

## BRUSHLESS MOTORS

## NX110EAP

ELECTRONIC DRIVE

DRIVE 1 / 4 Arms



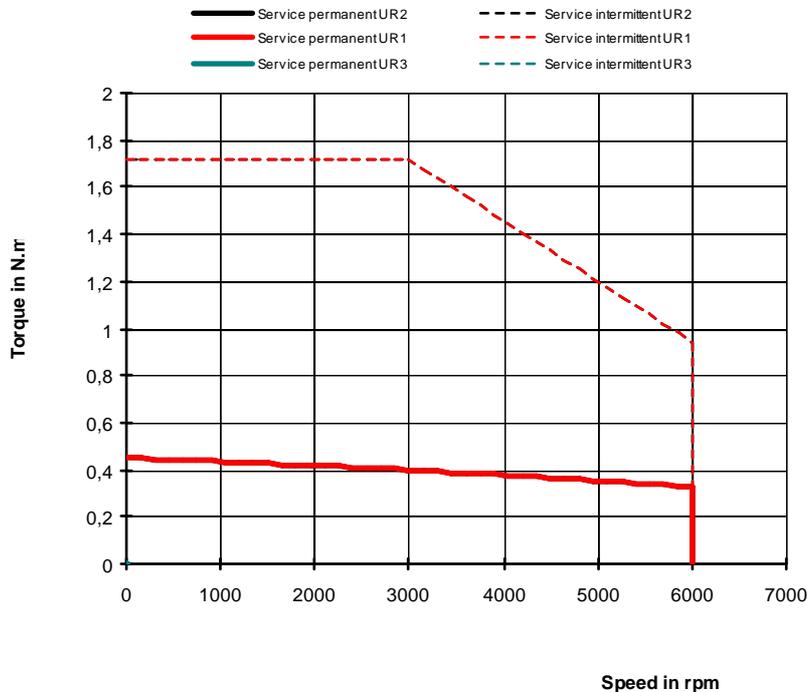
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	230		
Max mechanical speed	Nmax	t/min	20000		
Torque at low speed	M <sub>b</sub>	Nm	0,45		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	0,989		
Peak torque	M <sub>p</sub>	Nm	1,7	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	3,96	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	29,9		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,455		
Winding resistance (25°C)*	R <sub>b</sub>	W	22,6		
Winding inductance*	L	mH	26,5		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	1,3		
Thermal time constant	T <sub>th</sub>	sec	150		
Motor mass	M	kg	0,85		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	-	-
Rated speed	Nn1 Nn2 Nn3	t/min	6000	-	-
Rated torque	Mn1 Mn2 Mn3	Nm	0,33	-	-
Rated current	In1 In2 In3	A <sub>rms</sub>	0,78	-	-
Rated power	Pn1 Pn2 Pn3	W	210	-	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

FICHE-009

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NX110EAP

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## BRUSHLESS MOTORS

## NX205EAS

ELECTRONIC DRIVE

DRIVE 1.5 / 7.5 Arms



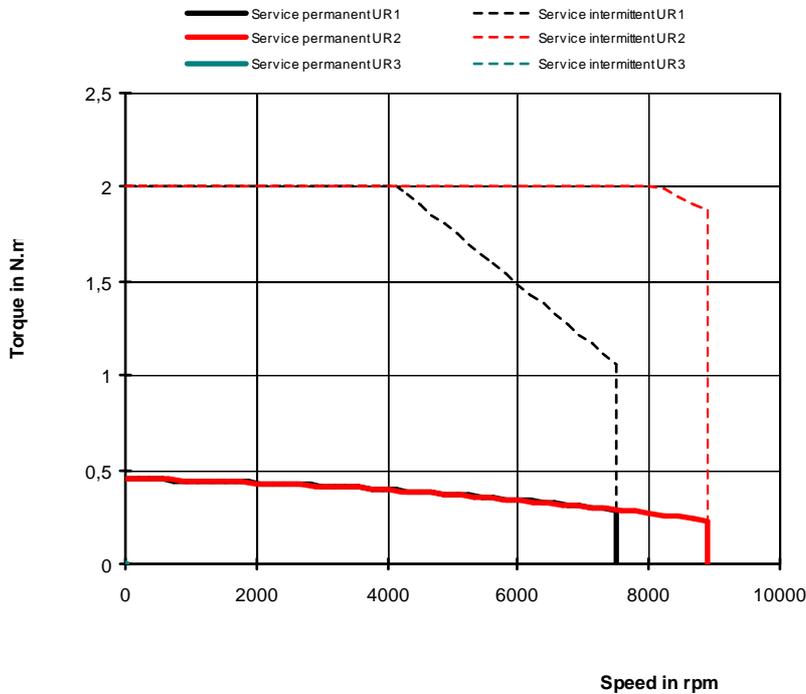
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	400		
Max mechanical speed	Nmax	t/min	20000		
Torque at low speed	M <sub>b</sub>	Nm	0,45		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	1,4		
Peak torque	M <sub>p</sub>	Nm	2,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	7,01	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	21,9		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,322		
Winding resistance (25°C)*	R <sub>b</sub>	W	8,89		
Winding inductance*	L	mH	24,3		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	2,1		
Thermal time constant	T <sub>th</sub>	sec	8,5		
Motor mass	M	kg	1		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	7500	8900	-
Rated torque	Mn1 Mn2 Mn3	Nm	0,29	0,23	-
Rated current	In1 In2 In3	A <sub>rms</sub>	0,96	0,80	-
Rated power	Pn1 Pn2 Pn3	W	230	210	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX205EAS

## BRUSHLESS MOTORS

## NX205EAV

ELECTRONIC DRIVE

DRIVE 1.5 / 6 Arms



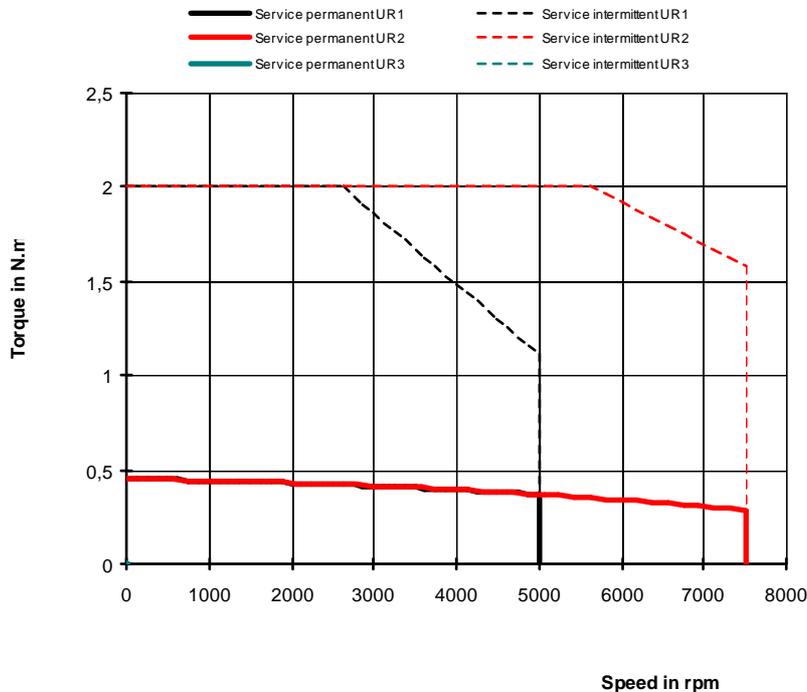
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	400		
Max mechanical speed	Nmax	t/min	20000		
Torque at low speed	M <sub>b</sub>	Nm	0,45		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	1,01		
Peak torque	M <sub>p</sub>	Nm	2,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	5,08	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	30,2		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,444		
Winding resistance (25°C)*	R <sub>b</sub>	W	17,6		
Winding inductance*	L	mH	46,4		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	2,1		
Thermal time constant	T <sub>th</sub>	sec	8,5		
Motor mass	M	kg	1		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	5000	7500	-
Rated torque	Mn1 Mn2 Mn3	Nm	0,37	0,29	-
Rated current	In1 In2 In3	A <sub>rms</sub>	0,86	0,69	-
Rated power	Pn1 Pn2 Pn3	W	190	230	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX205EAV

## BRUSHLESS MOTORS

## NX210EAG

ELECTRONIC DRIVE

DRIVE 3 / 11 Arms



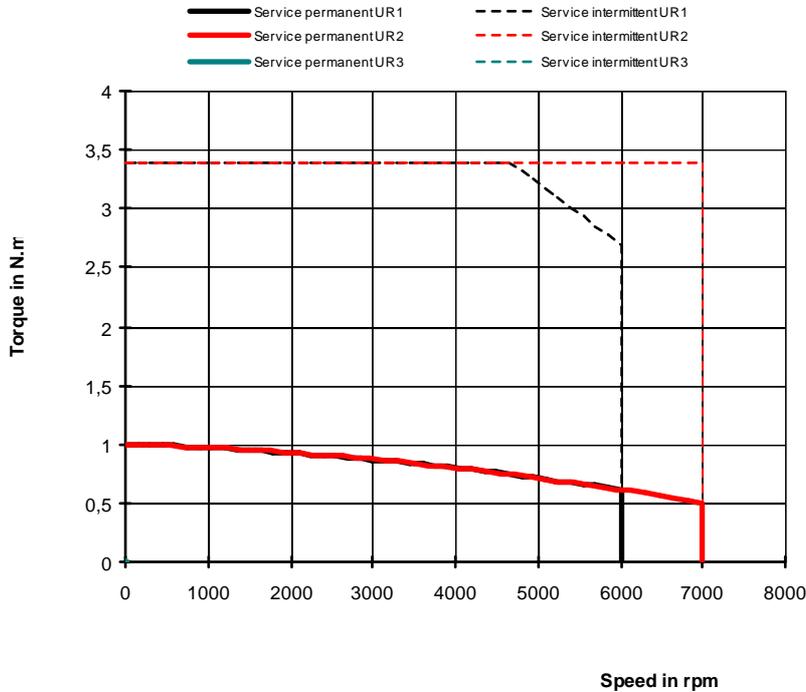
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	400		
Max mechanical speed	Nmax	t/min	20000		
Torque at low speed	$M_b$	Nm	1		
Permanent current at low speed	$I_o$	$A_{rms}$	2,75		
Peak torque	$M_p$	Nm	3,4	--	
Current for the peak torque	$I_p$	$A_{rms}$	11	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	23,6		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,364		
Winding resistance (25°C)*	$R_b$	W	3,89		
Winding inductance*	L	mH	8,26		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	3,8		
Thermal time constant	$T_{th}$	sec	350		
Motor mass	M	kg	1,3		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	6000	7000	-
Rated torque	Mn1 Mn2 Mn3	Nm	0,61	0,50	-
Rated current	In1 In2 In3	$A_{rms}$	1,83	1,53	-
Rated power	Pn1 Pn2 Pn3	W	390	370	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX210EAG

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## BRUSHLESS MOTORS

## NX210EAP

ELECTRONIC DRIVE

DRIVE 2 / 8 Arms



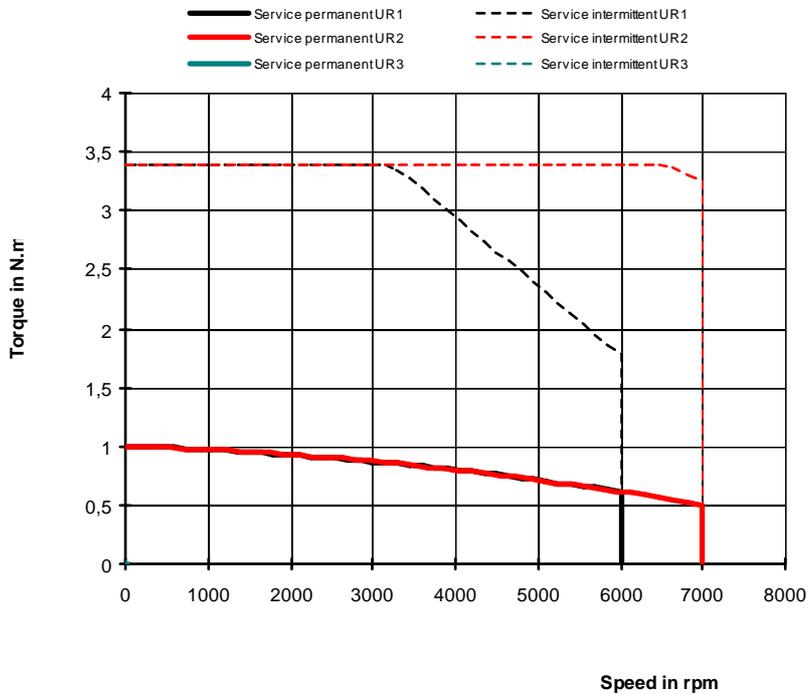
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	400		
Max mechanical speed	Nmax	t/min	20000		
Torque at low speed	M <sub>b</sub>	Nm	1		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	1,99		
Peak torque	M <sub>p</sub>	Nm	3,4	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	7,96	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	32,6		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,503		
Winding resistance (25°C)*	R <sub>b</sub>	W	7,74		
Winding inductance*	L	mH	15,8		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	3,8		
Thermal time constant	T <sub>th</sub>	sec	350		
Motor mass	M	kg	1,3		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	6000	7000	-
Rated torque	Mn1 Mn2 Mn3	Nm	0,61	0,50	-
Rated current	In1 In2 In3	A <sub>rms</sub>	1,32	1,11	-
Rated power	Pn1 Pn2 Pn3	W	390	370	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX210EAP

