

BRUSHLESS MOTORS	
EX310EAK	
ELECTRONIC DRIVE	
DRIVE 2.5/10 Arms 230 Vac	

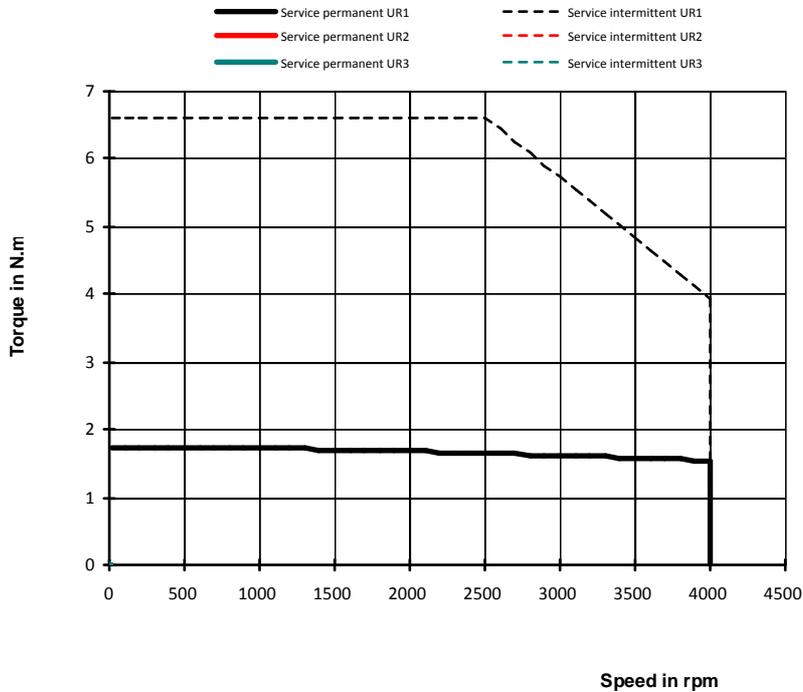
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	230	
Max mechanical speed	Nmax	t/min	15000	
Torque at low speed	M_o	Nm	1.75	
Permanent current at low speed	I_o	A_{rms}	2.16	
Peak torque	M_p	Nm	6.6	--
Current for the peak torque	I_p	A_{rms}	9.85	--
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	50.9	
Torque sensitivity	K_t	Nm/ A_{rms}	0.81	
Winding resistance (25°C)*	R_b	W	6.58	
Winding inductance*	L	mH	20.3	
Rotor inertia	J	$kgm^2 \times 10^{-5}$	7.9	
Thermal time constant	Tth	min	20	
Motor mass	M	kg	2.4	
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	- -
Rated speed	Nn1 Nn2 Nn3	t/min	4000	- -
Rated torque	Mn1 Mn2 Mn3	Nm	1.54	- -
Rated current	In1 In2 In3	A_{rms}	1.96	- -
Rated power	Pn1 Pn2 Pn3	W	640	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX310EAP	
ELECTRONIC DRIVE	
DRIVE 1.5/6 Arms 400 Vac	

