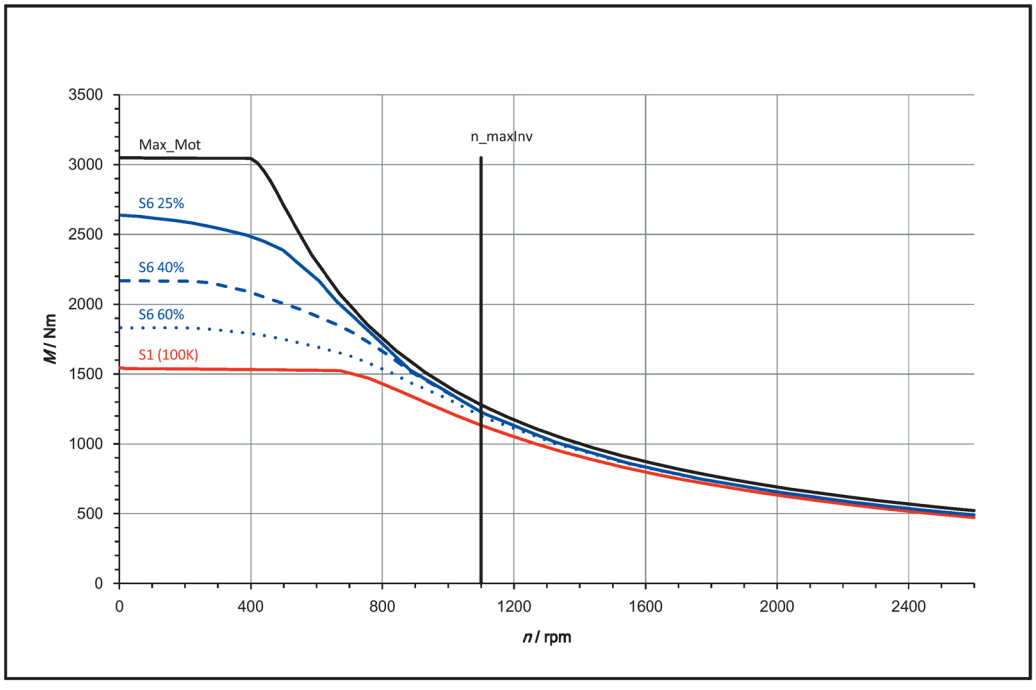
The performance data apply for cooling jackets and cooling conditions in accordance with the Siemens design. The data for duty type S6 are valid for a 2 min. duty cycle. The specified motor data apply to operation with a power unit. The motor data for operation on two power units must be converted in accordance with the Configuration Manual. In both application cases, the data apply at a converter pulse frequency of 4 kHz. The data sheet is also valid for: 1FE2187-8LNxx-xAB0, 1FE2187-8LNxx-xAC0, 1FE2187-8LNxx-xCB0.

1) Minimum of $n_{max\ mech}$ and $n_{max\ VPM}$

2) Rotor package with standard rotor sleeve

3) Stator with cooling jacket, winding impregnated (for values for rotor package with standard rotor sleeve, see the Configuration Manual)





[———] SINAMICS ALM 480 V (720 V DC)

Figure 2-65 PD_1FE2187-8LNxx-xCC1_Index_a

2.2 Technical data and characteristics for asynchronous motors

2.2.1 Technical data for the asynchronous version

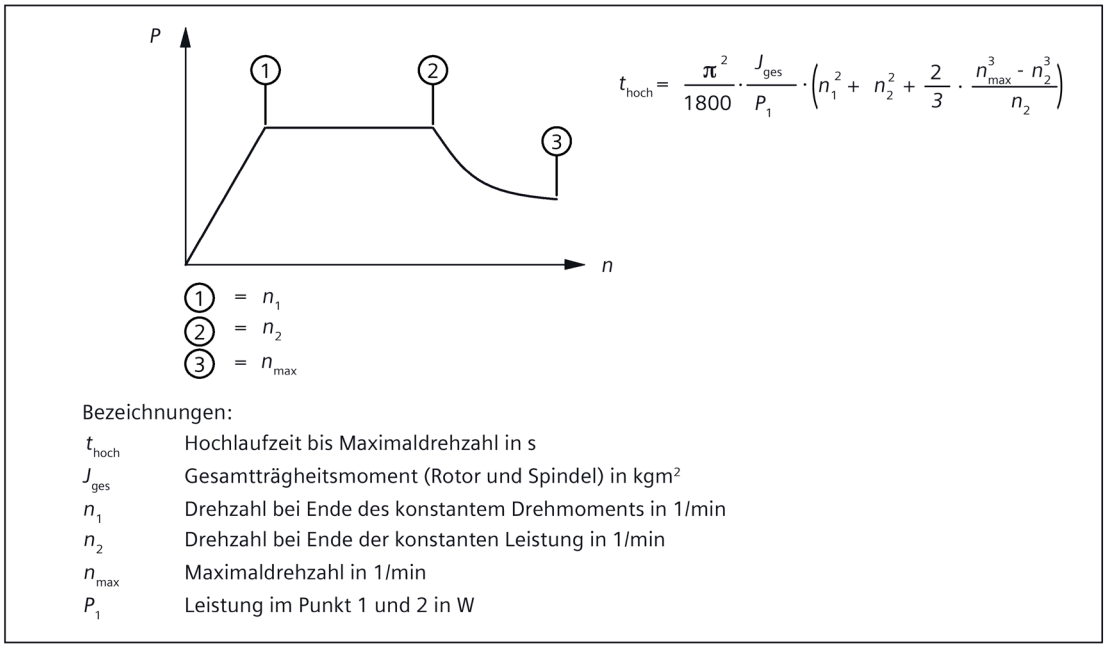
Note

The values specified in the following tables are valid for the asynchronous version with water cooling.

Motor article number	Connection type	Rated torque M_N / Nm				Rated current I_N / A				Maximum current I_{max} [1] / A	Rated speed n_N / rpm	Maximum speed n_{max} / rpm
		S1	S6-60%	S6-40%	S6-25%	S1	S6-60%	S6-40%	S6-25%			
8-pole built-in motors												
1FE2093-8AG□□-□□□1	Y	75	90	106	125	24	29	34	40	60	950	10000
1FE2093-8AM□□-□□□2	D	23	28	32	38	28.5	34	40	47	90	4750	19000
1FE2093-8AM□□-□□□2	Y	65	79	93	109	30	36	42	50	90	1600	10000
1FE2094-8AJ□□-□□□1	Y	95	115	134	158	39	37	55	65	85	1100	10000
1FE2094-8AM□□-□□□2	D	34	41	48	56	45	54	63	75	85	4750	19000
1FE2094-8AM□□-□□□2	Y	90	108	126	148	45	54	65	75	85	1600	10000
1FE2094-8CJ□□-□□□1	Y	136	164	191	225	53	64	74	88	113	1300	10000
1FE2094-8CG□□-□□□2	D	55	67	78	91	45	54	63	74	85	3200	16000
1FE2094-8CG□□-□□□2	Y	136	164	192	226	45	54	63	74	85	1050	10000
1FE2095-8CJ□□-□□□1	Y	172	207	241	285	59	71	83	98	113	1250	10000
1FE2095-8CG□□-□□□2	D	70	84	98	116	56	67	78	92	113	3000	16000
1FE2095-8CG□□-□□□2	Y	177	212	248	292	60	72	84	99	113	1000	10000
1FE2145-8CC□□-□□□2	Y	420	504	588	693	60	72	84	100	113	500	6000
1FE2145-8CC□□-□□□2	D	159	193	225	265	58	70	81	96	113	1500	10000
1FE2145-8CE□□-□□□1	Y	420	505	590	695	85	102	119	135	141	750	6000
1FE2147-8CC□□-□□□2	Y	611	733	856	1008	85	102	119	135	141	500	6000
1FE2147-8CC□□-□□□2	D	257	311	363	428	81	97	113	134	141	1300	10000
1FE2147-8CE□□-□□□1	Y	611	736	858	1012	130	154	180	205	210	750	6000

2.2.2 Calculating the acceleration time based on the torque/power characteristic for the asynchronous version

With the following formula and the values in the table, you can calculate the acceleration time of the motor.



Bezeichnungen:

t_{hoch}	Hochlaufzeit bis Maximaldrehzahl in s
J_{ges}	Gesamtträgheitsmoment (Rotor und Spindel) in kgm²
n_1	Drehzahl bei Ende des konstantem Drehmoments in 1/min
n_2	Drehzahl bei Ende der konstanten Leistung in 1/min
n_{max}	Maximaldrehzahl in 1/min
P_1	Leistung im Punkt 1 und 2 in W

Figure 2-66 Calculation of the acceleration time_1FE2_ASM_MCC

Table 2- 2 Relevant data for calculating the acceleration time

Motor article number	Rated speed	Maximum speed	Maximum torque	Maximum power	Maximum speed at constant power	Moment of inertia	Acceleration time up to maximum speed with motor moment of inertia
	n_N	n_{max}	M_{max}	P_{max}	$n_{2,Pmax}$	J_{mot}	t_{high}
	rpm	rpm	Nm	kW	rpm	kgm²	s
1FE2093-8AG□□-□□□1	950	10000	205	20.4	950	0.0202	3.8
1FE2093-8AM□□-□□□2 D	4750	19000	100	49.7	4250	0.0202	2.5
1FE2093-8AM□□-□□□2 Y	1600	10000	190	31.8	1550	0.0202	1.5
1FE2094-8AJ□□-□□□1	1100	10000	245	28.2	2400	0.0266	1.5
1FE2094-8AM□□-□□□2 D	4750	19000	86	42.8	8600	0.0266	2.0
1FE2094-8AM□□-□□□2 Y	1600	10000	190	31.8	3900	0.0266	0.8
1FE2094-8CJ□□-□□□1	1300	10000	330	44.9	1650	0.0377	1.9
1FE2094-8CG□□-□□□2 D	3200	16000	120	40.2	5800	0.0377	2.5
1FE2094-8CG□□-□□□2 Y	1050	10000	290	31.9	1800	0.0377	2.4
1FE2095-8CJ□□-□□□1	1250	10000	375	49.1	1450	0.0443	2.3
1FE2095-8CG□□-□□□2 D	3000	16000	180	56.5	5750	0.0443	2.1
1FE2095-8CG□□-□□□2 Y	1000	10000	380	39.8	1900	0.0443	2.2
1FE2145-8CC□□-□□□2 Y	500	6000	870	45.6	650	0.28	7.5
1FE2145-8CC□□-□□□2 D	1500	10000	350	55.0	2000	0.28	9.4
1FE2145-8CE□□-□□□1	750	6000	750	58.9	1200	0.28	3.2
1FE2147-8CC□□-□□□2 Y	500	6000	1100	57.6	600	0.39	8.9
1FE2147-8CC□□-□□□2 D	1300	10000	520	70.8	2100	0.39	9.7
1FE2147-8CE□□-□□□1	750	6000	1050	82.5	1450	0.39	2.6

2.2.3 P/n and M/n diagrams for 8-pole built-in motors with aluminum rotor

Built-in motors must be continually cooled independent of the operating mode.

Note

The characteristic curves and specified values are valid for water cooling and a cast winding design.

Note

Depending on the mechanical design of the motor spindle, various levels of frictional losses occur (e.g. bearing losses, eddy losses, losses at rotary glands).

The level of friction losses is not known to the manufacturer of the built-in motors.

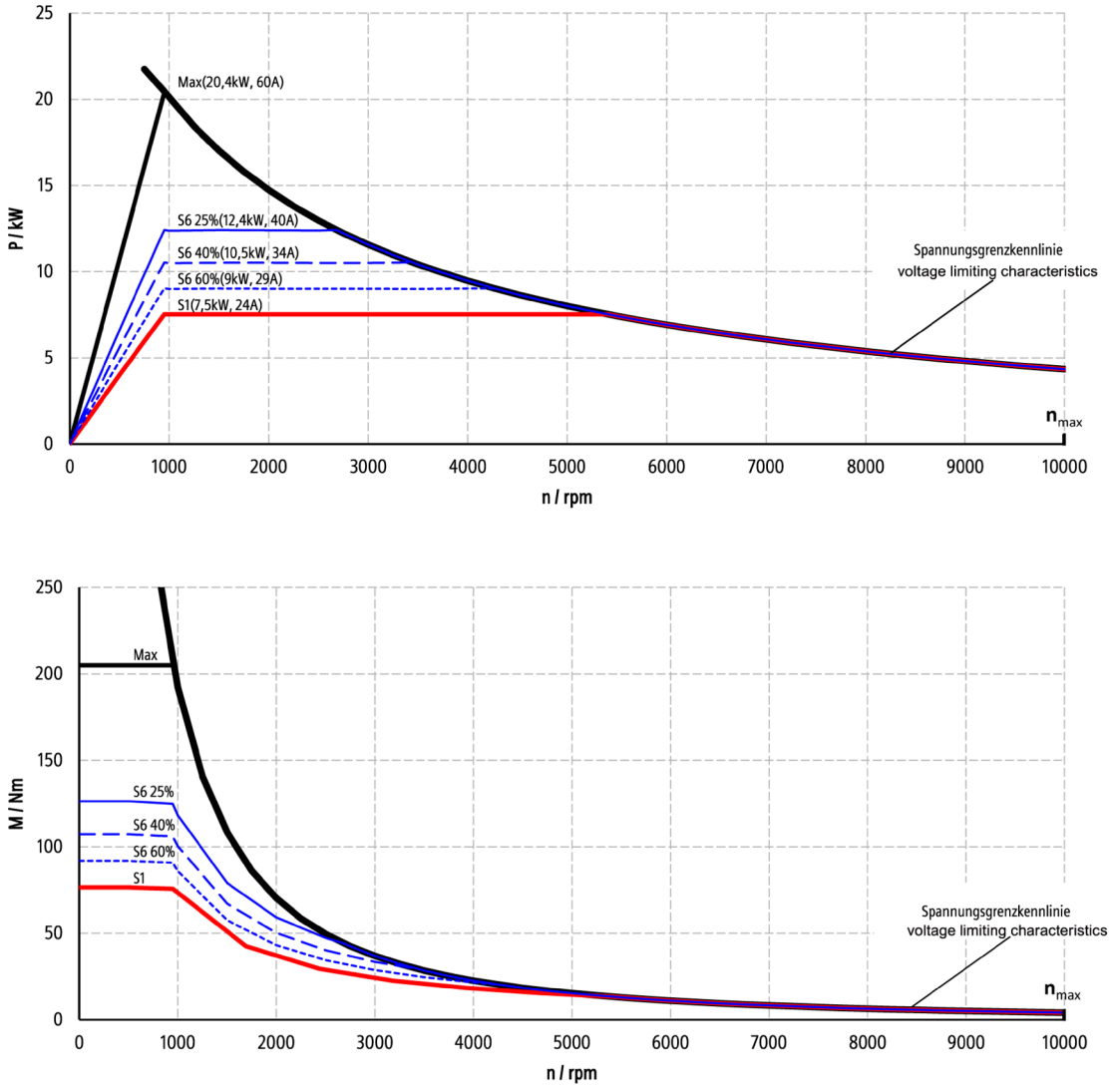
The motor powers and torques specified in this documentation refer to the values that the rotor of the built-in motor transfers to the spindle.

To calculate the net power output at the shaft, subtract the total friction losses from the specified values.

2.2.3.1 PD_1FE2093-8AGxx-xxx1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

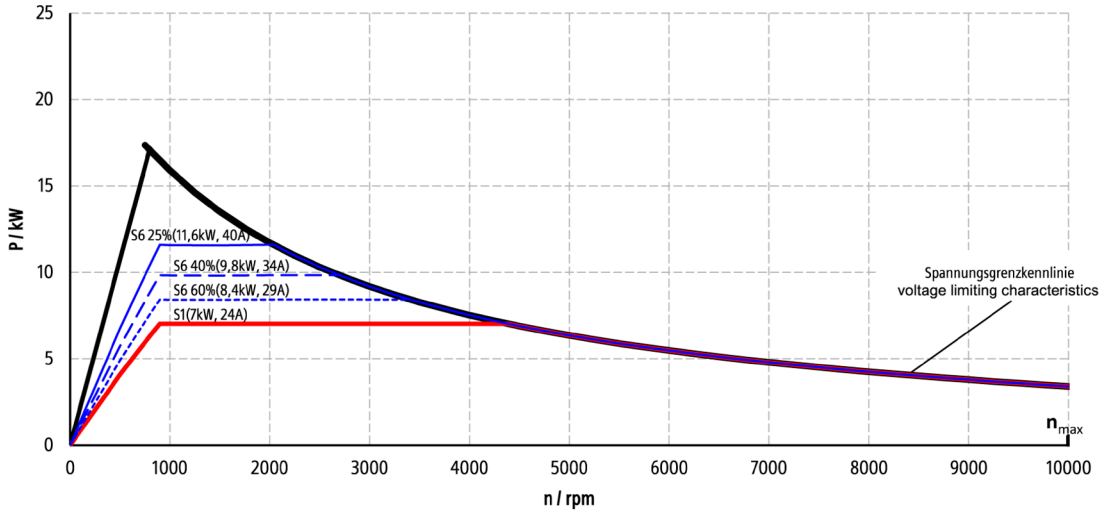
n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
950	7.5	75	24.0	10000	1660	1070	2730	5400	205	60	78	24

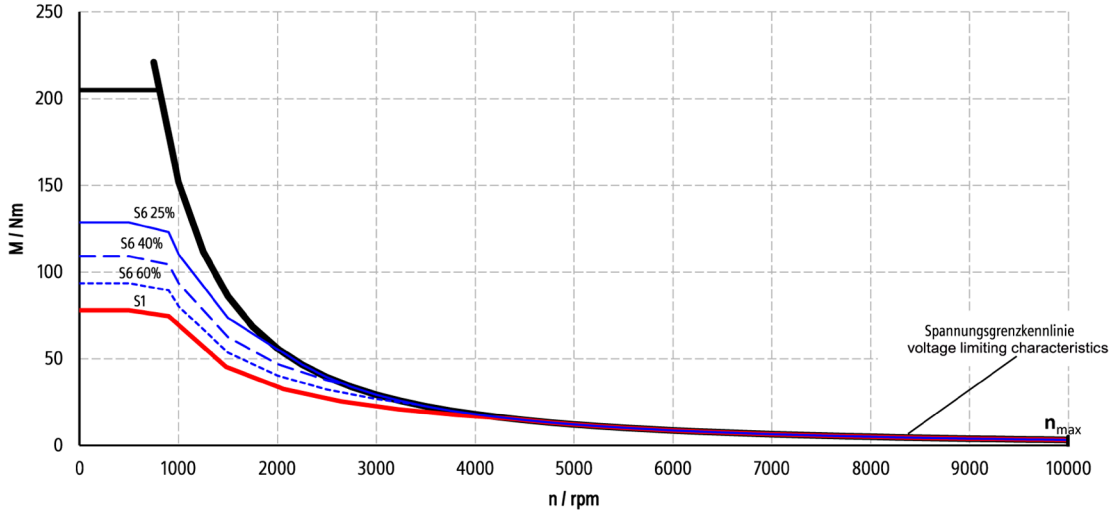


PD_1FE2093-8AGxx-xxx1_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
900	7.0	74	24.0	10000	1660	1070	2730	4350	205	60	78	24

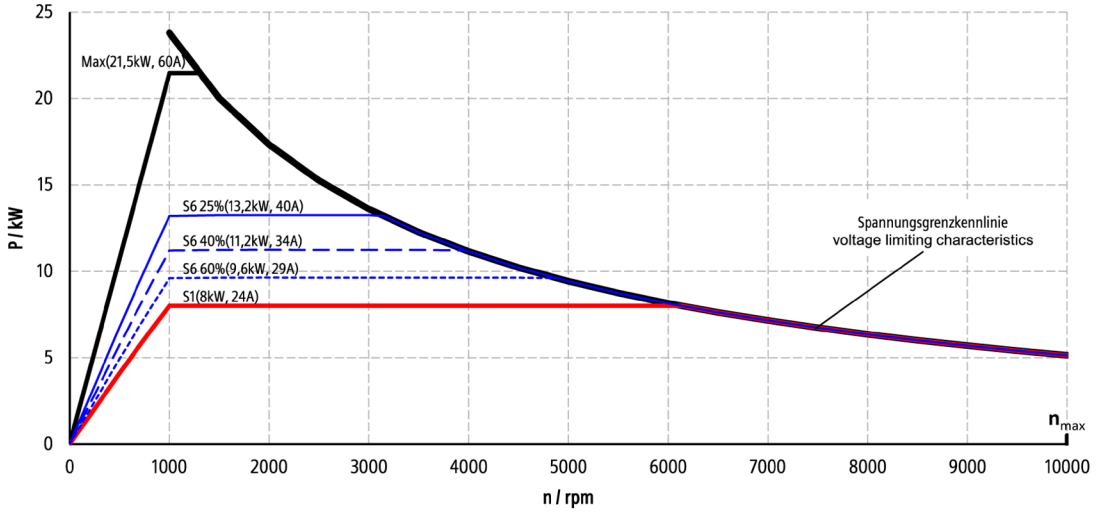


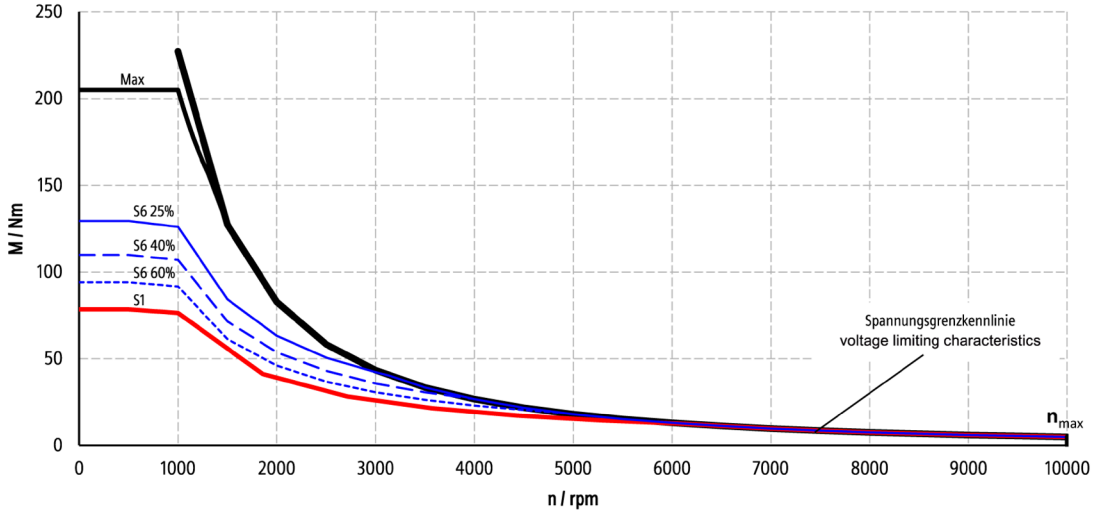


PD_1FE2093-8AGxx-xxx1_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1000	8.0	76	24.0	10000	1660	1070	2730	6100	205	60	78	24

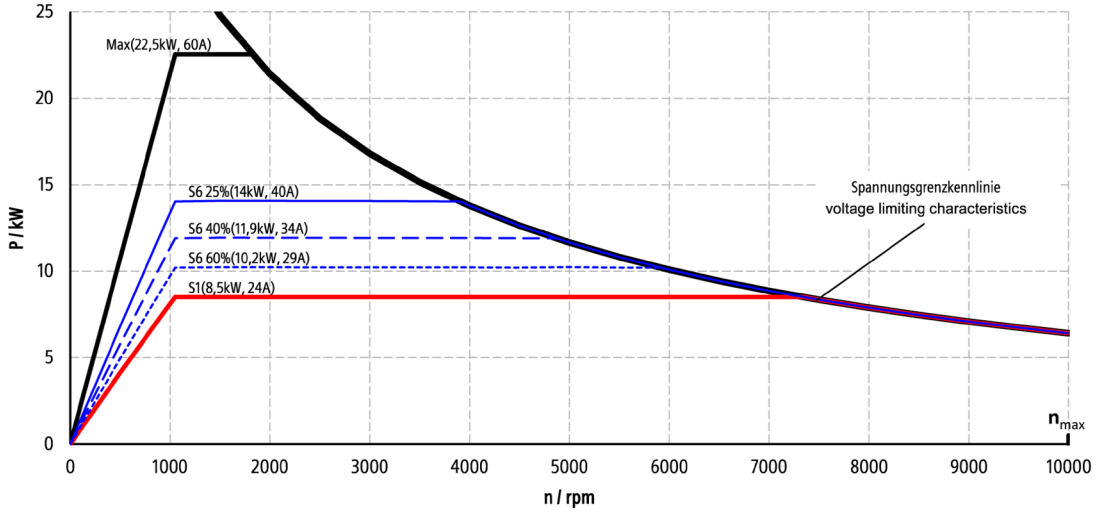


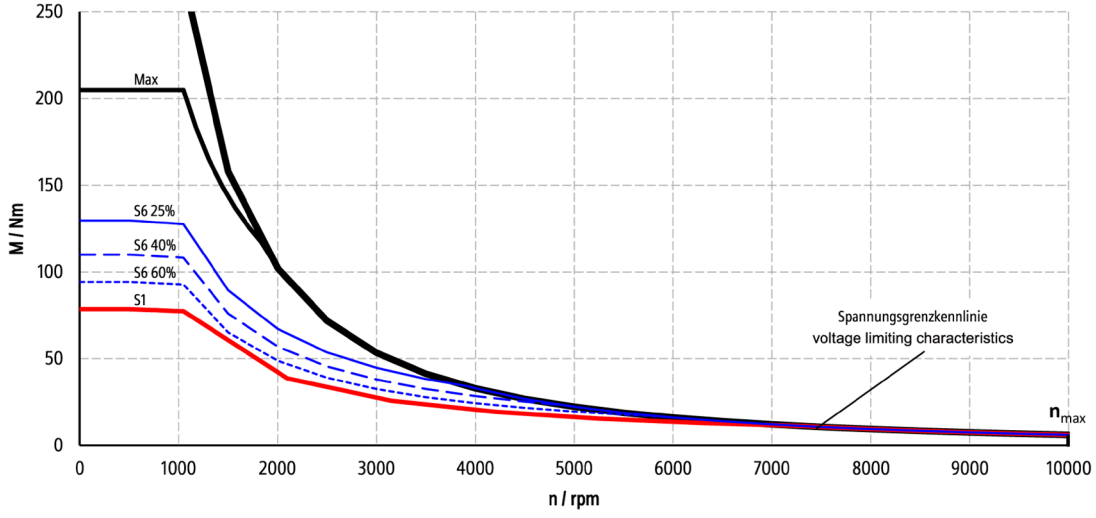


PD_1FE2093-8AGxx-xxx1_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1050	8.5	77	24.0	10000	1660	1070	2730	7300	205	60	78	24



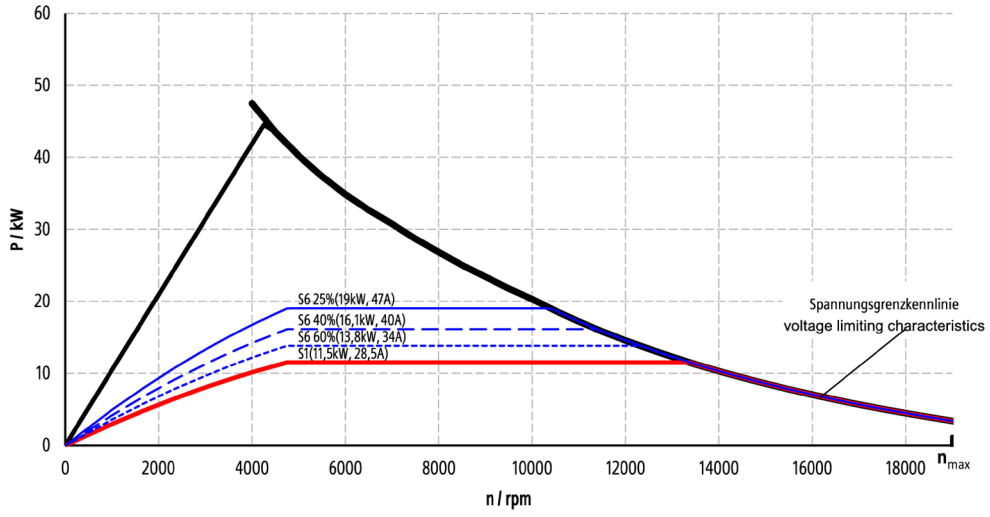


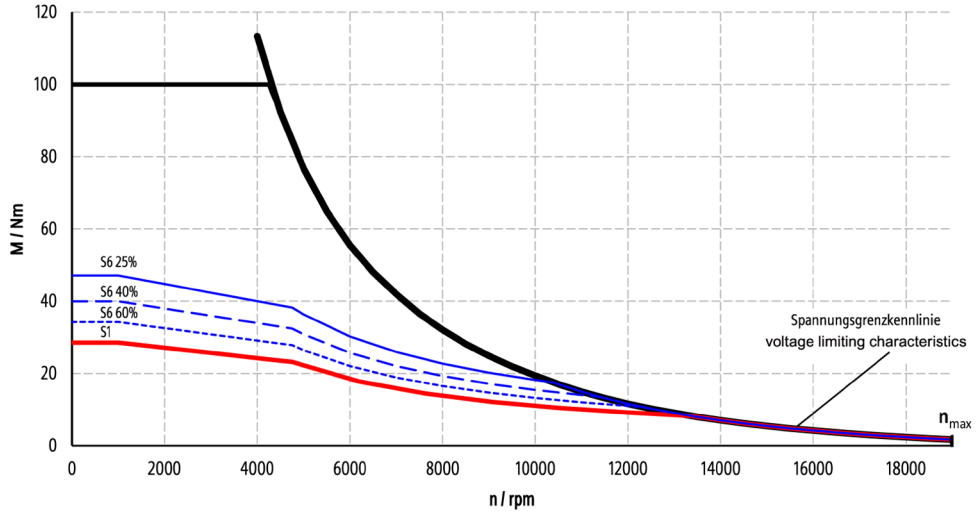
PD_1FE2093-8AGxx-xxx1_Index_--4

2.2.3.2 PD_1FE2093-8AMxx-xxx2 D

SINAMICS, 3 AC 400 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
4750	11.5	23	28.5	19000	1030	450	1480	13300	100	90	28	30

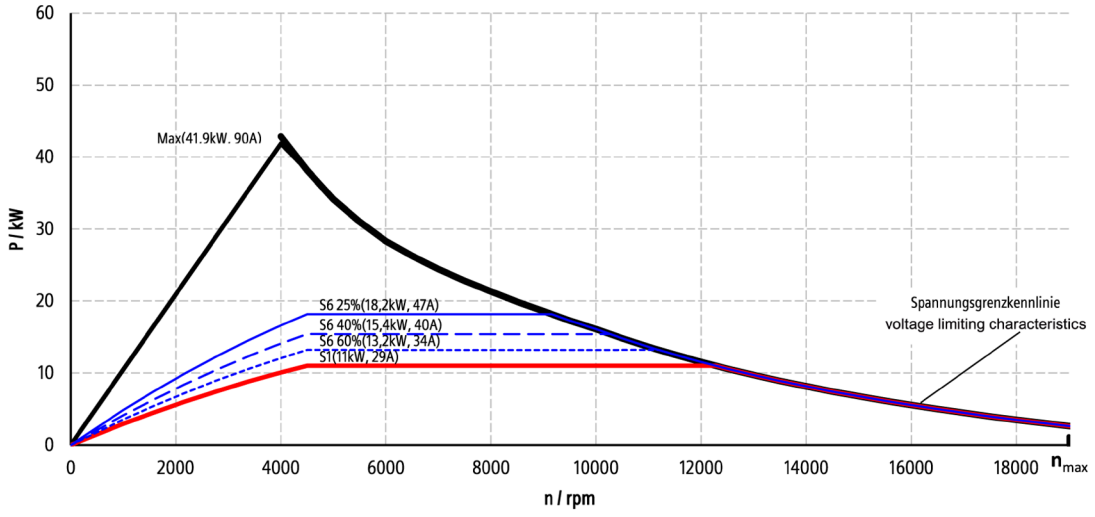


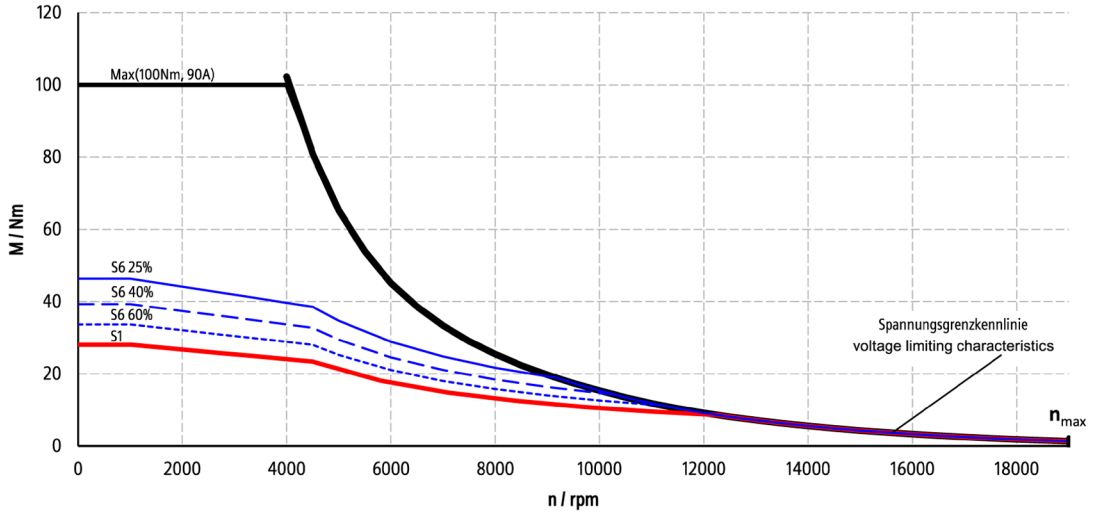


PD_1FE2093-8AMxx-xxx2 D_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
4500	11.0	23	28.5	19000	1030	450	1480	12200	100	90	28	30

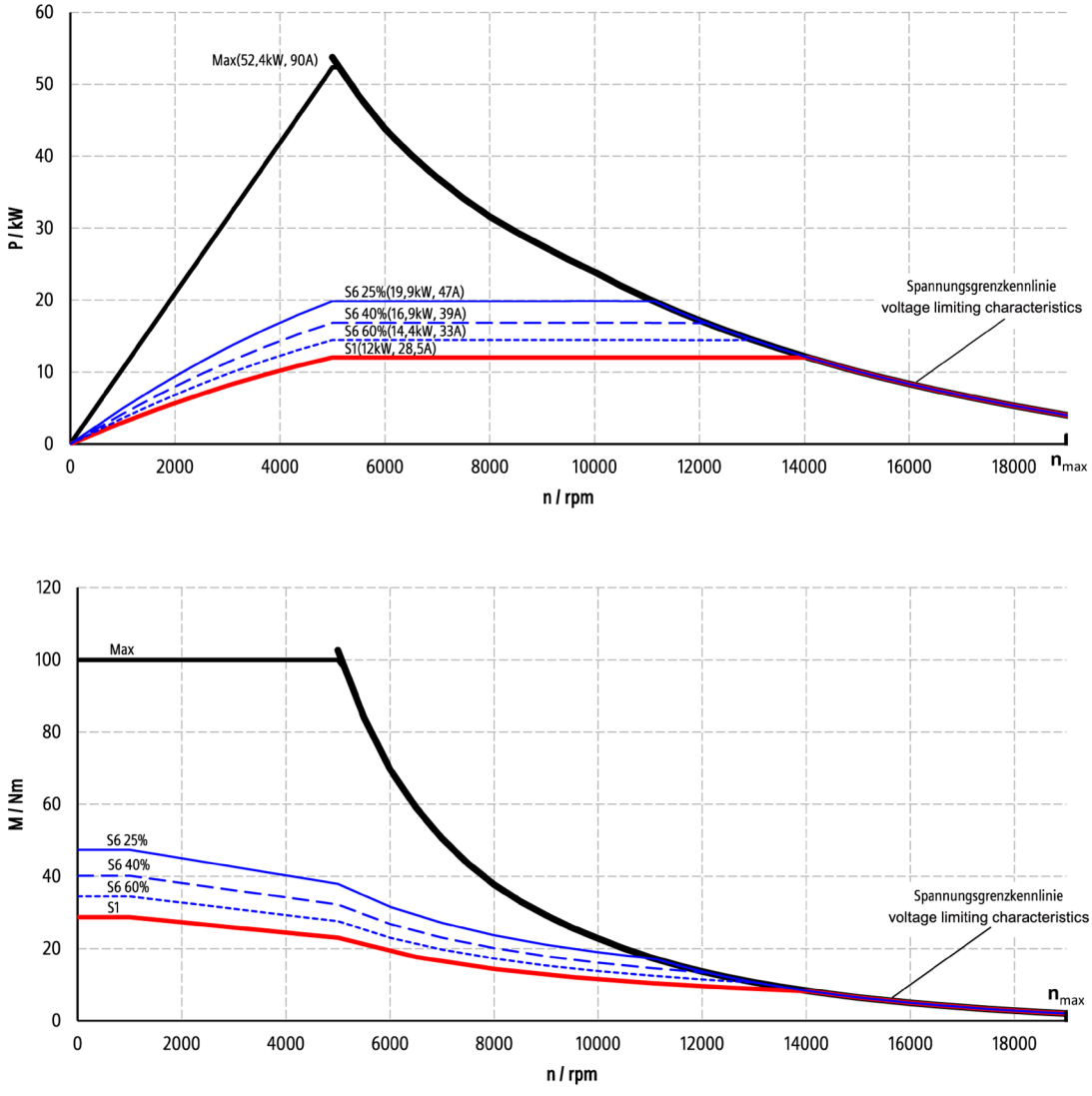




PD_1FE2093-8AMxx-xxx2 D_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), delta connection