## BRUSHLESS MOTORS

## NX210EAT

ELECTRONIC DRIVE

DRIVE 1.5 / 6 Arms



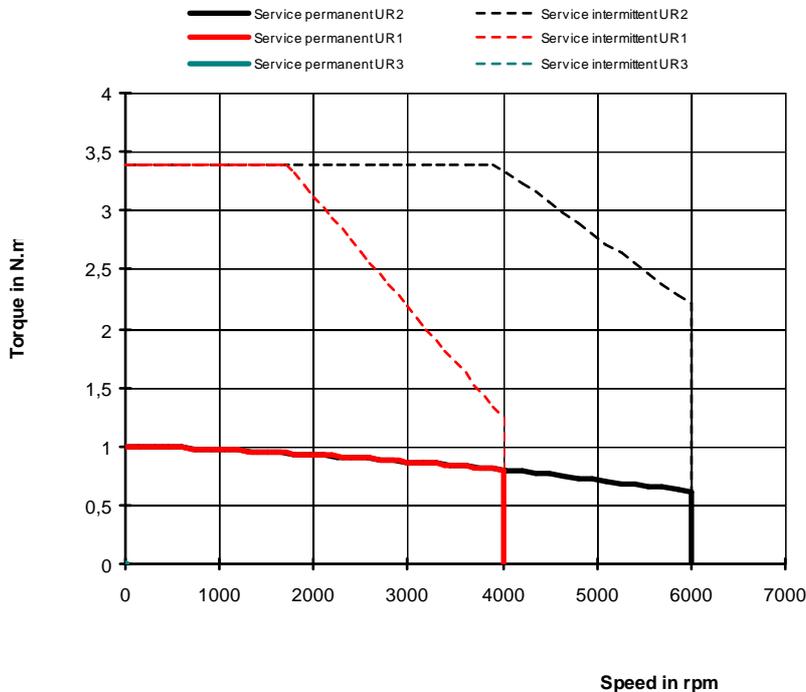
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	400		
Max mechanical speed	Nmax	t/min	20000		
Torque at low speed	$M_b$	Nm	1		
Permanent current at low speed	$I_o$	$A_{rms}$	1,33		
Peak torque	$M_p$	Nm	3,4	--	
Current for the peak torque	$I_p$	$A_{rms}$	5,35	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	48,6		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,75		
Winding resistance (25°C)*	$R_b$	W	16,3		
Winding inductance*	L	mH	35		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	3,8		
Thermal time constant	$T_{th}$	sec	350		
Motor mass	M	kg	1,3		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	4000	6000	-
Rated torque	Mn1 Mn2 Mn3	Nm	0,80	0,61	-
Rated current	In1 In2 In3	$A_{rms}$	1,11	0,89	-
Rated power	Pn1 Pn2 Pn3	W	330	390	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX210EAT

## BRUSHLESS MOTORS

## NX310EAI

ELECTRONIC DRIVE

DRIVE 3.5 / 14 Arms



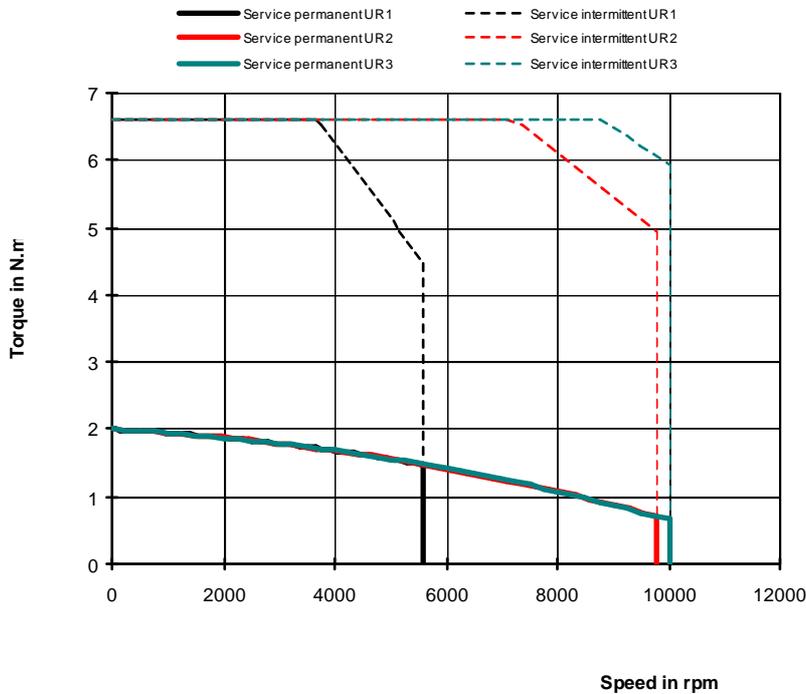
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	15000		
Torque at low speed	$M_b$	Nm	2		
Permanent current at low speed	$I_o$	$A_{rms}$	3,38		
Peak torque	$M_p$	Nm	6,6	--	
Current for the peak torque	$I_p$	$A_{rms}$	13,5	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	36,5		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,591		
Winding resistance (25°C)*	$R_b$	W	3,41		
Winding inductance*	L	mH	10,5		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	7,9		
Thermal time constant	$T_{th}$	min	20		
Motor mass	M	kg	2,1		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	5600	9800	10000
Rated torque	Mn1 Mn2 Mn3	Nm	1,48	0,71	0,66
Rated current	In1 In2 In3	$A_{rms}$	2,61	1,42	1,35
Rated power	Pn1 Pn2 Pn3	W	870	720	690

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX310EAI

## BRUSHLESS MOTORS

## NX310EAK

ELECTRONIC DRIVE

DRIVE 2.5 / 10 Arms



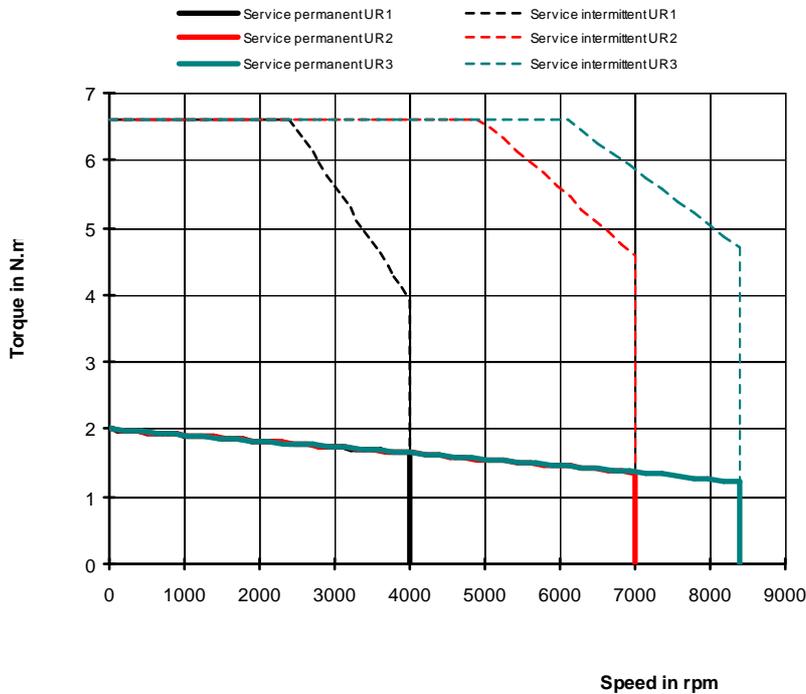
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	15000		
Torque at low speed	M <sub>b</sub>	Nm	2		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	2,43		
Peak torque	M <sub>p</sub>	Nm	6,6	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	9,71	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	50,9		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,823		
Winding resistance (25°C)*	R <sub>b</sub>	W	6,58		
Winding inductance*	L	mH	20,3		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	7,9		
Thermal time constant	T <sub>th</sub>	min	20		
Motor mass	M	kg	2,1		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4000	7000	8400
Rated torque	Mn1 Mn2 Mn3	Nm	1,65	1,36	1,22
Rated current	In1 In2 In3	A <sub>rms</sub>	2,06	1,76	1,61
Rated power	Pn1 Pn2 Pn3	W	690	1000	1070

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX310EAK

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## BRUSHLESS MOTORS

## NX310EAP

ELECTRONIC DRIVE

DRIVE 1.5 / 6 Arms



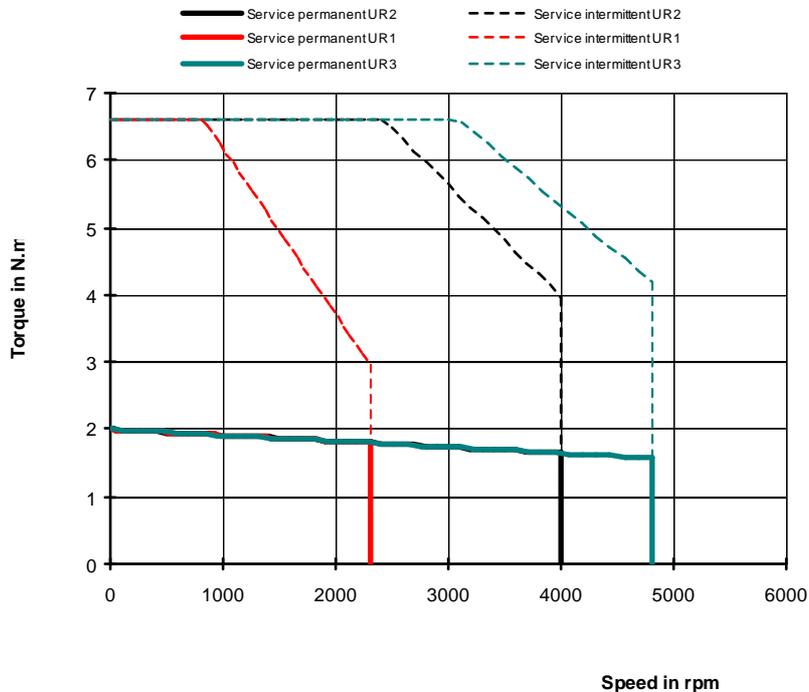
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	15000		
Torque at low speed	$M_b$	Nm	2		
Permanent current at low speed	$I_o$	$A_{rms}$	1,39		
Peak torque	$M_p$	Nm	6,6	--	
Current for the peak torque	$I_p$	$A_{rms}$	5,56	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	88,9		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,44		
Winding resistance (25°C)*	$R_b$	W	20,7		
Winding inductance*	L	mH	62		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	7,9		
Thermal time constant	$T_{th}$	min	20		
Motor mass	M	kg	2,1		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	4800
Rated torque	Mn1 Mn2 Mn3	Nm	1,80	1,65	1,57
Rated current	In1 In2 In3	$A_{rms}$	1,27	1,18	1,13
Rated power	Pn1 Pn2 Pn3	W	430	690	790

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX310EAP

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## BRUSHLESS MOTORS

## NX310EAX

ELECTRONIC DRIVE

DRIVE 4 / 16 Arms



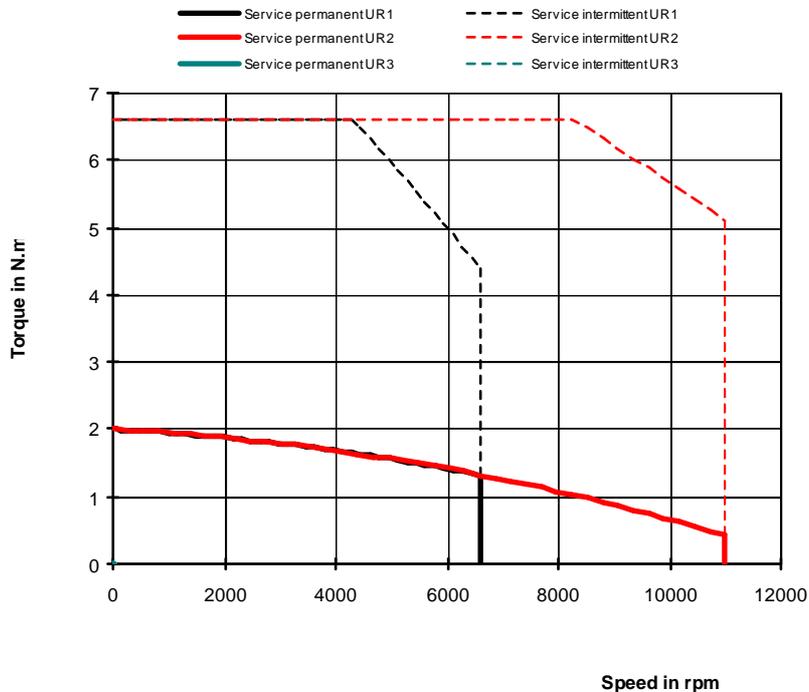
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	400		
Max mechanical speed	Nmax	t/min	15000		
Torque at low speed	M <sub>b</sub>	Nm	2		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	3,85		
Peak torque	M <sub>p</sub>	Nm	6,6	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	15,4	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V <sub>rms</sub>	32,1		
Torque sensitivity	Kt	Nm/A <sub>rms</sub>	0,52		
Winding resistance (25°C)*	Rb	W	2,68		
Winding inductance*	L	mH	8,08		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	7,9		
Thermal time constant	T <sub>th</sub>	min	20		
Motor mass	M	kg	2,1		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	6600	11000	-
Rated torque	Mn1 Mn2 Mn3	Nm	1,32	0,43	-
Rated current	In1 In2 In3	A <sub>rms</sub>	2,71	1,11	-
Rated power	Pn1 Pn2 Pn3	W	910	490	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX310EAX