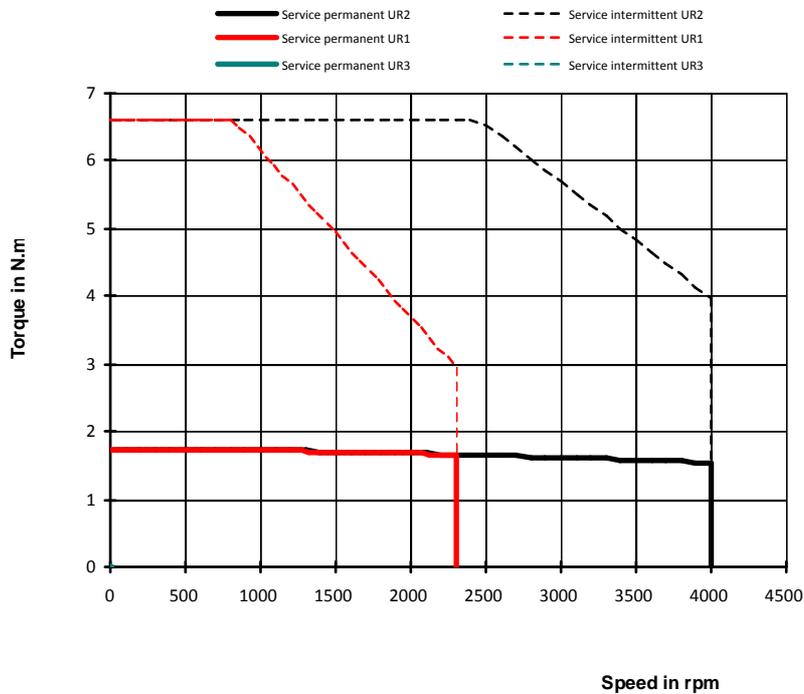
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	400		
Max mechanical speed	Nmax	t/min	15000		
Torque at low speed	M _o	Nm	1.75		
Permanent current at low speed	I _o	A _{rms}	1.24		
Peak torque	M _p	Nm	6.6	--	
Current for the peak torque	I _p	A _{rms}	5.64	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	88.9		
Torque sensitivity	Kt	Nm/A _{rms}	1.42		
Winding resistance (25°C)*	Rb	W	20.7		
Winding inductance*	L	mH	62		
Rotor inertia	J	kgm ² x10 ⁻⁵	7.9		
Thermal time constant	Tth	min	20		
Motor mass	M	kg	2.4		
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	-
Rated torque	Mn1 Mn2 Mn3	Nm	1.66	1.54	-
Rated current	In1 In2 In3	A _{rms}	1.19	1.12	-
Rated power	Pn1 Pn2 Pn3	W	400	640	-

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 adaptative phase advance

FICHE-009

Création: 13 oct 2003	Edition: 03/nov/2010	EX310EAP	
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BRUSHLESS MOTORS	
EX420EAJ	
ELECTRONIC DRIVE	
DRIVE 5/20 Arms 230 Vac	 

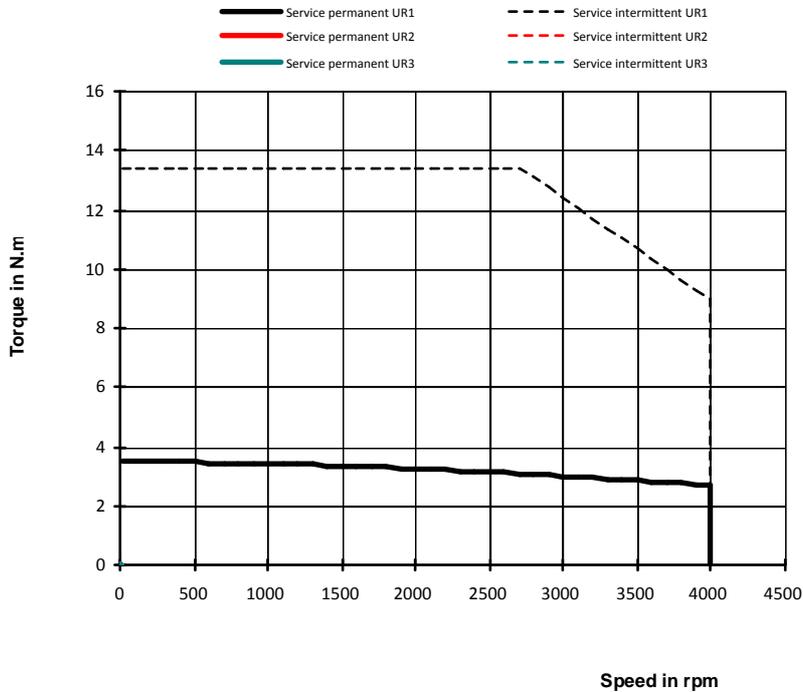
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	230	
Max mechanical speed	Nmax	t/min	12000	
Torque at low speed	M _o	Nm	3.5	
Permanent current at low speed	I _o	A _{rms}	4.26	
Peak torque	M _p	Nm	13.4	--
Current for the peak torque	I _p	A _{rms}	19.6	--
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	51.4	
Torque sensitivity	Kt	Nm/A _{rms}	0.821	
Winding resistance (25°C)*	Rb	W	2.3	
Winding inductance*	L	mH	11	
Rotor inertia	J	kgm ² x10 ⁻⁵	29	
Thermal time constant	Tth	min	12	
Motor mass	M	kg	5.8	
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	- -
Rated speed	Nn1 Nn2 Nn3	t/min	4000	- -
Rated torque	Mn1 Mn2 Mn3	Nm	2.67	- -
Rated current	In1 In2 In3	A _{rms}	3.33	- -
Rated power	Pn1 Pn2 Pn3	W	1120	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX420EAP	
ELECTRONIC DRIVE	
DRIVE 2.5/12 Arms 400 Vac	