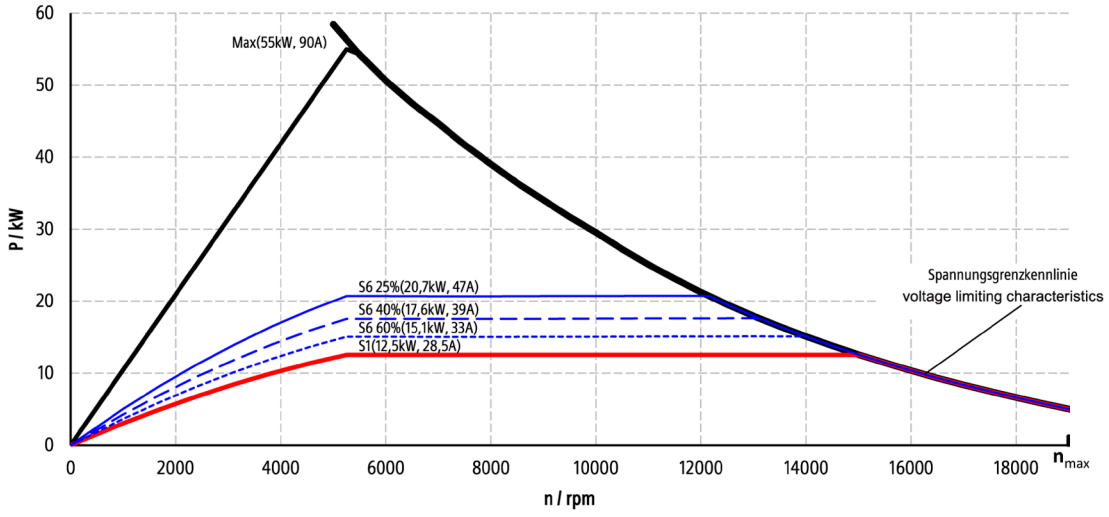
n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
5000	12.0	23	28.5	19000	1030	450	1480	14000	100	90	28	30

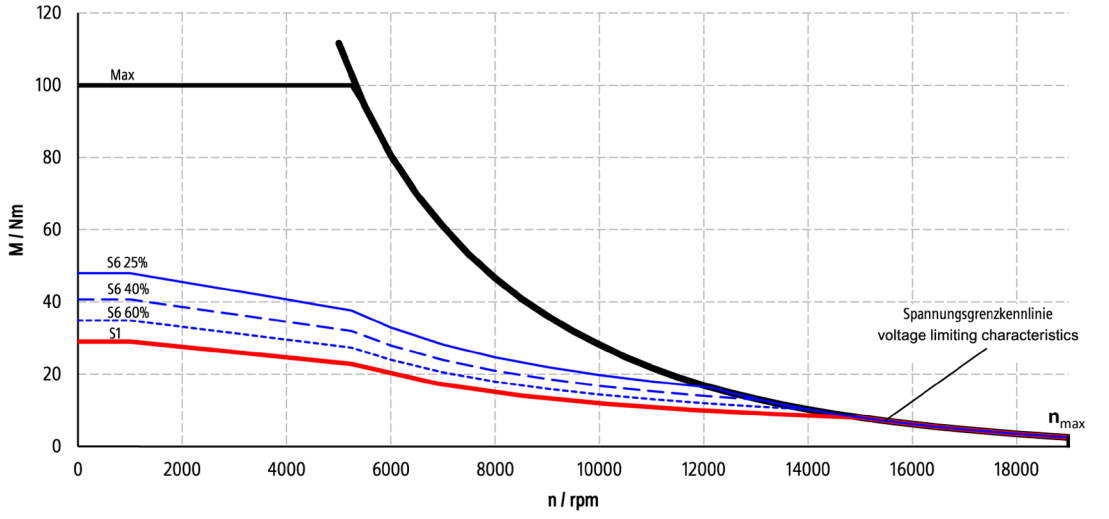


PD_1FE2093-8AMxx-xxx2 D_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
5250	12.5	23	28.5	19000	1030	450	1480	15000	100	90	28	30



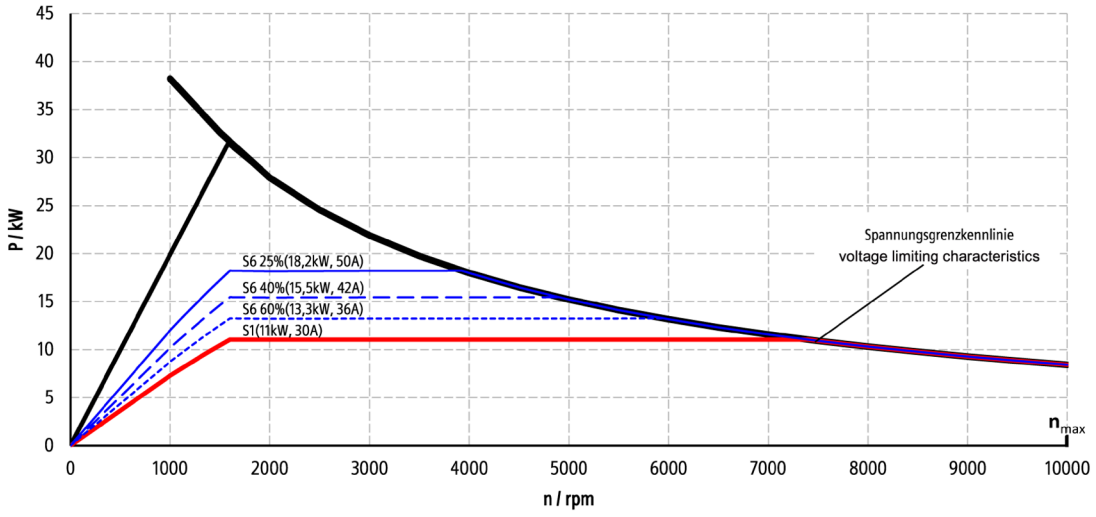


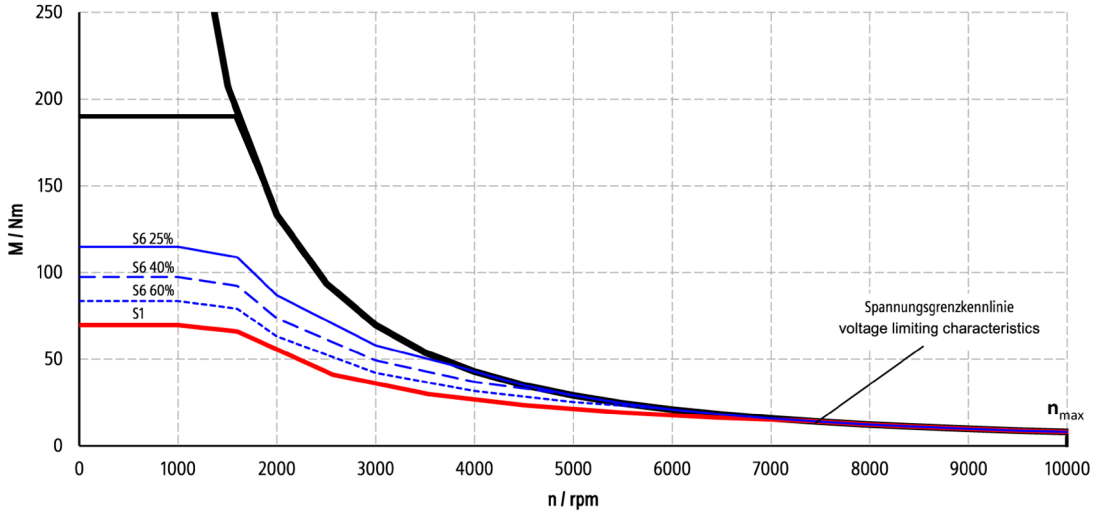
PD_1FE2093-8AMxx-xxx2 D_Index_--4

2.2.3.3 PD_1FE2093-8AMxx-xxx2 Y

SINAMICS, 3 AC 400 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1600	11.0	65	30.0	10000	1550	850	2400	7400	190	90	69	30

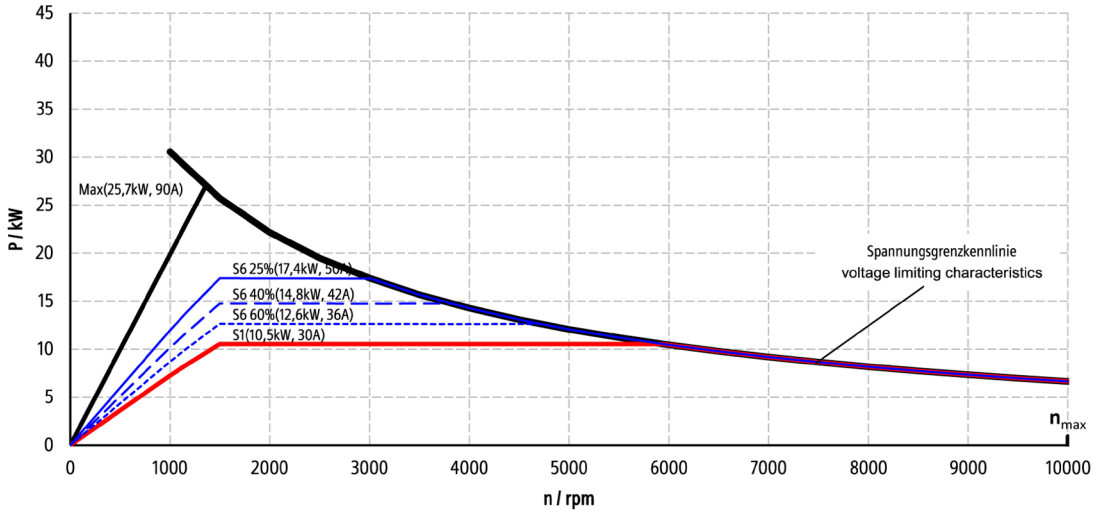


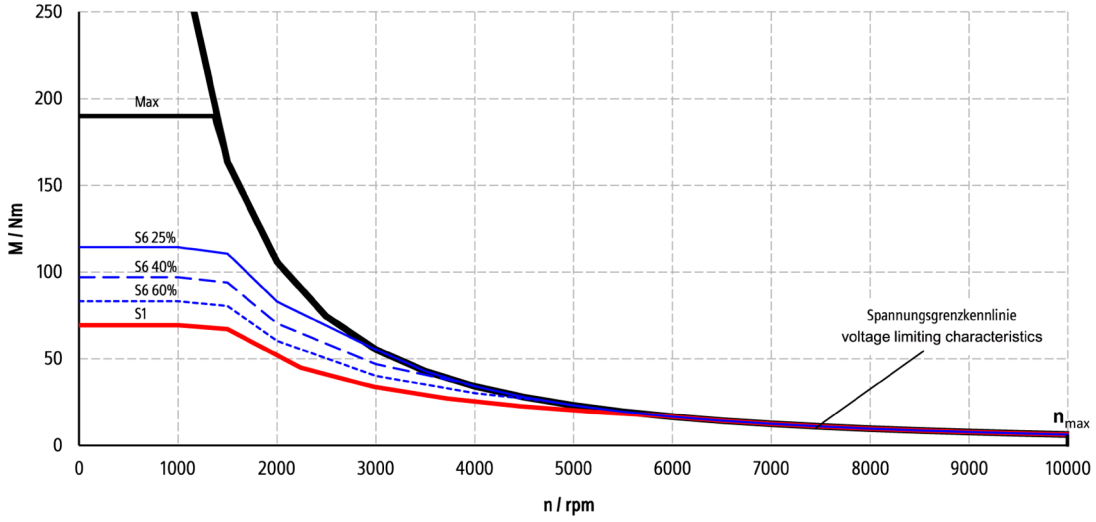


PD_1FE2093-8AMxx-xxx2 Y_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1500	10.5	66	30.0	10000	1550	850	2400	5900	190	90	69	30

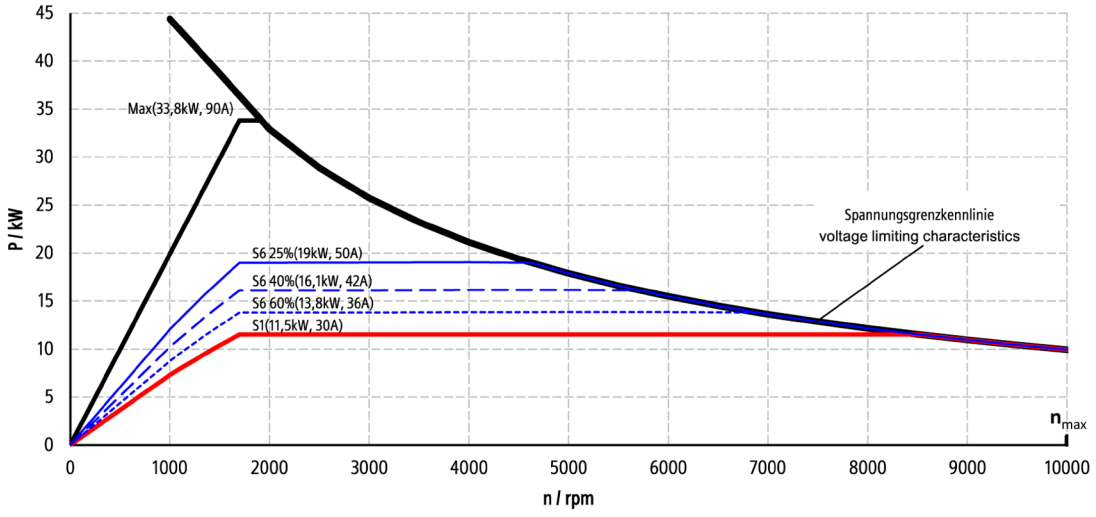


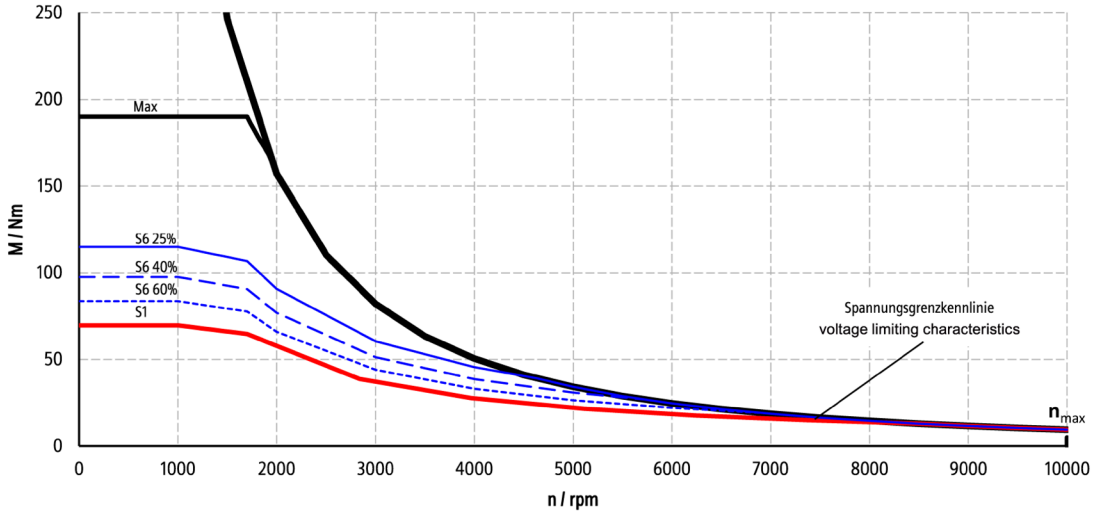


PD_1FE2093-8AMxx-xxx2 Y_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1700	11.5	64	30.0	10000	1550	850	2400	8500	190	90	69	30

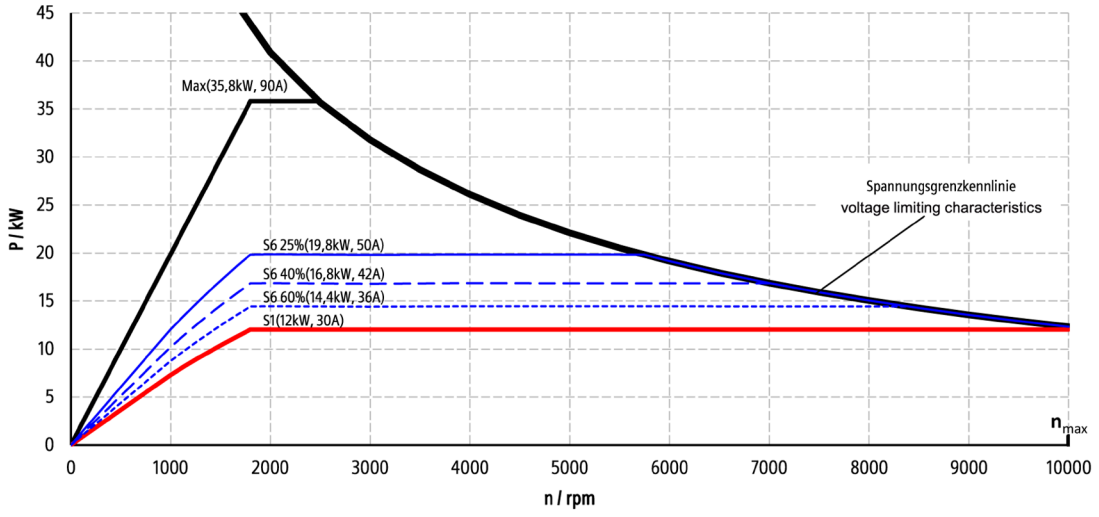


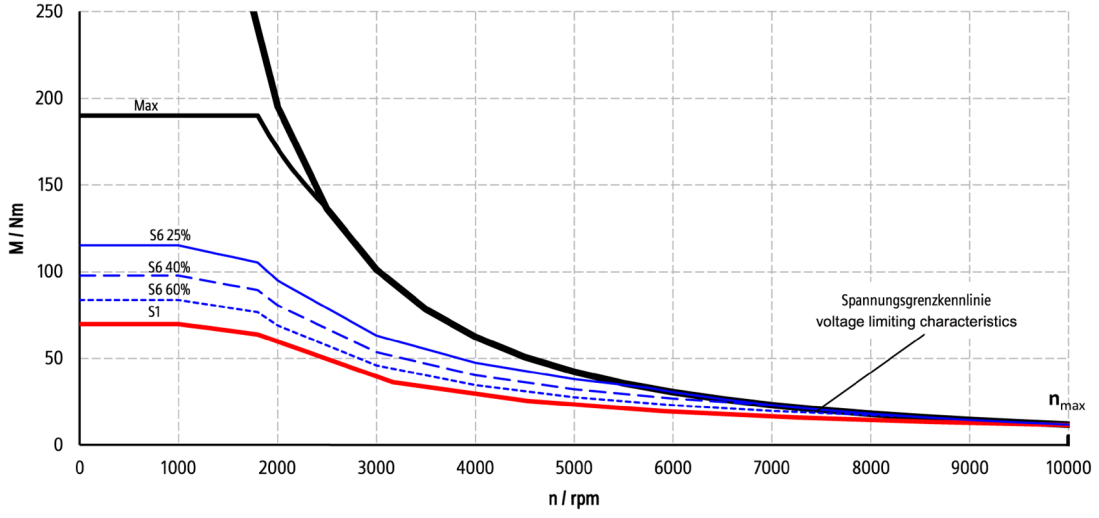


PD_1FE2093-8AMxx-xxx2 Y_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1800	12.0	63	30.0	10000	1550	850	2400	10000	190	90	69	30



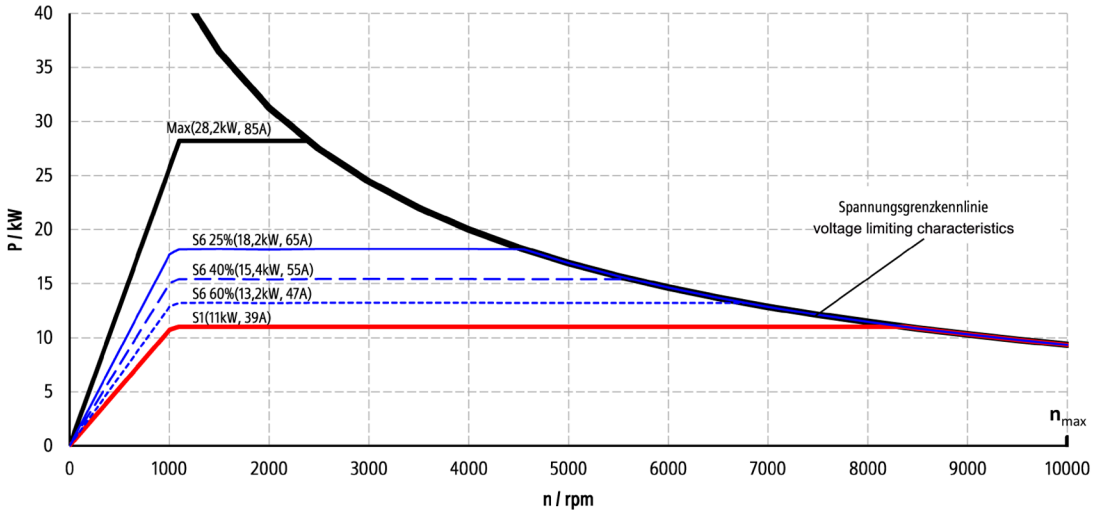


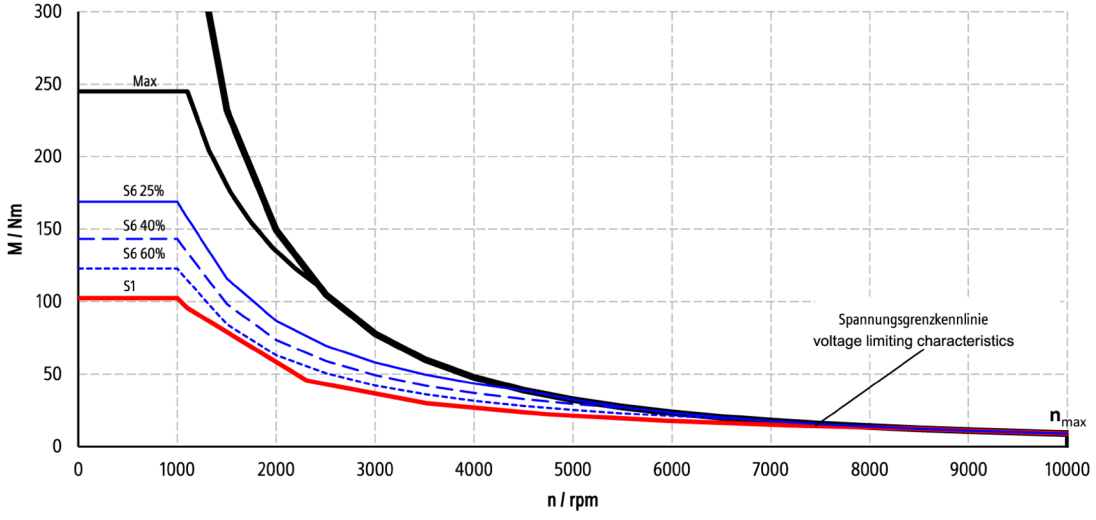
PD_1FE2093-8AMxx-xxx2 Y_Index_--4

2.2.3.4 PD_1FE2094-8AJxx-xxx1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1100	11.0	95	39.0	10000	1800	970	2770	8300	245	85	103	39

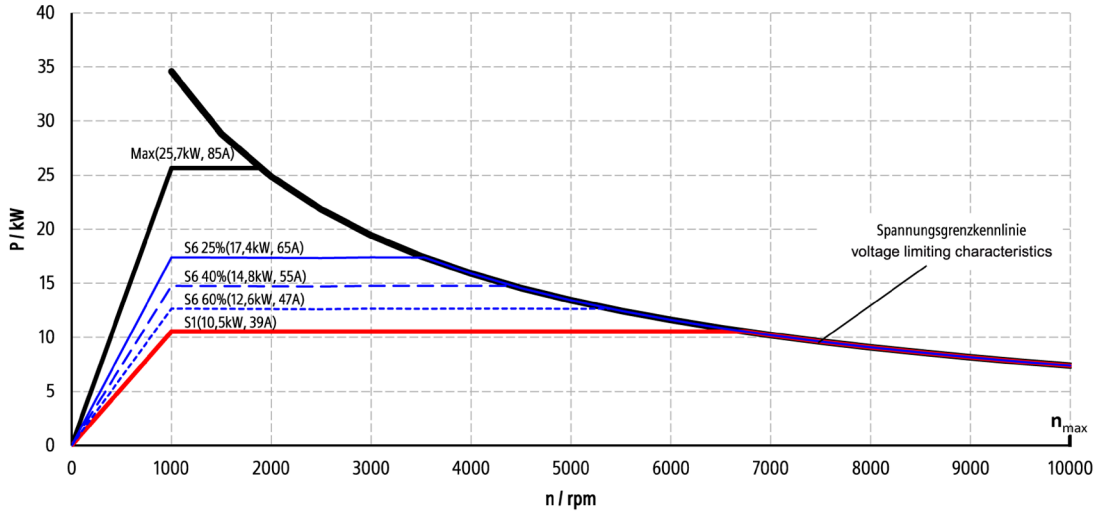


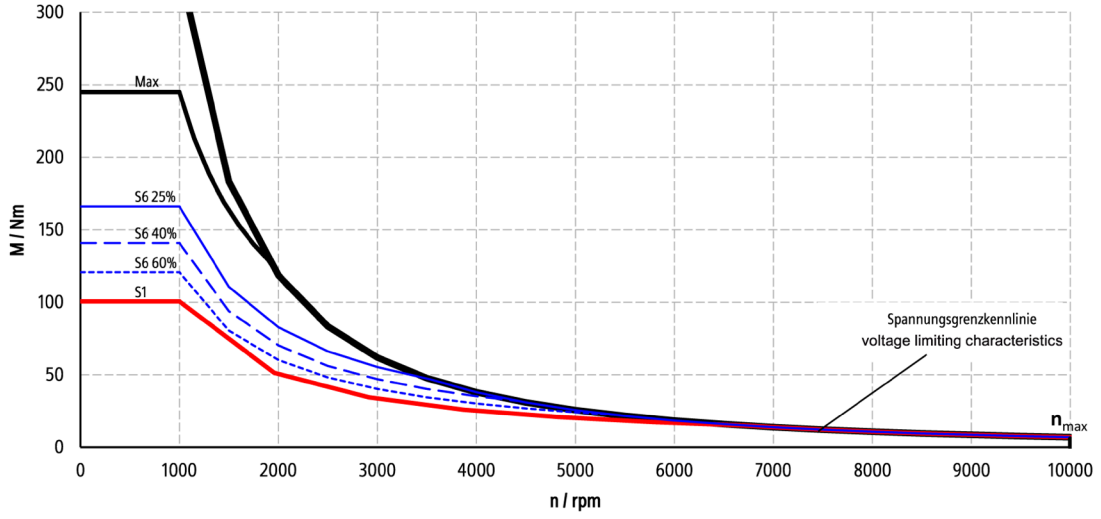


PD_1FE2094-8AJxx-xxx1_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1000	10.5	100	39.0	10000	1800	970	2770	6700	245	85	103	39

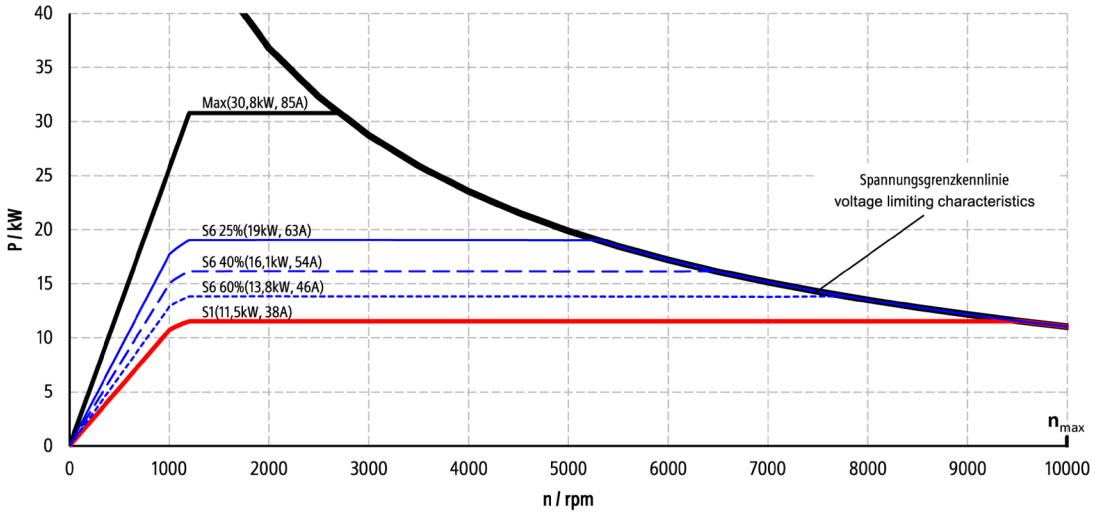


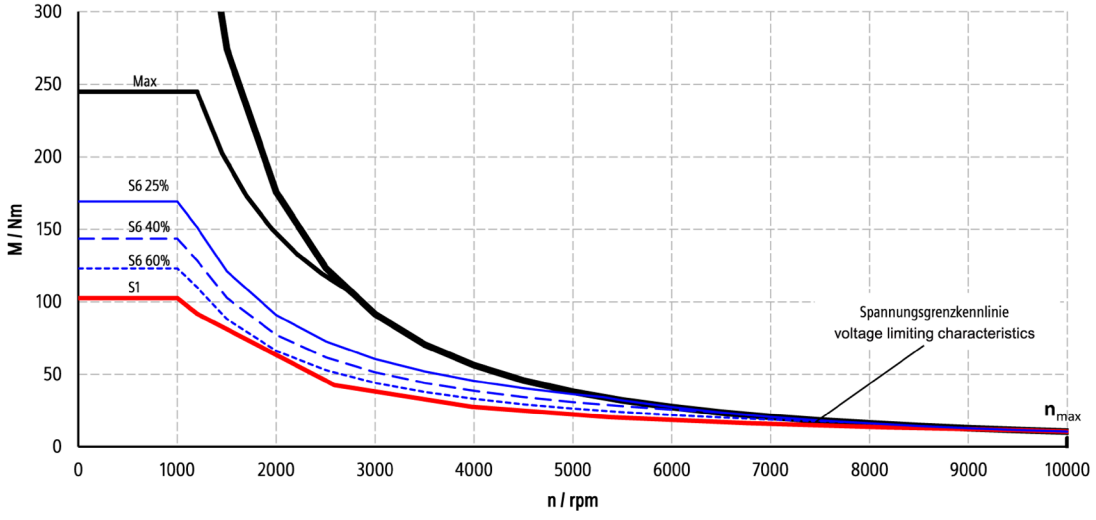


PD_1FE2094-8AJxx-xxx1_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1200	11.5	91	38.0	10000	1800	970	2770	9500	245	85	103	39

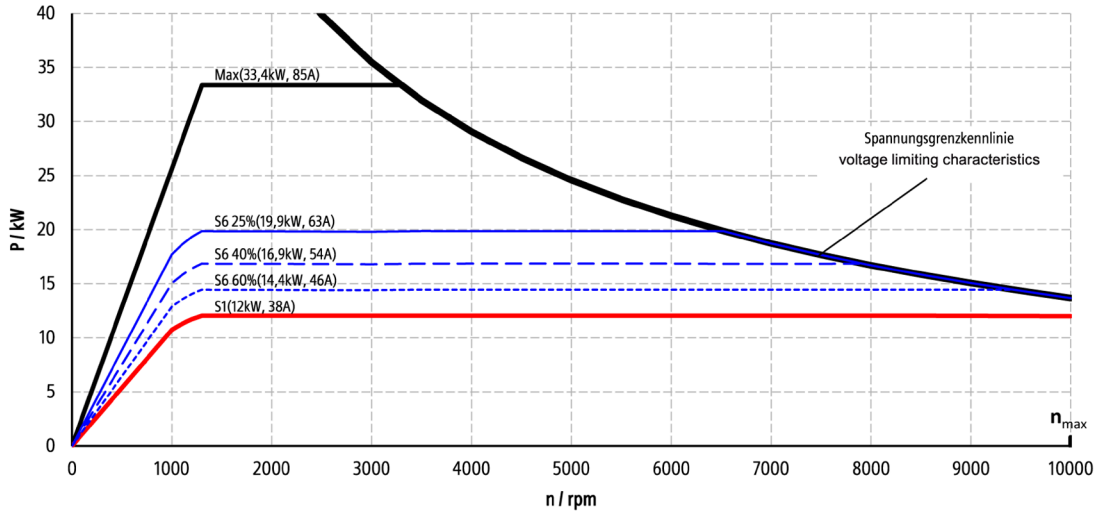


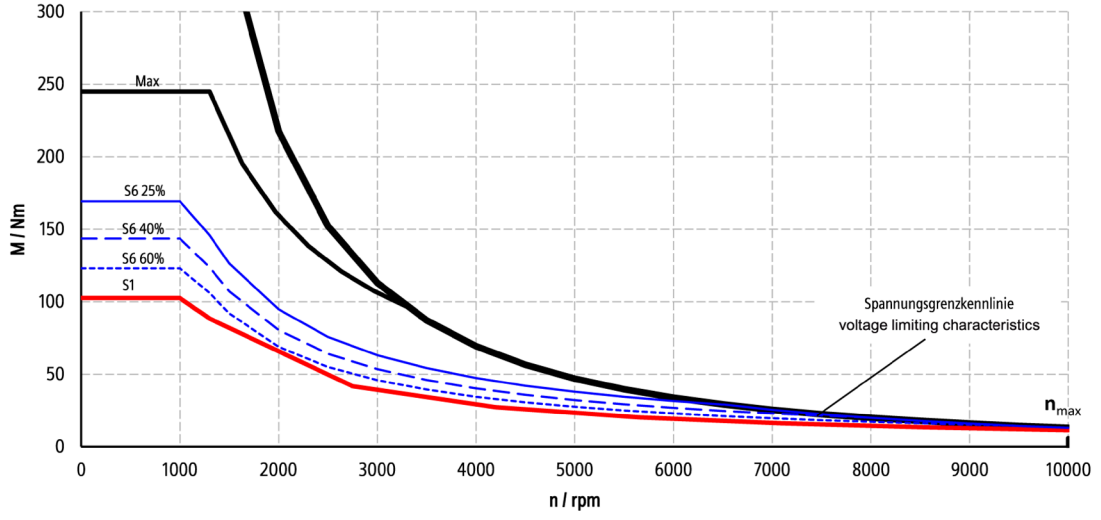


PD_1FE2094-8AJxx-xxx1_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1300	12.0	88	38.0	10000	1800	970	2770	10000	245	85	103	39