## BRUSHLESS MOTORS

## NX420EAJ

ELECTRONIC DRIVE

DRIVE 5 / 20 Arms



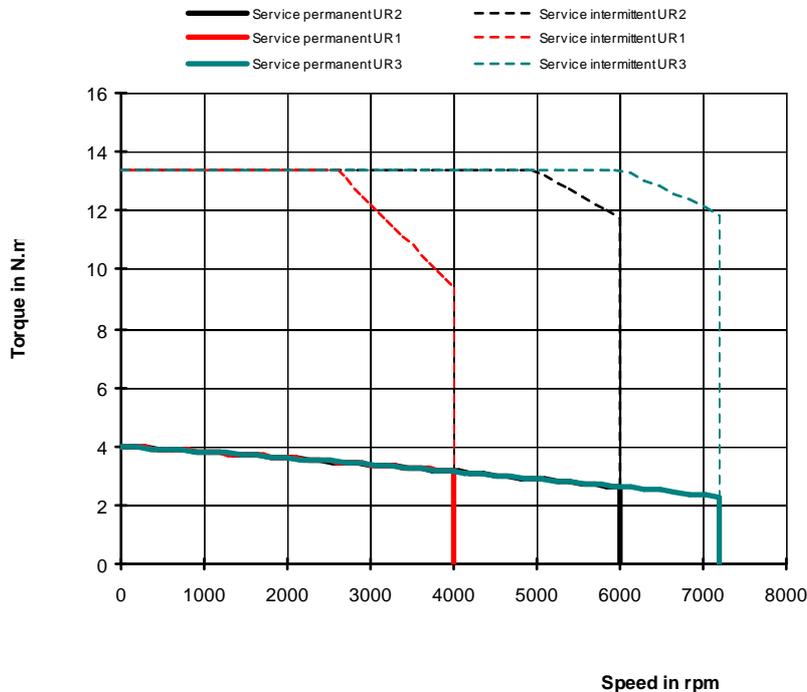
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	M <sub>b</sub>	Nm	4		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	4,69		
Peak torque	M <sub>p</sub>	Nm	13,4	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	18,8	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	51,9		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,853		
Winding resistance (25°C)*	R <sub>b</sub>	W	2,3		
Winding inductance*	L	mH	11		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	29		
Thermal time constant	T <sub>th</sub>	min	12		
Motor mass	M	kg	3,8		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4000	6000	7200
Rated torque	Mn1 Mn2 Mn3	Nm	3,14	2,62	2,28
Rated current	In1 In2 In3	A <sub>rms</sub>	3,74	3,17	2,79
Rated power	Pn1 Pn2 Pn3	W	1310	1650	1720

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX420EAJ

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## BRUSHLESS MOTORS

## NX420EAP

ELECTRONIC DRIVE

DRIVE 3 / 11 Arms



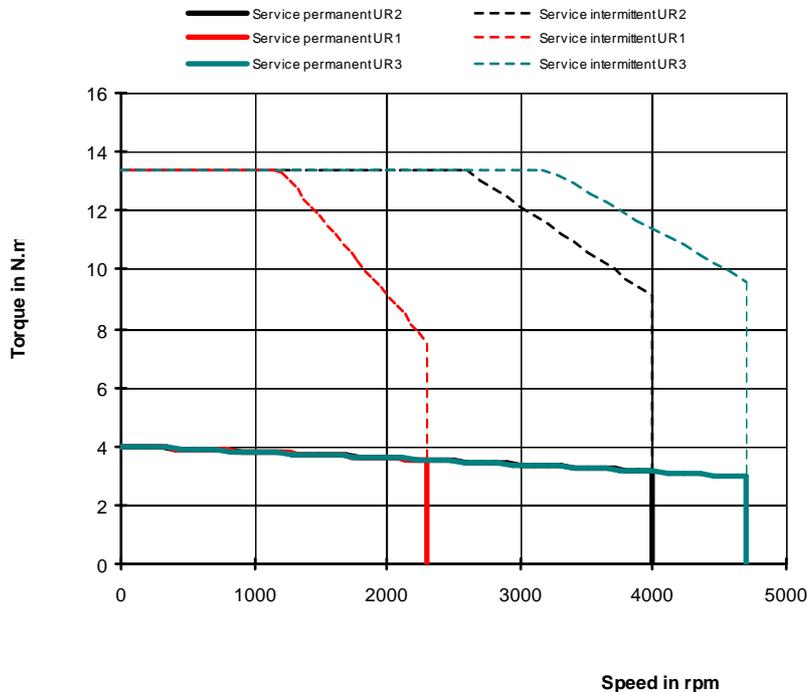
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	4		
Permanent current at low speed	$I_o$	$A_{rms}$	2,71		
Peak torque	$M_p$	Nm	13,4	--	
Current for the peak torque	$I_p$	$A_{rms}$	10,9	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	89,9		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,48		
Winding resistance (25°C)*	$R_b$	W	7,2		
Winding inductance*	L	mH	33		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	29		
Thermal time constant	$T_{th}$	min	12		
Motor mass	M	kg	3,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	4700
Rated torque	Mn1 Mn2 Mn3	Nm	3,53	3,14	2,96
Rated current	In1 In2 In3	$A_{rms}$	2,41	2,16	2,05
Rated power	Pn1 Pn2 Pn3	W	850	1310	1460

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX420EAP

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## BRUSHLESS MOTORS

## NX420EAV

ELECTRONIC DRIVE

DRIVE 1.5 / 6 Arms



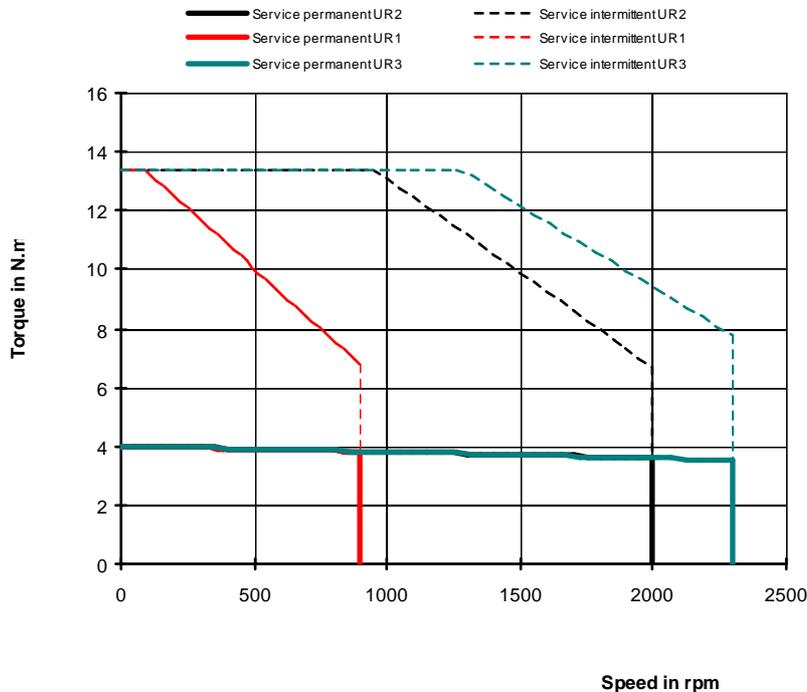
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	4		
Permanent current at low speed	$I_o$	$A_{rms}$	1,36		
Peak torque	$M_p$	Nm	13,4	--	
Current for the peak torque	$I_p$	$A_{rms}$	5,47	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	179		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	2,94		
Winding resistance (25°C)*	$R_b$	W	28,4		
Winding inductance*	L	mH	131		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	29		
Thermal time constant	Tth	min	12		
Motor mass	M	kg	3,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	900	2000	2300
Rated torque	Mn1 Mn2 Mn3	Nm	3,83	3,60	3,53
Rated current	In1 In2 In3	$A_{rms}$	1,30	1,23	1,21
Rated power	Pn1 Pn2 Pn3	W	360	750	850

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

FICHE-009

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NX420EAV

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## BRUSHLESS MOTORS

## NX420EAX

ELECTRONIC DRIVE

DRIVE 6 / 22 Arms



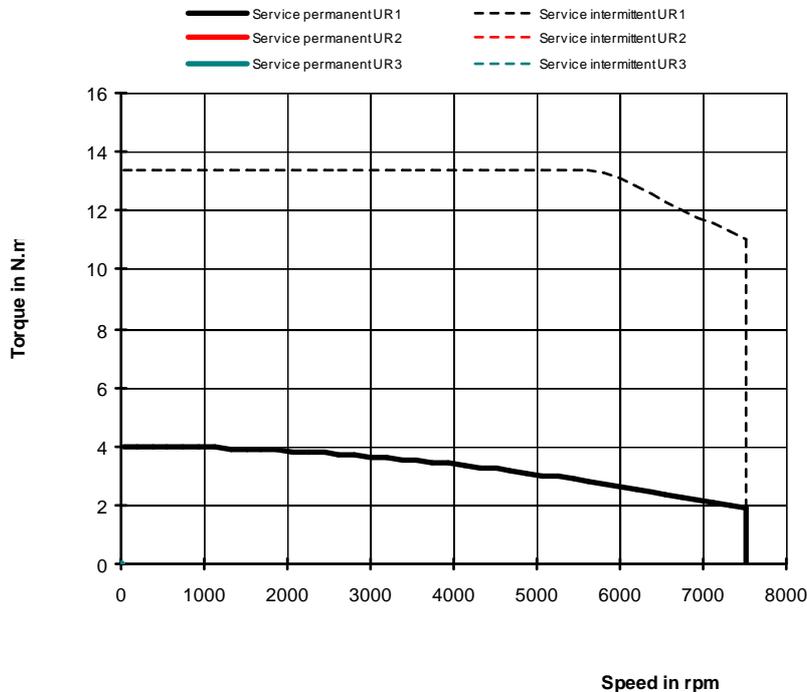
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	400		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	4		
Permanent current at low speed	$I_o$	$A_{rms}$	5,42		
Peak torque	$M_p$	Nm	13,4	--	
Current for the peak torque	$I_p$	$A_{rms}$	21,8	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	44,9		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,738		
Winding resistance (25°C)*	$R_b$	W	1,8		
Winding inductance*	L	mH	8,24		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	29		
Thermal time constant	$T_{th}$	min	12		
Motor mass	M	kg	3,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	400	-	-
Rated speed	Nn1 Nn2 Nn3	t/min	7500	-	-
Rated torque	Mn1 Mn2 Mn3	Nm	1,89	-	-
Rated current	In1 In2 In3	$A_{rms}$	2,72	-	-
Rated power	Pn1 Pn2 Pn3	W	1490	-	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX420EAX

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## BRUSHLESS MOTORS

## NX430EAF

ELECTRONIC DRIVE

DRIVE 7 / 27 Arms



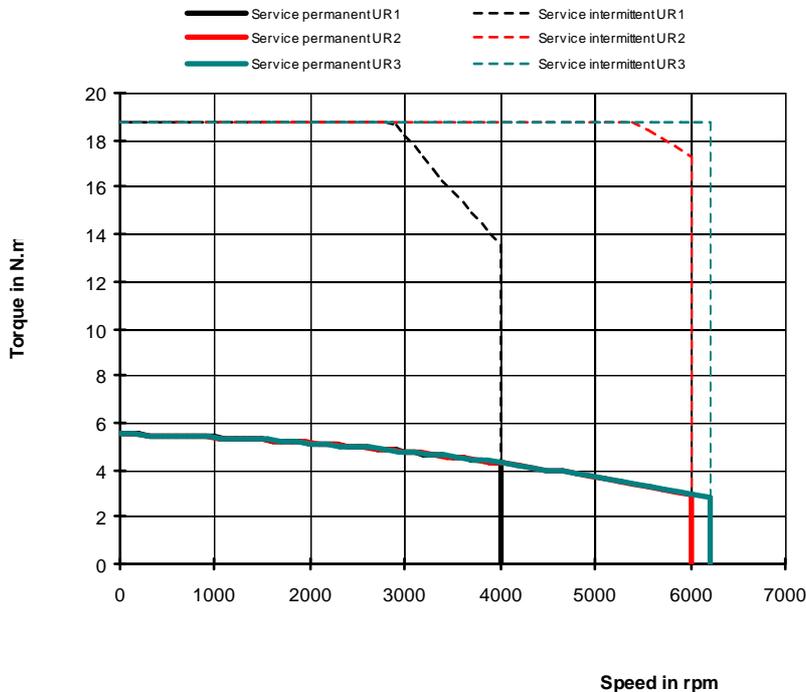
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	5,5		
Permanent current at low speed	$I_o$	$A_{rms}$	6,64		
Peak torque	$M_p$	Nm	18,8	--	
Current for the peak torque	$I_p$	$A_{rms}$	26,5	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	51,8		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,828		
Winding resistance (25°C)*	$R_b$	W	1,38		
Winding inductance*	L	mH	6,8		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42,6		
Thermal time constant	$T_{th}$	min	18		
Motor mass	M	kg	4,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4000	6000	6200
Rated torque	Mn1 Mn2 Mn3	Nm	4,29	2,98	2,82
Rated current	In1 In2 In3	$A_{rms}$	5,28	3,76	3,58
Rated power	Pn1 Pn2 Pn3	W	1800	1870	1830