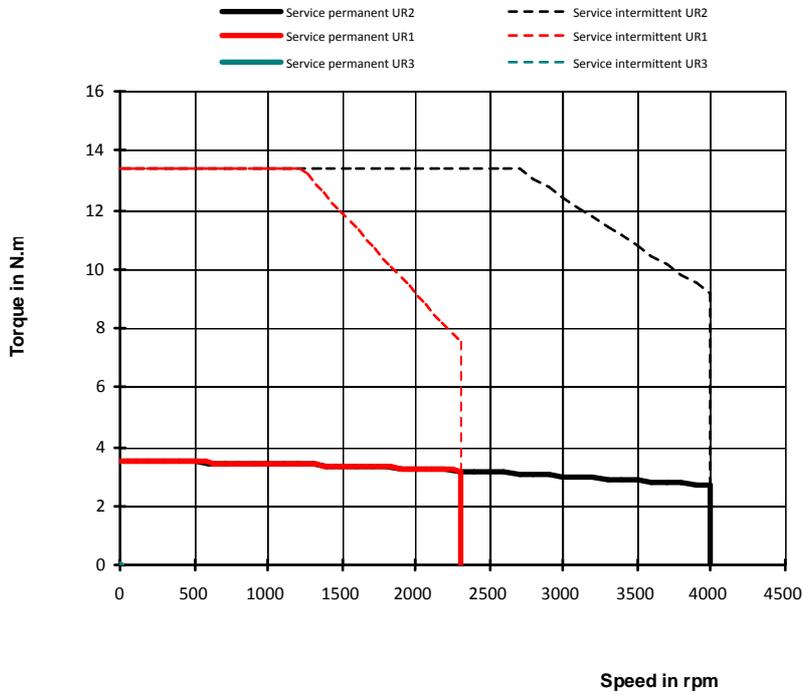
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	M_o	Nm	3.5		
Permanent current at low speed	I_o	A_{rms}	2.46		
Peak torque	M_p	Nm	13.4	--	
Current for the peak torque	I_p	A_{rms}	11.3	--	
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	89		
Torque sensitivity	K_t	Nm/A_{rms}	1.42		
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	Tth	min	12		
Motor mass	M	kg	5.8		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	-
Rated torque	Mn1 Mn2 Mn3	Nm	3.18	2.67	-
Rated current	In1 In2 In3	A_{rms}	2.26	1.92	-
Rated power	Pn1 Pn2 Pn3	W	770	1120	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX420EAV	
ELECTRONIC DRIVE	
DRIVE 1.5/6 Arms 400 Vac	