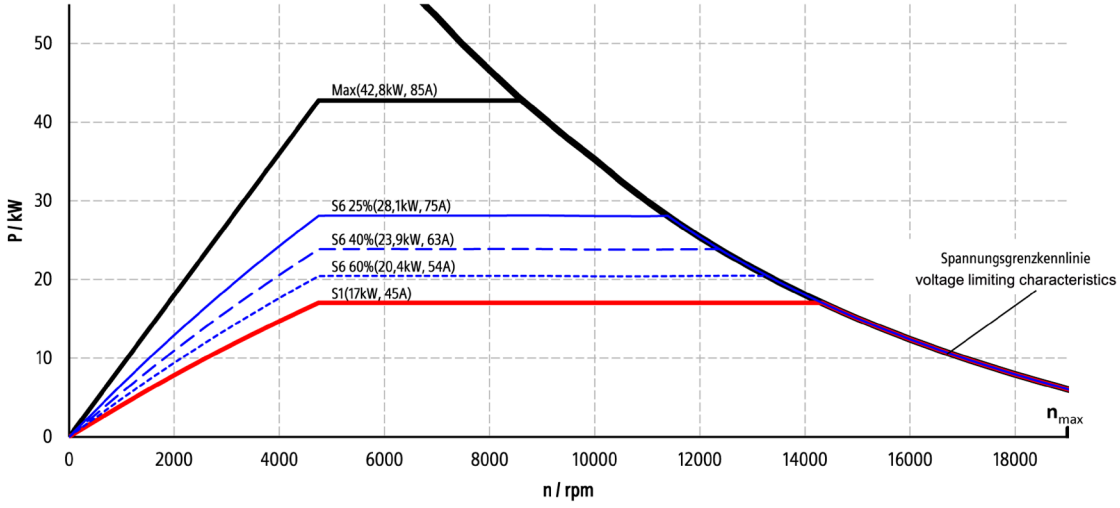


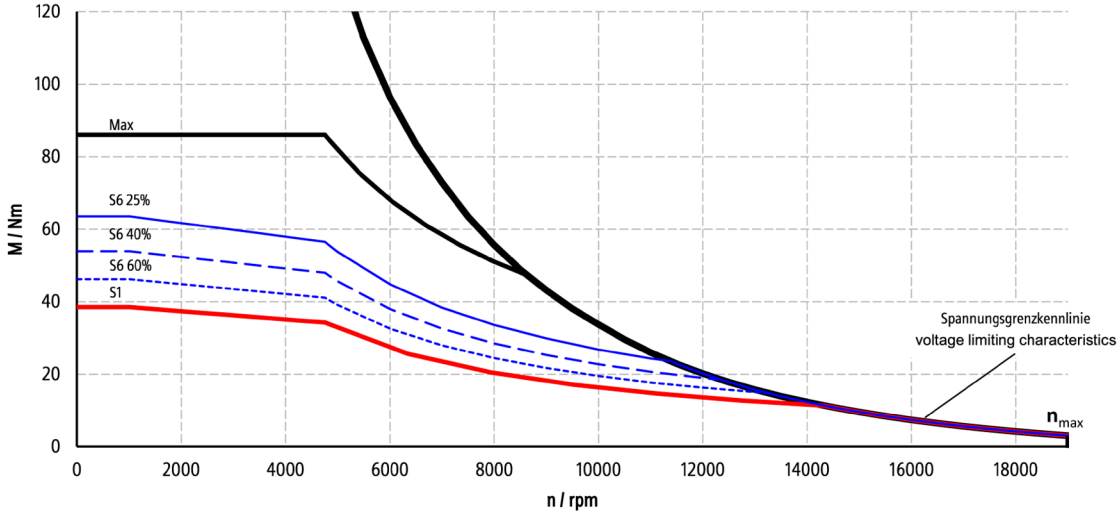
PD_1FE2094-8AJxx-xxx1_Index_--4

2.2.3.5 PD_1FE2094-8AMxx-xxx2 D

SINAMICS, 3 AC 400 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
4750	17.0	34	45.0	19000	1400	700	2100	14300	86	85	38	45

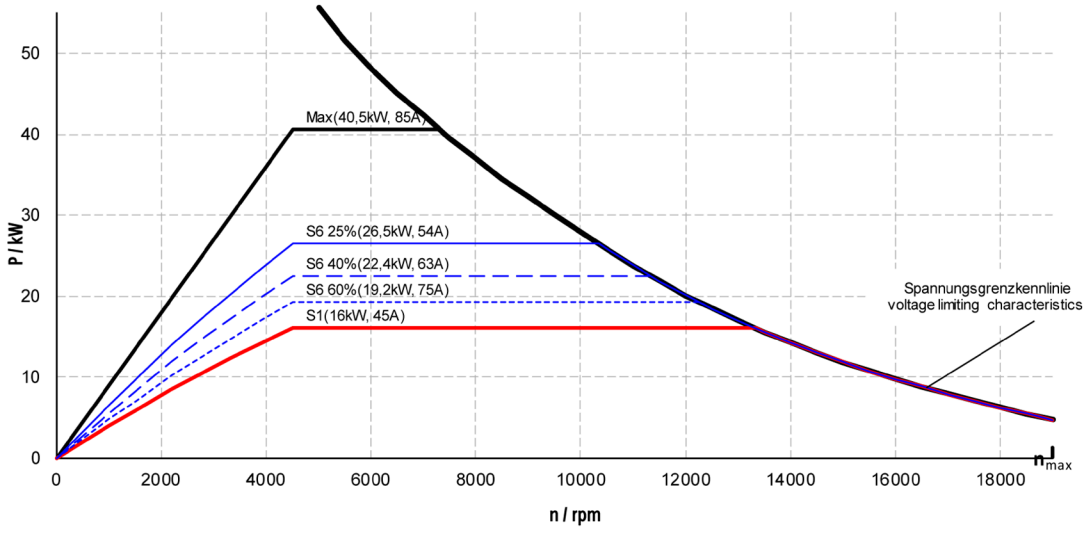


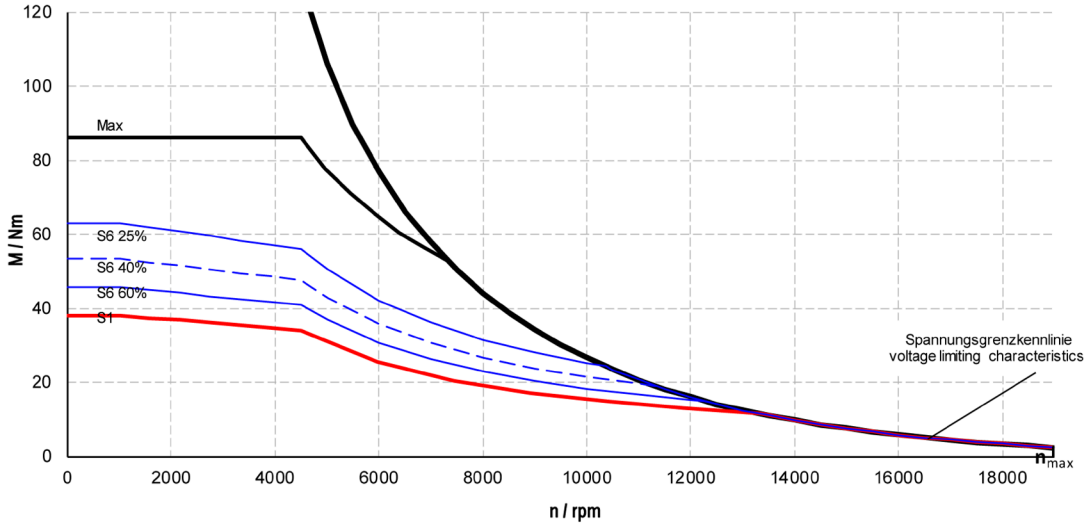


PD_1FE2094-8AMxx-xxx2 D_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
4500	16.0	34	45.0	19000	1400	700	2100	13300	86	85	38	45

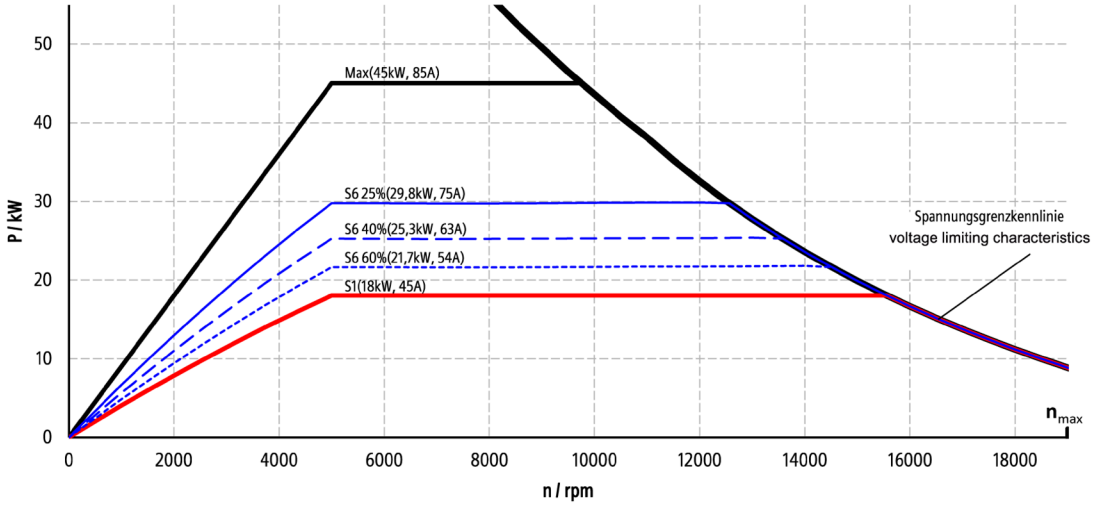


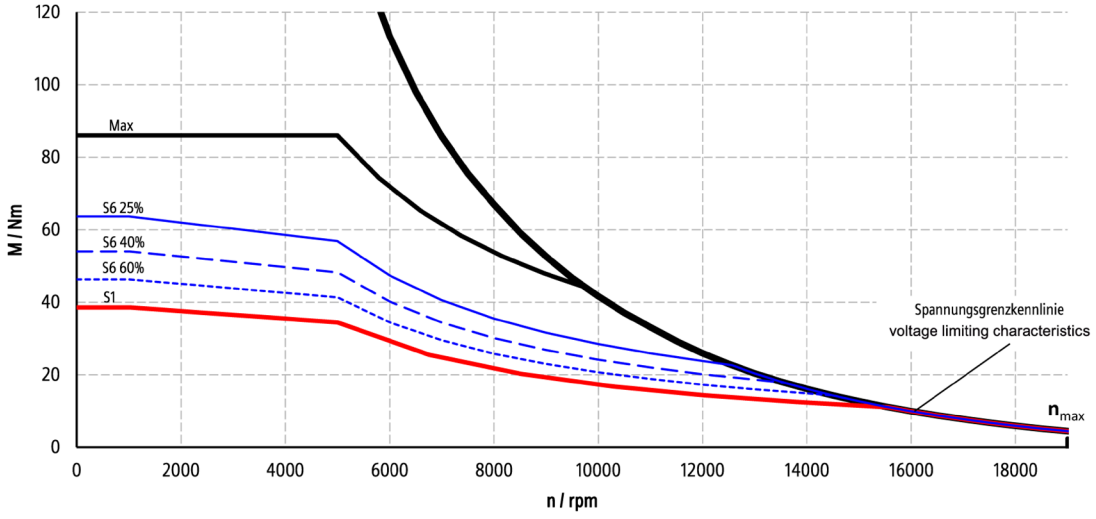


PD_1FE2094-8AMxx-xxx2 D_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
5000	18.0	34	45.0	19000	1400	700	2100	15500	86	85	38	45

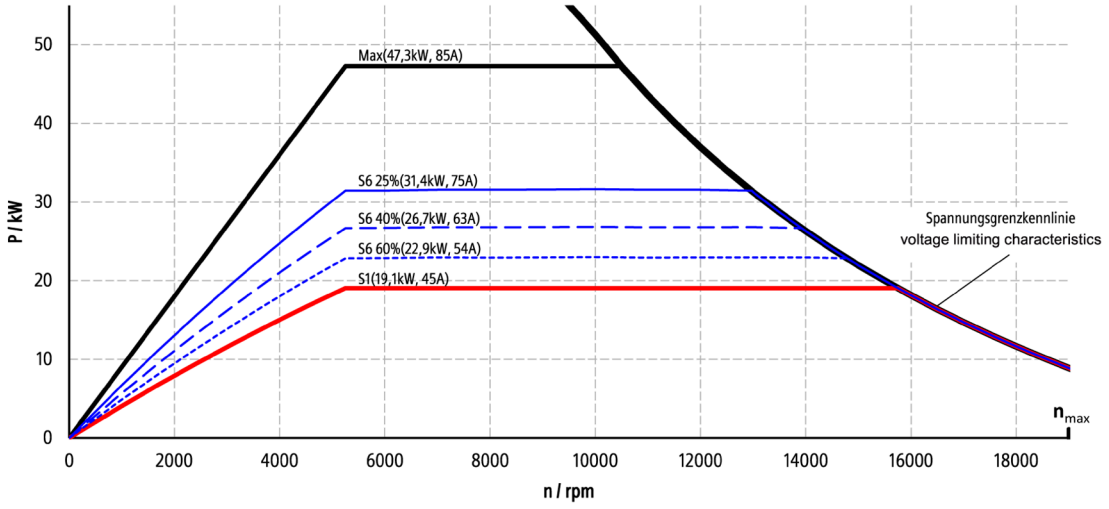


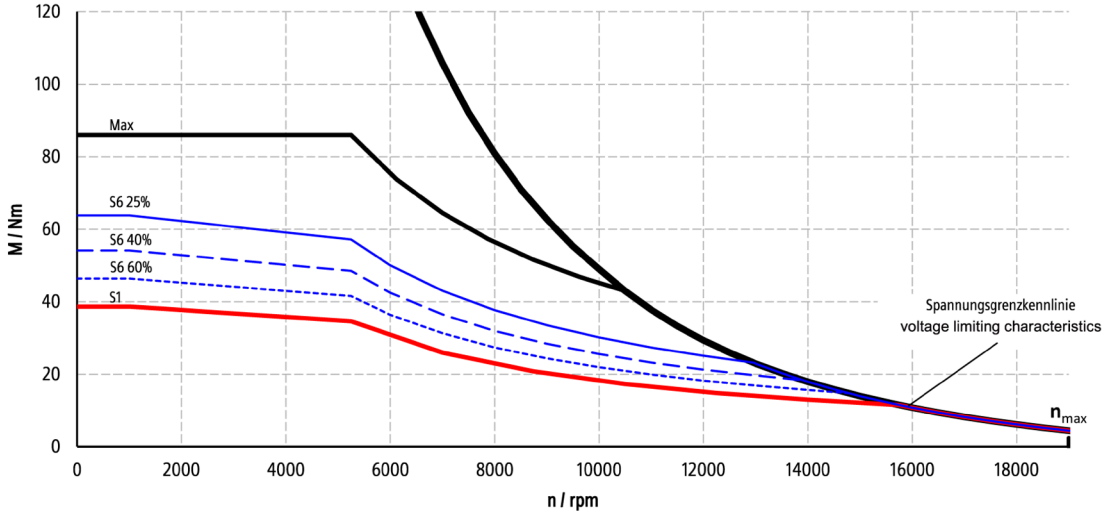


PD_1FE2094-8AMxx-xxx2 D_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
5250	19.0	35	45.0	19000	1400	700	2100	15700	86	85	38	45



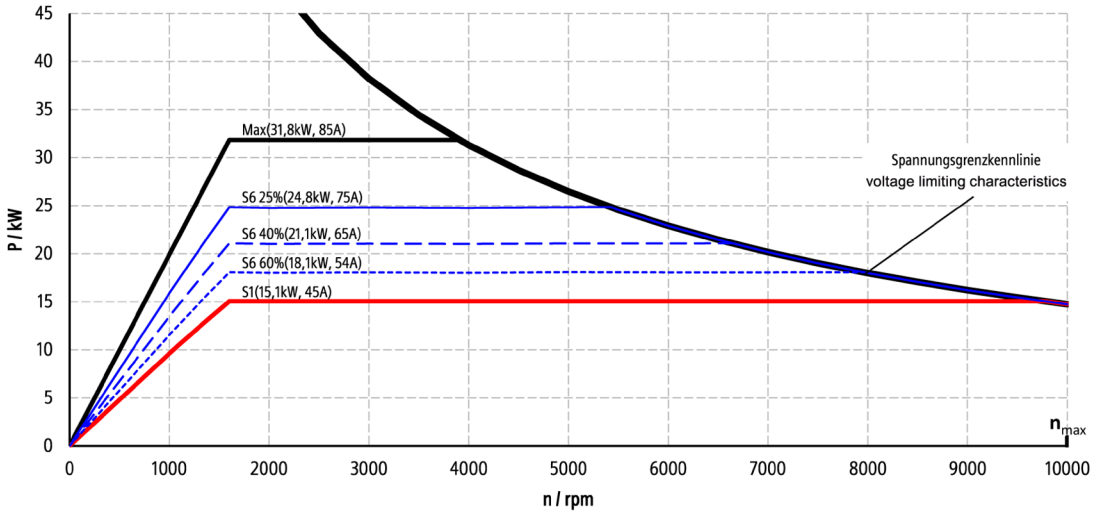


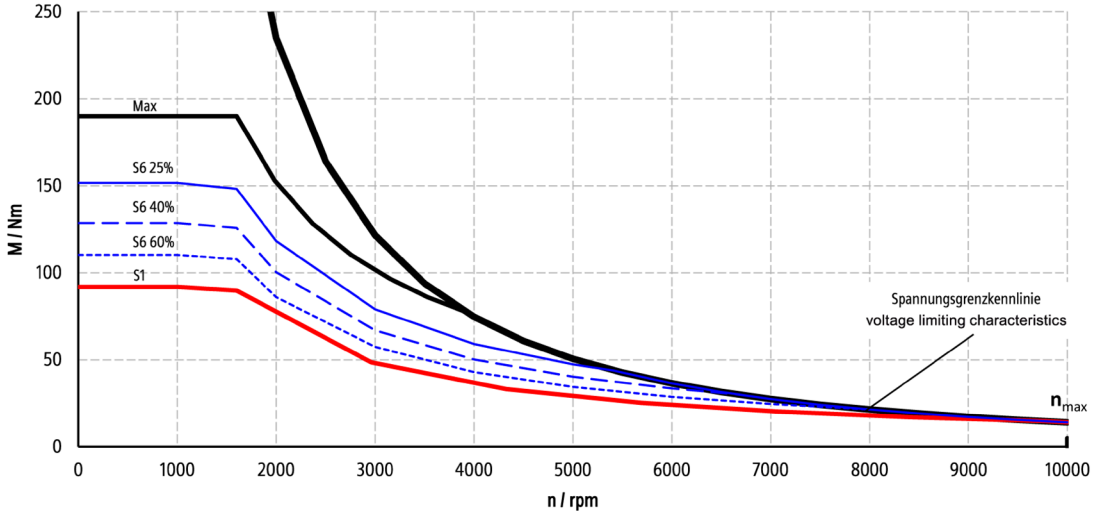
PD_1FE2094-8AMxx-xxx2 D_Index_--4

2.2.3.6 PD_1FE2094-8AMxx-xxx2 Y

SINAMICS, 3 AC 400 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1600	15.0	90	45.0	10000	2000	1100	3100	9700	190	85	92	45

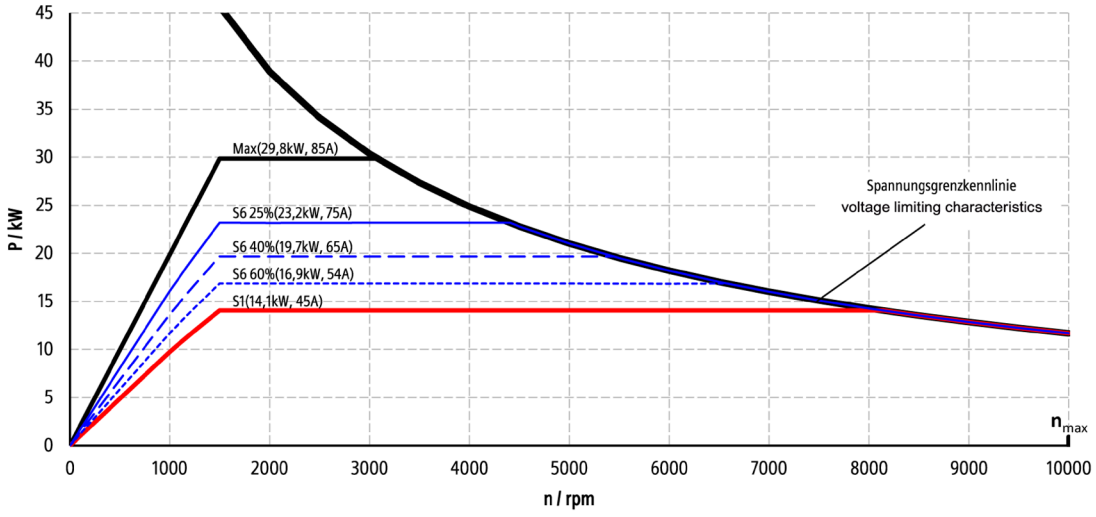


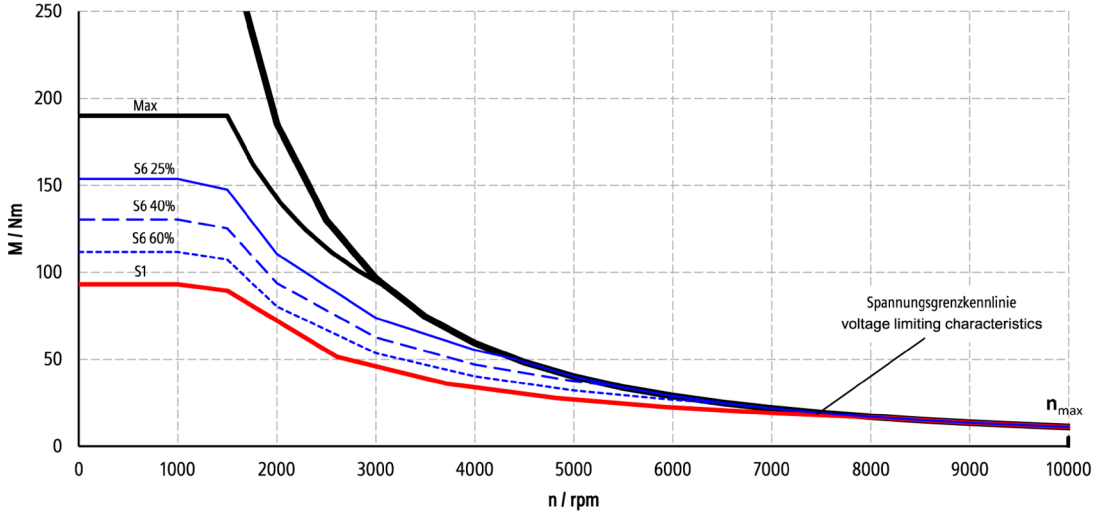


PD_1FE2094-8AMxx-xxx2 Y_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1500	14.0	89	45.0	10000	2000	1100	3100	8100	190	85	92	45

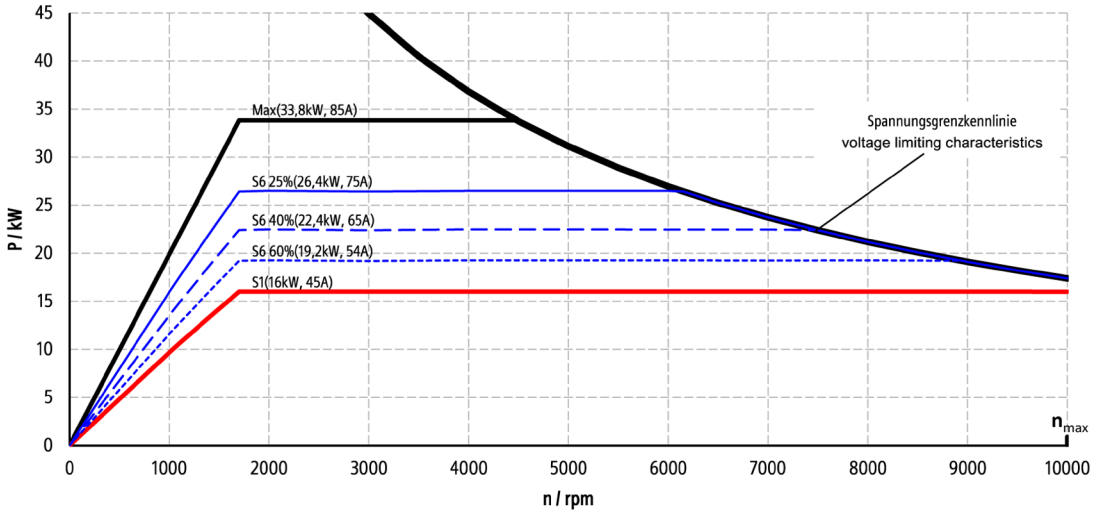


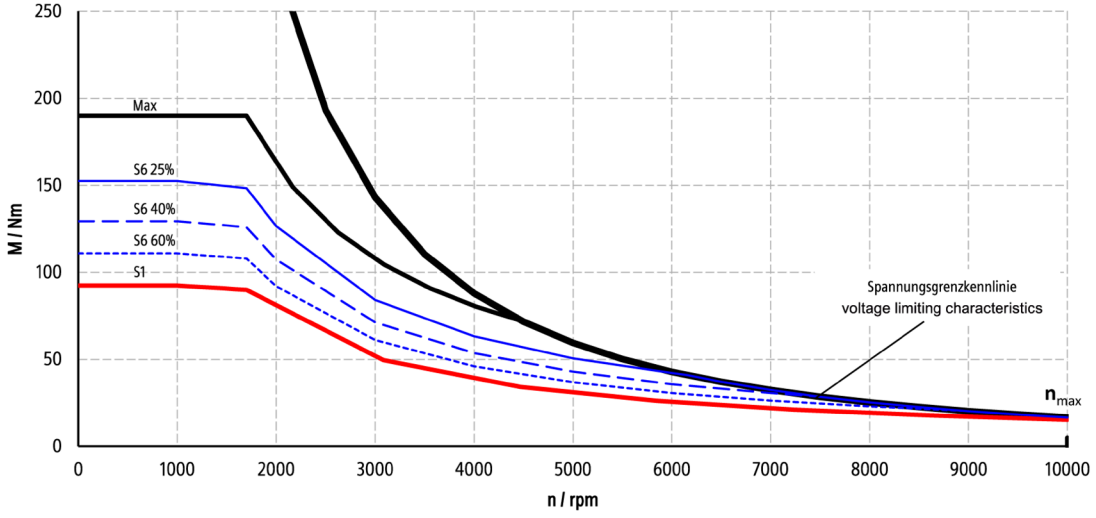


PD_1FE2094-8AMxx-xxx2 Y_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1700	16.0	90	45.0	10000	2000	1100	3100	10000	190	85	92	45

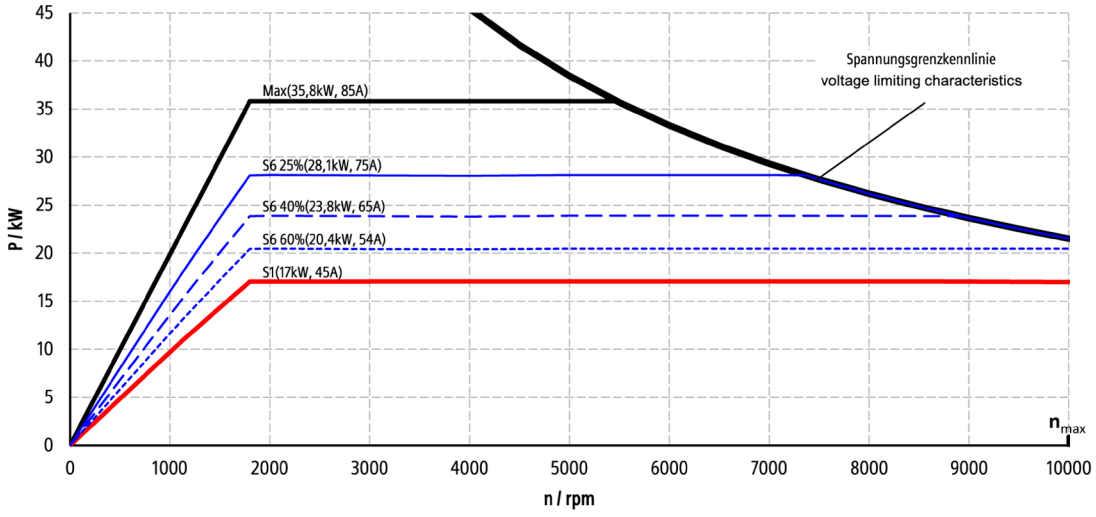


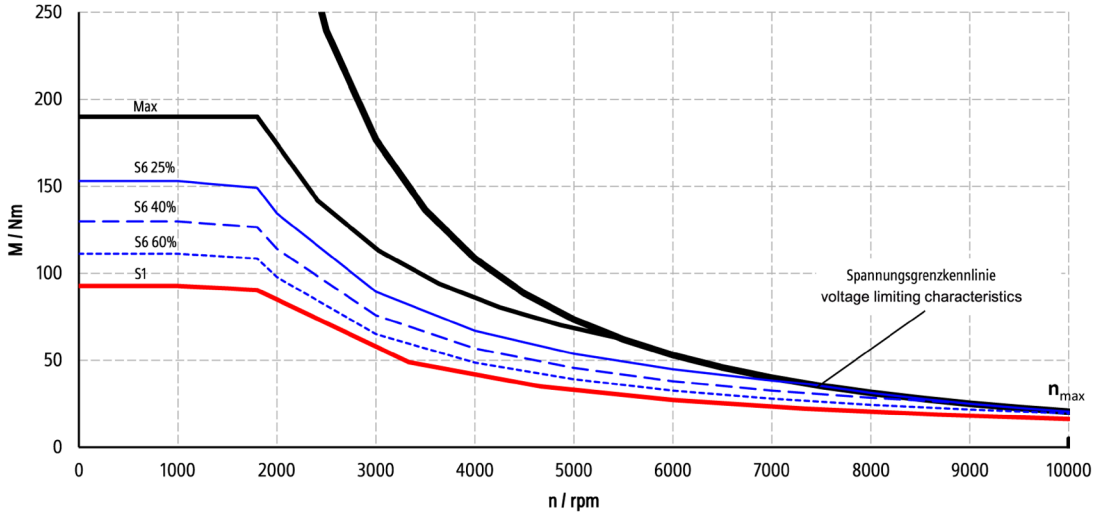


PD_1FE2094-8AMxx-xxx2 Y_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1800	17.0	90	45.0	10000	2000	1100	3100	10000	190	85	92	45





PD_1FE2094-8AMxx-xxx2 Y_Index_--4

2.2.4 P/n and M/n diagrams for 8-pole built-in motors with copper rotor

Built-in motors must be continually cooled independent of the operating mode.

Note

The characteristic curves and specified values are valid for water cooling and a cast winding design.

Note

Depending on the mechanical design of the motor spindle, various levels of frictional losses occur (e.g. bearing losses, eddy losses, losses at rotary glands).

The level of friction losses is not known to the manufacturer of the built-in motors.

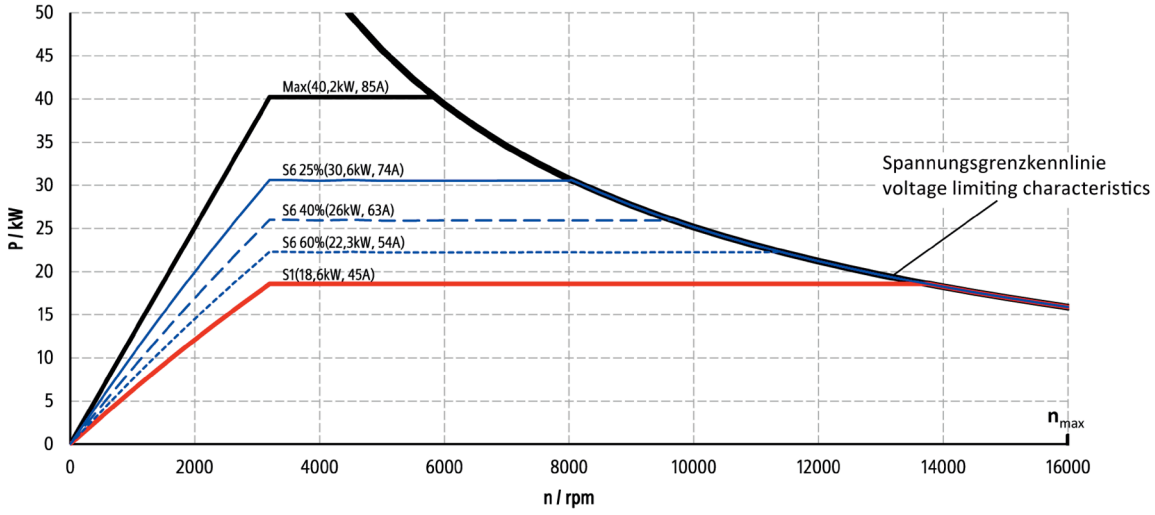
The motor powers and torques specified in this documentation refer to the values that the rotor of the built-in motor transfers to the spindle.

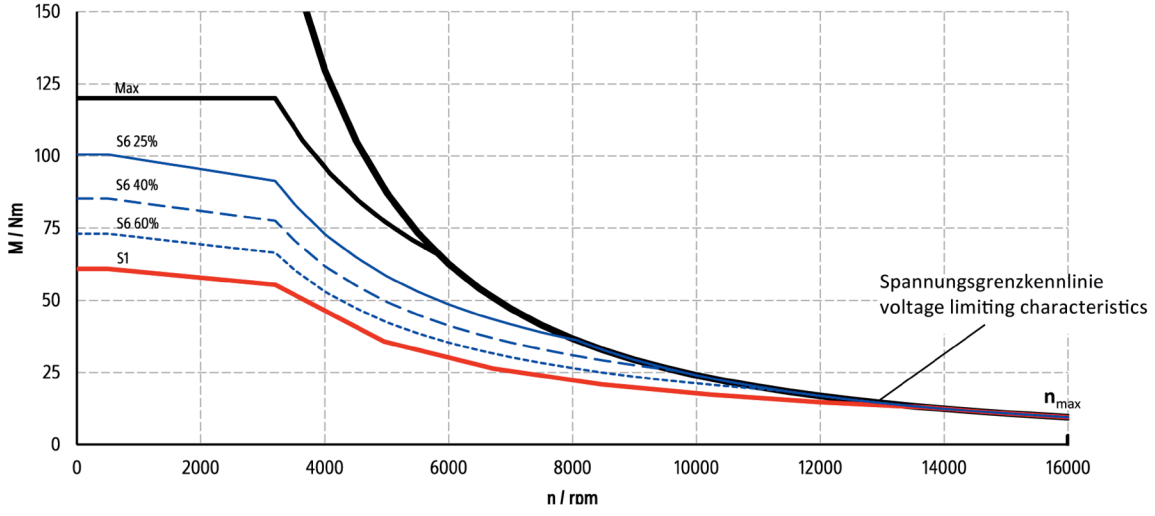
To calculate the net power output at the shaft, subtract the total friction losses from the specified values.