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX430EAF

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## BRUSHLESS MOTORS

## NX430EAH

ELECTRONIC DRIVE

DRIVE 6 / 23 Arms



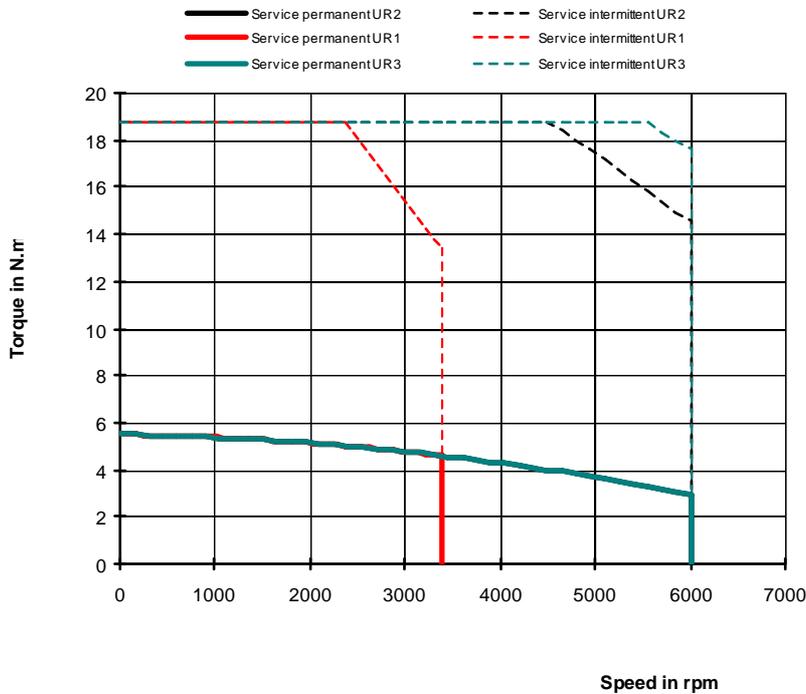
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	5,5		
Permanent current at low speed	$I_o$	$A_{rms}$	5,64		
Peak torque	$M_p$	Nm	18,8	--	
Current for the peak torque	$I_p$	$A_{rms}$	22,5	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	61		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,975		
Winding resistance (25°C)*	$R_b$	W	1,81		
Winding inductance*	L	mH	9,44		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42,6		
Thermal time constant	$T_{th}$	min	18		
Motor mass	M	kg	4,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	3400	6000	6000
Rated torque	Mn1 Mn2 Mn3	Nm	4,59	2,98	2,98
Rated current	In1 In2 In3	$A_{rms}$	4,78	3,19	3,19
Rated power	Pn1 Pn2 Pn3	W	1640	1870	1870

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX430EAH

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## BRUSHLESS MOTORS

## NX430EAJ

ELECTRONIC DRIVE

DRIVE 6 / 22 Arms



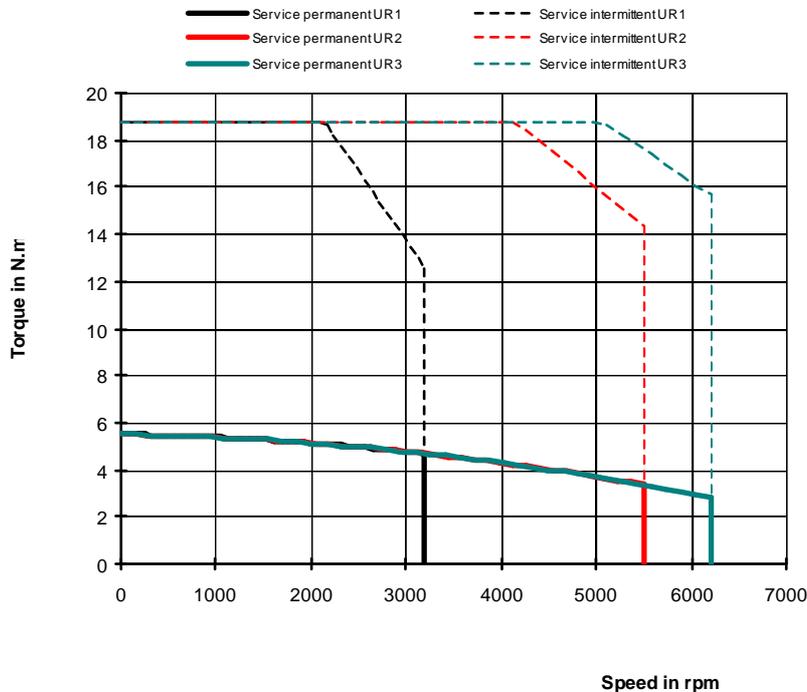
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	5,5		
Permanent current at low speed	$I_o$	$A_{rms}$	5,24		
Peak torque	$M_p$	Nm	18,8	--	
Current for the peak torque	$I_p$	$A_{rms}$	21	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	65,6		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,05		
Winding resistance (25°C)*	$R_b$	W	2,19		
Winding inductance*	L	mH	10,9		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42,6		
Thermal time constant	$T_{th}$	min	18		
Motor mass	M	kg	4,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	3200	5500	6200
Rated torque	Mn1 Mn2 Mn3	Nm	4,68	3,35	2,82
Rated current	In1 In2 In3	$A_{rms}$	4,53	3,31	2,83
Rated power	Pn1 Pn2 Pn3	W	1570	1930	1830

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX430EAJ

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## BRUSHLESS MOTORS

## NX430EAL

ELECTRONIC DRIVE

DRIVE 4 / 16 Arms



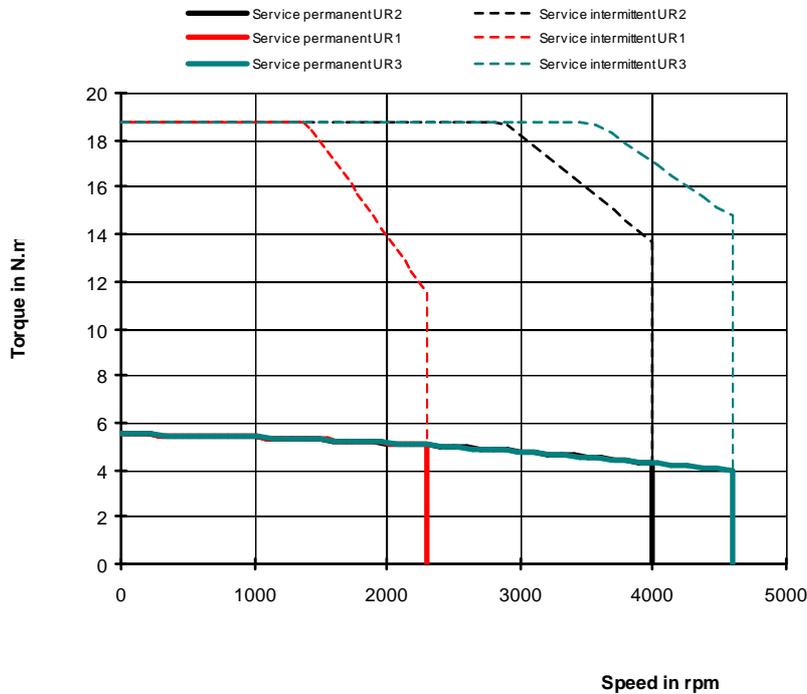
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	5,5		
Permanent current at low speed	$I_o$	$A_{rms}$	3,78		
Peak torque	$M_p$	Nm	18,8	--	
Current for the peak torque	$I_p$	$A_{rms}$	15,1	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	90,9		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,45		
Winding resistance (25°C)*	$R_b$	W	4,22		
Winding inductance*	L	mH	21		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42,6		
Thermal time constant	$T_{th}$	min	18		
Motor mass	M	kg	4,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	4600
Rated torque	Mn1 Mn2 Mn3	Nm	5,04	4,29	3,95
Rated current	In1 In2 In3	$A_{rms}$	3,49	3,01	2,78
Rated power	Pn1 Pn2 Pn3	W	1210	1800	1900

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX430EAL

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## BRUSHLESS MOTORS

## NX430EAP

ELECTRONIC DRIVE

DRIVE 3 / 12 Arms



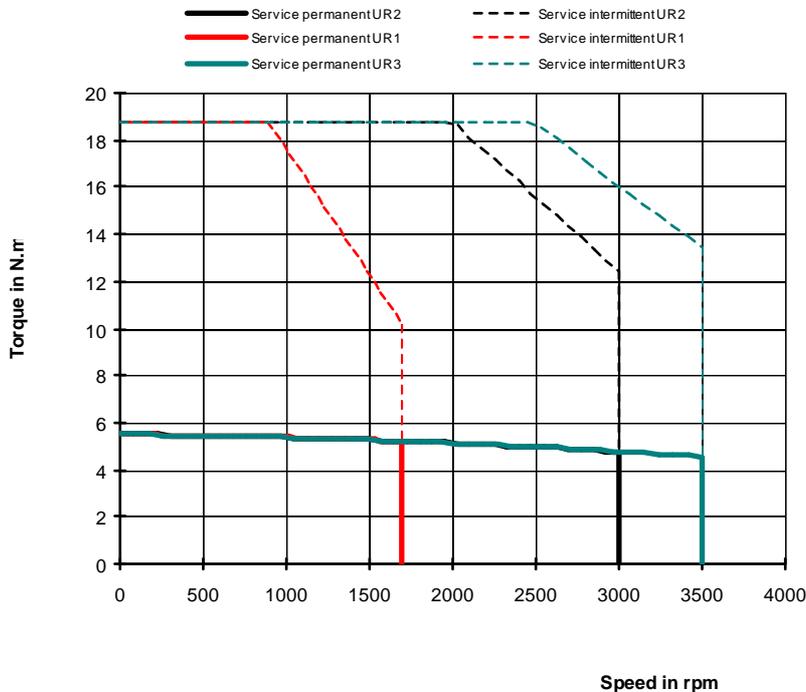
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	5,5		
Permanent current at low speed	$I_o$	$A_{rms}$	2,82		
Peak torque	$M_p$	Nm	18,8	--	
Current for the peak torque	$I_p$	$A_{rms}$	11,3	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	122		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,95		
Winding resistance (25°C)*	$R_b$	W	7,26		
Winding inductance*	L	mH	37,8		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42,6		
Thermal time constant	$T_{th}$	min	18		
Motor mass	M	kg	4,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1700	3000	3500
Rated torque	Mn1 Mn2 Mn3	Nm	5,22	4,77	4,55
Rated current	In1 In2 In3	$A_{rms}$	2,69	2,48	2,37
Rated power	Pn1 Pn2 Pn3	W	930	1500	1670

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX430EAP

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## BRUSHLESS MOTORS

## NX430EAV

ELECTRONIC DRIVE

DRIVE 1.5 / 6 Arms



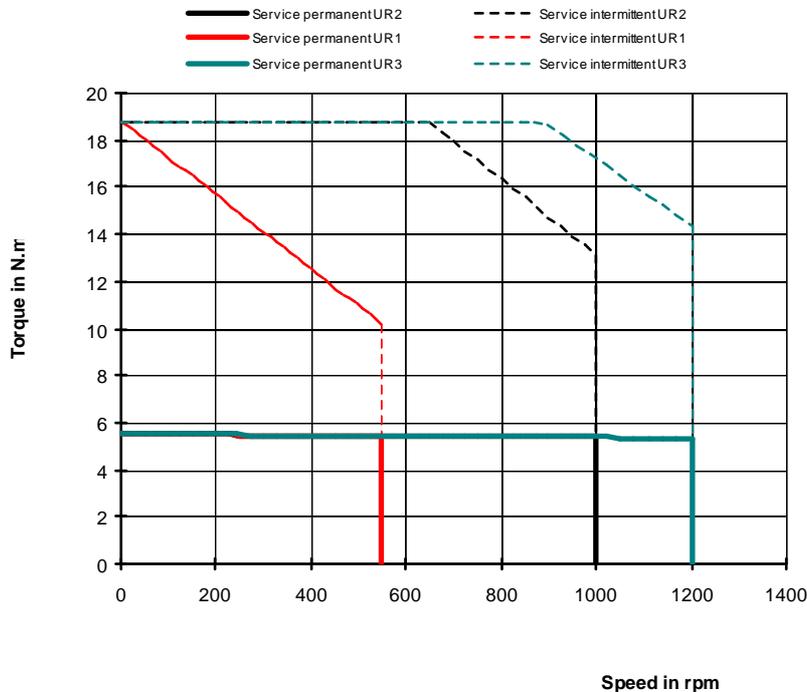
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	$M_b$	Nm	5,5		
Permanent current at low speed	$I_o$	$A_{rms}$	1,41		
Peak torque	$M_p$	Nm	18,8	--	
Current for the peak torque	$I_p$	$A_{rms}$	5,64	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	244		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	3,9		
Winding resistance (25°C)*	$R_b$	W	29		
Winding inductance*	L	mH	151		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42,6		
Thermal time constant	$T_{th}$	min	18		
Motor mass	M	kg	4,8		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	550	1000	1200
Rated torque	Mn1 Mn2 Mn3	Nm	5,45	5,38	5,34
Rated current	In1 In2 In3	$A_{rms}$	1,40	1,38	1,37
Rated power	Pn1 Pn2 Pn3	W	310	560	670