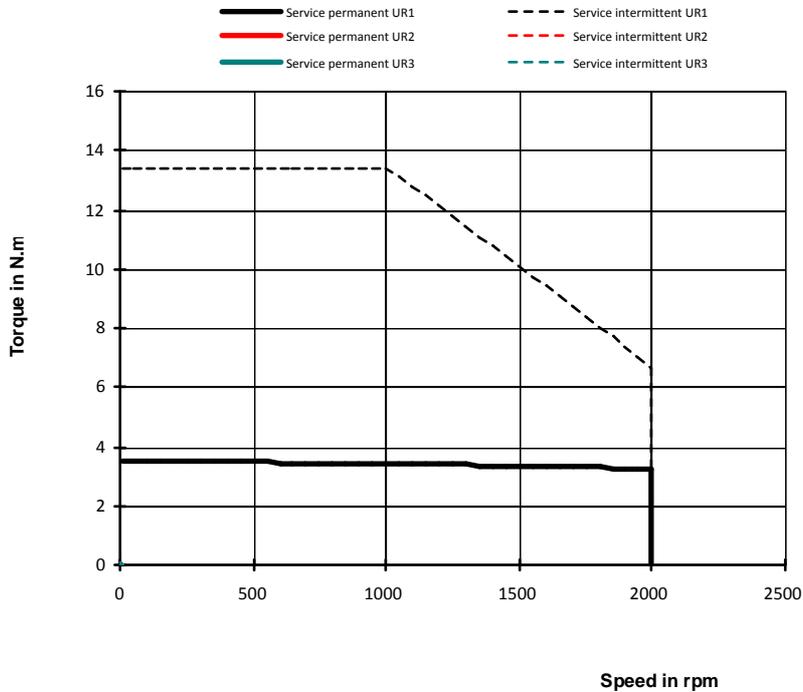
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	M_o	Nm	3.5		
Permanent current at low speed	I_o	A_{rms}	1.24		
Peak torque	M_p	Nm	13.4	--	
Current for the peak torque	I_p	A_{rms}	5.68	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V_{rms}	177		
Torque sensitivity	Kt	Nm/ A_{rms}	2.83		
Winding resistance (25°C)*	Rb	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	5.8		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	400	-	-
Rated speed	Nn1 Nn2 Nn3	t/min	2000	-	-
Rated torque	Mn1 Mn2 Mn3	Nm	3.25	-	-
Rated current	In1 In2 In3	A_{rms}	1.16	-	-
Rated power	Pn1 Pn2 Pn3	W	680	-	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX430EAF	
ELECTRONIC DRIVE	
DRIVE 6/20 Arms 230 Vac	 