2.2.4.1 PD_1FE2094-8CGxx-xxx2 D

SINAMICS, 3 AC 400 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3200	18.5	55	45.0	16000	1700	300	2000	13700	120	85	61	45

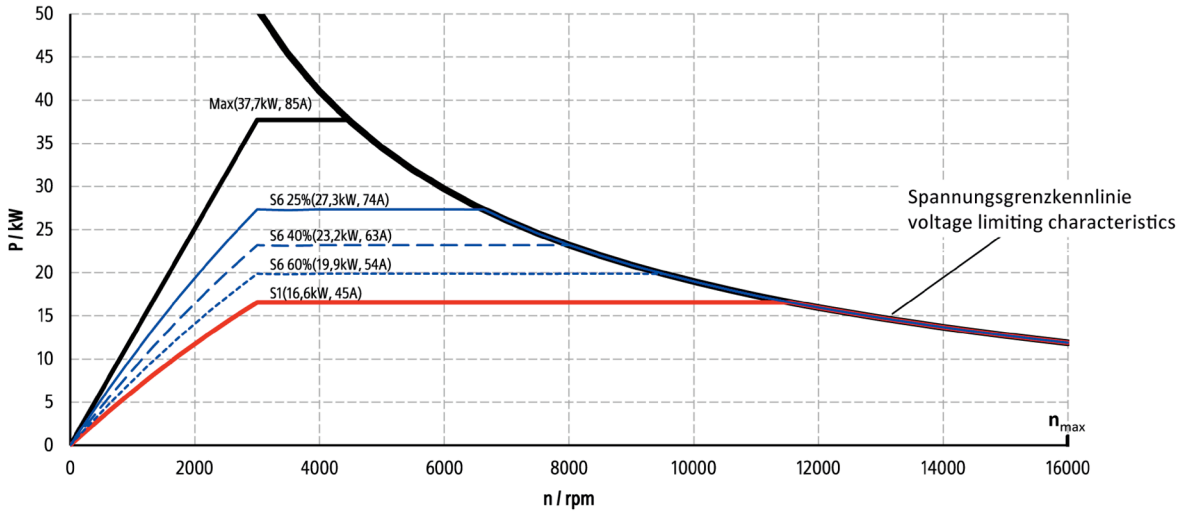


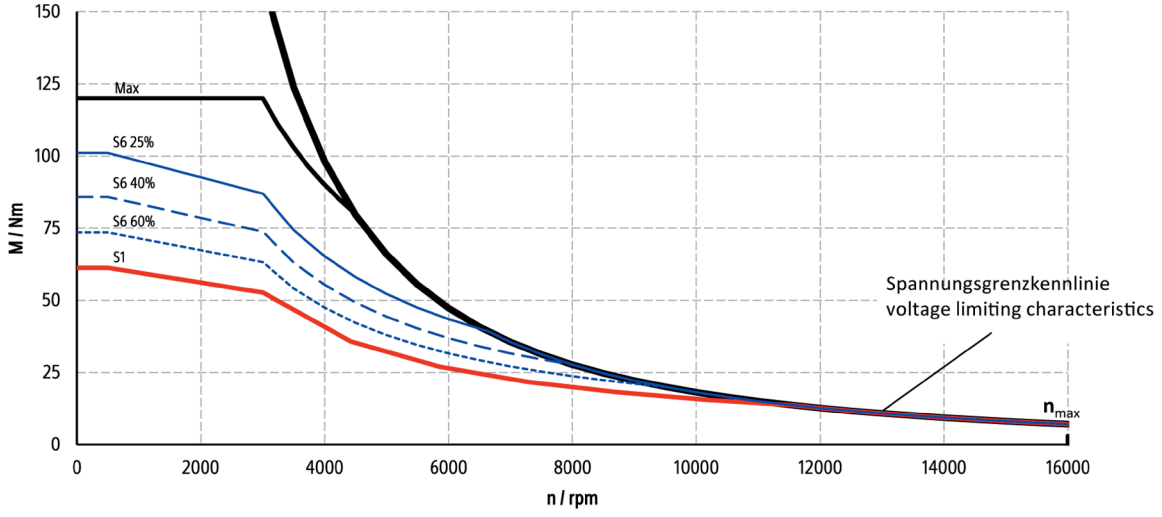


PD_1FE2094-8CGxx-xxx2 D_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3000	16.5	53	45.0	16000	1700	300	2000	11500	120	85	61	45

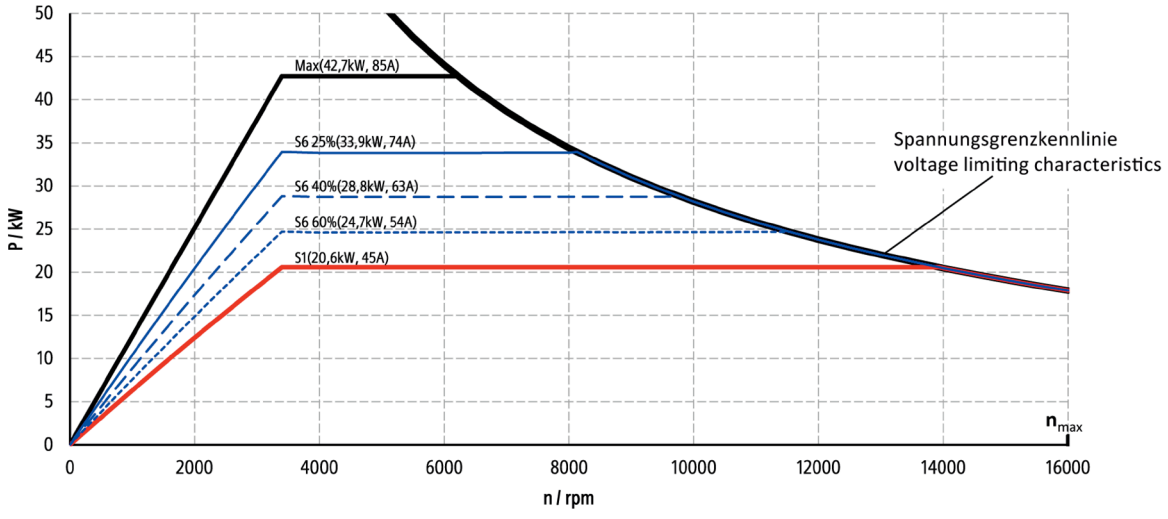


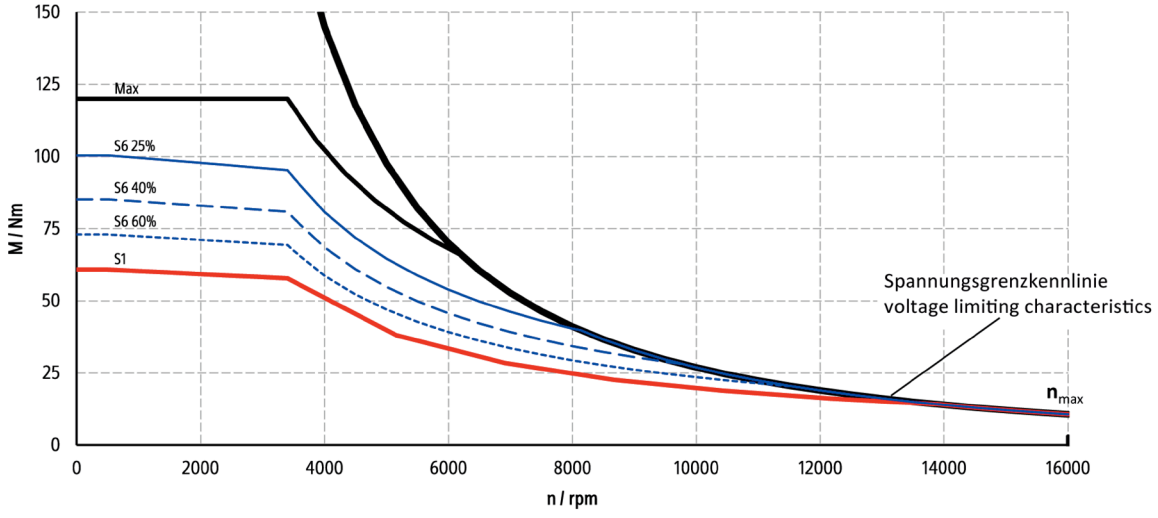


PD_1FE2094-8CGxx-xxx2 D_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3400	20.5	58	45.0	16000	1700	300	2000	13900	120	85	61	45

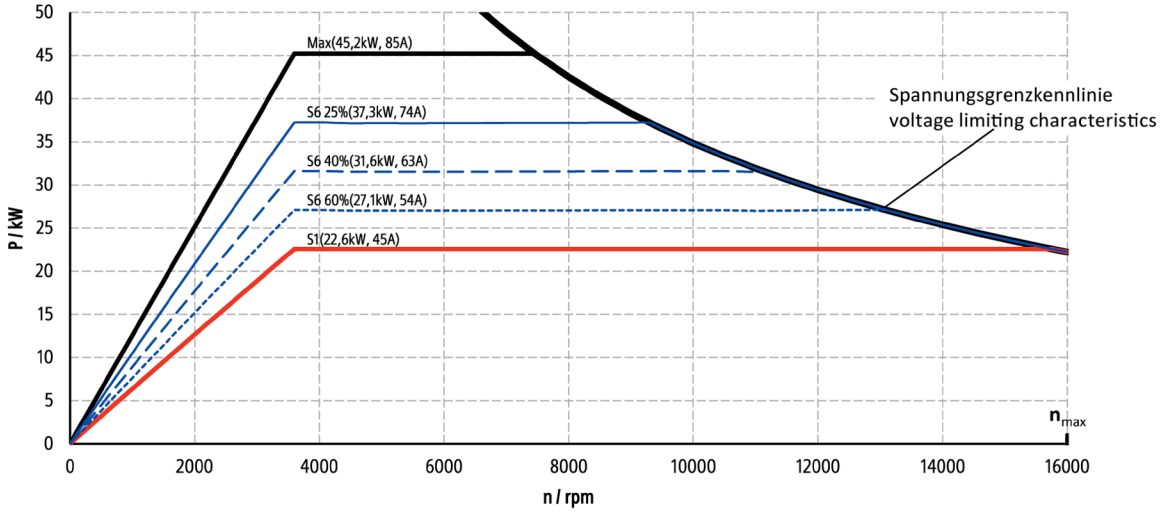


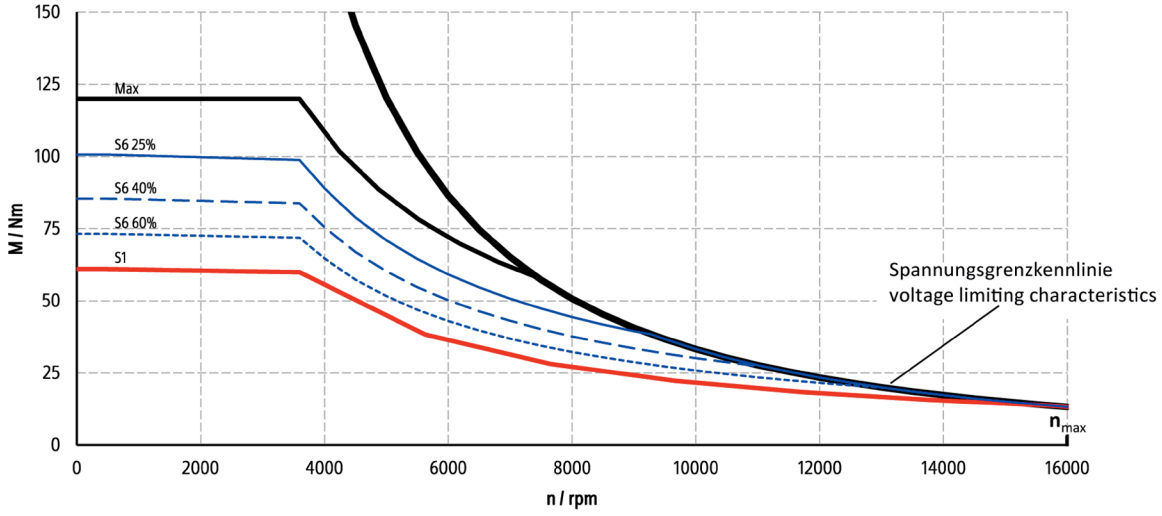


PD_1FE2094-8CGxx-xxx2 D_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3600	22.5	60	45.0	16000	1700	300	2000	15700	120	85	in	45



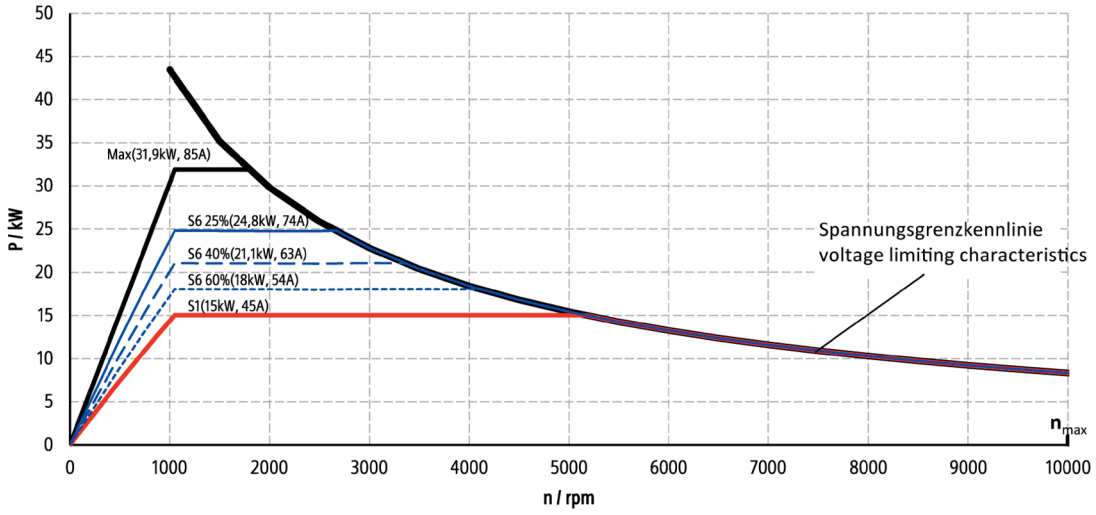


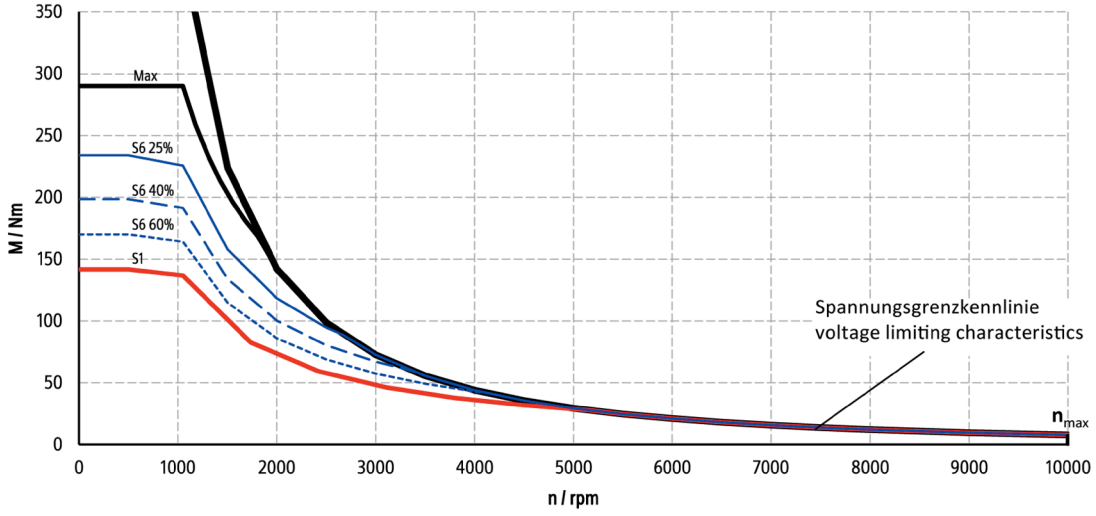
PD_1FE2094-8CGxx-xxx2 D_Index_--4

2.2.4.2 PD_1FE2094-8CGxx-xxx2 Y

SINAMICS, 3 AC 400 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1050	15.0	136	45.0	10000	3000	900	3900	5100	290	85	142	45

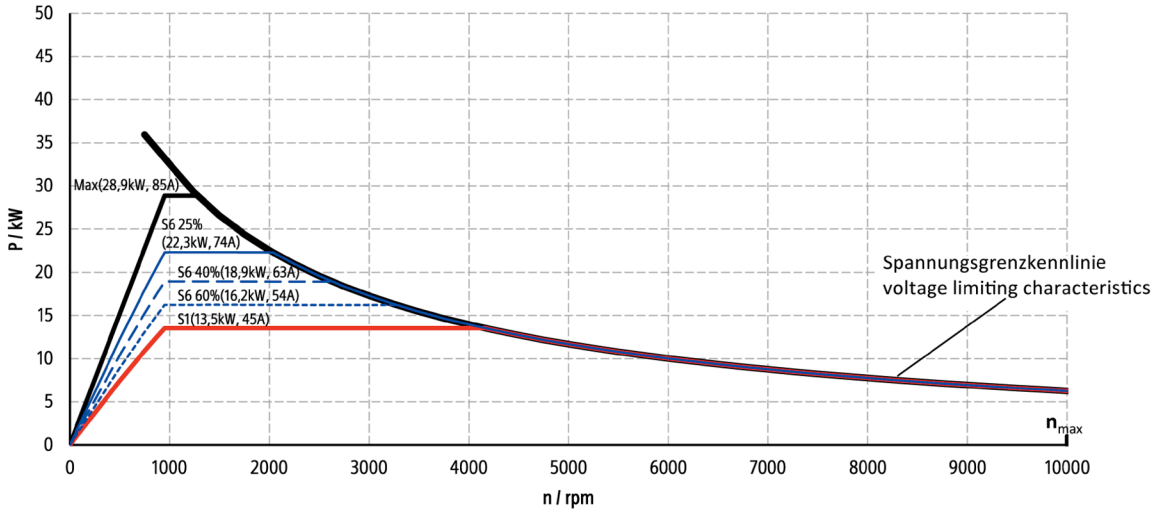


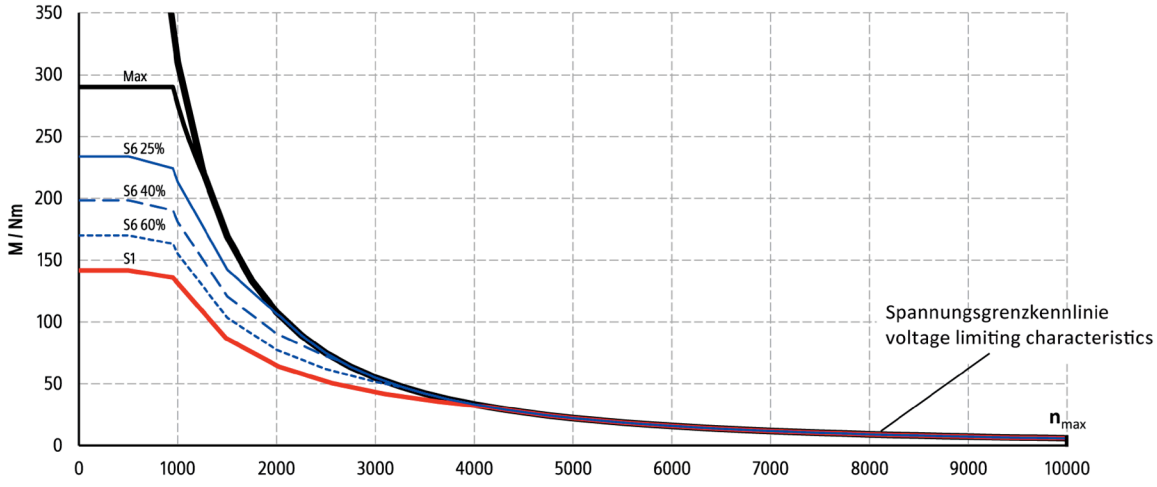


PD_1FE2094-8CGxx-xxx2 Y_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
950	13.5	136	45.0	10000	3000	900	3900	4100	290	85	142	45

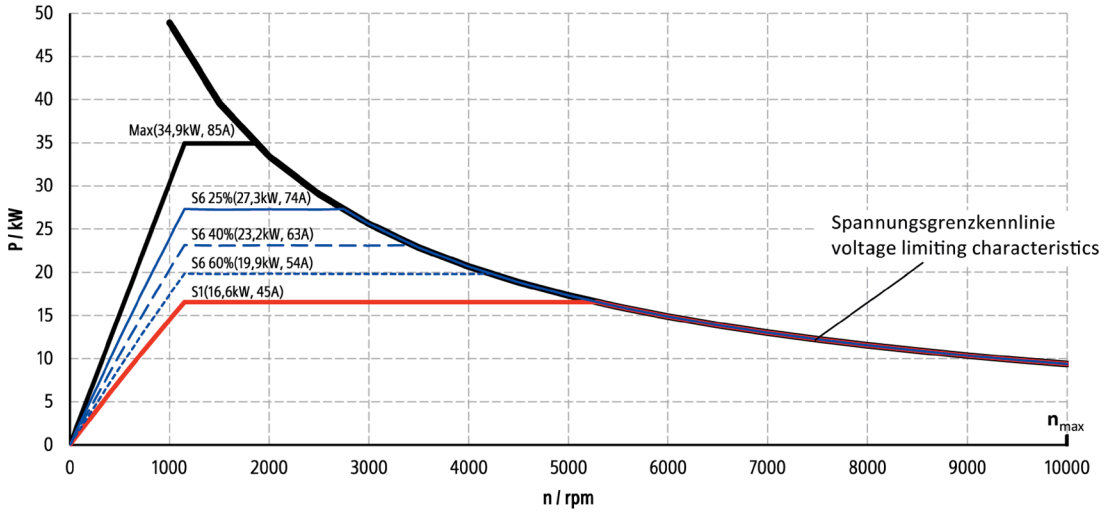


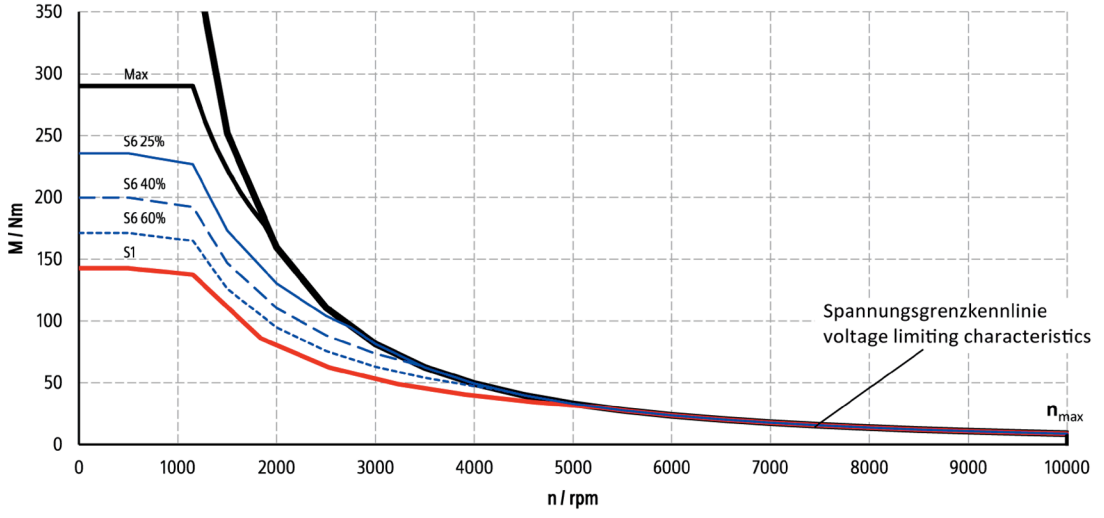


PD_1FE2094-8CGxx-xxx2 Y_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1150	16.5	137	45.0	10000	3000	900	3900	5200	290	85	142	45

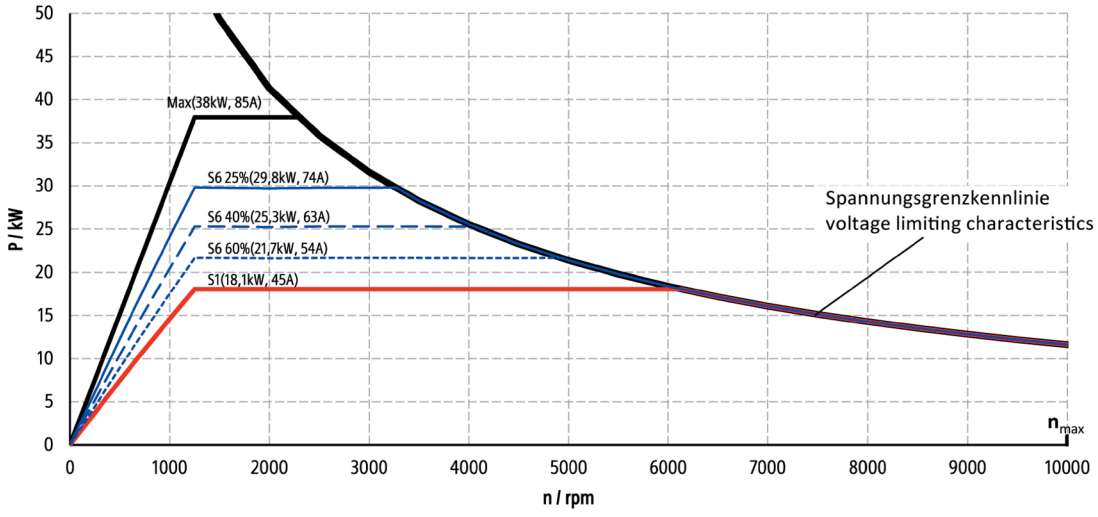


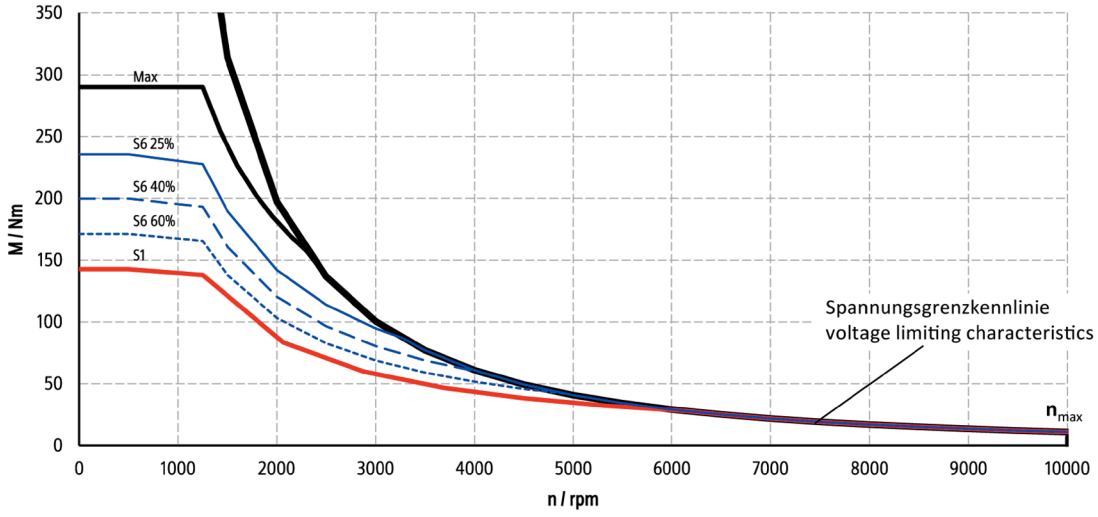


PD_1FE2094-8CGxx-xxx2 Y_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1250	18.0	138	45.0	10000	3000	900	3900	6100	290	85	in	45



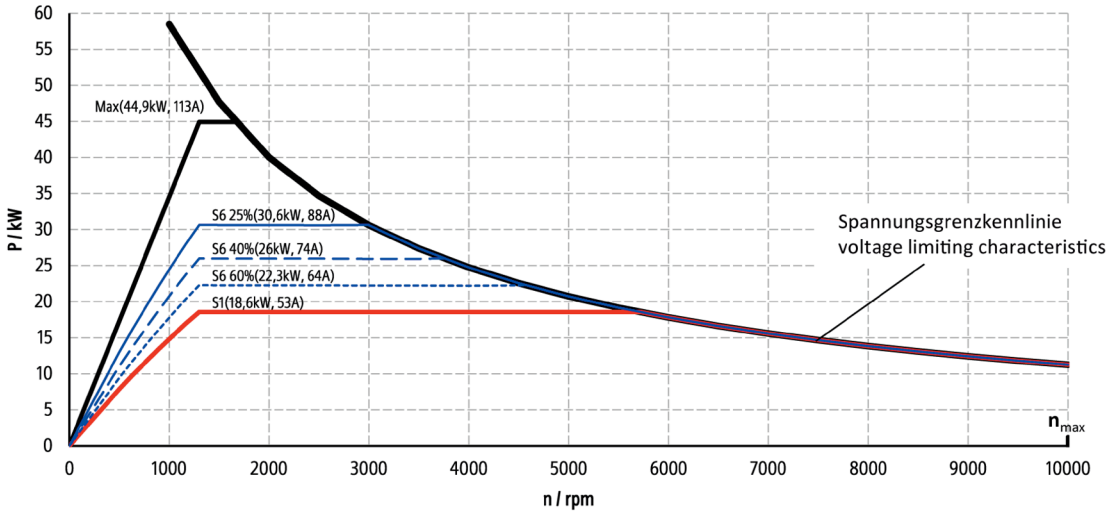


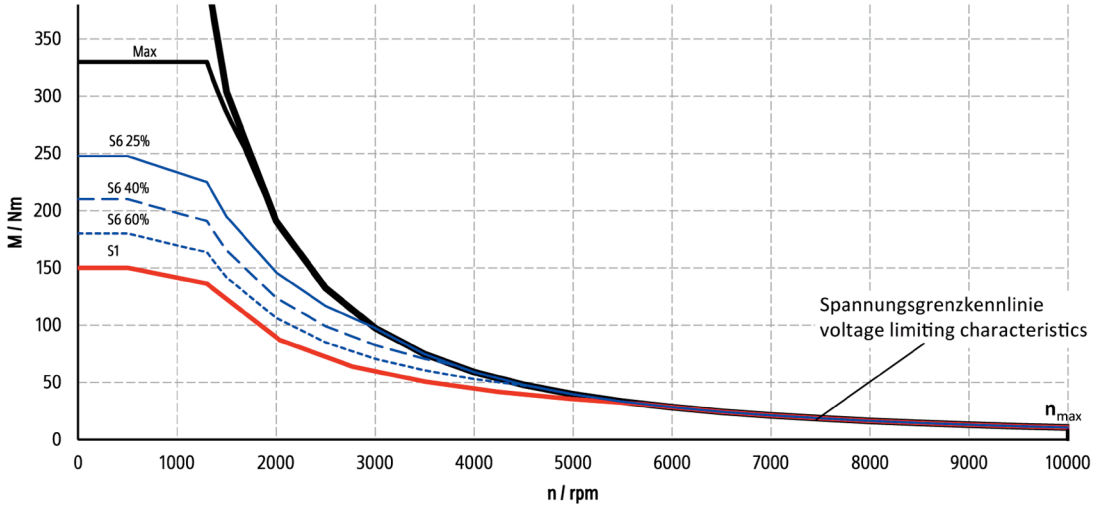
PD_1FE2094-8CGxx-xxx2 Y_Index_--4

2.2.4.3 PD_1FE2094-8CJxx-xxx1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1300	18.5	136	53.0	10000	3100	950	4050	5700	330	113	150	54

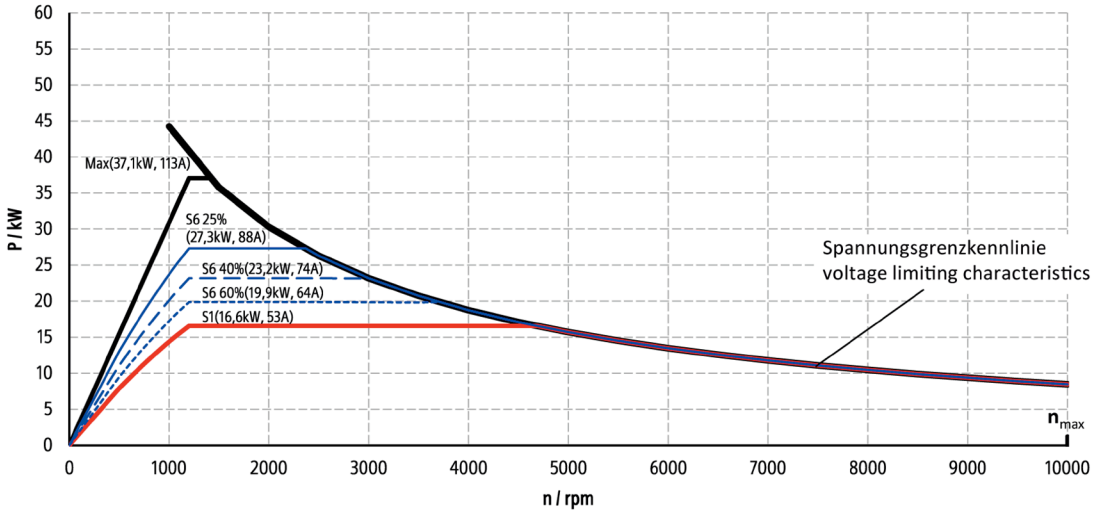


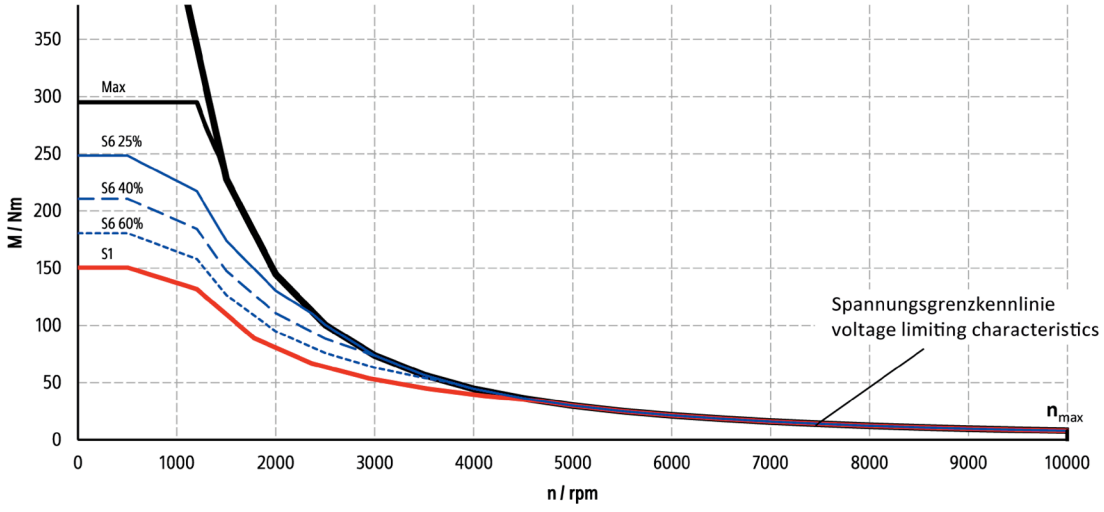


PD_1FE2094-8CJxx-xxx1_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1200	16.5	131	53.0	10000	3100	950	4050	4600	330	113	150	54

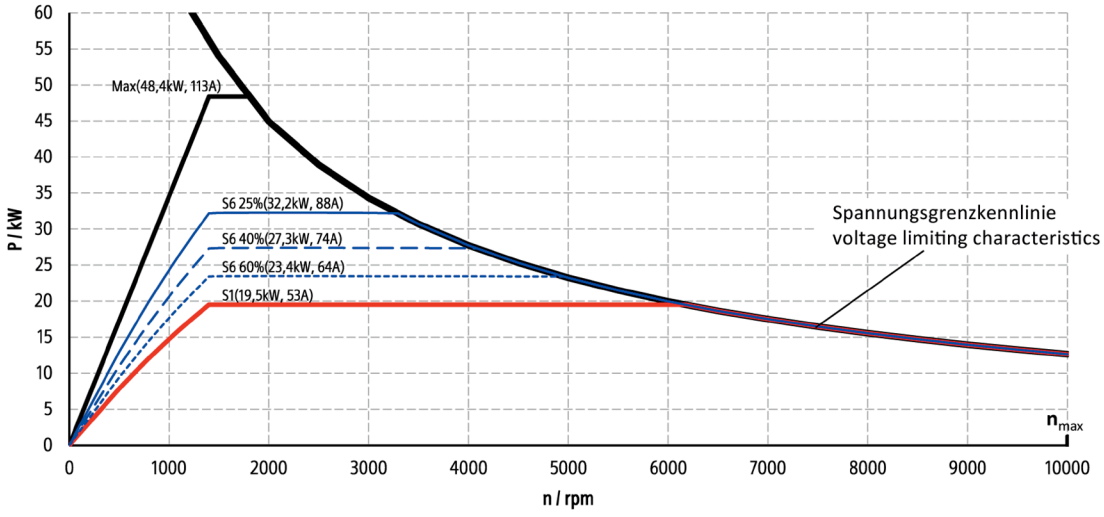


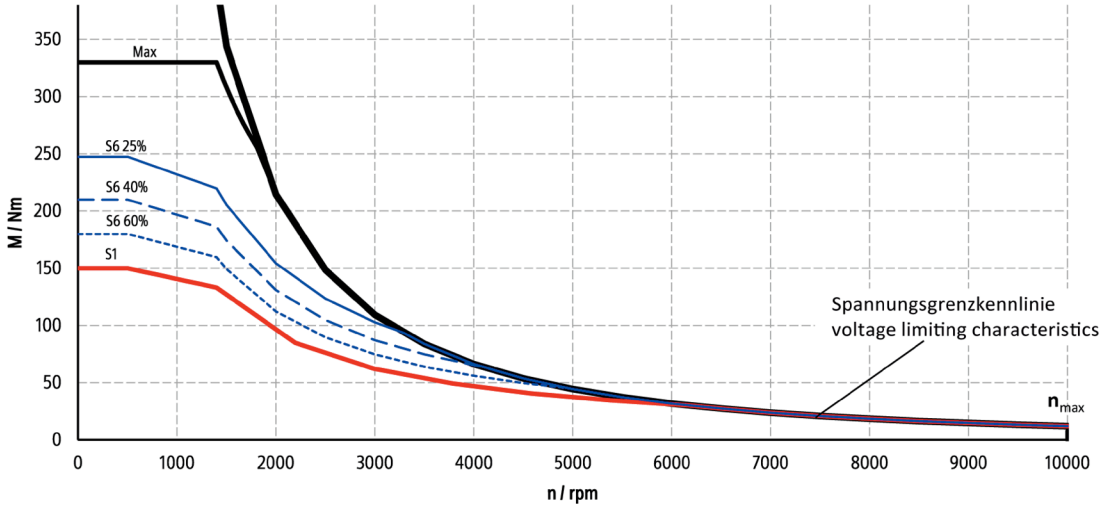


PD_1FE2094-8CJxx-xxx1_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1400	19.5	133	53.0	10000	3100	950	4050	6100	330	113	150	54