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX430EAV

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## BRUSHLESS MOTORS

## NX620EAD

ELECTRONIC DRIVE

DRIVE 13 / 50 Arms



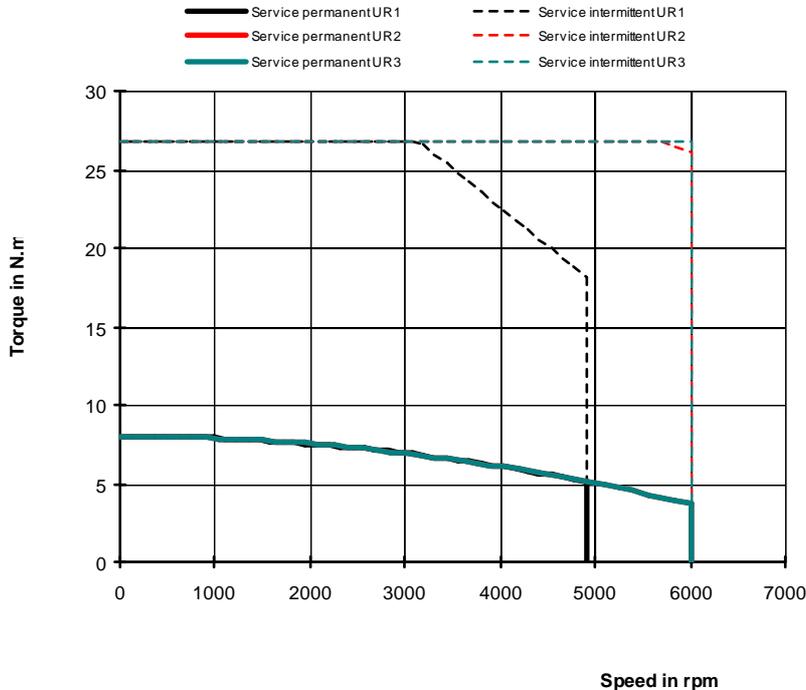
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M <sub>b</sub>	Nm	8		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	12,1		
Peak torque	M <sub>p</sub>	Nm	26,7	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	48,3	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V <sub>rms</sub>	42		
Torque sensitivity	Kt	Nm/A <sub>rms</sub>	0,662		
Winding resistance (25°C)*	Rb	W	0,439		
Winding inductance*	L	mH	3,69		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	98		
Thermal time constant	T <sub>th</sub>	min	27		
Motor mass	M	kg	7		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4900	6000	6000
Rated torque	Mn1 Mn2 Mn3	Nm	5,12	3,68	3,68
Rated current	In1 In2 In3	A <sub>rms</sub>	8,23	6,19	6,19
Rated power	Pn1 Pn2 Pn3	W	2630	2310	2310

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX620EAD

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## BRUSHLESS MOTORS

## NX620EAJ

ELECTRONIC DRIVE

DRIVE 10 / 40 Arms



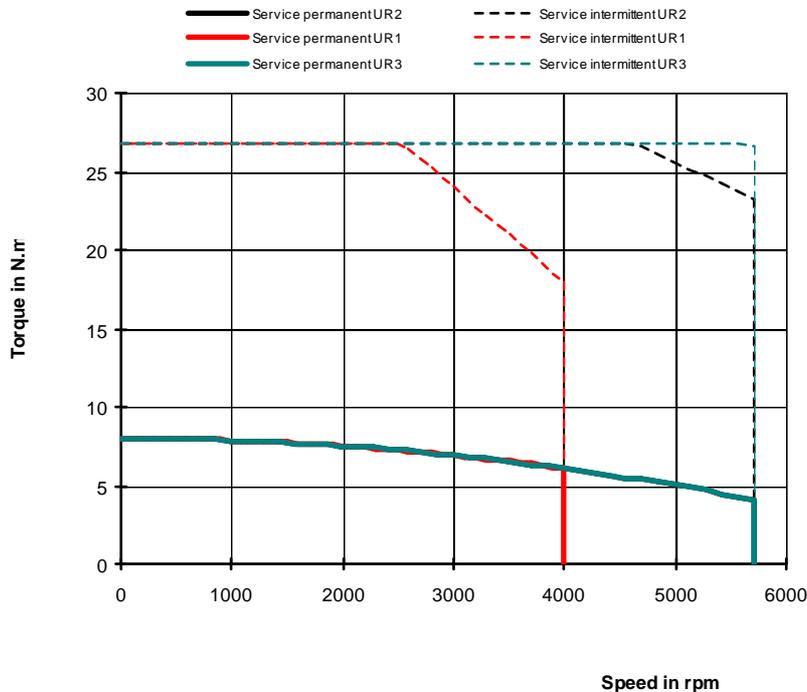
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	$M_b$	Nm	8		
Permanent current at low speed	$I_o$	$A_{rms}$	9,89		
Peak torque	$M_p$	Nm	26,7	--	
Current for the peak torque	$I_p$	$A_{rms}$	39,5	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	51,3		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,809		
Winding resistance (25°C)*	$R_b$	W	0,603		
Winding inductance*	L	mH	5,52		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	98		
Thermal time constant	$T_{th}$	min	27		
Motor mass	M	kg	7		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4000	5700	5700
Rated torque	Mn1 Mn2 Mn3	Nm	6,08	4,10	4,10
Rated current	In1 In2 In3	$A_{rms}$	7,82	5,56	5,56
Rated power	Pn1 Pn2 Pn3	W	2550	2450	2450

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX620EAJ

## BRUSHLESS MOTORS

## NX620EAR

ELECTRONIC DRIVE

DRIVE 6 / 22 Arms



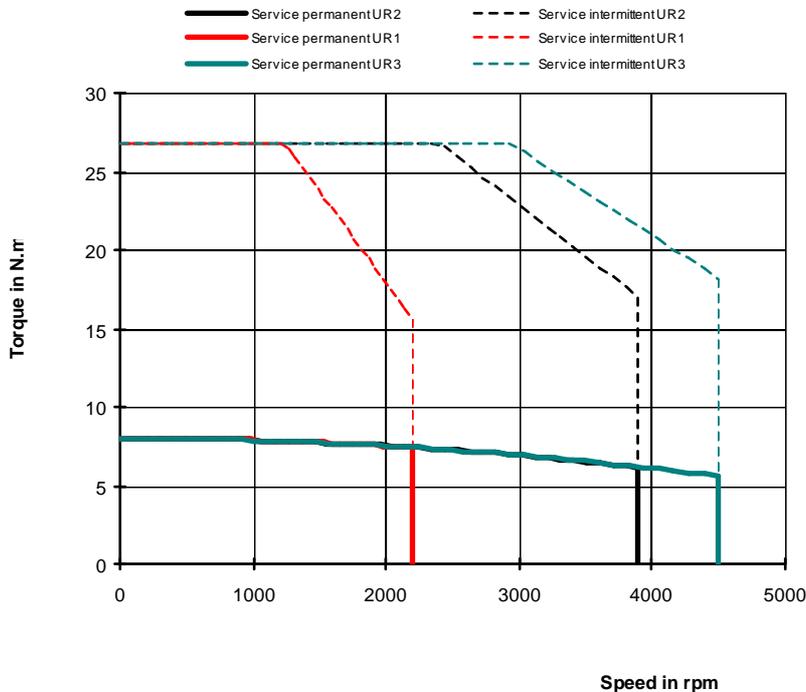
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M <sub>b</sub>	Nm	8		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	5,31		
Peak torque	M <sub>p</sub>	Nm	26,7	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	21,2	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V <sub>rms</sub>	95,7		
Torque sensitivity	Kt	Nm/A <sub>rms</sub>	1,51		
Winding resistance (25°C)*	Rb	W	2,24		
Winding inductance*	L	mH	19,2		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	98		
Thermal time constant	T <sub>th</sub>	min	27		
Motor mass	M	kg	7		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2200	3900	4500
Rated torque	Mn1 Mn2 Mn3	Nm	7,42	6,17	5,57
Rated current	In1 In2 In3	A <sub>rms</sub>	4,99	4,25	3,89
Rated power	Pn1 Pn2 Pn3	W	1710	2520	2620

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX620EAR

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## BRUSHLESS MOTORS

## NX620EAV

ELECTRONIC DRIVE

DRIVE 3 / 12 Arms



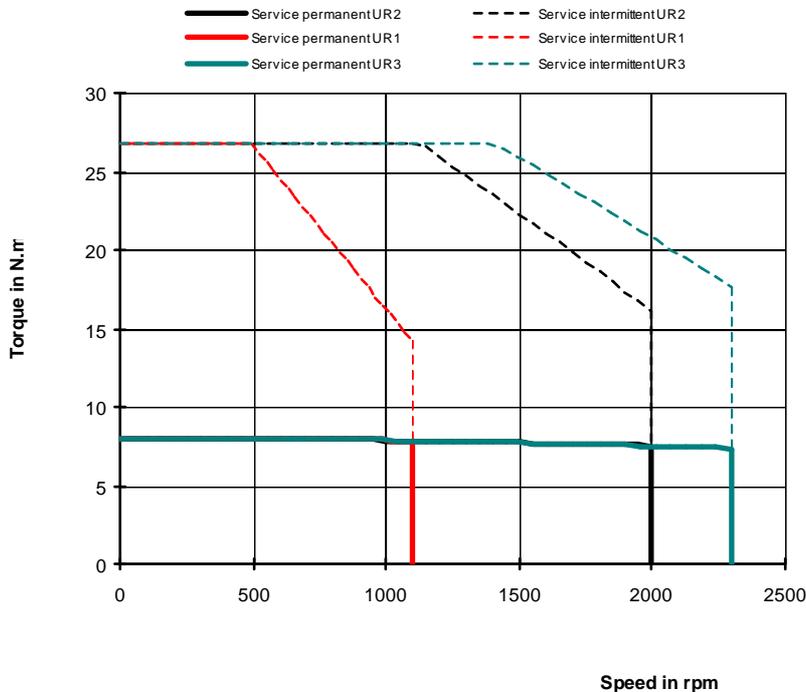
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M <sub>b</sub>	Nm	8		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	2,83		
Peak torque	M <sub>p</sub>	Nm	26,7	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	11,3	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	180		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	2,83		
Winding resistance (25°C)*	R <sub>b</sub>	W	7,9		
Winding inductance*	L	mH	67,6		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	98		
Thermal time constant	T <sub>th</sub>	min	27		
Motor mass	M	kg	7		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1100	2000	2300
Rated torque	Mn1 Mn2 Mn3	Nm	7,85	7,52	7,36
Rated current	In1 In2 In3	A <sub>rms</sub>	2,79	2,69	2,64
Rated power	Pn1 Pn2 Pn3	W	900	1570	1770

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX620EAV

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## BRUSHLESS MOTORS

## NX630EAG

ELECTRONIC DRIVE

DRIVE 14 / 56 Arms



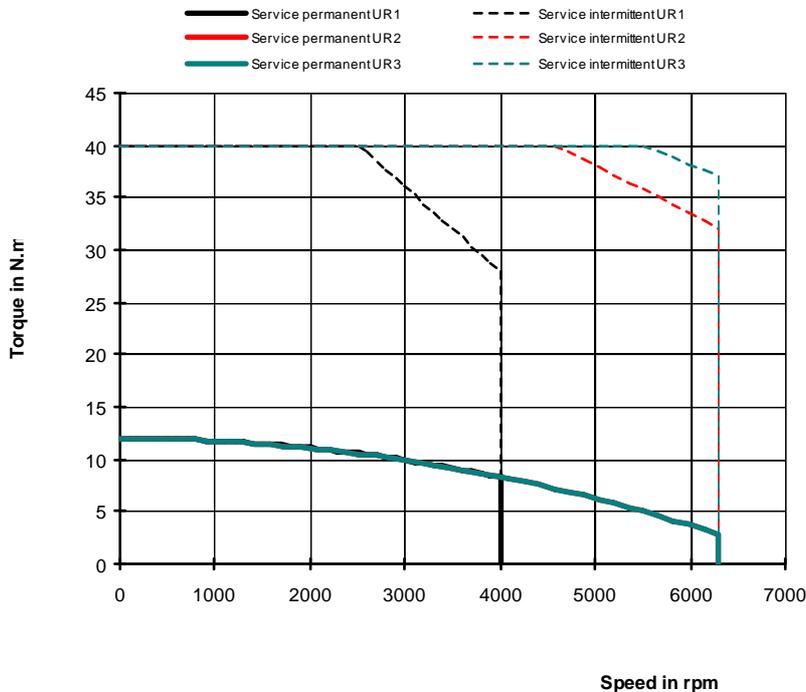
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	$M_b$	Nm	12		
Permanent current at low speed	$I_o$	$A_{rms}$	13,9		
Peak torque	$M_p$	Nm	40,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	55,6	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	52,1		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	0,861		
Winding resistance (25°C)*	$R_b$	W	0,341		
Winding inductance*	L	mH	3,53		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	147		
Thermal time constant	$T_{th}$	min	33		
Motor mass	M	kg	8,9		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4000	6300	6300
Rated torque	Mn1 Mn2 Mn3	Nm	8,31	2,86	2,86
Rated current	In1 In2 In3	$A_{rms}$	10,10	4,00	4,00
Rated power	Pn1 Pn2 Pn3	W	3480	1890	1890