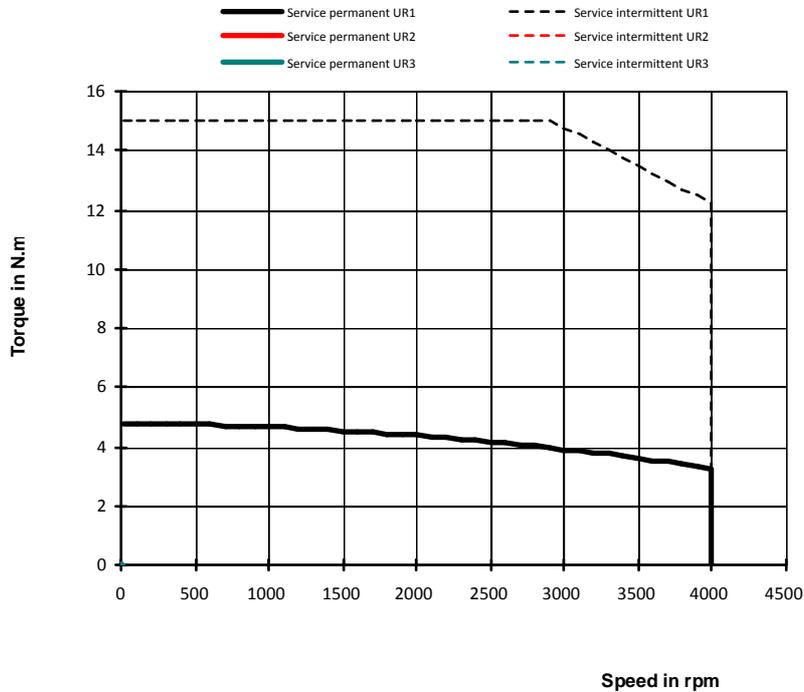
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	230	
Max mechanical speed	Nmax	t/min	12000	
Torque at low speed	M _o	Nm	4.8	
Permanent current at low speed	I _o	A _{rms}	5.79	
Peak torque	M _p	Nm	18.8	--
Current for the peak torque	I _p	A _{rms}	26.6	--
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	51.8	
Torque sensitivity	Kt	Nm/A _{rms}	0.828	
Winding resistance (25°C)*	Rb	W	1.38	
Winding inductance*	L	mH	6.8	
Rotor inertia	J	kgm ² x10 ⁻⁵	42.6	
Thermal time constant	Tth	min	18	
Motor mass	M	kg	7	
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	- -
Rated speed	Nn1 Nn2 Nn3	t/min	4000	- -
Rated torque	Mn1 Mn2 Mn3	Nm	3.28	- -
Rated current	In1 In2 In3	A _{rms}	4.07	- -
Rated power	Pn1 Pn2 Pn3	W	1370	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX430EAJ	
ELECTRONIC DRIVE	
DRIVE 5/20 Arms 230 Vac	 

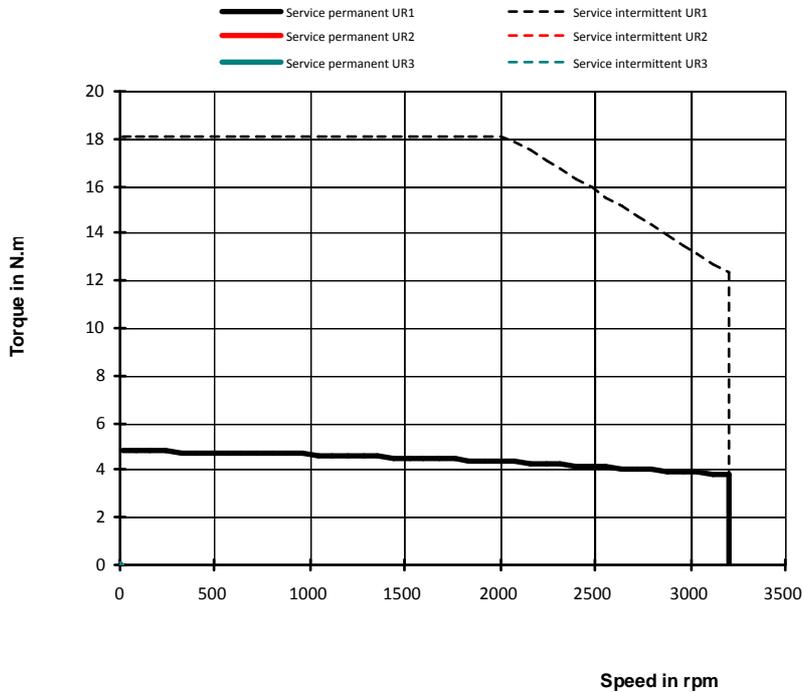
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	230	
Max mechanical speed	Nmax	t/min	12000	
Torque at low speed	M_o	Nm	4.8	
Permanent current at low speed	I_o	A_{rms}	4.57	
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	Tth	min	18	
Motor mass	M	kg	7	
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	- -
Rated speed	Nn1 Nn2 Nn3	t/min	3200	- -
Rated torque	Mn1 Mn2 Mn3	Nm	3.79	- -
Rated current	In1 In2 In3	A_{rms}	3.68	- -
Rated power	Pn1 Pn2 Pn3	W	1270	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX430EAL	
ELECTRONIC DRIVE	
DRIVE 3.5/12 Arms 400 Vac	 