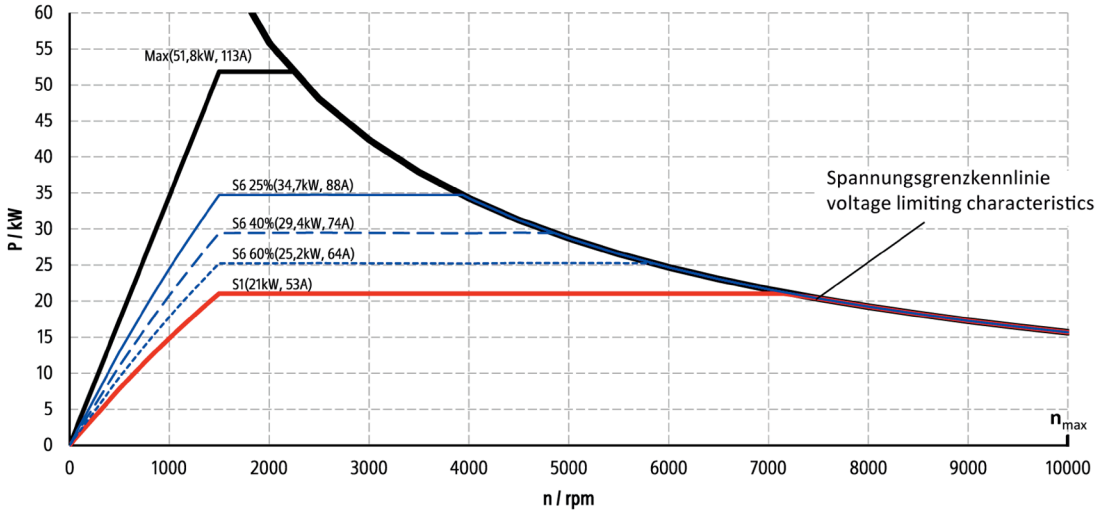


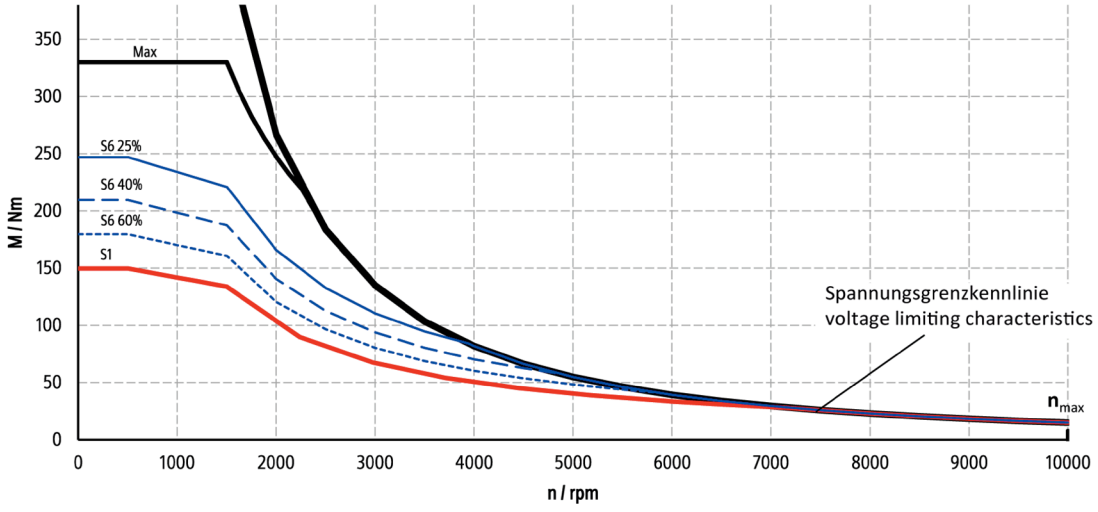


PD_1FE2094-8CJxx-xxx1_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1500	21.0	134	53.0	10000	3100	950	4050	7200	330	113	in	54



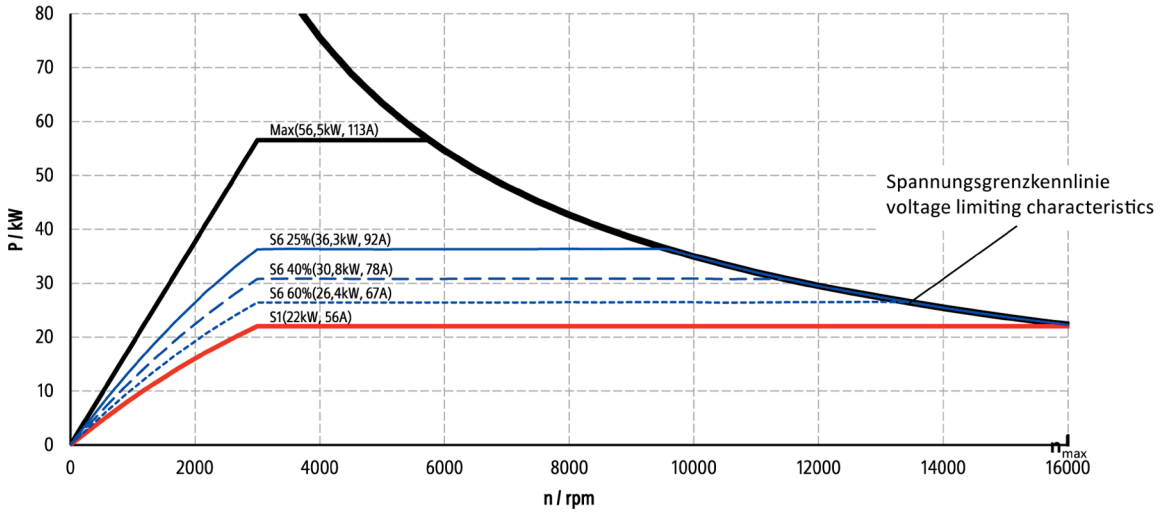


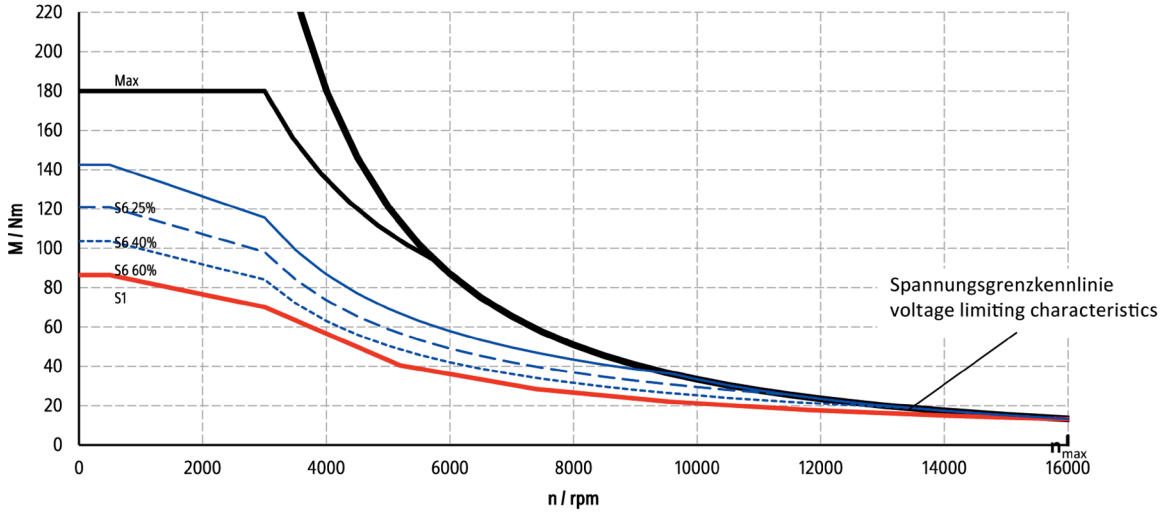
PD_1FE2094-8CJxx-xxx1_Index_--4

2.2.4.4 PD_1FE2095-8CGxx-xxx2 D

SINAMICS, 3 AC 400 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3000	22.0	70	56.0	16000	1800	400	2200	16000	180	113	86	60

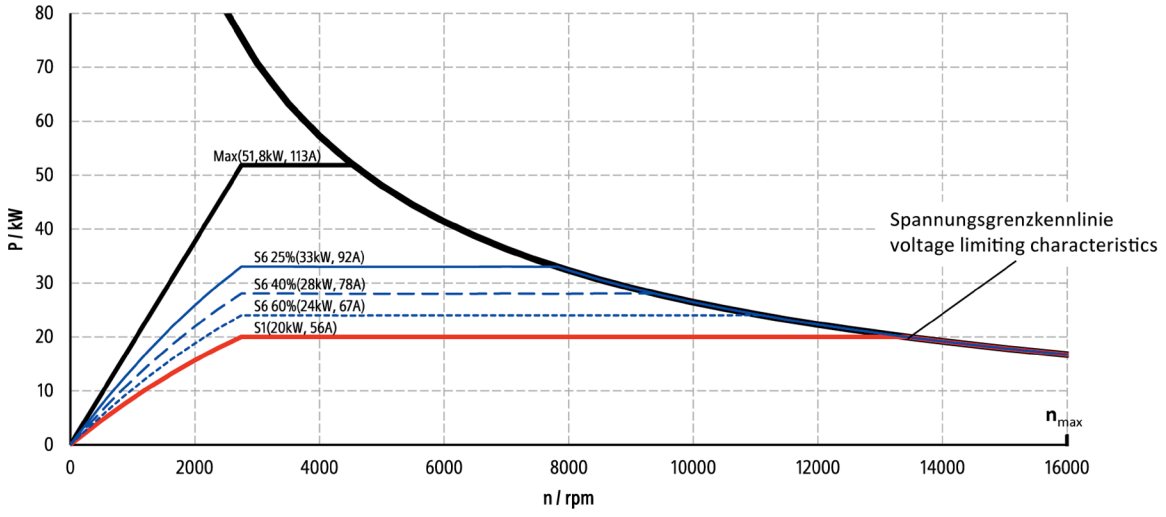


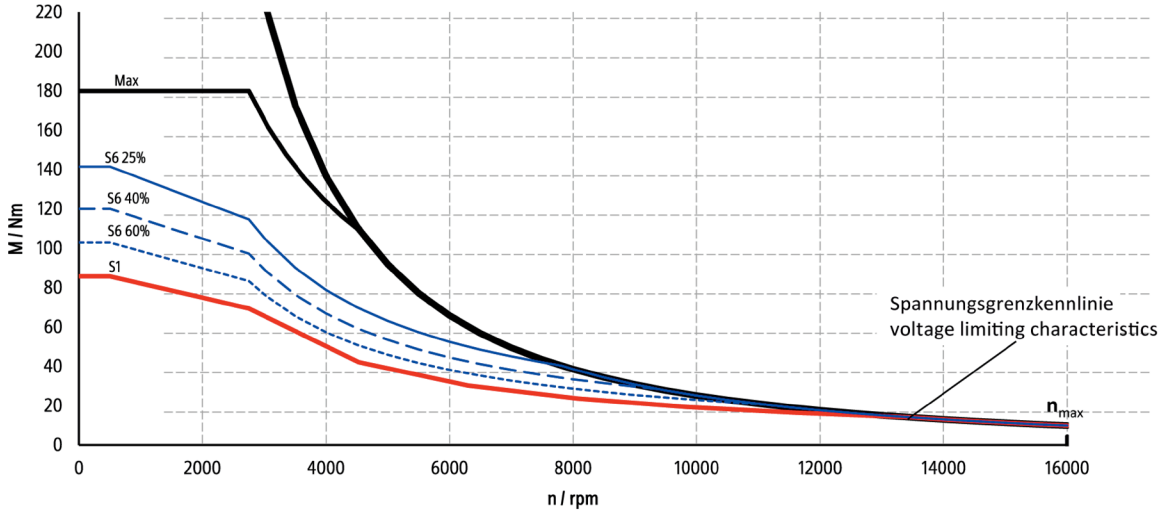


PD_1FE2095-8CGxx-xxx2 D_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
2750	20.0	69	56.0	16000	1800	400	2200	13400	180	113	86	60

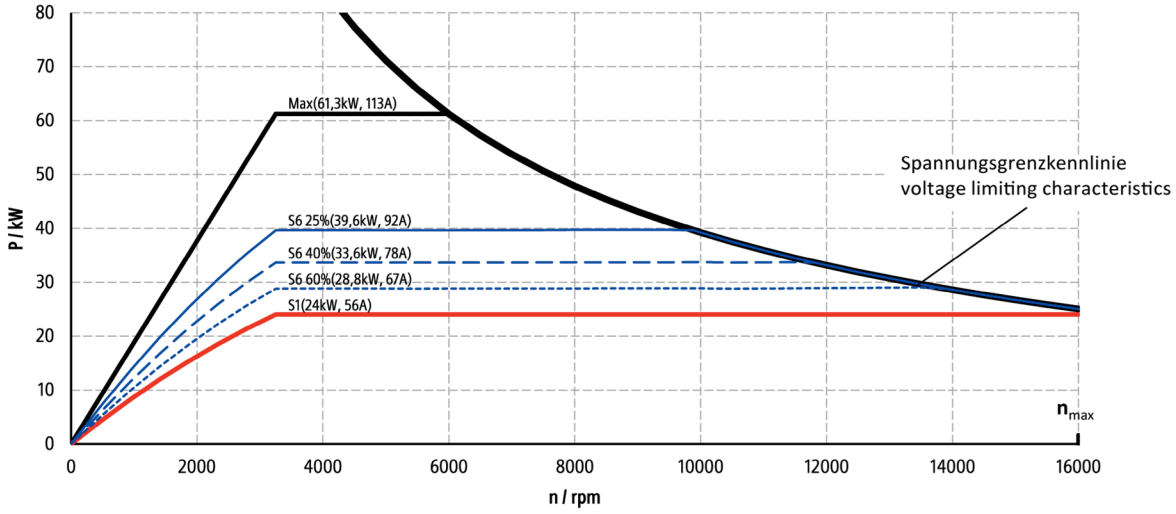


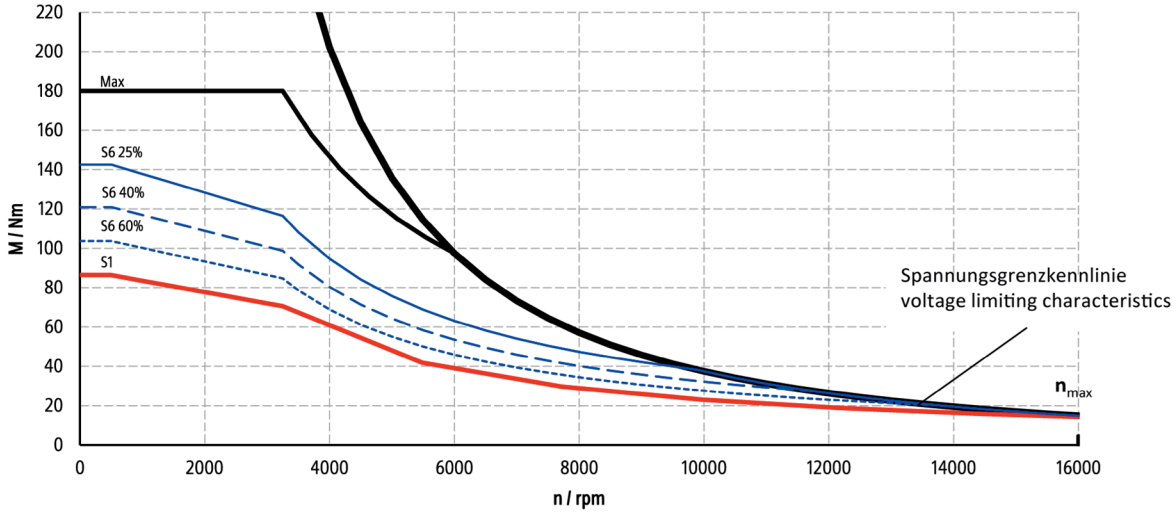


PD_1FE2095-8CGxx-xxx2 D_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3250	24.0	71	56.0	16000	1800	400	2200	16000	180	113	86	60

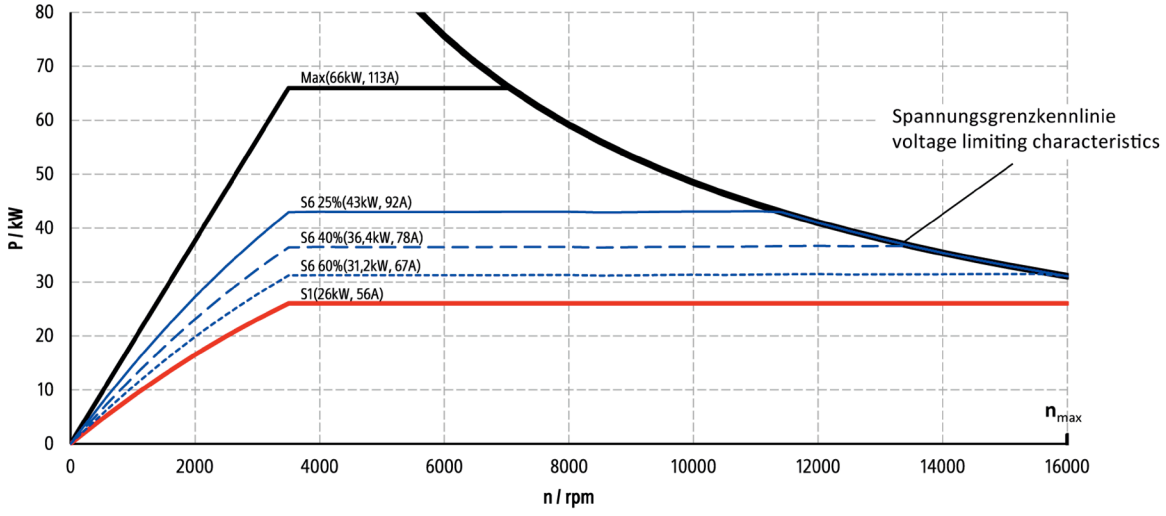


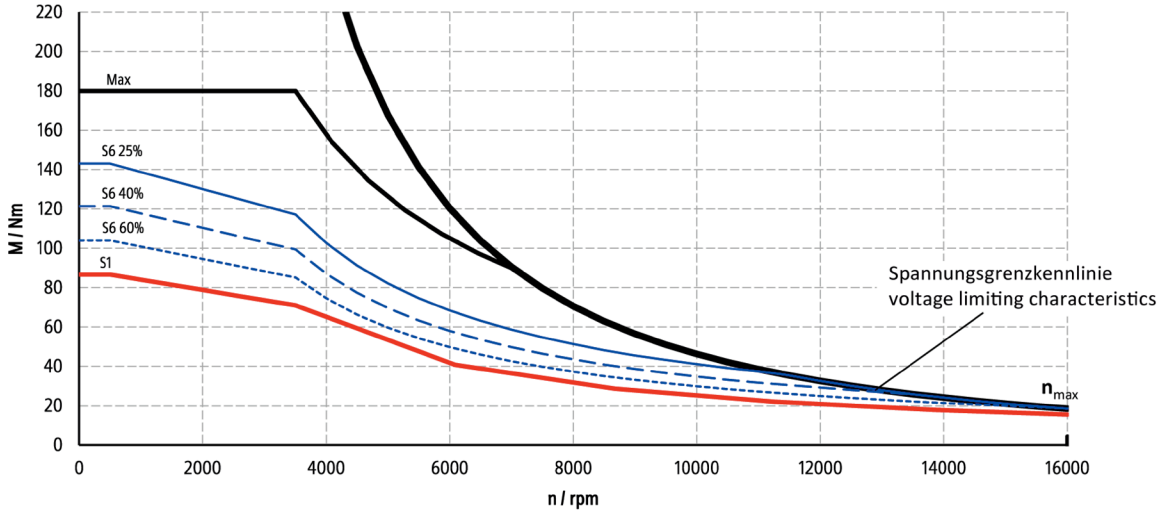


PD_1FE2095-8CGxx-xxx2 D_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
3500	26.0	71	56.0	16000	1800	400	2200	16000	180	113	in	60



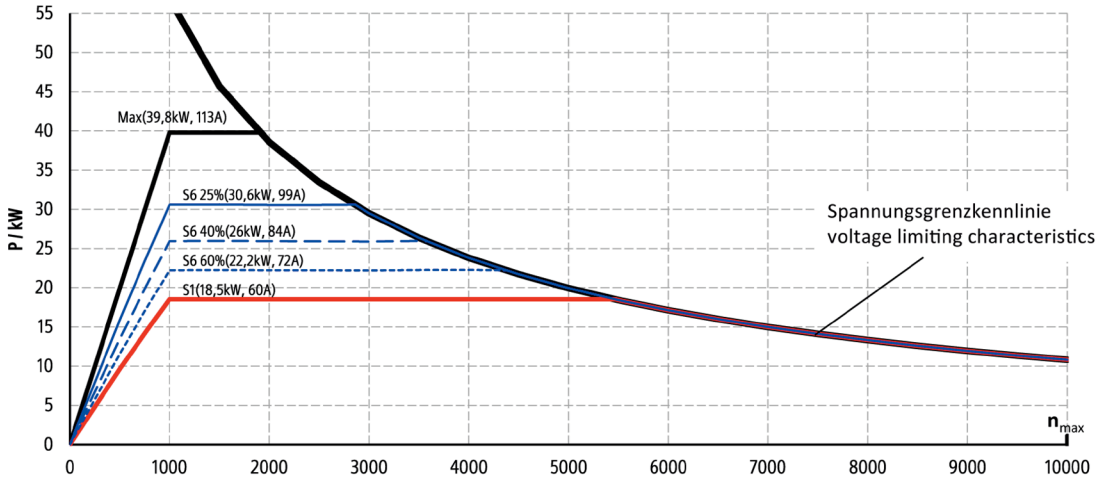


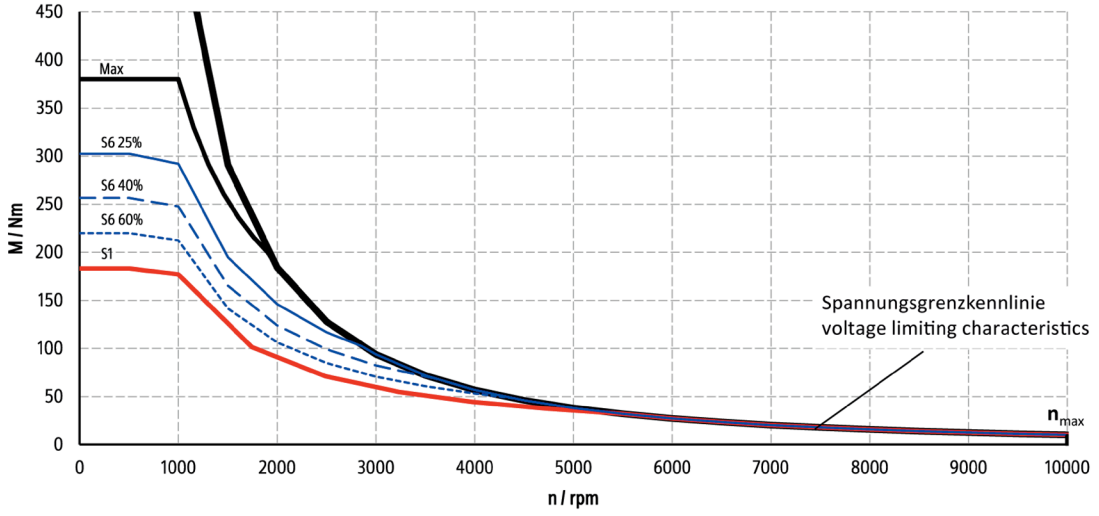
PD_1FE2095-8CGxx-xxx2 D_Index_--4

2.2.4.5 PD_1FE2095-8CGxx-xxx2 Y

SINAMICS, 3 AC 400 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1000	18.5	177	60.0	10000	3800	1200	5000	5400	380	113	183	60

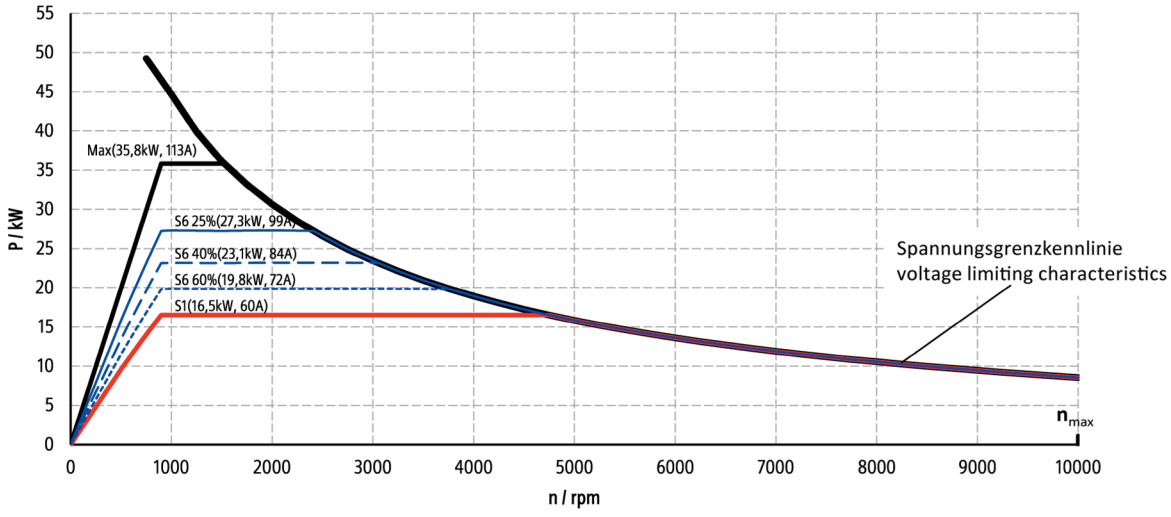


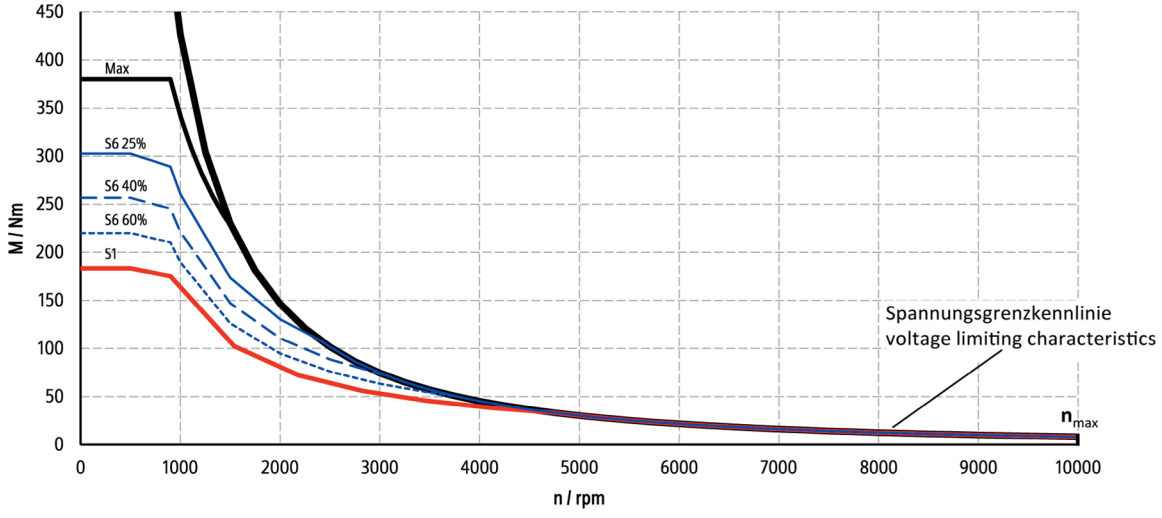


PD_1FE2095-8CGxx-xxx2 Y_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
900	16.5	175	60.0	10000	3800	1200	5000	4700	380	113	183	60

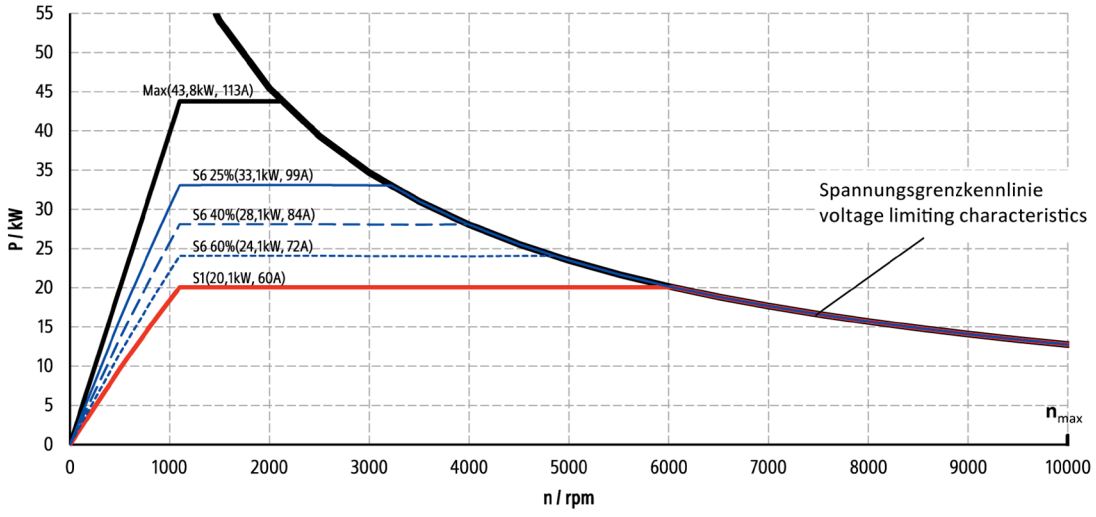


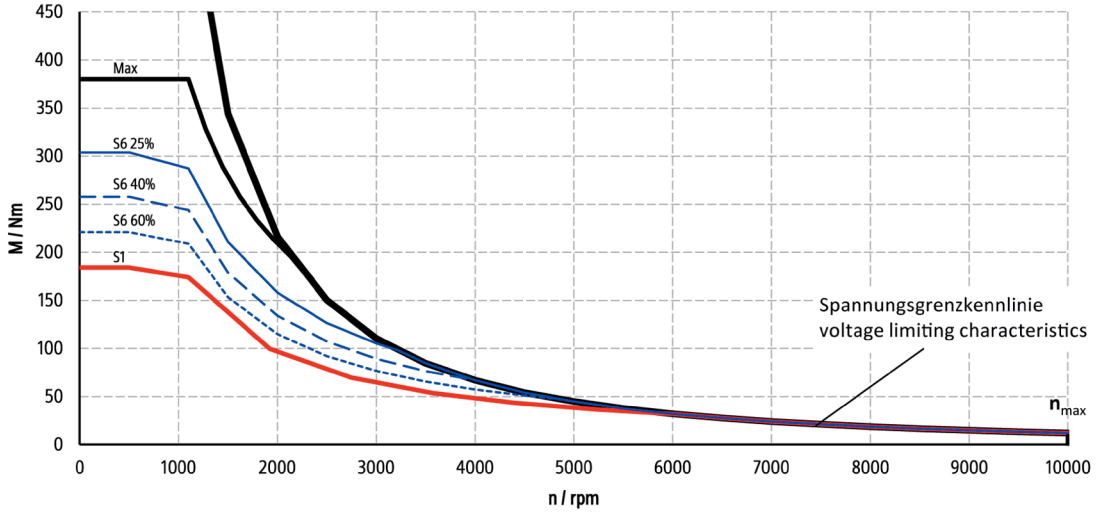


PD_1FE2095-8CGxx-xxx2 Y_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1100	20.0	174	60.0	10000	3800	1200	5000	6000	380	113	183	60

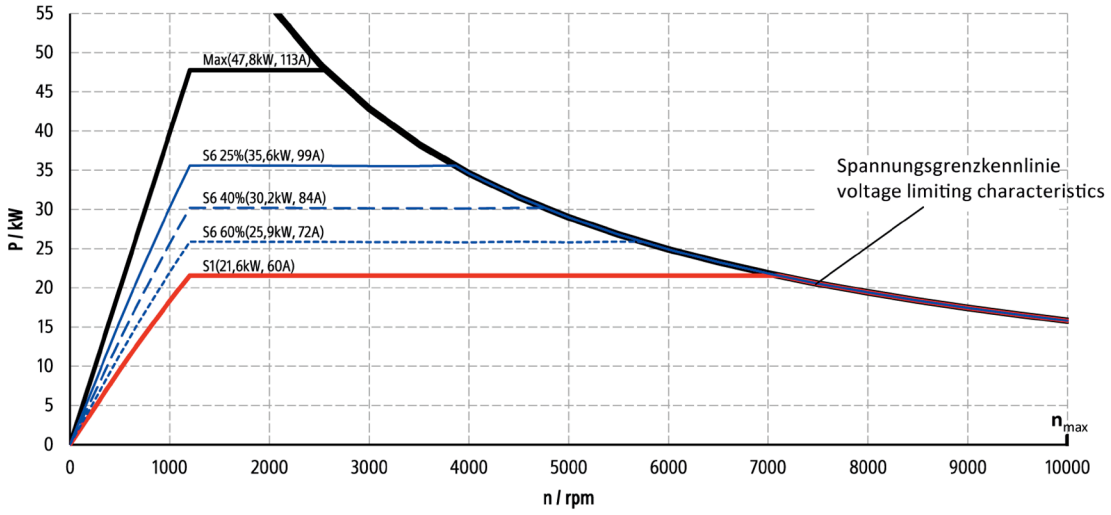


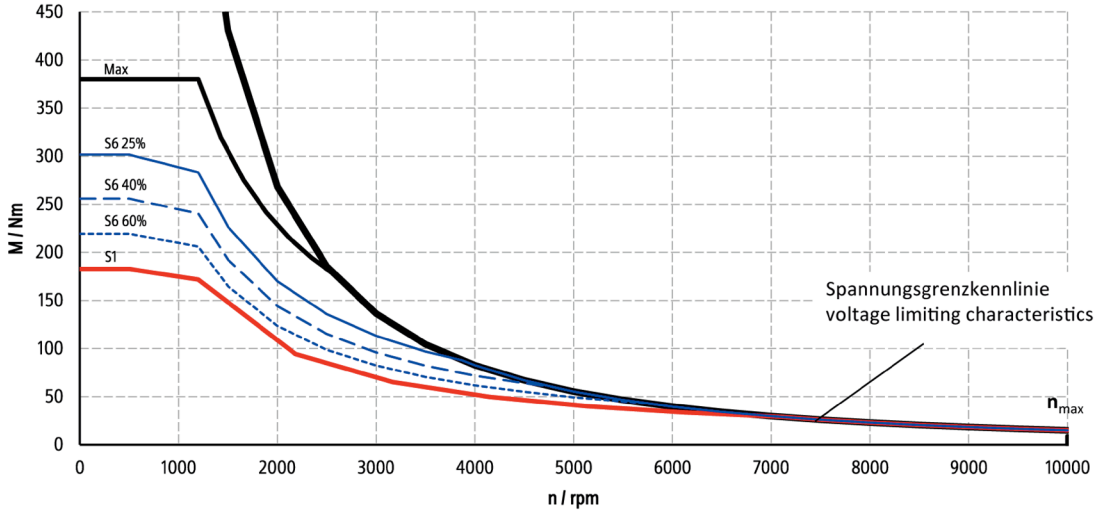


PD_1FE2095-8CGxx-xxx2 Y_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1200	21.5	171	60.0	10000	3800	1200	5000	7100	380	113	in	60