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

FICHE-009

Création: 18 avr 2000

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23/juin/2010

NX630EAG

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## BRUSHLESS MOTORS

## NX630EAK

ELECTRONIC DRIVE

DRIVE 10 / 40 Arms



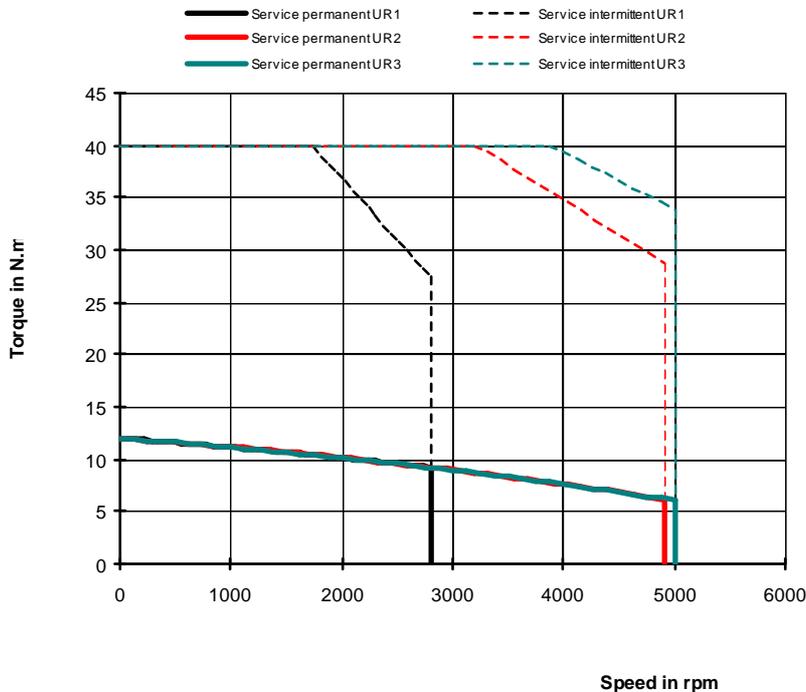
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M <sub>b</sub>	Nm	12		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	9,86		
Peak torque	M <sub>p</sub>	Nm	40,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	39,4	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	73,6		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	1,22		
Winding resistance (25°C)*	R <sub>b</sub>	W	0,674		
Winding inductance*	L	mH	7,06		
Rotor inertia	J	kgm <sup>2</sup> ×10 <sup>-5</sup>	147		
Thermal time constant	T <sub>th</sub>	min	33		
Motor mass	M	kg	8,9		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2800	4900	5000
Rated torque	Mn1 Mn2 Mn3	Nm	9,21	6,23	6,07
Rated current	In1 In2 In3	A <sub>rms</sub>	7,80	5,53	5,41
Rated power	Pn1 Pn2 Pn3	W	2700	3190	3180

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX630EAK

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## BRUSHLESS MOTORS

## NX630EAN

ELECTRONIC DRIVE

DRIVE 8 / 32 Arms



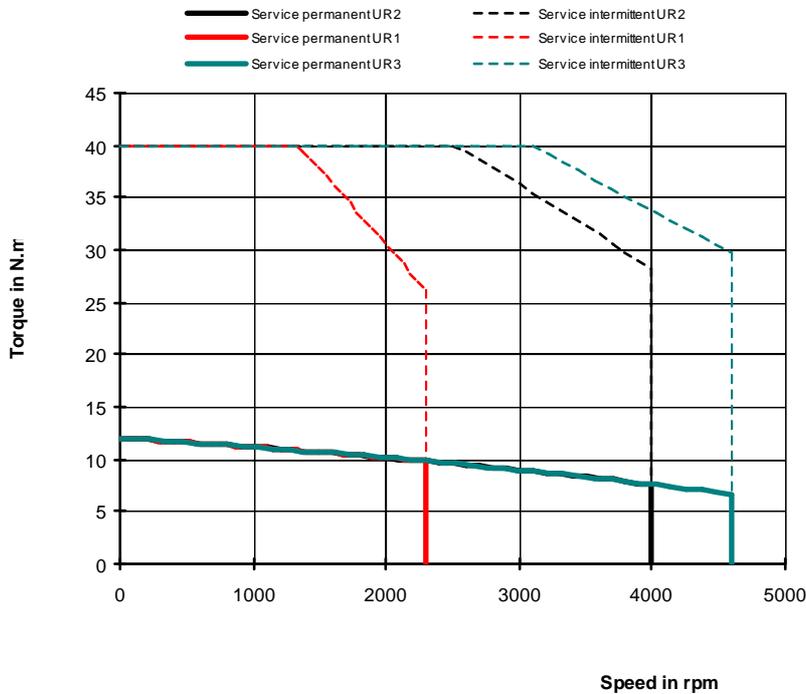
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	$M_b$	Nm	12		
Permanent current at low speed	$I_o$	$A_{rms}$	7,93		
Peak torque	$M_p$	Nm	40,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	31,6	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	91,6		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,51		
Winding resistance (25°C)*	$R_b$	W	1,12		
Winding inductance*	L	mH	10,9		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	147		
Thermal time constant	$T_{th}$	min	33		
Motor mass	M	kg	8,9		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	4600
Rated torque	Mn1 Mn2 Mn3	Nm	9,81	7,60	6,70
Rated current	In1 In2 In3	$A_{rms}$	6,63	5,30	4,74
Rated power	Pn1 Pn2 Pn3	W	2360	3180	3230

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX630EAN

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## BRUSHLESS MOTORS

## NX630EAR

ELECTRONIC DRIVE

DRIVE 6 / 22 Arms



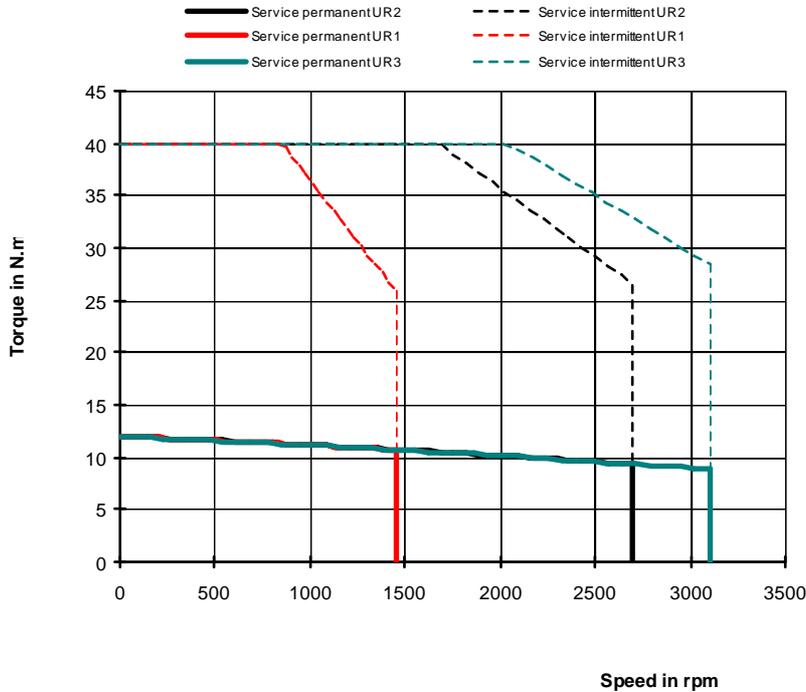
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	$M_b$	Nm	12		
Permanent current at low speed	$I_o$	$A_{rms}$	5,25		
Peak torque	$M_p$	Nm	40,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	21	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	138		
Torque sensitivity	$K_t$	$Nm/A_{rms}$	2,29		
Winding resistance (25°C)*	$R_b$	W	2,43		
Winding inductance*	L	mH	24,9		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	147		
Thermal time constant	$T_{th}$	min	33		
Motor mass	M	kg	8,9		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1450	2700	3100
Rated torque	Mn1 Mn2 Mn3	Nm	10,73	9,34	8,84
Rated current	In1 In2 In3	$A_{rms}$	4,75	4,20	4,00
Rated power	Pn1 Pn2 Pn3	W	1630	2640	2870

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX630EAR

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## BRUSHLESS MOTORS

## NX820EAL

ELECTRONIC DRIVE

DRIVE 18 / 70 Arms



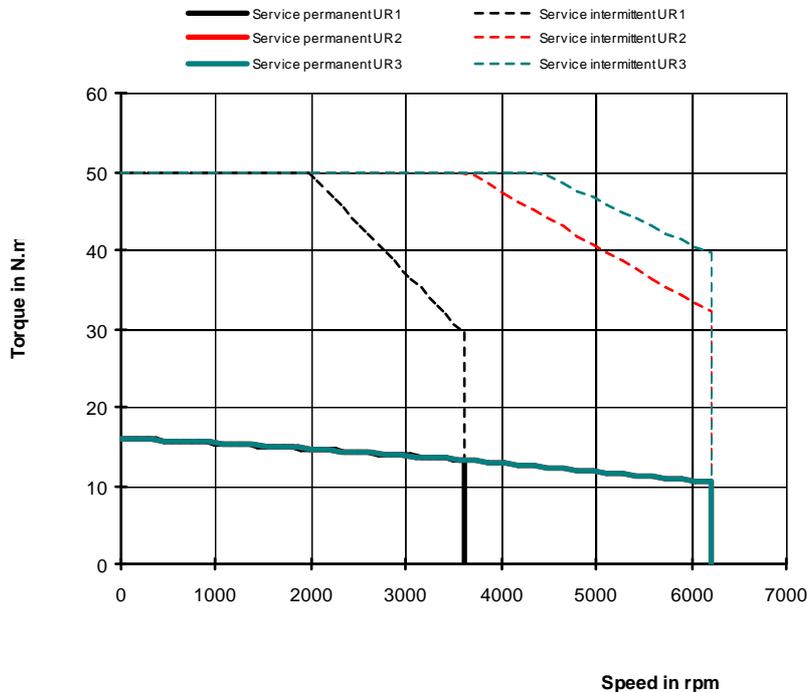
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M <sub>b</sub>	Nm	16		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	17,6		
Peak torque	M <sub>p</sub>	Nm	50,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	69,1	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	56,9		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	0,912		
Winding resistance (25°C)*	R <sub>b</sub>	W	0,379		
Winding inductance*	L	mH	3,35		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	320		
Thermal time constant	T <sub>th</sub>	min	34		
Motor mass	M	kg	13		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	3600	6200	6200
Rated torque	Mn1 Mn2 Mn3	Nm	13,24	10,35	10,35
Rated current	In1 In2 In3	A <sub>rms</sub>	14,82	11,90	11,90
Rated power	Pn1 Pn2 Pn3	W	4990	6720	6720

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX820EAL

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## BRUSHLESS MOTORS

## NX820EAR

ELECTRONIC DRIVE

DRIVE 12 / 44 Arms



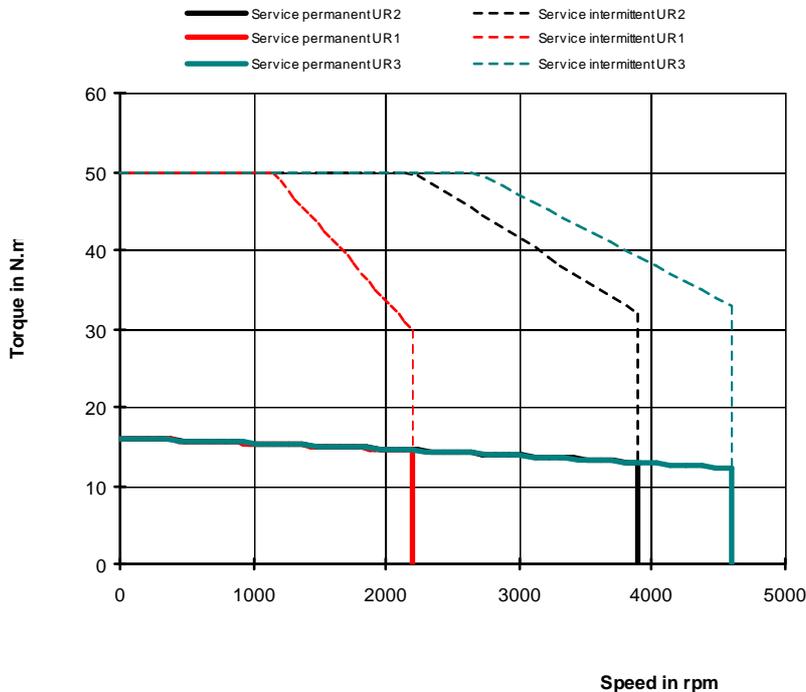
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M <sub>b</sub>	Nm	16		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	11		
Peak torque	M <sub>p</sub>	Nm	50,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	43,2	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	91		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	1,46		
Winding resistance (25°C)*	R <sub>b</sub>	W	1,01		
Winding inductance*	L	mH	8,57		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	320		
Thermal time constant	T <sub>th</sub>	min	34		
Motor mass	M	kg	13		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2200	3900	4600
Rated torque	Mn1 Mn2 Mn3	Nm	14,48	12,94	12,22
Rated current	In1 In2 In3	A <sub>rms</sub>	10,04	9,07	8,62
Rated power	Pn1 Pn2 Pn3	W	3340	5290	5880

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX820EAR

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BRUSHLESS MOTORS			
<b>NX820EAX</b>			
ELECTRONIC DRIVE			
<b>DRIVE 6 / 21 Arms</b>			