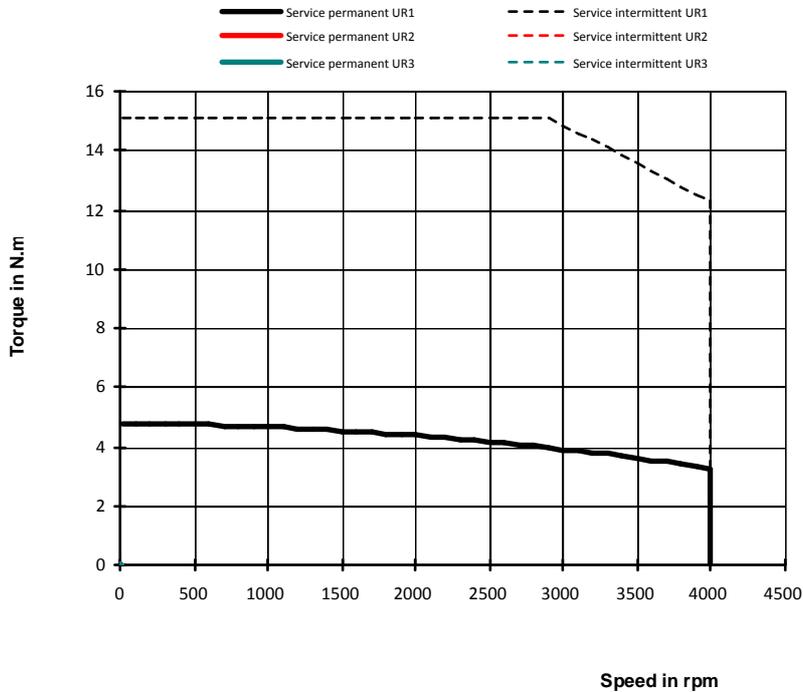
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400	
Max mechanical speed	Nmax	t/min	12000	
Torque at low speed	M_o	Nm	4.8	
Permanent current at low speed	I_o	A_{rms}	3.3	
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	Tth	min	18	
Motor mass	M	kg	7	
Voltage of the mains	UR1 UR2 UR3	V_{rms}	400	- -
Rated speed	Nn1 Nn2 Nn3	t/min	4000	- -
Rated torque	Mn1 Mn2 Mn3	Nm	3.28	- -
Rated current	In1 In2 In3	A_{rms}	2.32	- -
Rated power	Pn1 Pn2 Pn3	W	1370	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX430EAP	
ELECTRONIC DRIVE	
DRIVE 2.5/12 Arms 400 Vac	