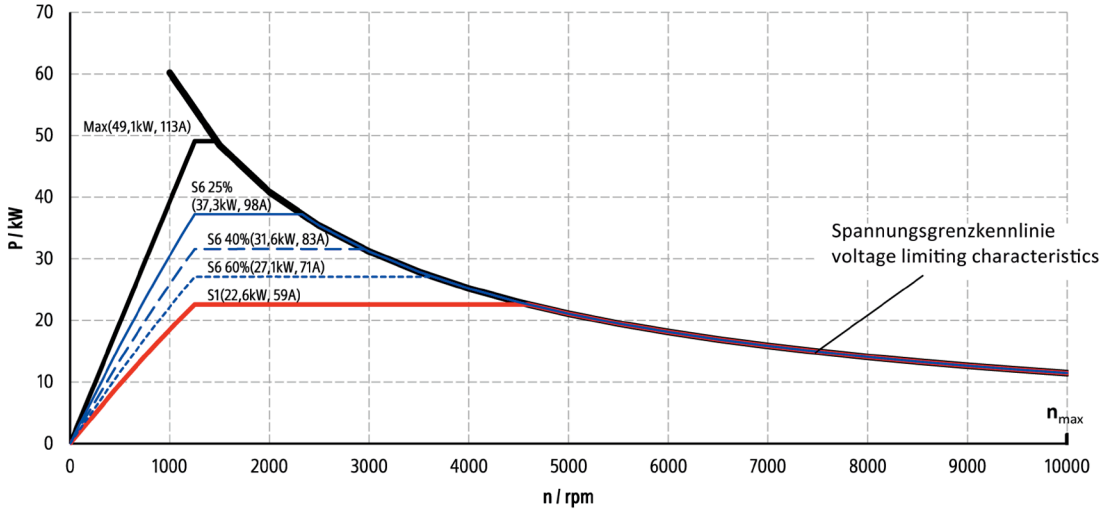


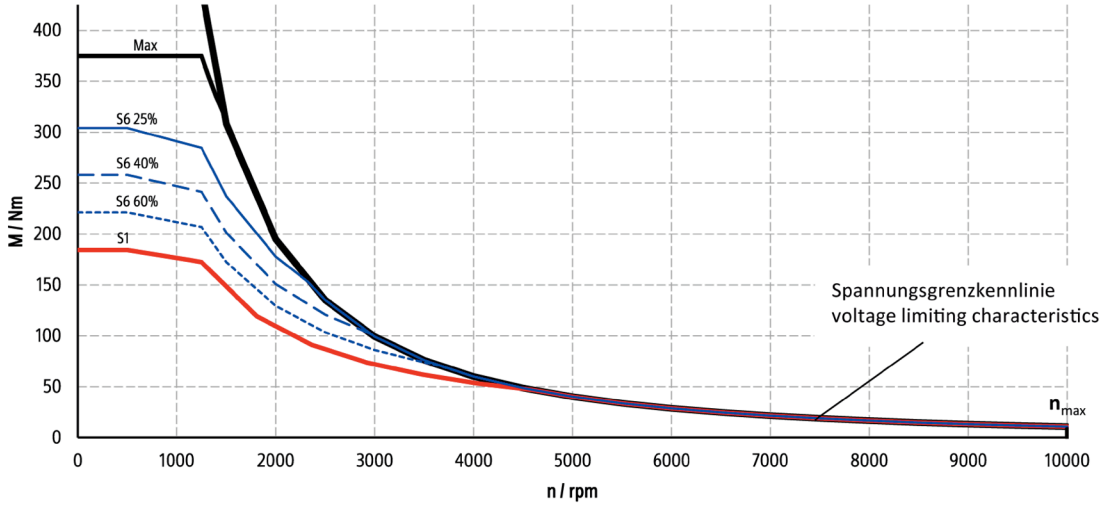
PD_1FE2095-8CGxx-xxx2 Y_Index_--4

2.2.4.6 PD_1FE2095-8CJxx-xxx1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1250	22.5	172	59.0	10000	3750	1150	4900	4500	375	113	184	60

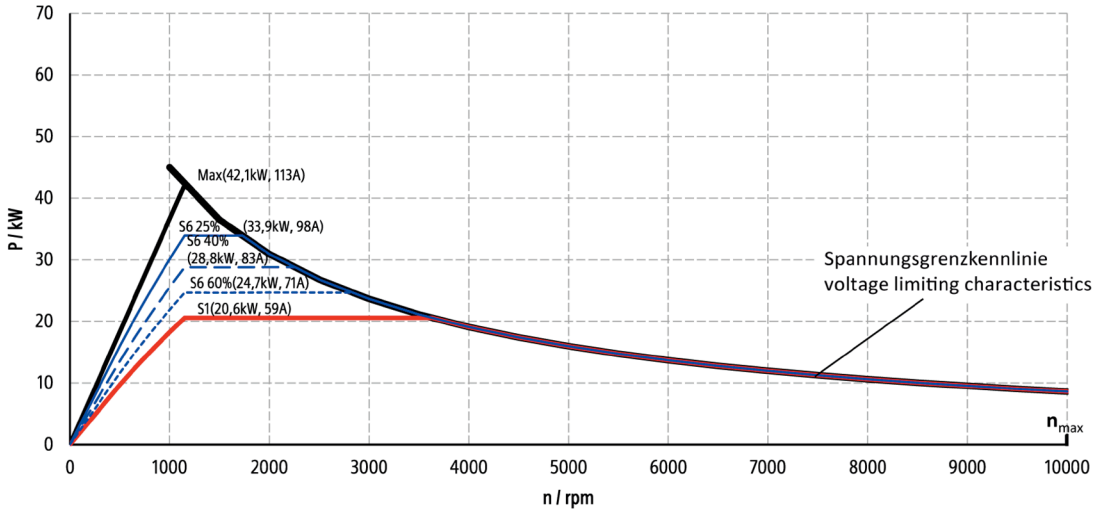


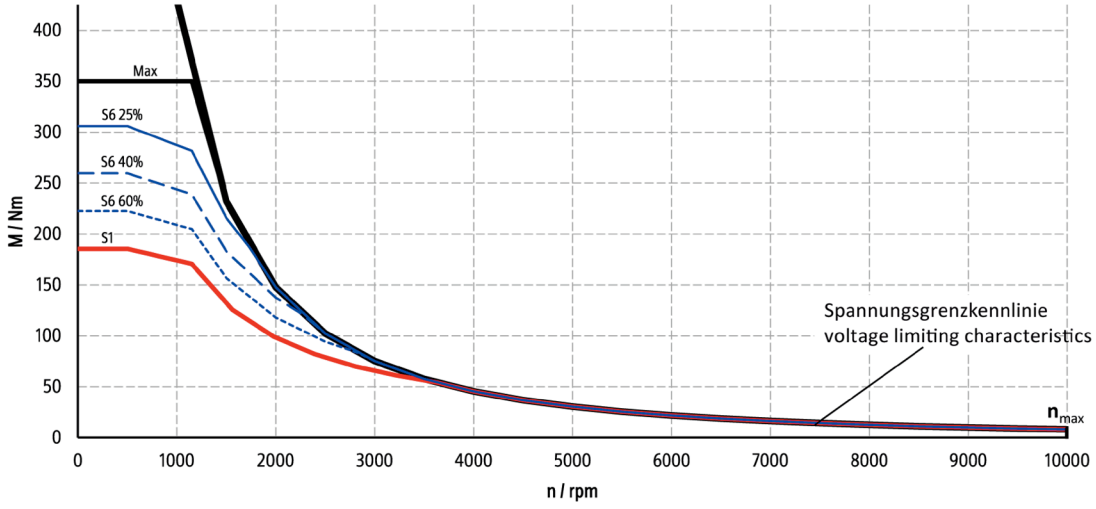


PD_1FE2095-8CJxx-xxx1_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1150	20.5	170	59.0	10000	3750	1150	4900	3600	375	113	184	60

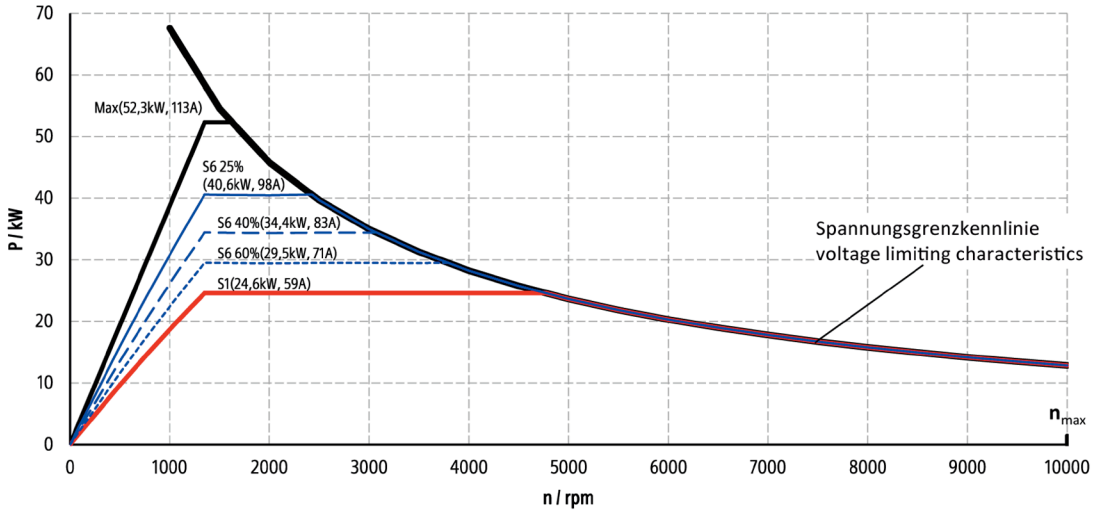


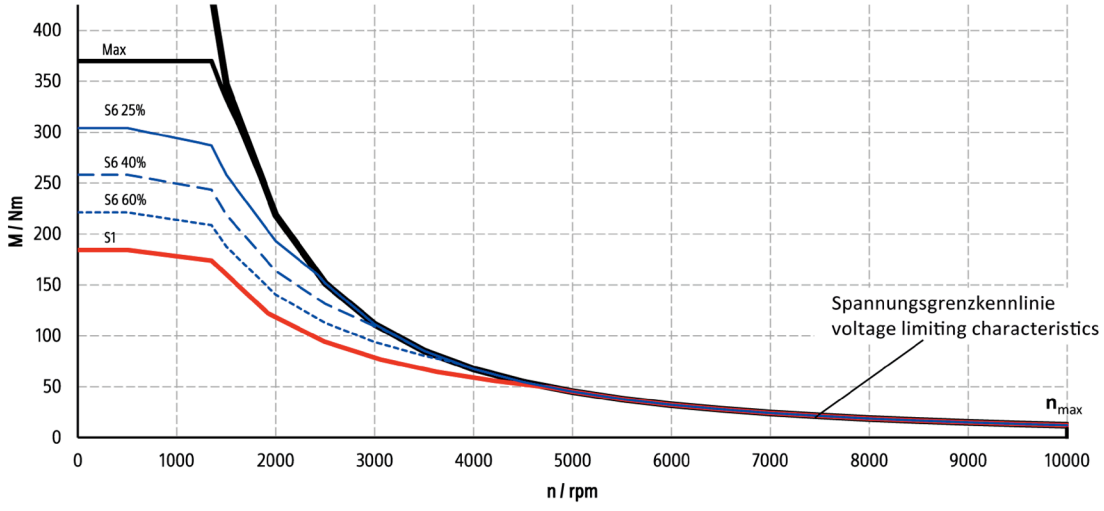


PD_1FE2095-8CJxx-xxx1_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1350	24.5	173	59.0	10000	3750	1150	4900	4700	375	113	184	60

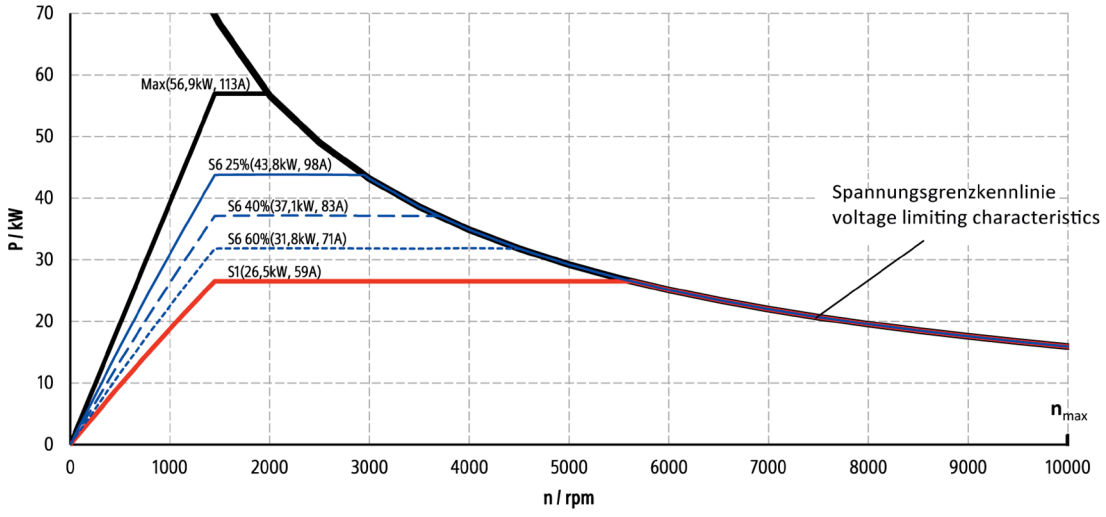


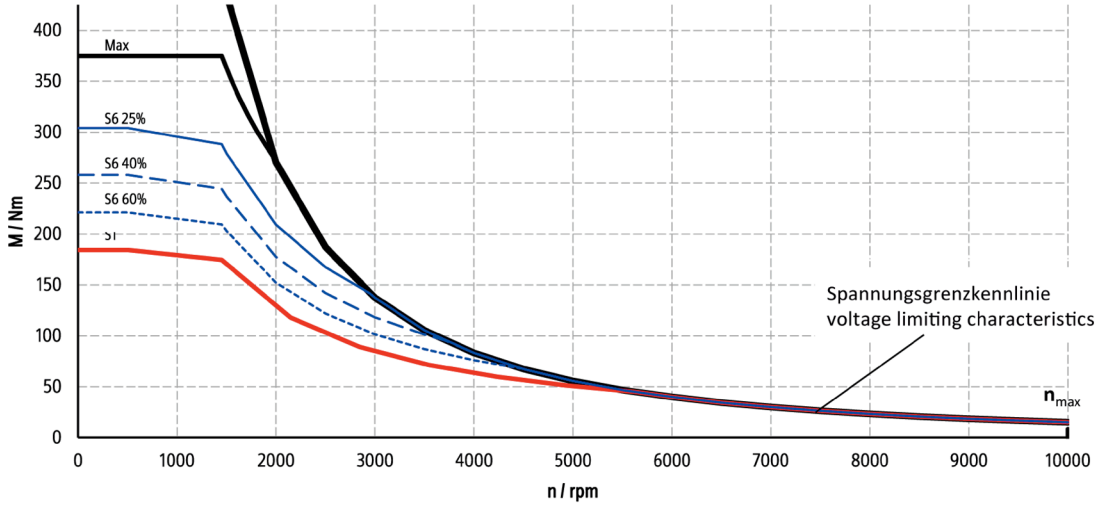


PD_1FE2095-8CJxx-xxx1_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1450	26.5	175	59.0	10000	3750	1150	4900	5600	375	113	in	60



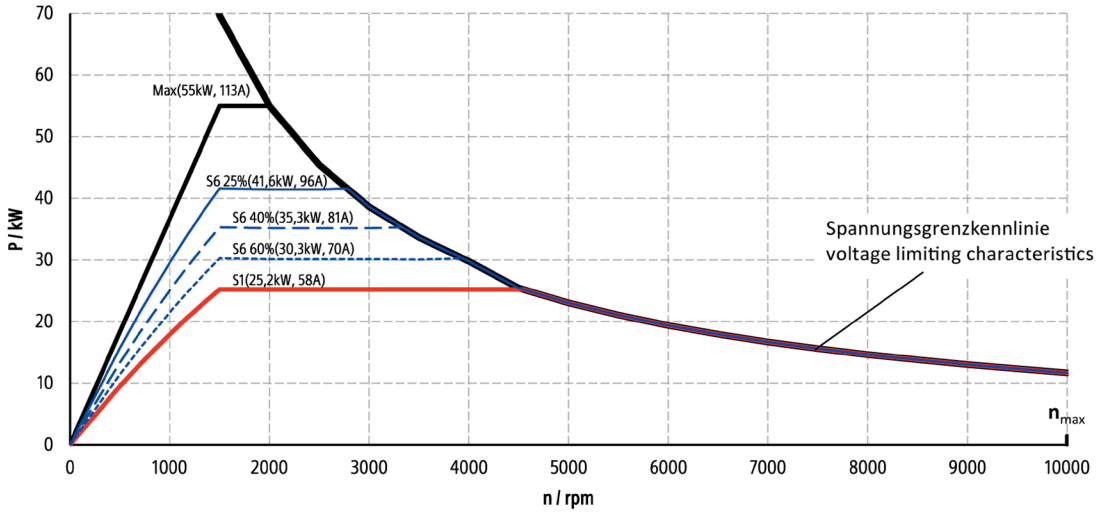


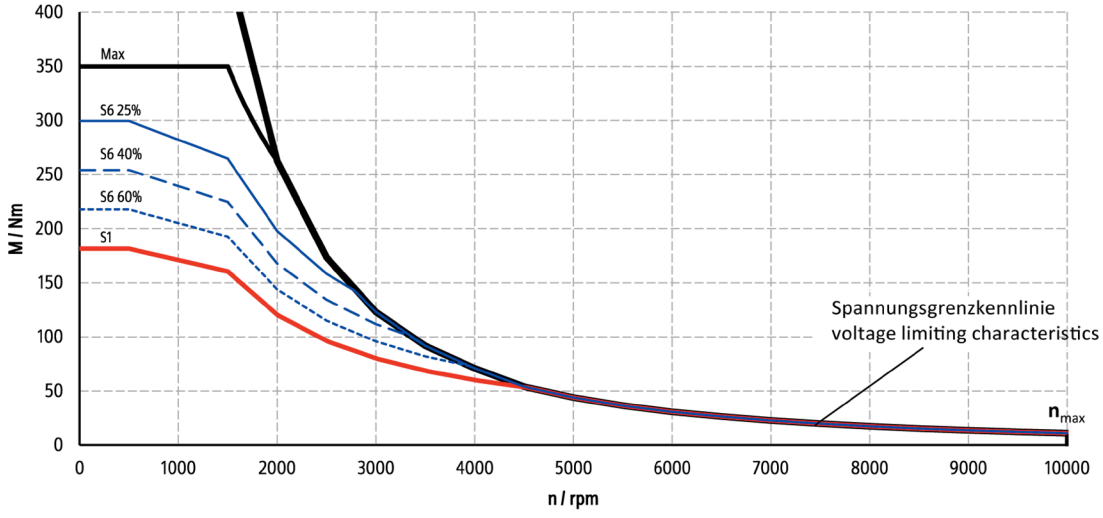
PD_1FE2095-8CJxx-xxx1_Index_--4

2.2.4.7 PD_1FE2145-8CCxx-xxx2 D

SINAMICS, 3 AC 400 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1500	25.0	159	58.0	10000	1700	350	2050	4500	350	113	181	60

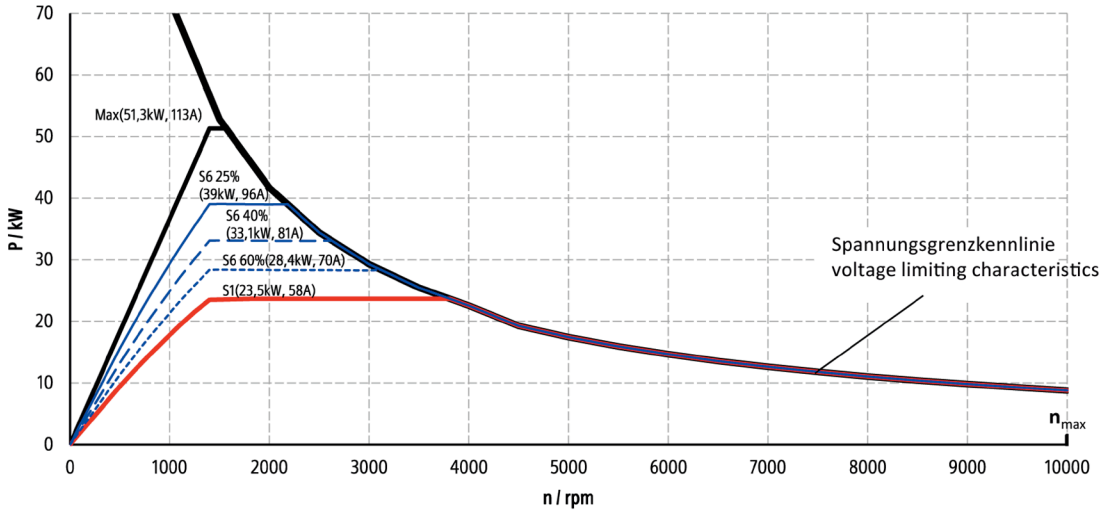


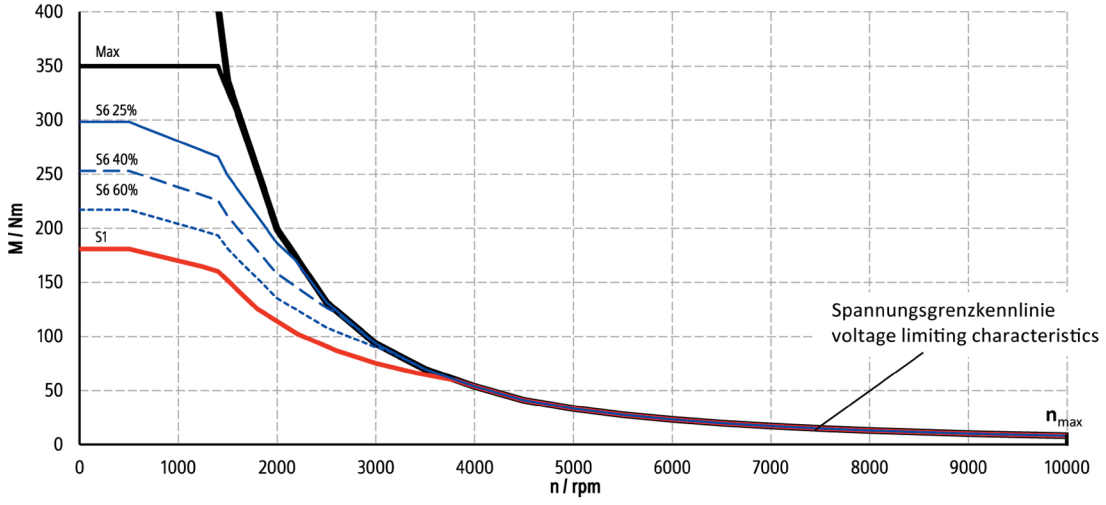


PD_1FE2145-8CCxx-xxx2 D_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1400	23.5	160	58.0	10000	1700	350	2050	3800	350	113	181	60

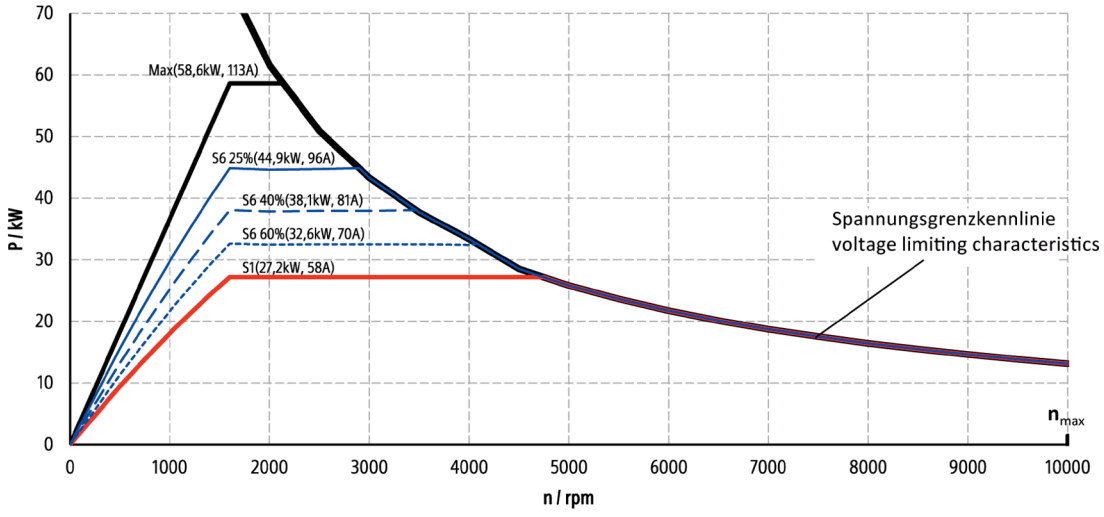


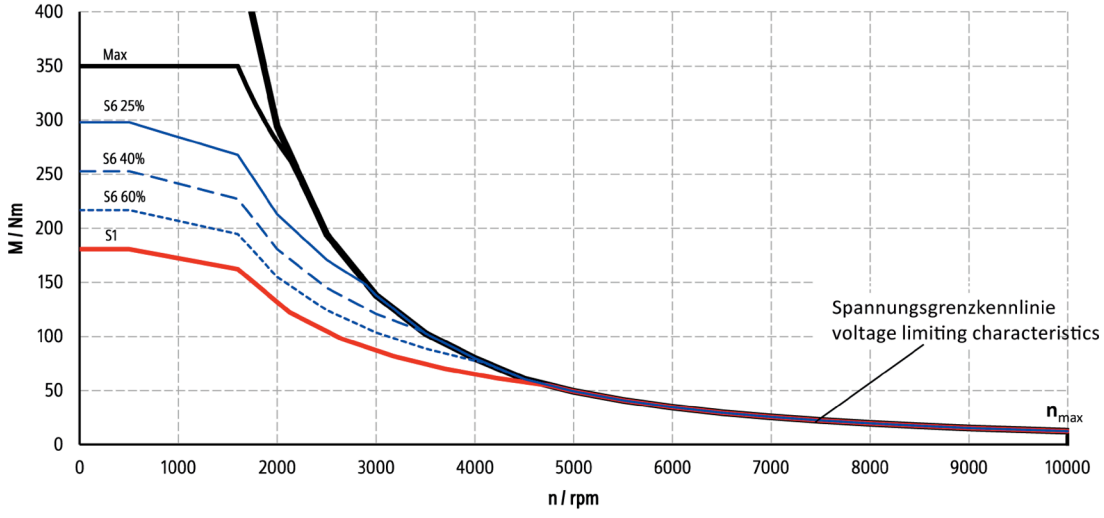


PD_1FE2145-8CCxx-xxx2 D_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1600	27.0	161	58.0	10000	1700	350	2050	4700	350	113	181	60

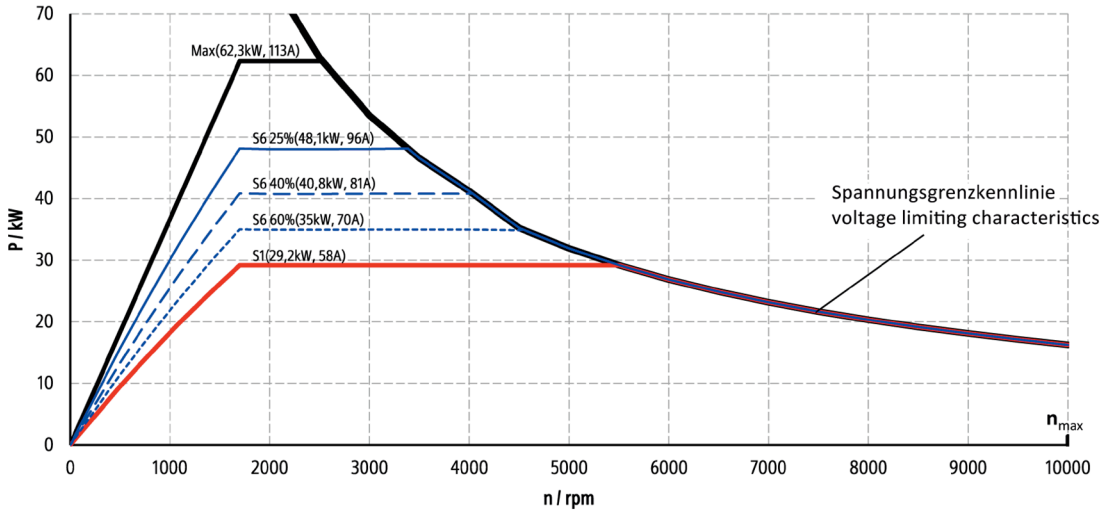


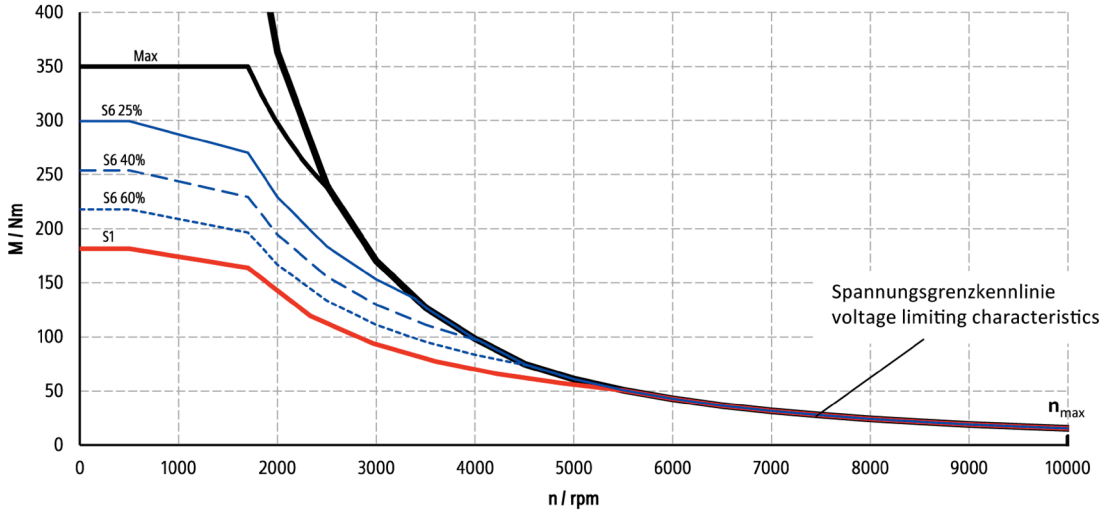


PD_1FE2145-8CCxx-xxx2 D_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1700	29.0	163	58.0	10000	1700	350	2050	5500	350	113	181	60



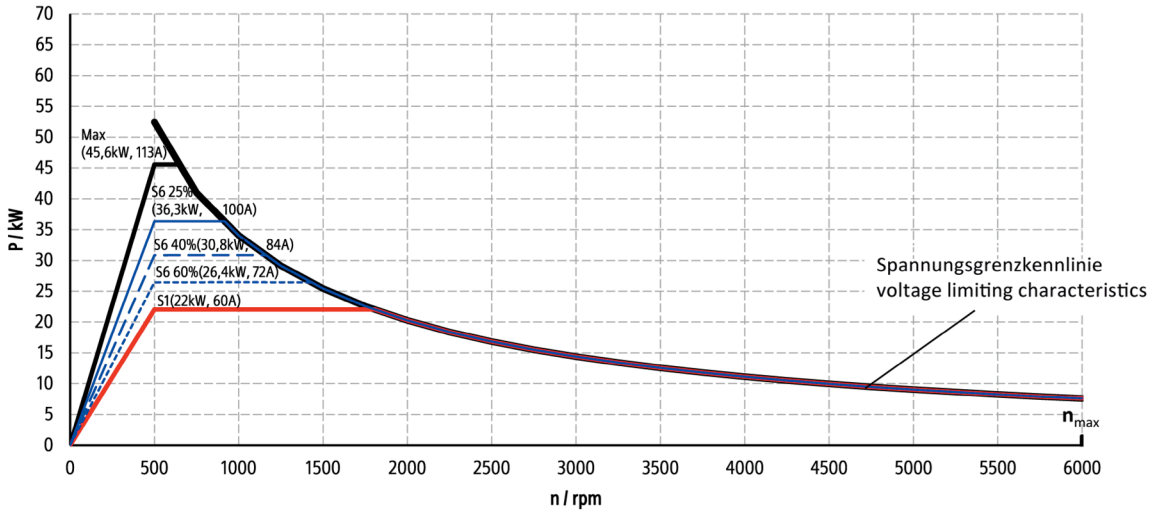


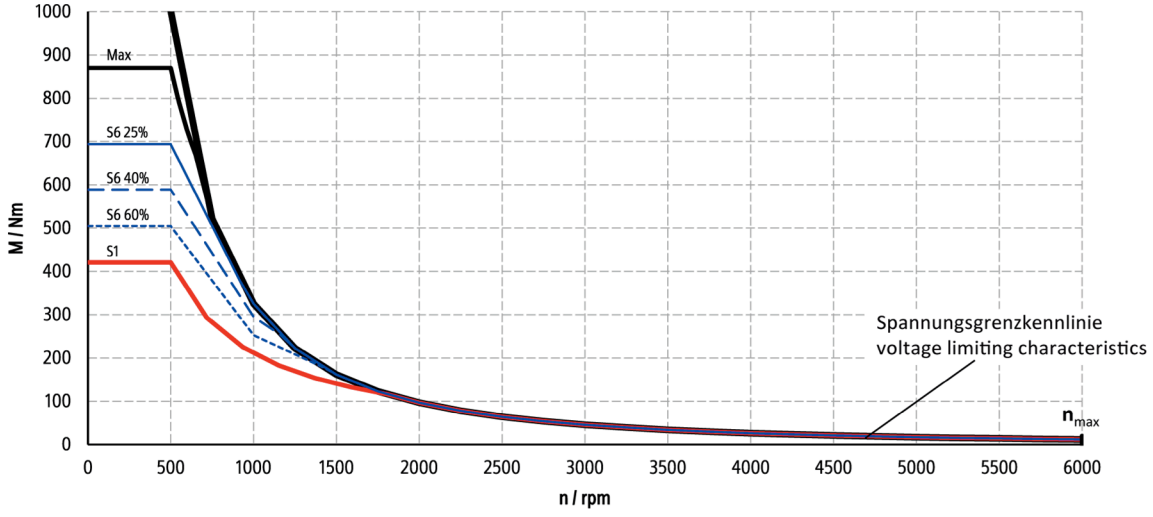
PD_1FE2145-8CCxx-xxx2 D_Index_--4

2.2.4.8 PD_1FE2145-8CCxx-xxx2 Y

SINAMICS, 3 AC 400 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
500	22.0	420	60.0	6000	3300	1600	4900	1800	870	113	420	58

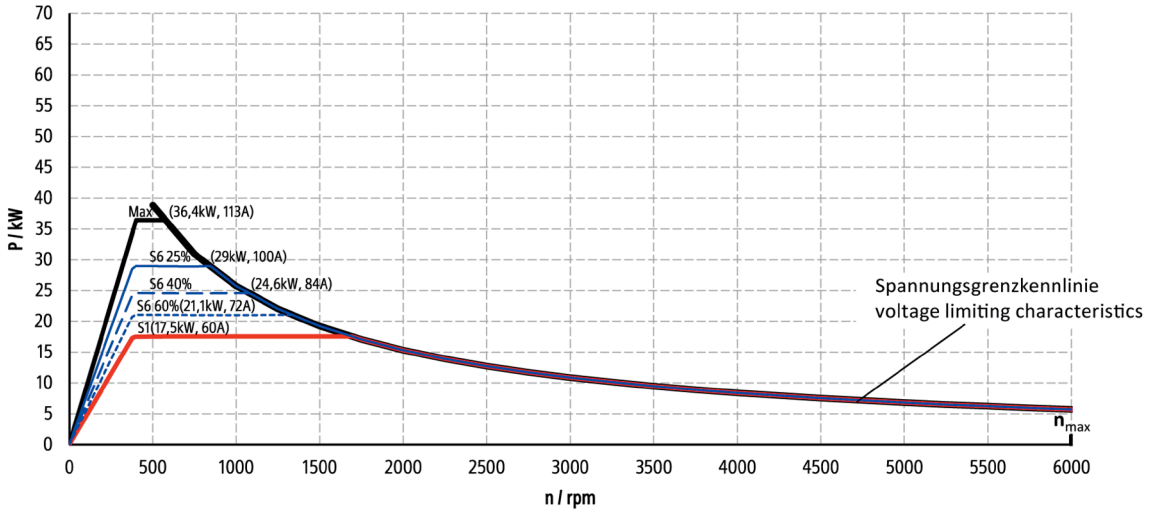


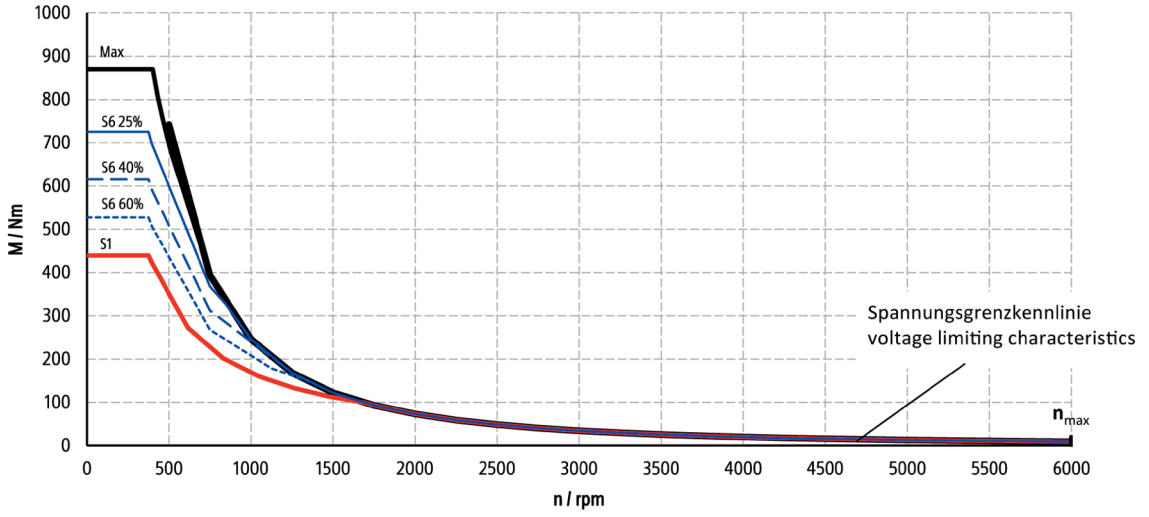


PD_1FE2145-8CCxx-xxx2 Y_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
400	17.5	418	60.0	6000	3300	1600	4900	1700	870	113	420	58