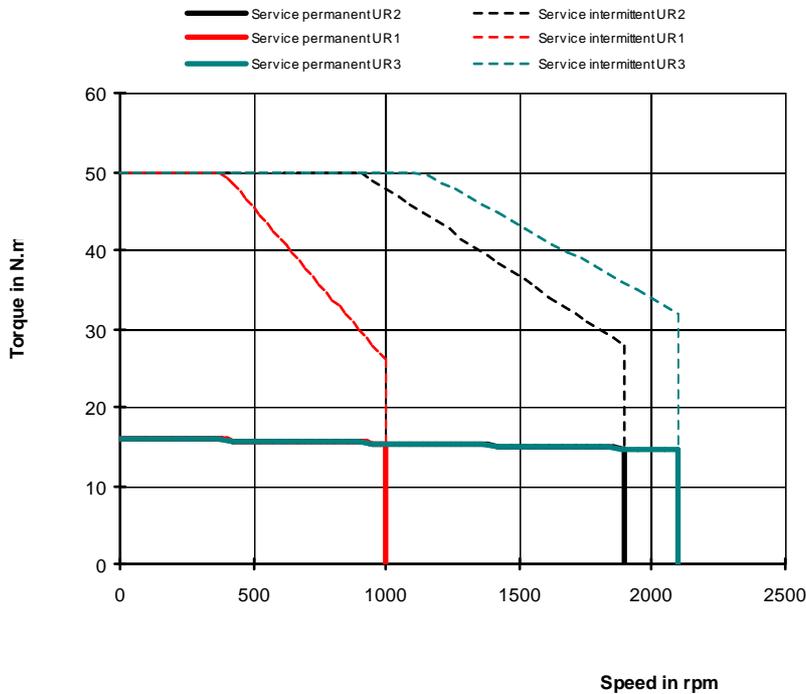
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M <sub>b</sub>	Nm	16		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	5,16		
Peak torque	M <sub>p</sub>	Nm	50,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	20,3	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V <sub>rms</sub>	193		
Torque sensitivity	Kt	Nm/A <sub>rms</sub>	3,1		
Winding resistance (25°C)*	Rb	W	4,53		
Winding inductance*	L	mH	38,7		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	320		
Thermal time constant	T <sub>th</sub>	min	34		
Motor mass	M	kg	13		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1000	1900	2100
Rated torque	Mn1 Mn2 Mn3	Nm	15,38	14,72	14,56
Rated current	In1 In2 In3	A <sub>rms</sub>	4,99	4,79	4,75
Rated power	Pn1 Pn2 Pn3	W	1610	2930	3200

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

FICHE-009

## BRUSHLESS MOTORS

## NX840EAJ

ELECTRONIC DRIVE

DRIVE 20 / 75 Arms



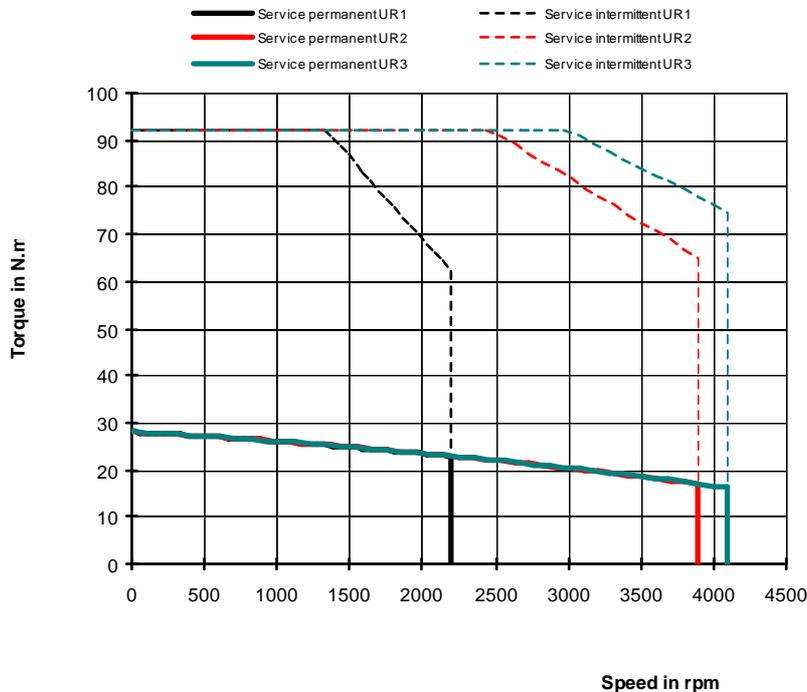
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M <sub>b</sub>	Nm	28		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	18,9		
Peak torque	M <sub>p</sub>	Nm	92,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	74,8	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V <sub>rms</sub>	92,8		
Torque sensitivity	Kt	Nm/A <sub>rms</sub>	1,48		
Winding resistance (25°C)*	Rb	W	0,371		
Winding inductance*	L	mH	4,28		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	620		
Thermal time constant	T <sub>th</sub>	min	52		
Motor mass	M	kg	20		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2200	3900	4100
Rated torque	Mn1 Mn2 Mn3	Nm	22,88	17,04	16,25
Rated current	In1 In2 In3	A <sub>rms</sub>	15,70	11,99	11,48
Rated power	Pn1 Pn2 Pn3	W	5270	6960	6980

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX840EAJ

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## BRUSHLESS MOTORS

## NX840EAK

ELECTRONIC DRIVE

DRIVE 17 / 67 Arms



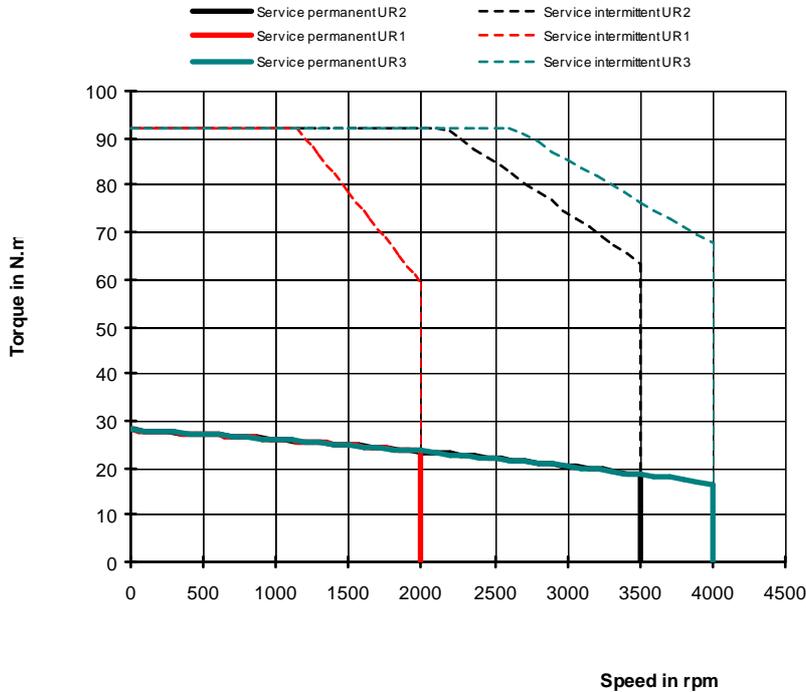
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	$M_b$	Nm	28		
Permanent current at low speed	$I_o$	$A_{rms}$	16,8		
Peak torque	$M_p$	Nm	92,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	66,5	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	104		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,67		
Winding resistance (25°C)*	$R_b$	W	0,493		
Winding inductance*	L	mH	5,42		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	620		
Thermal time constant	$T_{th}$	min	52		
Motor mass	M	kg	20		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2000	3500	4000
Rated torque	Mn1 Mn2 Mn3	Nm	23,45	18,56	16,65
Rated current	In1 In2 In3	$A_{rms}$	14,28	11,51	10,43
Rated power	Pn1 Pn2 Pn3	W	4910	6800	6970

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX840EAK

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## BRUSHLESS MOTORS

## NX840EAL

ELECTRONIC DRIVE

DRIVE 16 / 60 Arms



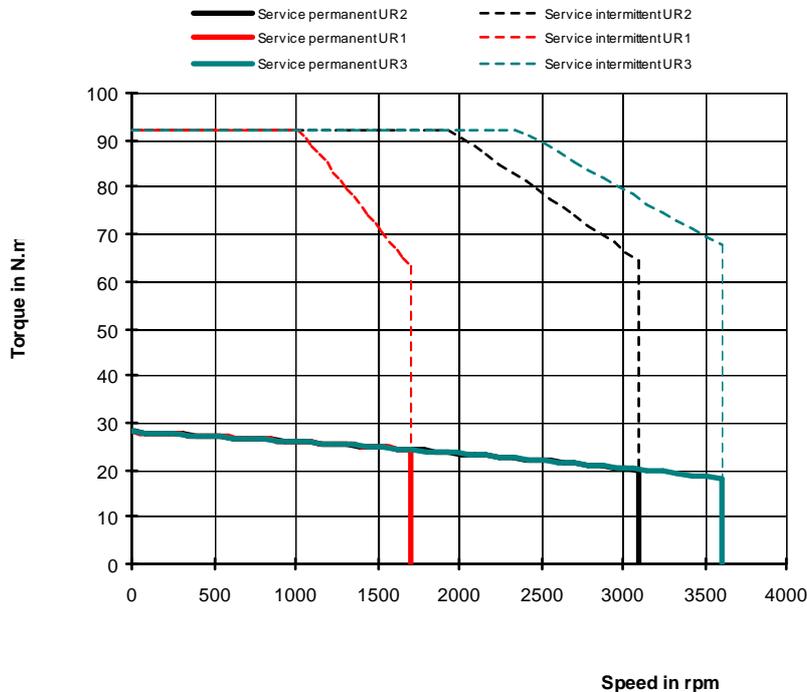
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M <sub>b</sub>	Nm	28		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	15,1		
Peak torque	M <sub>p</sub>	Nm	92,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	59,8	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V <sub>rms</sub>	116		
Torque sensitivity	Kt	Nm/A <sub>rms</sub>	1,85		
Winding resistance (25°C)*	Rb	W	0,579		
Winding inductance*	L	mH	6,69		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	620		
Thermal time constant	T <sub>th</sub>	min	52		
Motor mass	M	kg	20		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1700	3100	3600
Rated torque	Mn1 Mn2 Mn3	Nm	24,28	19,99	18,19
Rated current	In1 In2 In3	A <sub>rms</sub>	13,27	11,09	10,17
Rated power	Pn1 Pn2 Pn3	W	4320	6490	6860

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX840EAL

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## BRUSHLESS MOTORS

## NX840EAQ

ELECTRONIC DRIVE

DRIVE 11 / 40 Arms



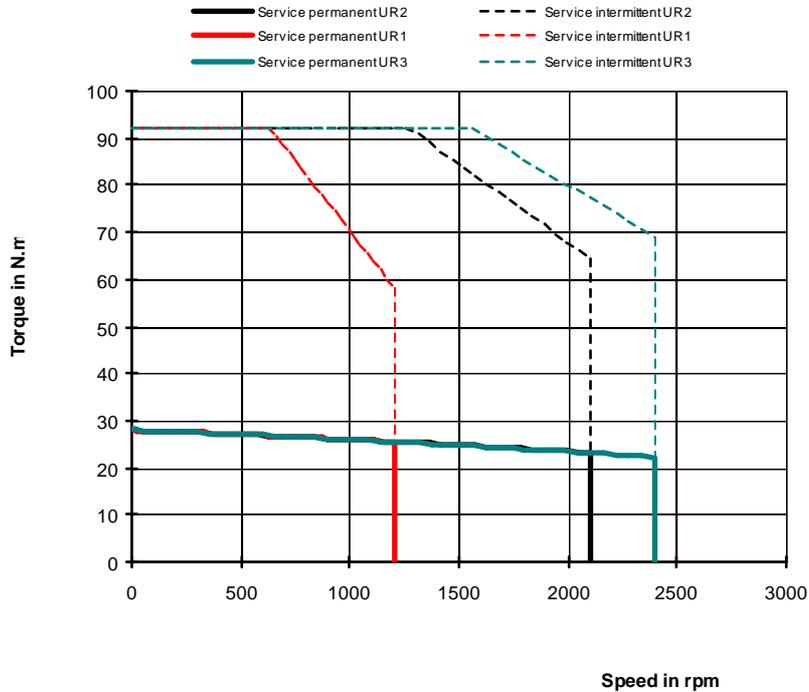
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	$M_b$	Nm	28		
Permanent current at low speed	$I_o$	$A_{rms}$	10,1		
Peak torque	$M_p$	Nm	92,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	39,9	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	174		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	2,78		
Winding resistance (25°C)*	$R_b$	W	1,36		
Winding inductance*	L	mH	15,1		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	620		
Thermal time constant	$T_{th}$	min	52		
Motor mass	M	kg	20		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1200	2100	2400
Rated torque	Mn1 Mn2 Mn3	Nm	25,54	23,17	22,27
Rated current	In1 In2 In3	$A_{rms}$	9,27	8,47	8,17
Rated power	Pn1 Pn2 Pn3	W	3210	5090	5600

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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23/juin/2010

NX840EAQ

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## BRUSHLESS MOTORS

## NX860EAD

ELECTRONIC DRIVE

DRIVE 35 / 135 Arms



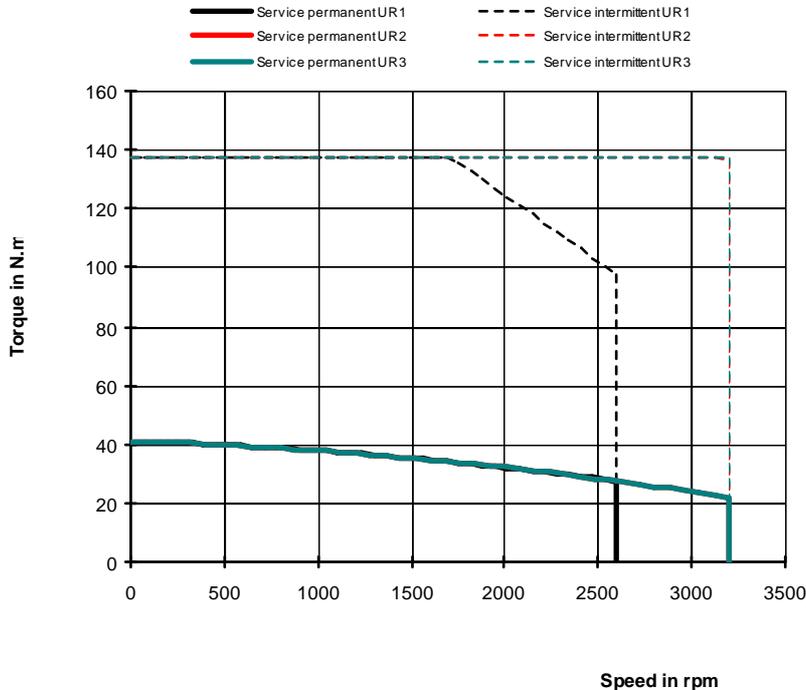
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	$M_b$	Nm	41		
Permanent current at low speed	$I_o$	$A_{rms}$	33		
Peak torque	$M_p$	Nm	137,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	132	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	78,7		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,24		
Winding resistance (25°C)*	$R_b$	W	0,156		
Winding inductance*	L	mH	2,03		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	920		
Thermal time constant	$T_{th}$	min	60		
Motor mass	M	kg	27		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2600	3200	3200
Rated torque	Mn1 Mn2 Mn3	Nm	27,47	21,89	21,89
Rated current	In1 In2 In3	$A_{rms}$	22,51	18,19	18,19
Rated power	Pn1 Pn2 Pn3	W	7480	7340	7340

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX860EAD

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## BRUSHLESS MOTORS

## NX860EAF

ELECTRONIC DRIVE

DRIVE 28 / 110 Arms



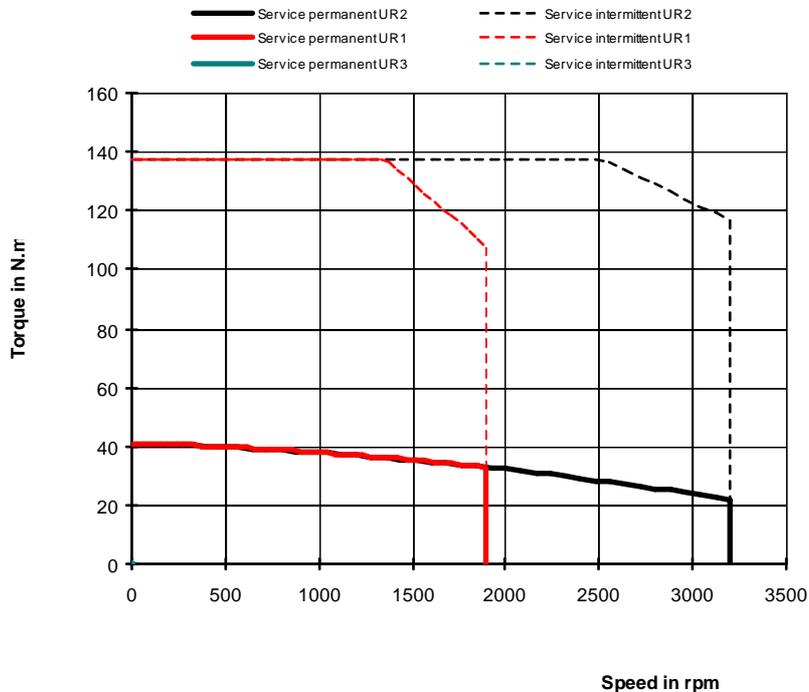
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V <sub>rms</sub>	400		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M <sub>b</sub>	Nm	41		
Permanent current at low speed	I <sub>o</sub>	A <sub>rms</sub>	27		
Peak torque	M <sub>p</sub>	Nm	137,0	--	
Current for the peak torque	I <sub>p</sub>	A <sub>rms</sub>	108	--	
Back emf constant at 1000 rpm (25°C)*	K <sub>e</sub>	V <sub>rms</sub>	96,1		
Torque sensitivity	K <sub>t</sub>	Nm/A <sub>rms</sub>	1,52		
Winding resistance (25°C)*	R <sub>b</sub>	W	0,238		
Winding inductance*	L	mH	3,04		
Rotor inertia	J	kgm <sup>2</sup> x10 <sup>-5</sup>	920		
Thermal time constant	T <sub>th</sub>	min	60		
Motor mass	M	kg	27		
Voltage of the mains	UR1 UR2 UR3	V <sub>rms</sub>	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	1900	3200	-
Rated torque	Mn1 Mn2 Mn3	Nm	32,81	21,89	-
Rated current	In1 In2 In3	A <sub>rms</sub>	21,80	14,88	-
Rated power	Pn1 Pn2 Pn3	W	6530	7340	-

All data are given in typical values under standard conditions

\* Phase to phase

Voltages and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX860EAF

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## BRUSHLESS MOTORS

## NX860EAJ

ELECTRONIC DRIVE

DRIVE 20 / 75 Arms



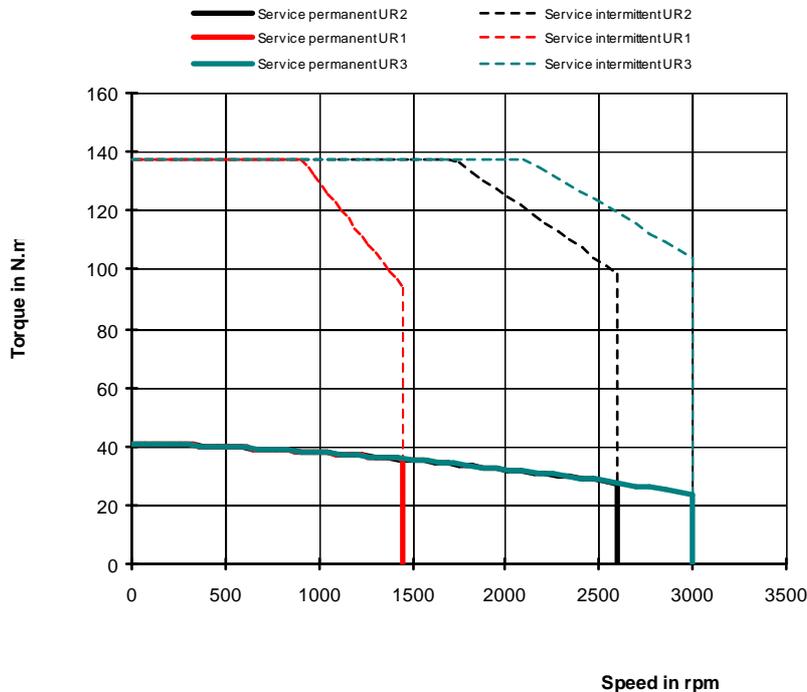
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	$M_b$	Nm	41		
Permanent current at low speed	$I_o$	$A_{rms}$	18,5		
Peak torque	$M_p$	Nm	137,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	74	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	140		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	2,21		
Winding resistance (25°C)*	$R_b$	W	0,499		
Winding inductance*	L	mH	6,43		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	920		
Thermal time constant	$T_{th}$	min	60		
Motor mass	M	kg	27		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1450	2600	3000
Rated torque	Mn1 Mn2 Mn3	Nm	35,58	27,47	23,85
Rated current	In1 In2 In3	$A_{rms}$	16,20	12,66	11,09
Rated power	Pn1 Pn2 Pn3	W	5400	7480	7490

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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## BRUSHLESS MOTORS

## NX860VAJ

ELECTRONIC DRIVE

DRIVE 30 / 75 Arms



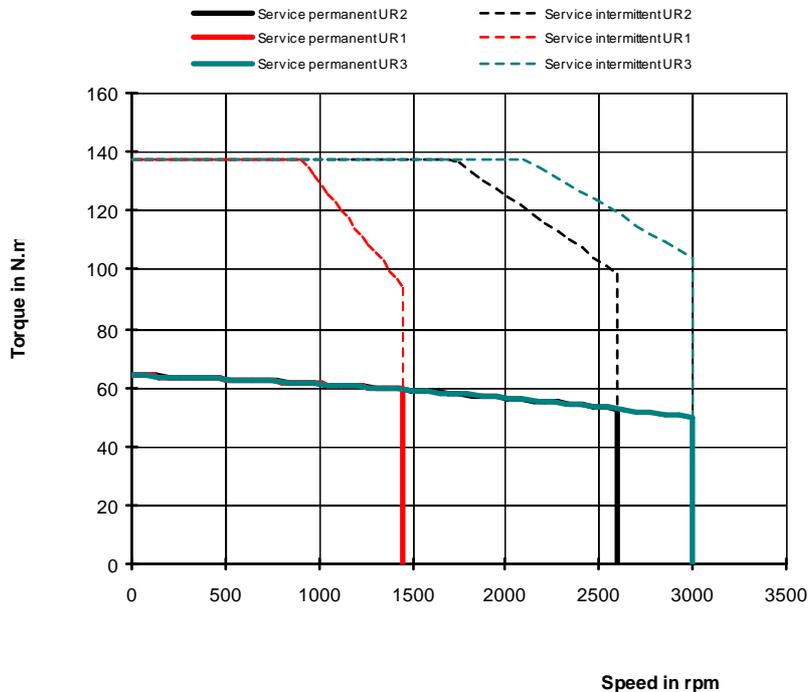
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	$M_b$	Nm	64		
Permanent current at low speed	$I_o$	$A_{rms}$	29,3		
Peak torque	$M_p$	Nm	137,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	74	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	140		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	2,18		
Winding resistance (25°C)*	$R_b$	W	0,499		
Winding inductance*	L	mH	6,43		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	920		
Thermal time constant	$T_{th}$	min	22		
Motor mass	M	kg	31		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1450	2600	3000
Rated torque	Mn1 Mn2 Mn3	Nm	59,23	52,57	49,66
Rated current	In1 In2 In3	$A_{rms}$	27,13	24,06	22,73
Rated power	Pn1 Pn2 Pn3	W	8990	14310	15600

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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NX860VAJ

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## BRUSHLESS MOTORS

## NX860VAF

ELECTRONIC DRIVE

DRIVE 45 / 110 Arms



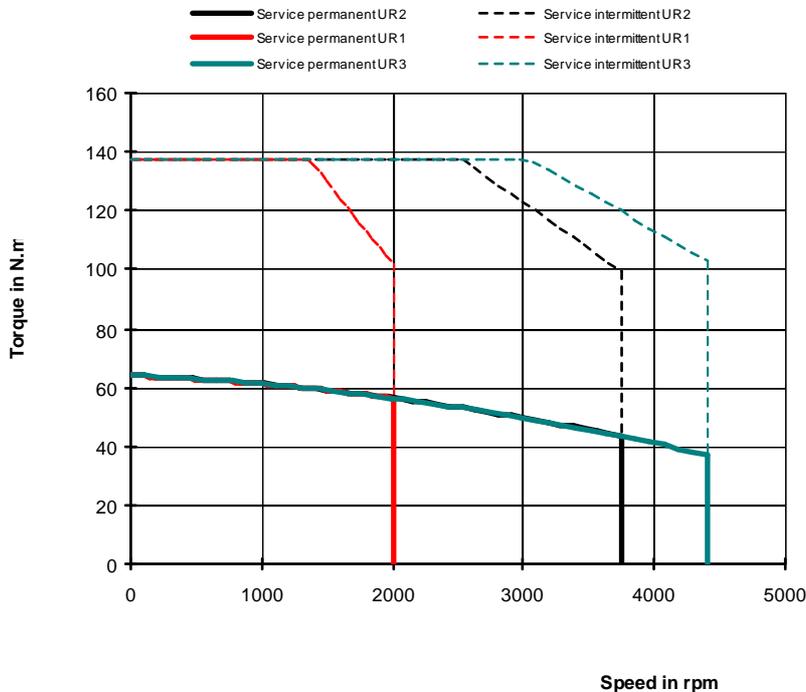
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	$V_{rms}$	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	$M_b$	Nm	64		
Permanent current at low speed	$I_o$	$A_{rms}$	42,7		
Peak torque	$M_p$	Nm	137,0	--	
Current for the peak torque	$I_p$	$A_{rms}$	108	--	
Back emf constant at 1000 rpm (25°C)*	$K_e$	$V_{rms}$	96,1		
Torque sensitivity	$K_t$	Nm/ $A_{rms}$	1,5		
Winding resistance (25°C)*	$R_b$	W	0,238		
Winding inductance*	L	mH	3,04		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	920		
Thermal time constant	$T_{th}$	min	22		
Motor mass	M	kg	31		
Voltage of the mains	UR1 UR2 UR3	$V_{rms}$	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2000	3750	4400
Rated torque	Mn1 Mn2 Mn3	Nm	56,36	43,38	37,05
Rated current	In1 In2 In3	$A_{rms}$	37,53	28,93	24,83
Rated power	Pn1 Pn2 Pn3	W	11800	17030	17070

All data are given in typical values under standard conditions

\* Phase to phase

Voltagés and currents are given in rms values



Characteristics are given for an optimal drive of the motor and an adaptive phase advance

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