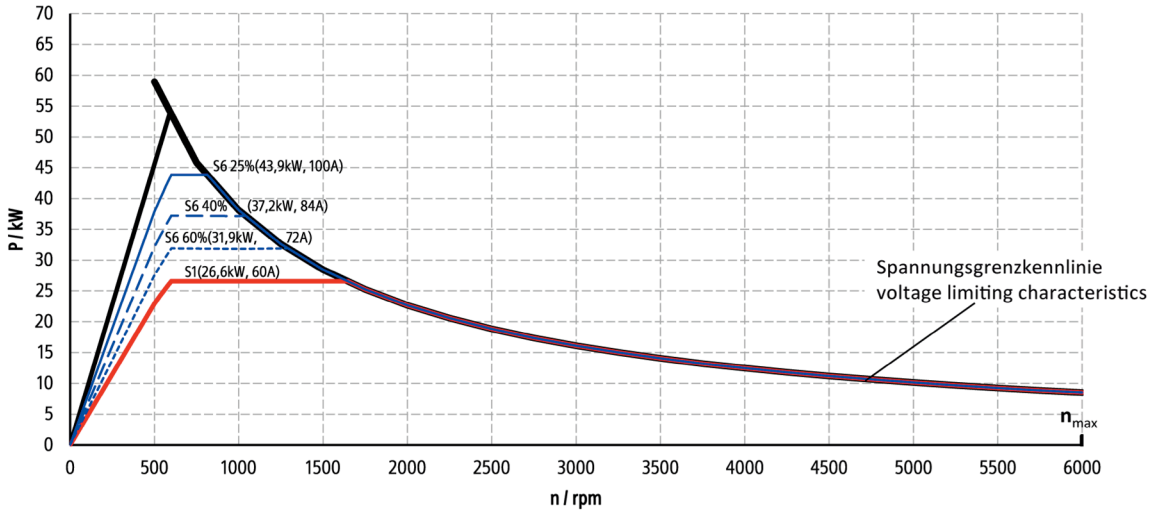


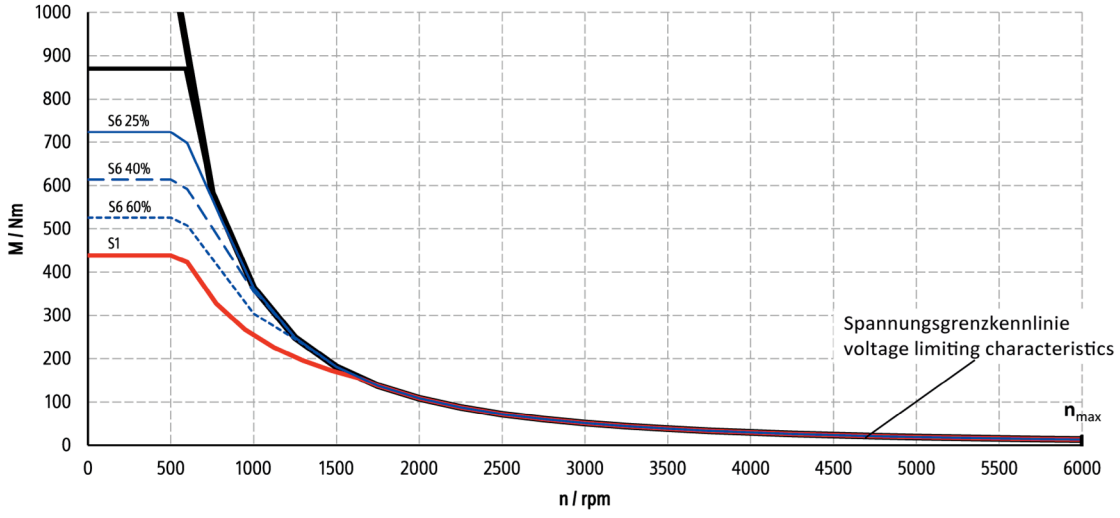


PD_1FE2145-8CCxx-xxx2 Y_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
600	26.5	422	60.0	6000	3300	1600	4900	1600	870	113	420	58

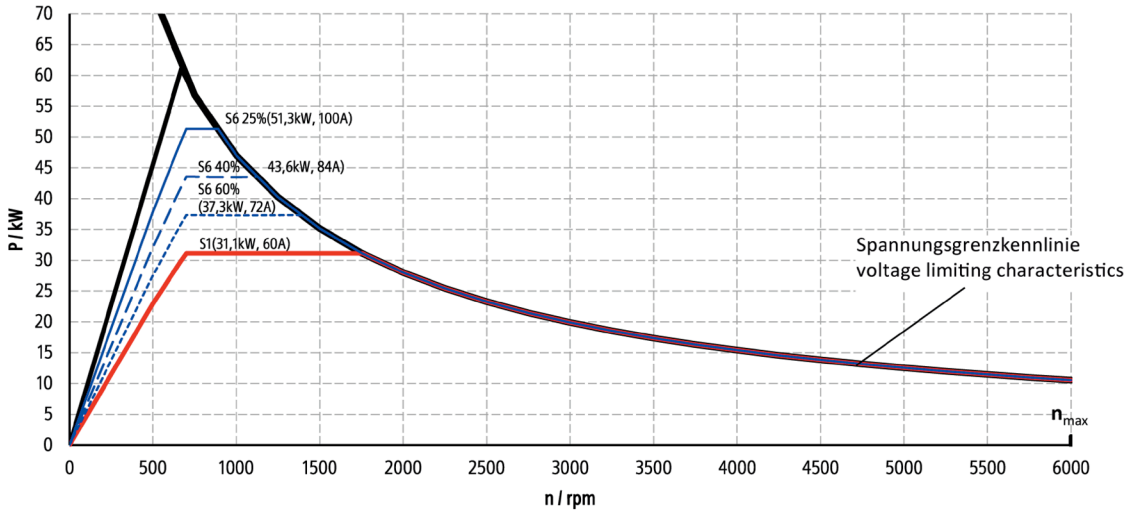


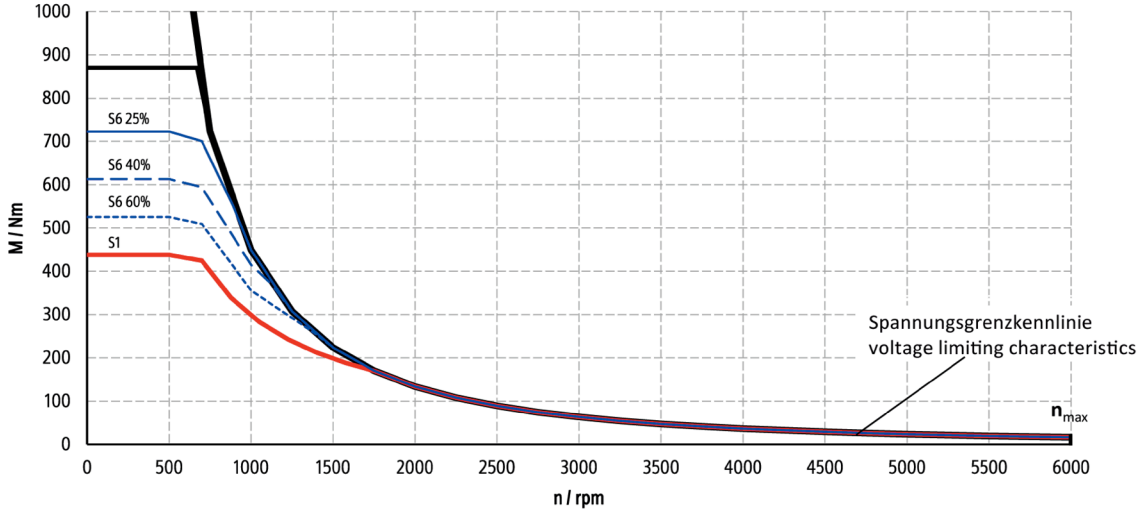


PD_1FE2145-8CCxx-xxx2 Y_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
700	31.0	423	60.0	6000	3300	1600	4900	1700	870	113	in	58



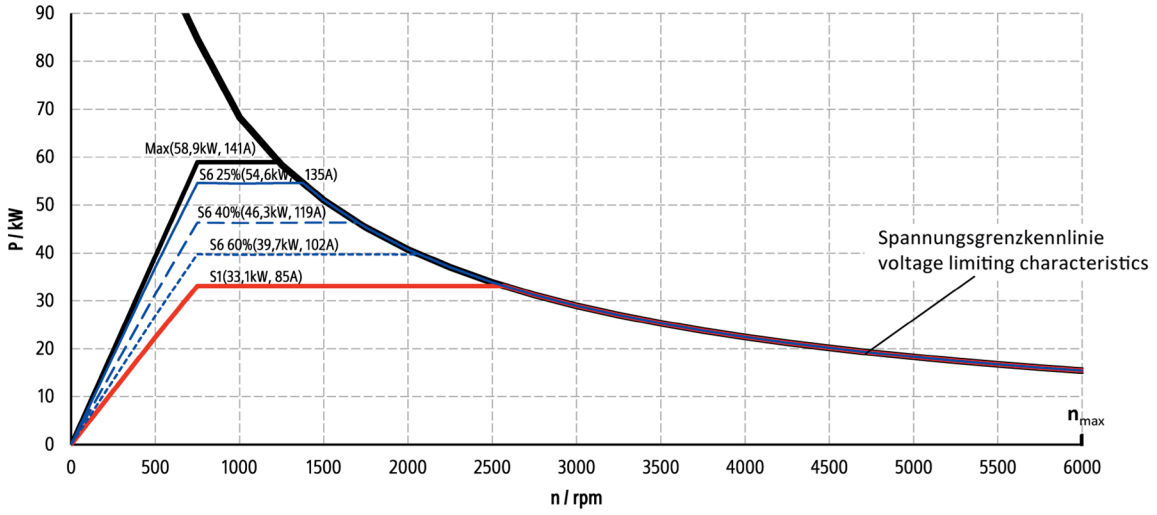


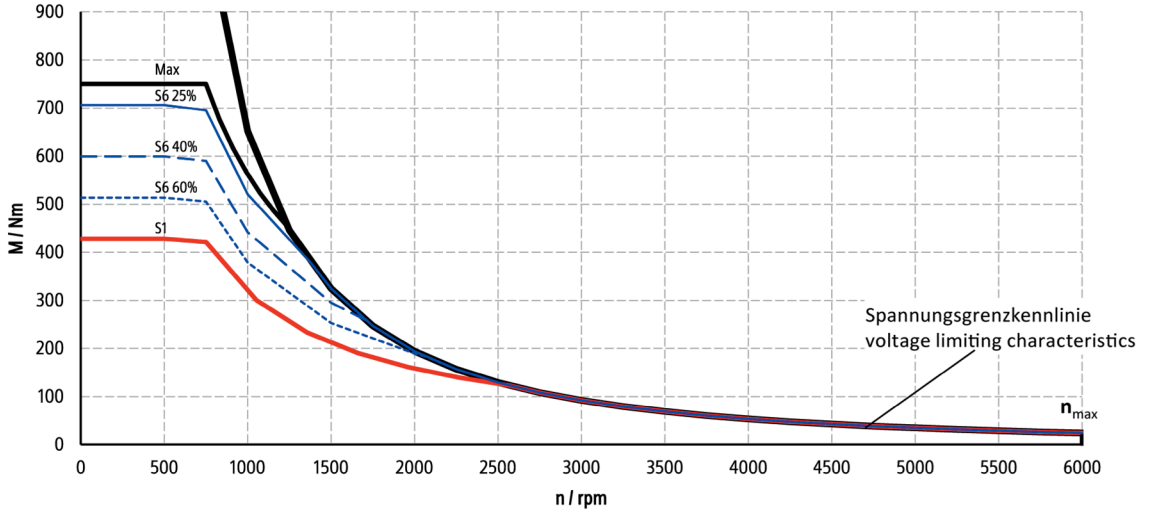
PD_1FE2145-8CCxx-xxx2 Y_Index_--4

2.2.4.9 PD_1FE2145-8CExx-xxx1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
750	33.0	420	85.0	6000	3700	1800	5500	2600	750	141	430	84

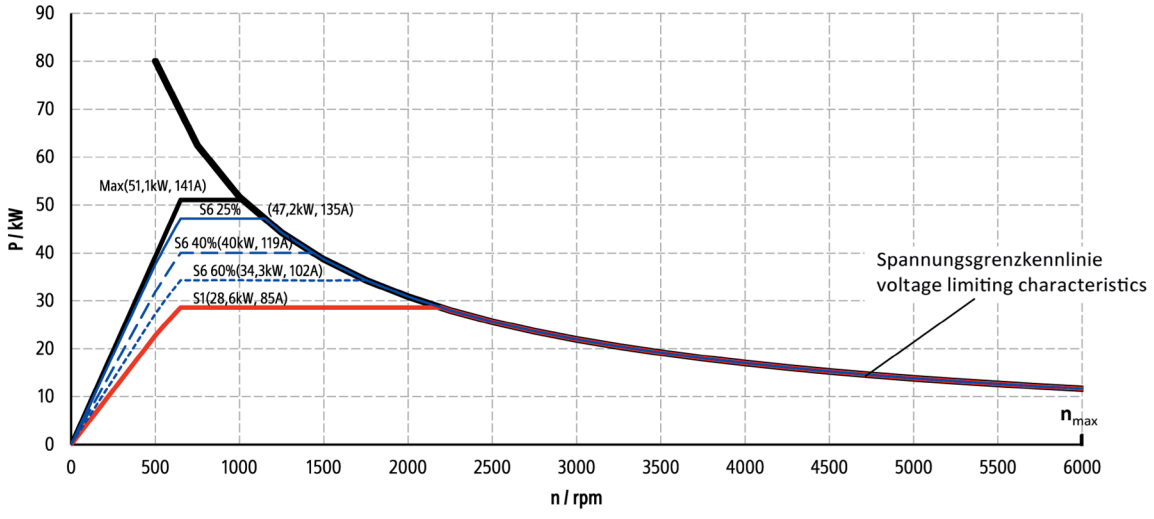


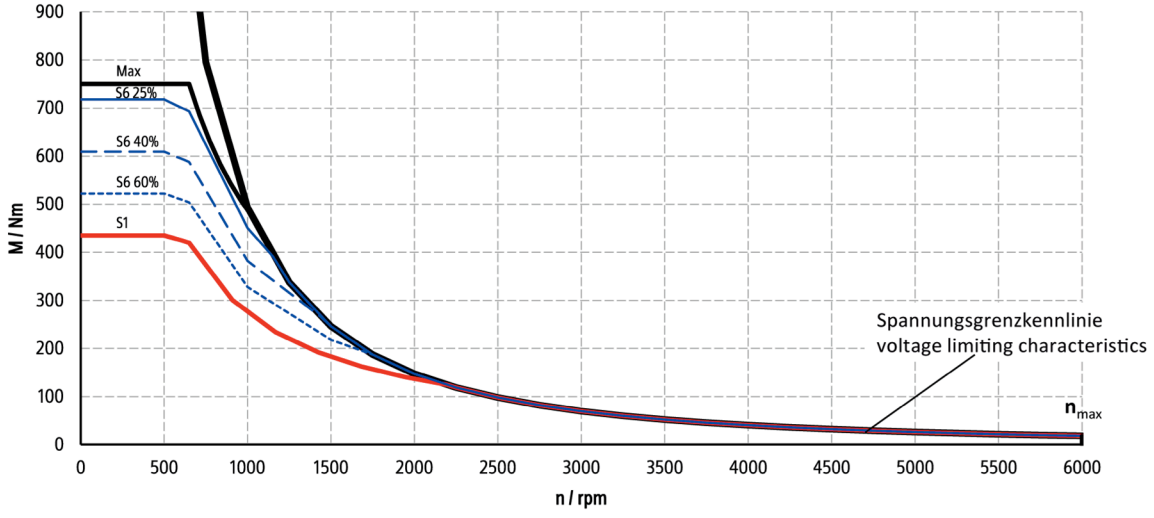


PD_1FE2145-8CExx-xxx1_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
650	28.5	419	85.0	6000	3700	1800	5500	2200	750	141	430	84

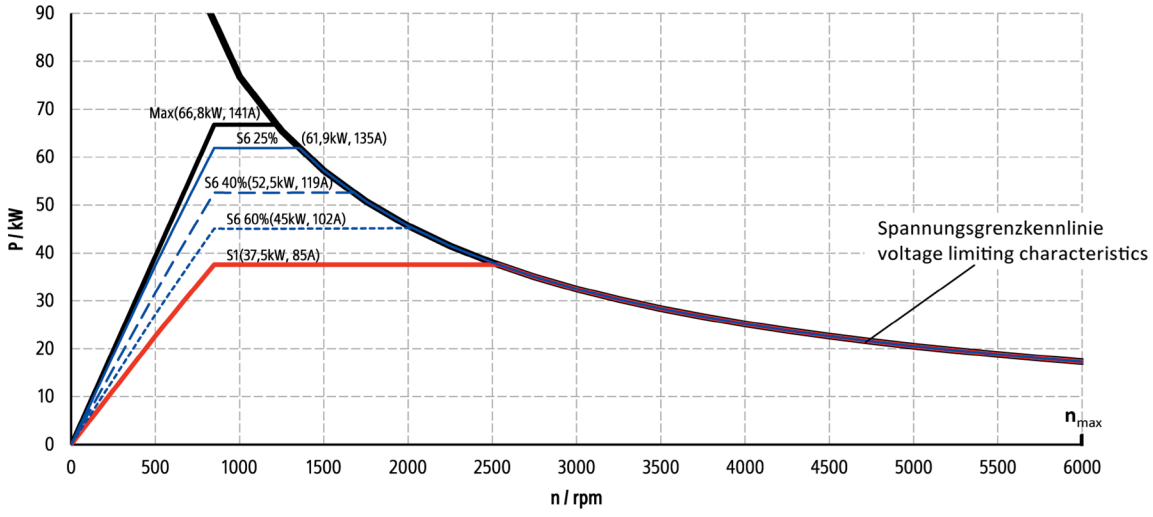


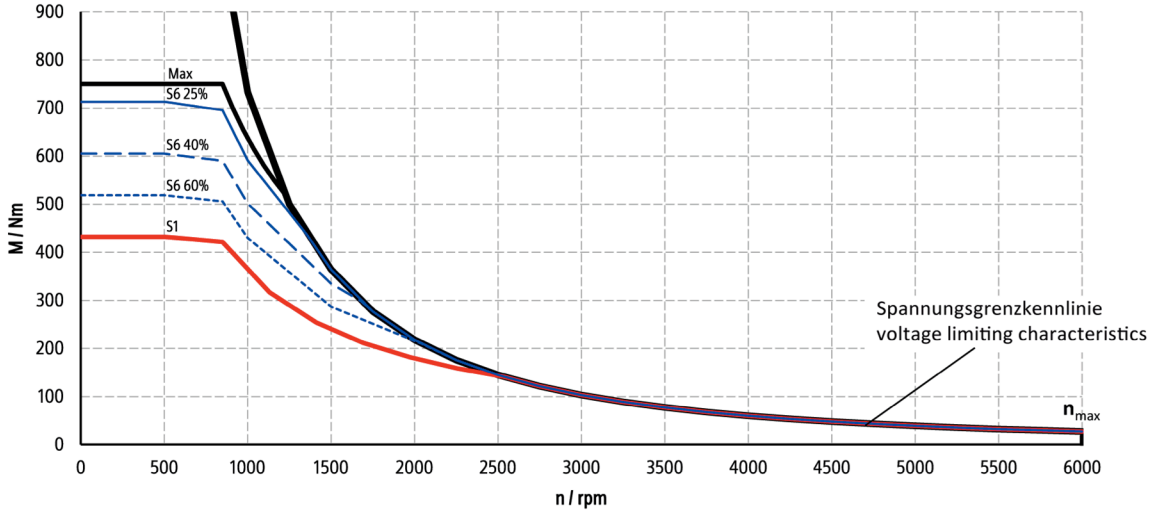


PD_1FE2145-8CExx-xxx1_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
850	37.5	421	85.0	6000	3700	1800	5500	2500	750	141	430	84

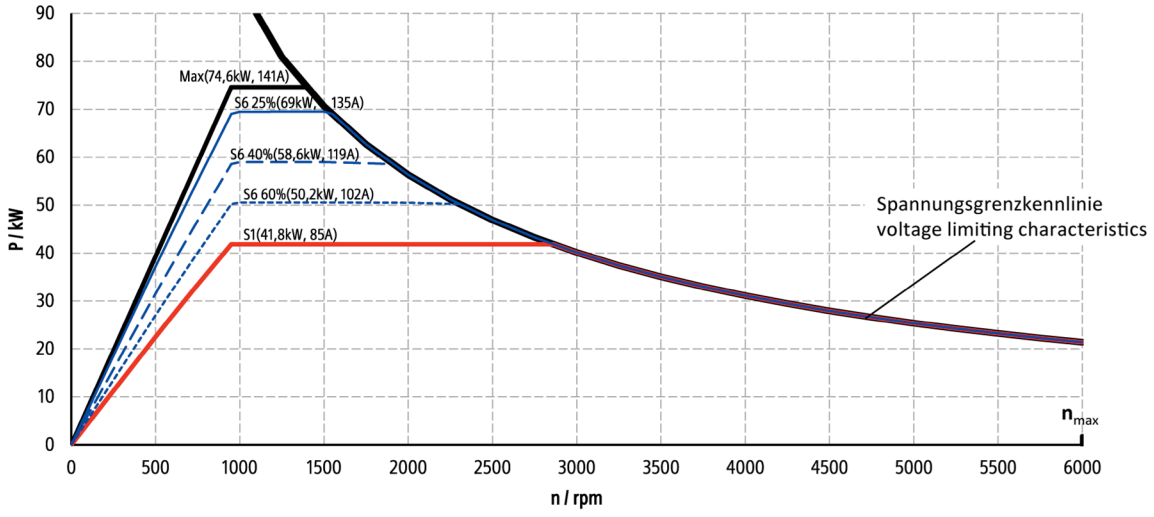


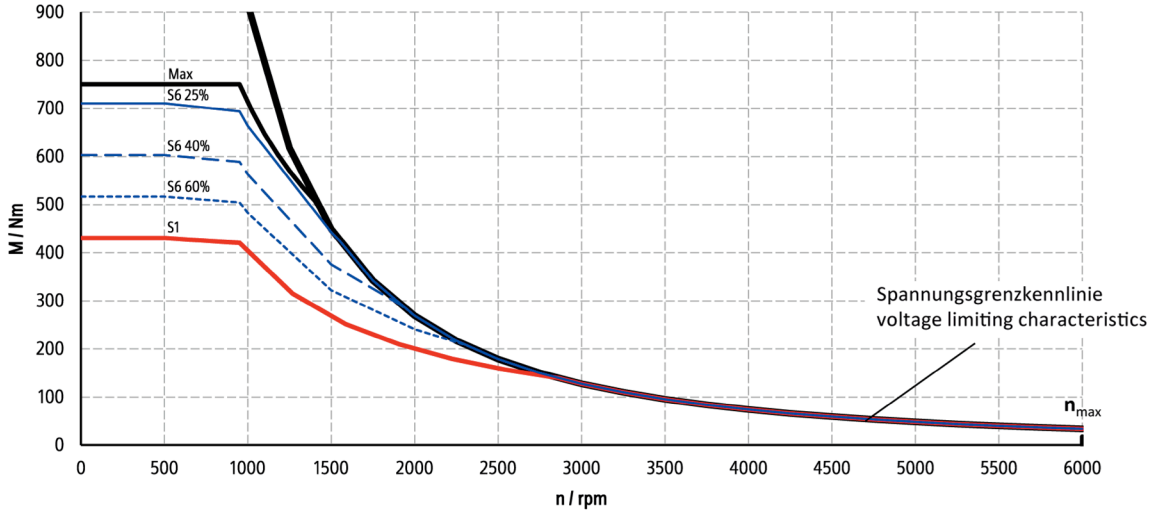


PD_1FE2145-8CExx-xxx1_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
950	42.0	422	85.0	6000	3700	1800	5500	2800	750	141	in	84



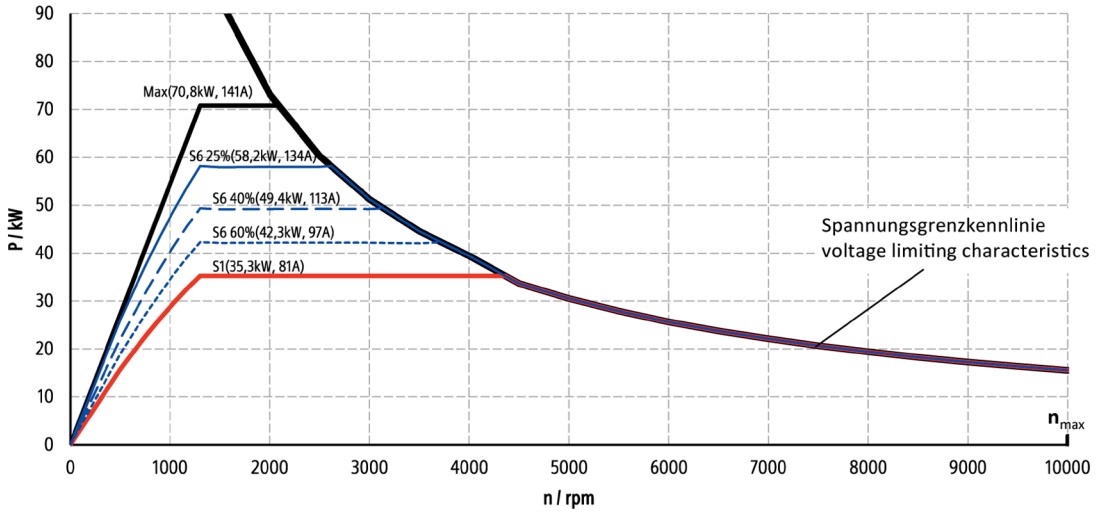


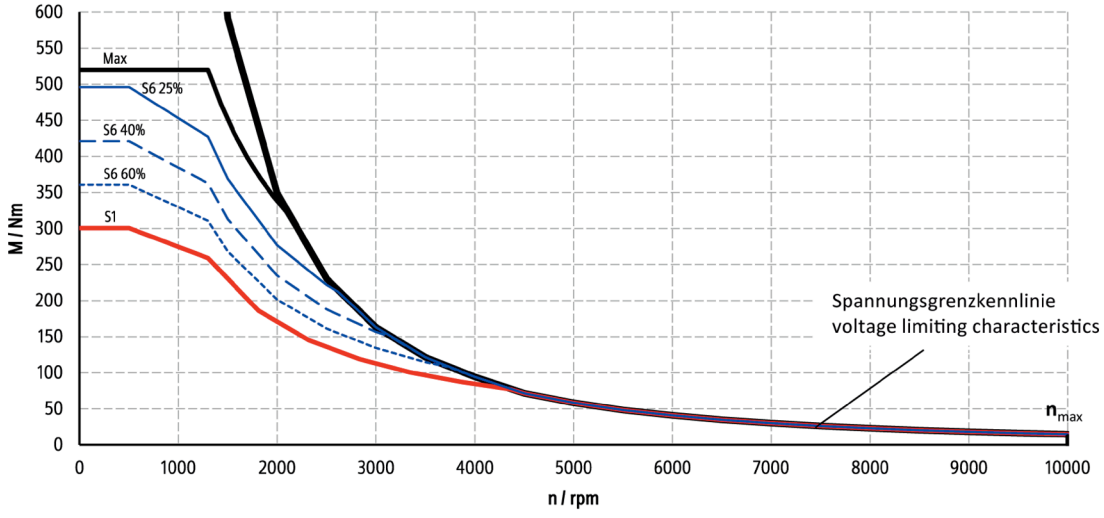
PD_1FE2145-8CExx-xxx1_Index_--4

2.2.4.10 PD_1FE2147-8CCxx-xxx2 D

SINAMICS, 3 AC 400 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1300	35.0	257	81.0	10000	2350	450	2800	4300	520	141	300	85

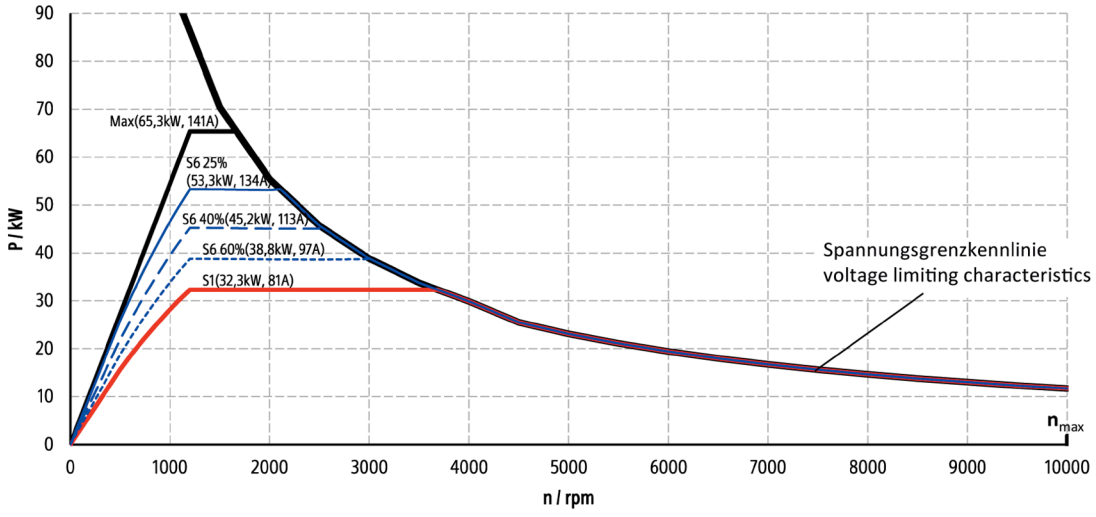


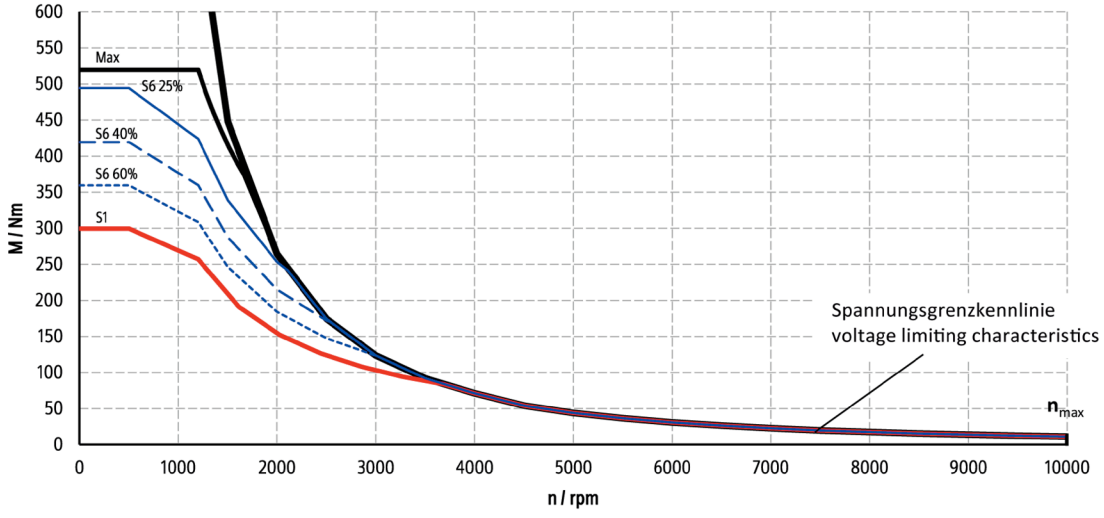


PD_1FE2147-8CCxx-xxx2 D_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1200	32.0	255	81.0	10000	2350	450	2800	3700	520	141	300	85

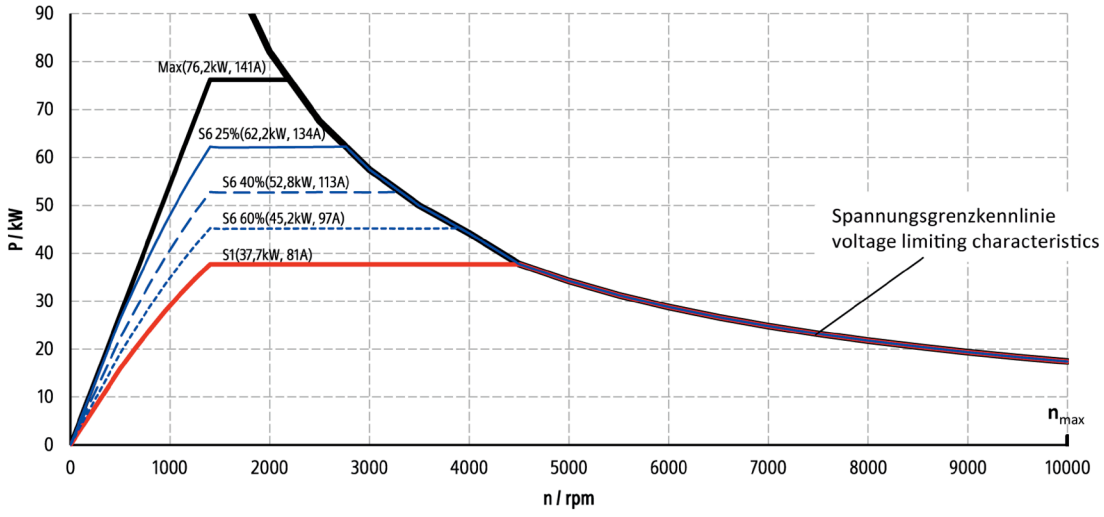


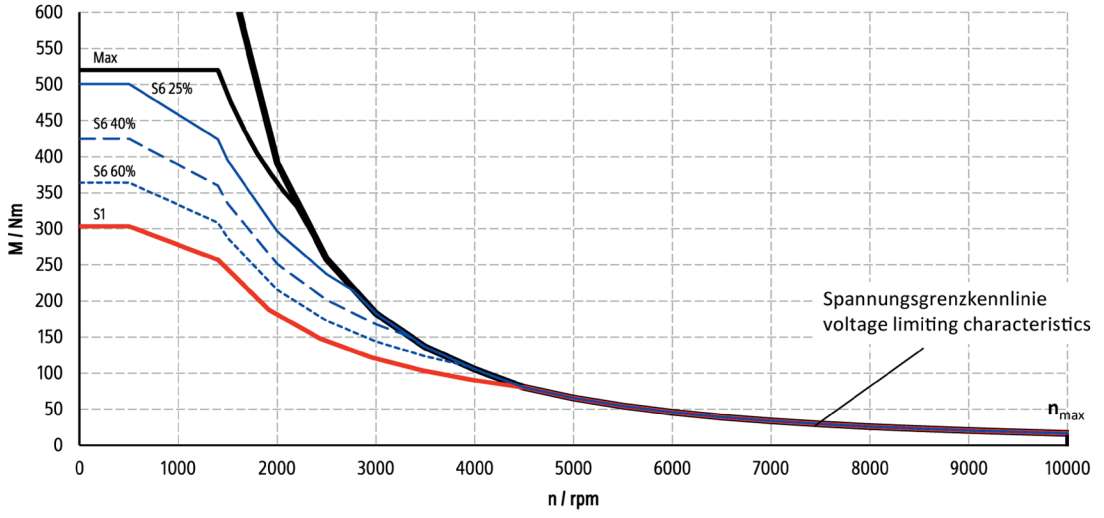


PD_1FE2147-8CCxx-xxx2 D_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1400	37.5	256	81.0	10000	2350	450	2800	4500	520	141	300	85

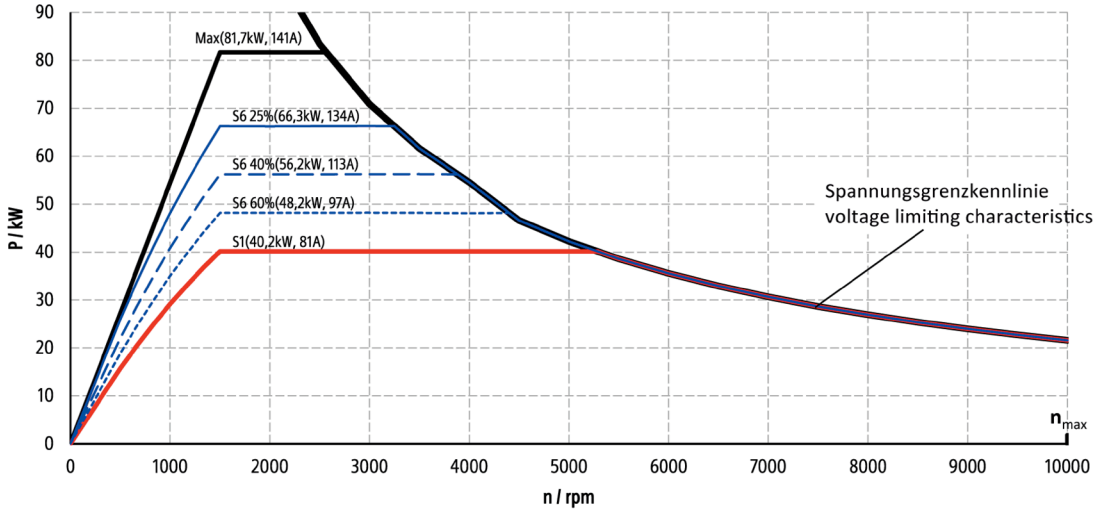


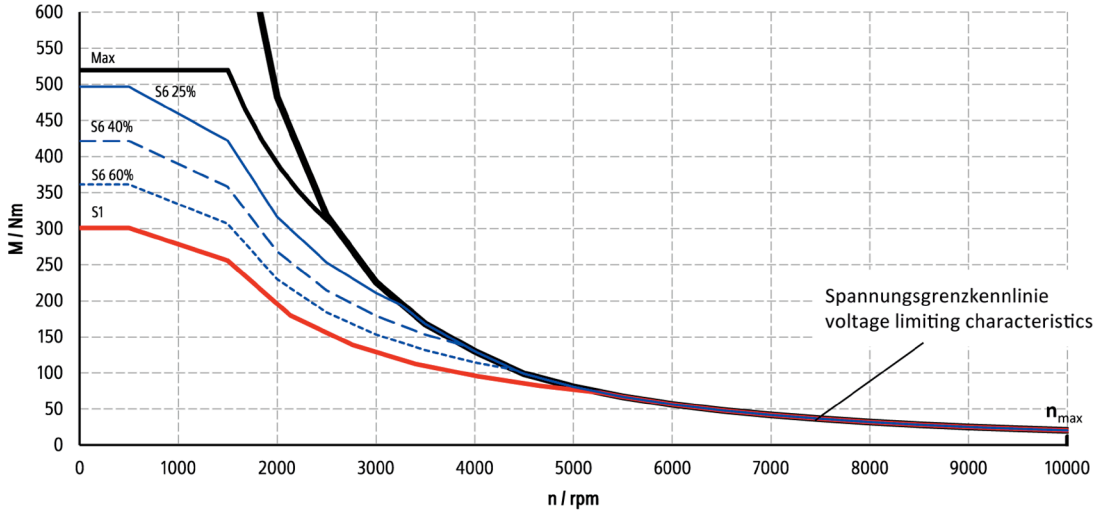


PD_1FE2147-8CCxx-xxx2 D_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), delta connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
1500	40.0	255	81.0	10000	2350	450	2800	5300	520	141	in	85



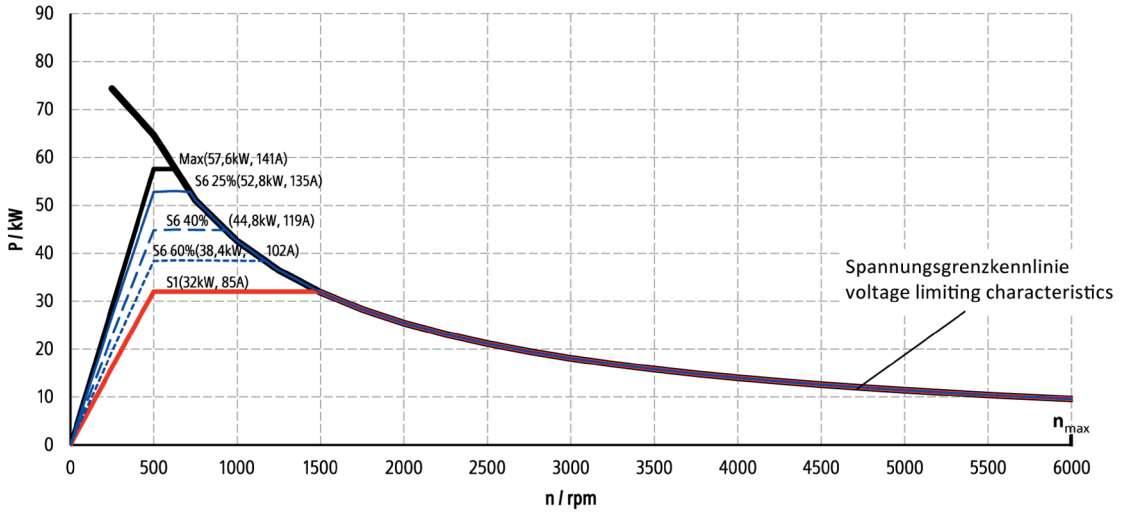


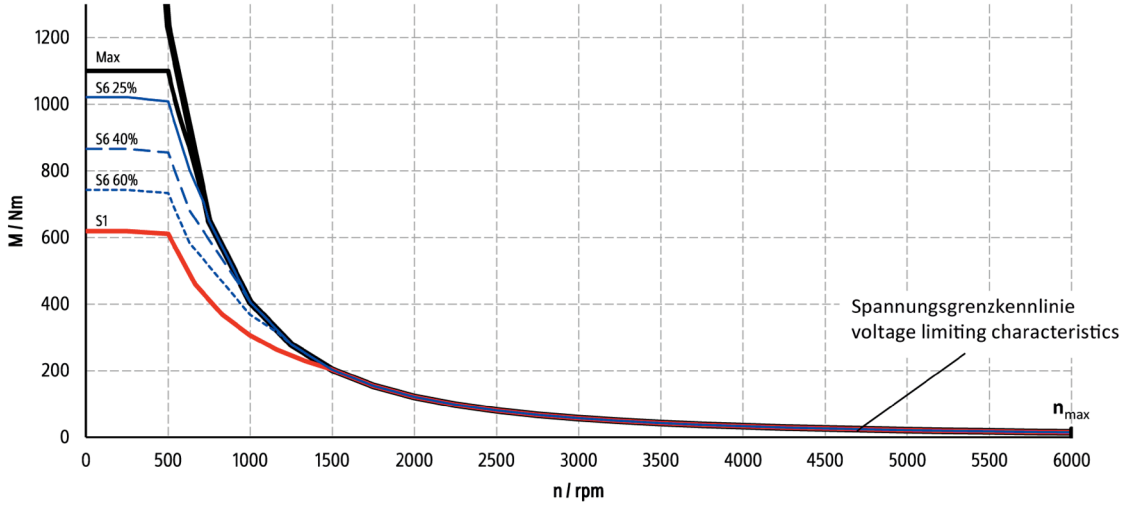
PD_1FE2147-8CCxx-xxx2 D_Index_--4

2.2.4.11 PD_1FE2147-8CCxx-xxx2 Y

SINAMICS, 3 AC 400 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
500	32.0	611	85.0	6000	4500	2600	7100	1500	1100	141	620	82

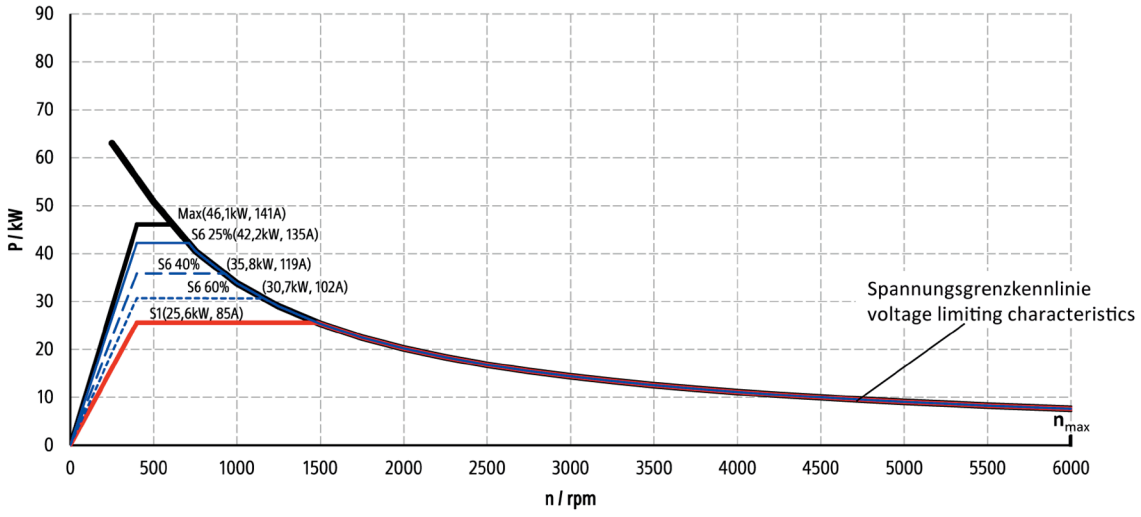


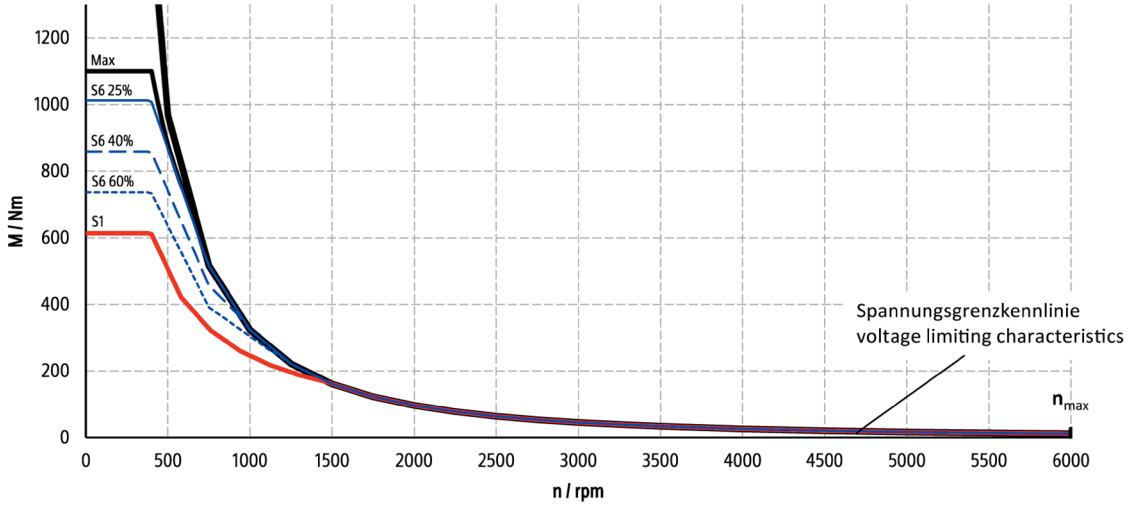


PD_1FE2147-8CCxx-xxx2 Y_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
400	25.5	609	85.0	6000	4500	2600	7100	1500	1100	141	620	82

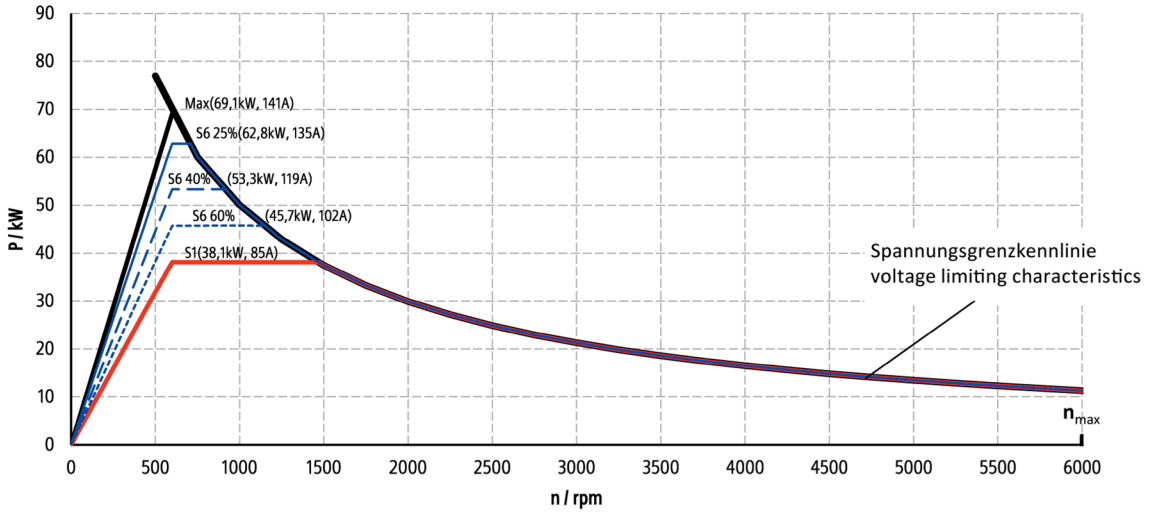


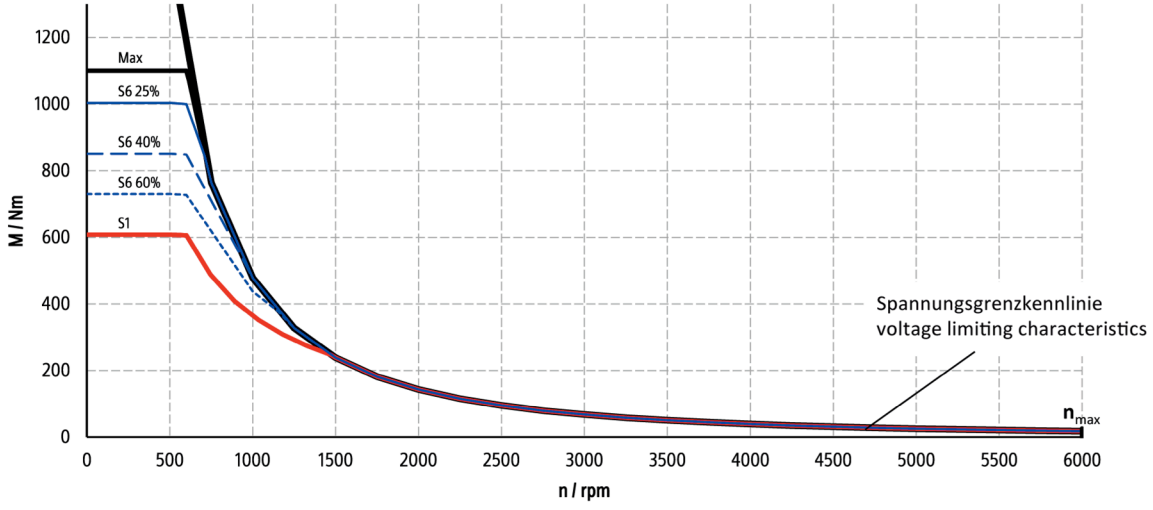


PD_1FE2147-8CCxx-xxx2 Y_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
600	38.0	605	85.0	6000	4500	2600	7100	1500	1100	141	620	82

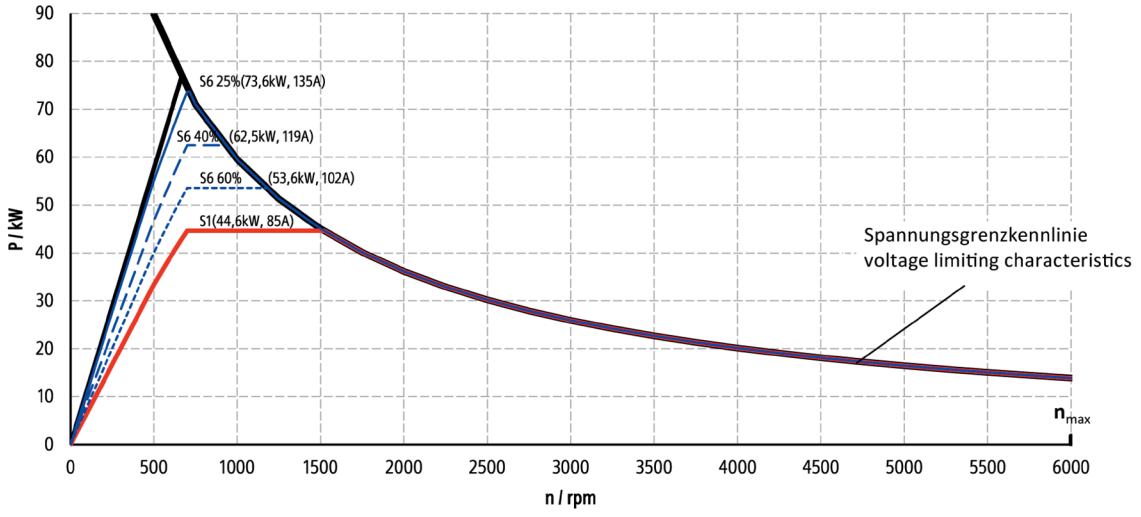


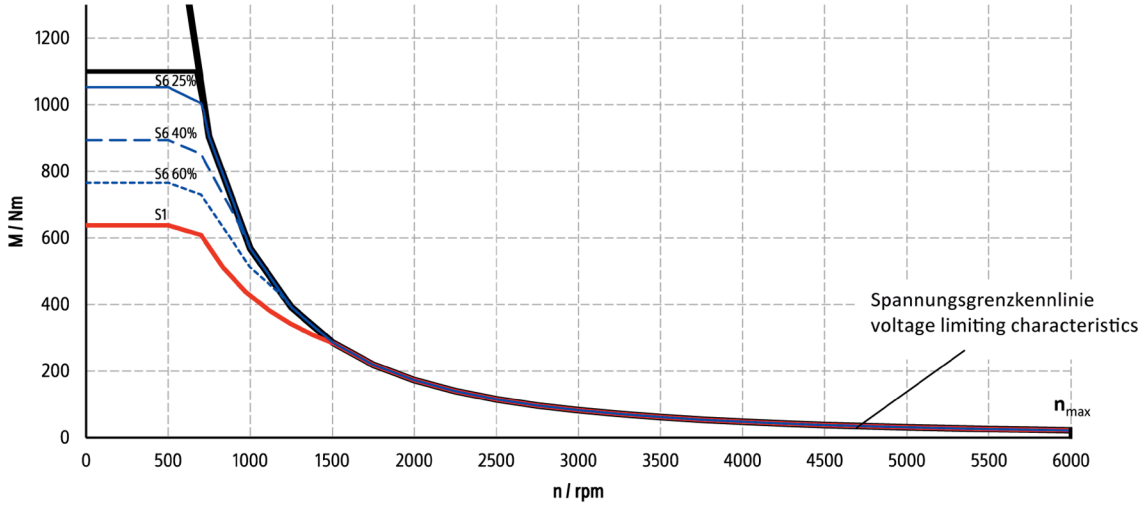


PD_1FE2147-8CCxx-xxx2 Y_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM), star connection

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
700	44.5	607	85.0	6000	4500	2600	7100	1500	1100	141	620	82



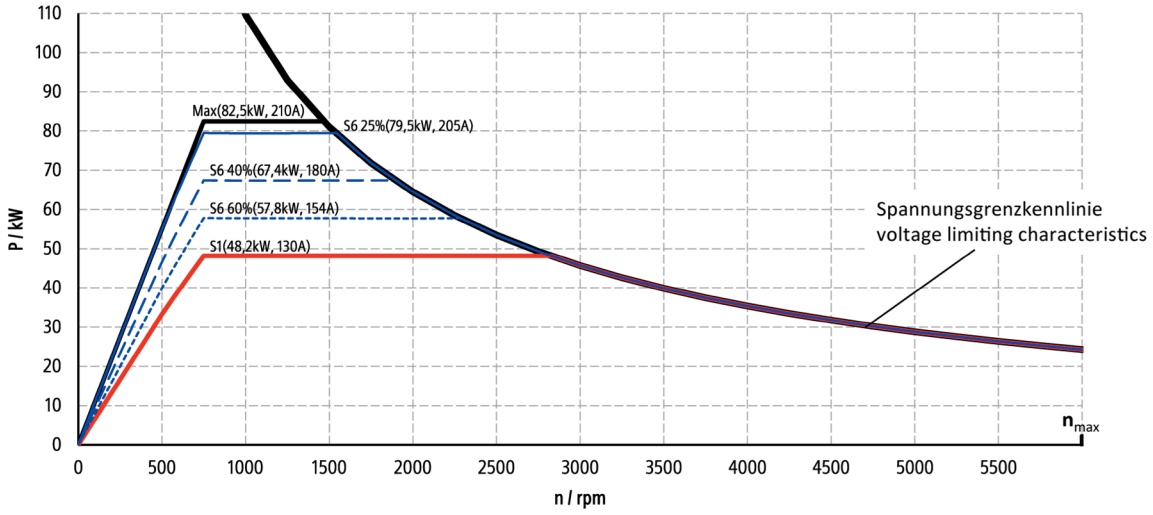


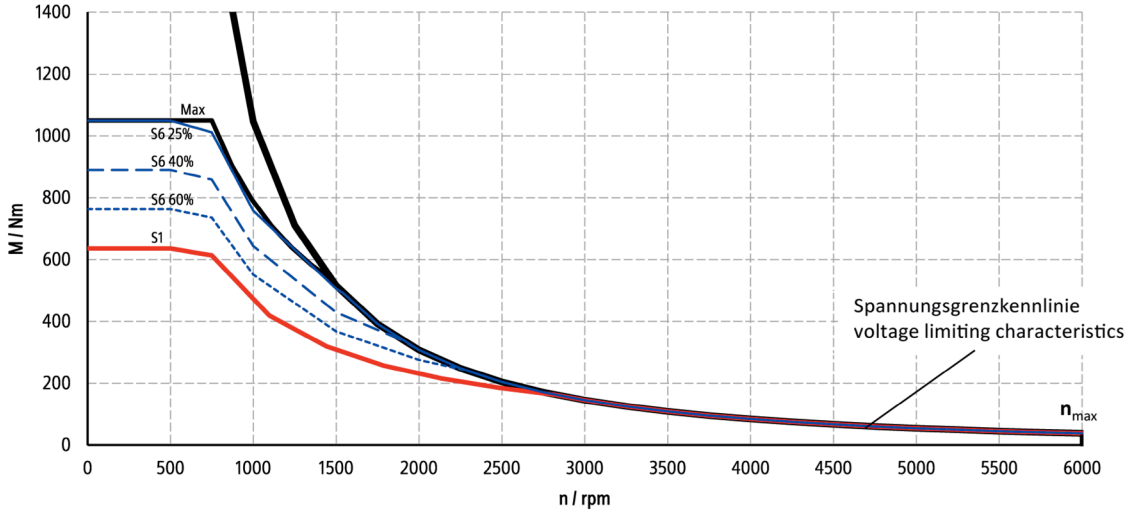
PD_1FE2147-8CCxx-xxx2 Y_Index_--4

2.2.4.12 PD_1FE2147-8CExx-xxx1

SINAMICS, 3 AC 400 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
750	48.0	611	130.0	6000	4500	2600	7100	2800	1050	210	640	129

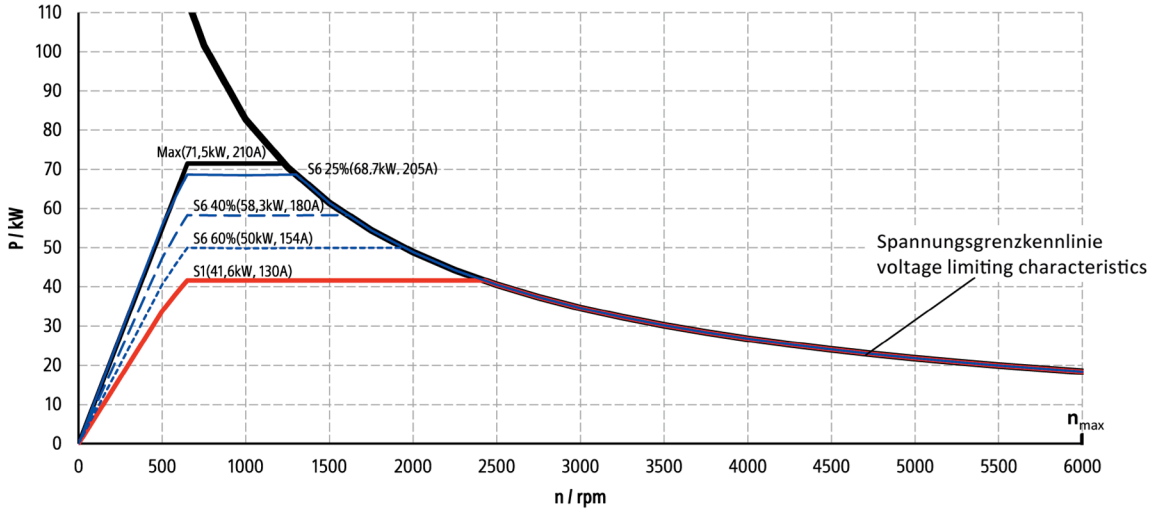


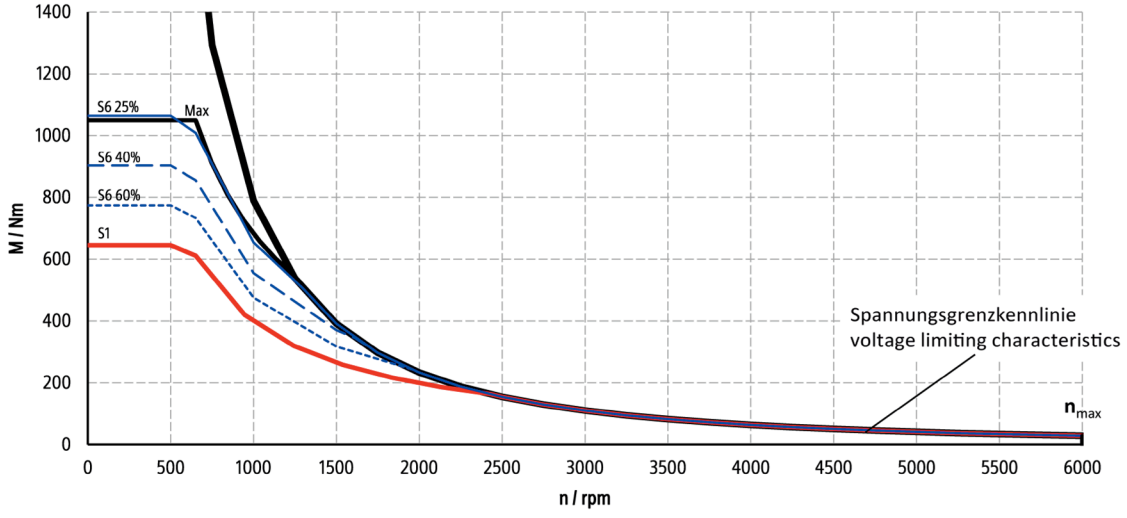


PD_1FE2147-8CExx-xxx1_Index_--1

SINAMICS, 3 AC 400 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
650	41.5	610	130.0	6000	4500	2600	7100	2400	1050	210	640	129

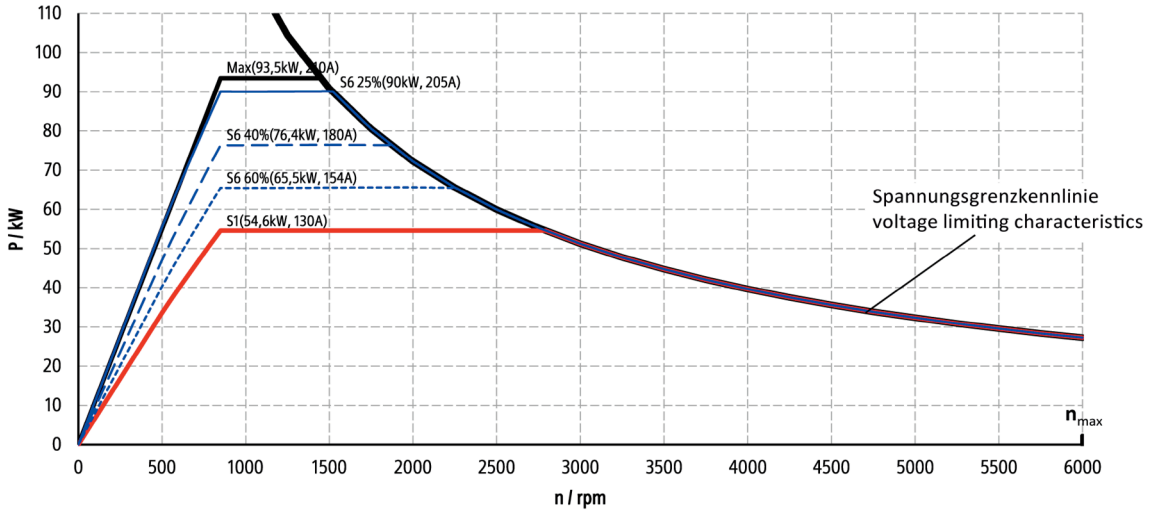


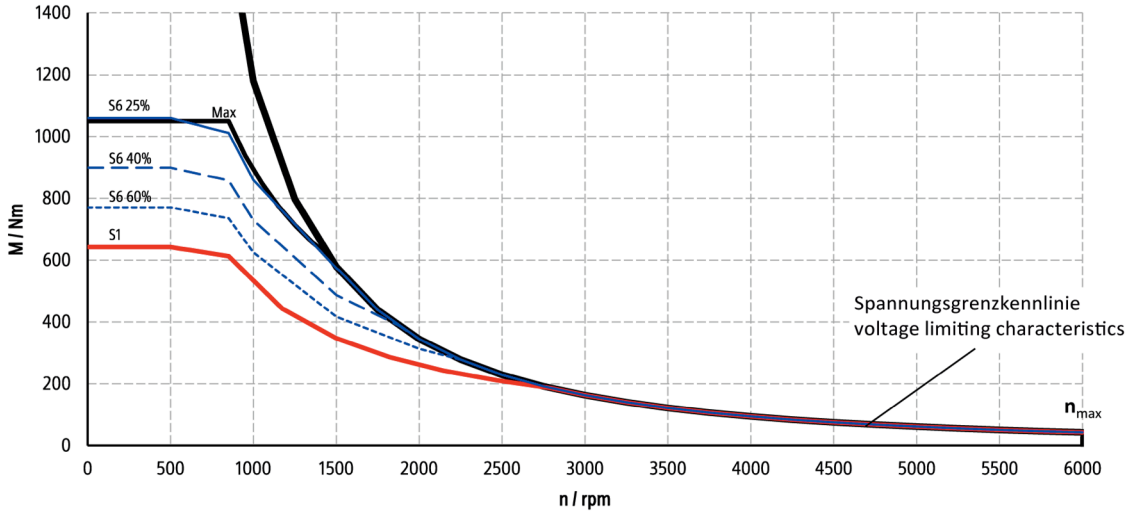


PD_1FE2147-8CExx-xxx1_Index_--2

SINAMICS, 3 AC 480 V, Smart/Basic Line Module, (SLM/BLM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
850	54.5	612	130.0	6000	4500	2600	7100	2800	1050	210	640	129

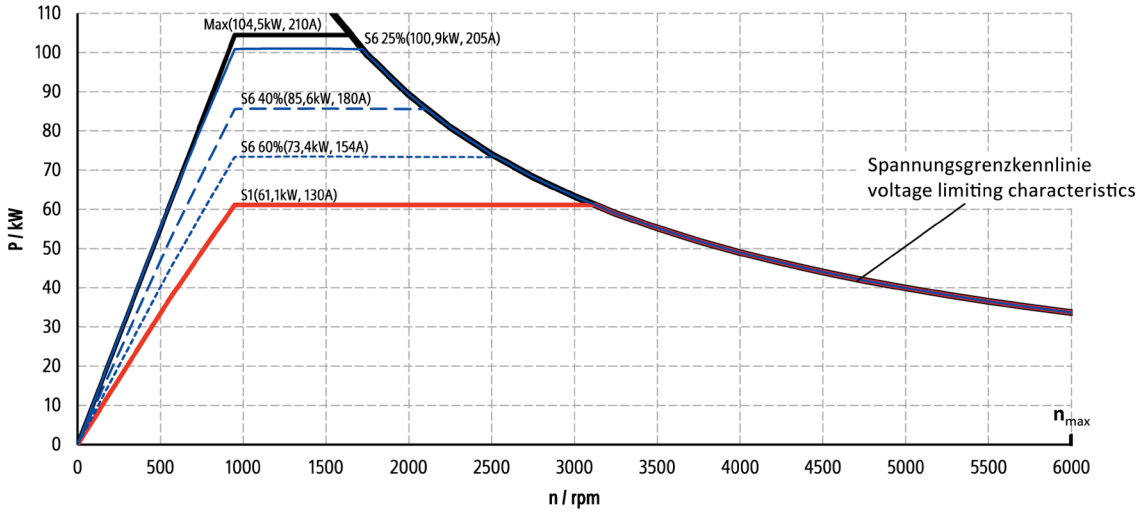


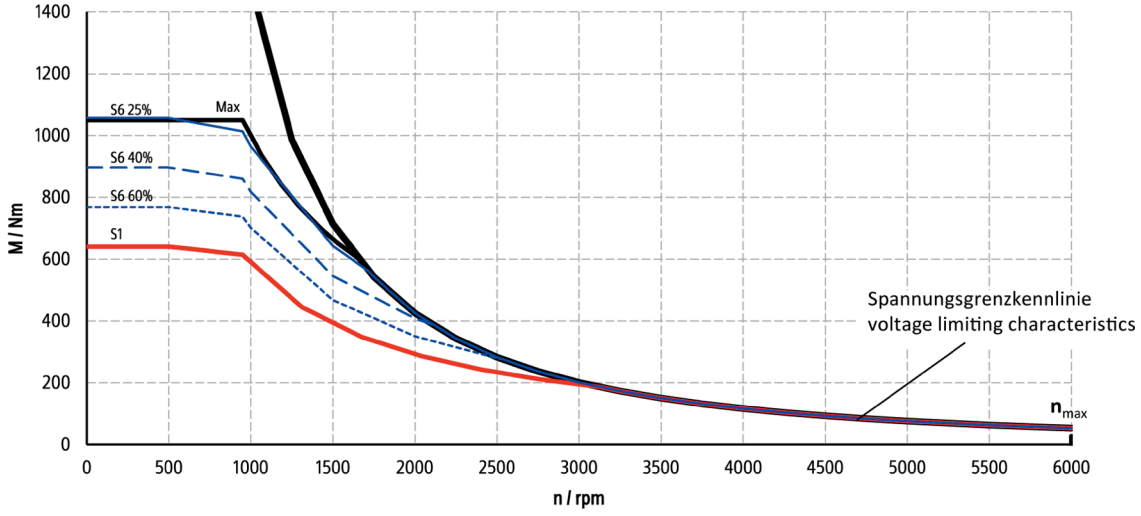


PD_1FE2147-8CExx-xxx1_Index_--3

SINAMICS, 3 AC 480 V, Active Line Module (ALM)

n_N in rpm	P_N in kW	M_N in Nm	I_N in A	n_{max} in rpm	$P_{V,stator}$ in W	$P_{V,rotor}$ in W	$P_{V,total}$ in W	n_2 in rpm	M_{max} in Nm	I_{max} in A	M_0 in Nm	I_0 in A
950	61.0	613	130.0	6000	4500	2600	7100	3100	1050	210	in	129





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Siemens AG
Digital Industries
Motion Control
Postfach 31 80
91050 ERLANGEN
Germany

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