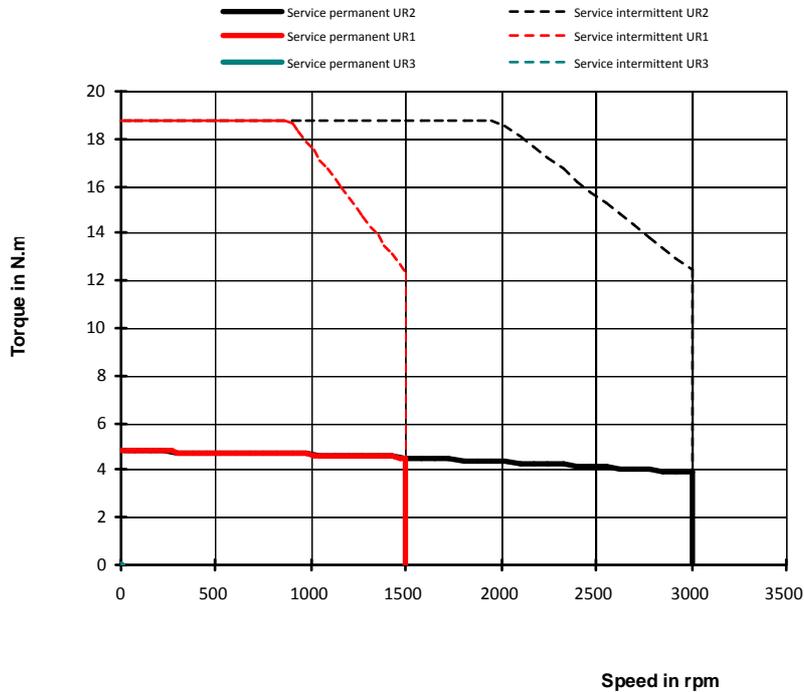
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	M_o	Nm	4.8		
Permanent current at low speed	I_o	A_{rms}	2.46		
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	Tth	min	18		
Motor mass	M	kg	7		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	1500	3000	-
Rated torque	Mn1 Mn2 Mn3	Nm	4.53	3.90	-
Rated current	In1 In2 In3	A_{rms}	2.34	2.03	-
Rated power	Pn1 Pn2 Pn3	W	710	1230	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX620EAO	
ELECTRONIC DRIVE	
DRIVE 6/23 Arms 400 Vac	

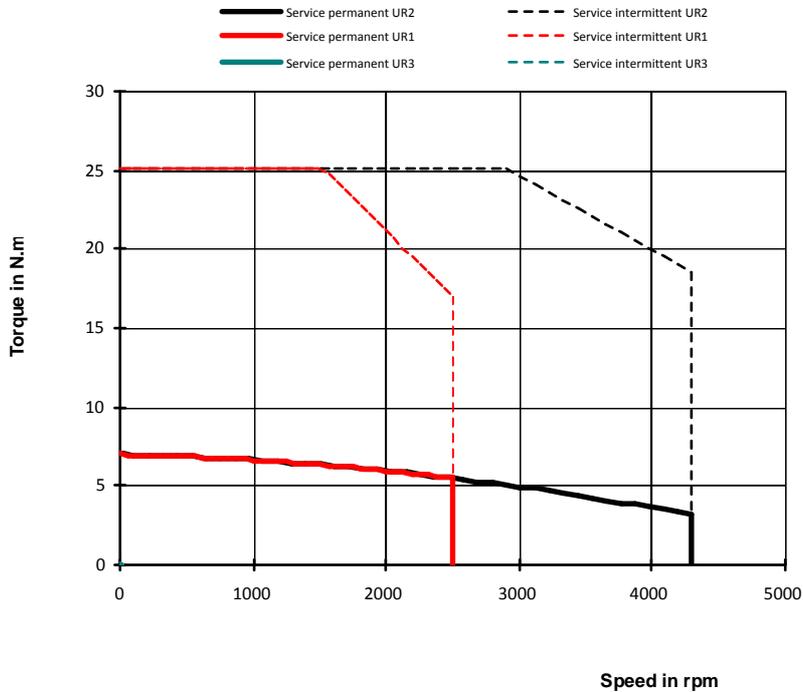
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M_o	Nm	7		
Permanent current at low speed	I_o	A_{rms}	5.51		
Peak torque	M_p	Nm	26.7	--	
Current for the peak torque	I_p	A_{rms}	24.8	--	
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	81.7		
Torque sensitivity	K_t	Nm/A_{rms}	1.27		
Winding resistance (25°C)*	R_b	W	1.63		
Winding inductance*	L	mH	14		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	98		
Thermal time constant	Tth	min	27		
Motor mass	M	kg	11.3		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	2500	4300	-
Rated torque	Mn1 Mn2 Mn3	Nm	5.49	3.13	-
Rated current	In1 In2 In3	A_{rms}	4.47	2.75	-
Rated power	Pn1 Pn2 Pn3	W	1440	1410	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX630EAI	
ELECTRONIC DRIVE	
DRIVE 10/36 Arms 230 Vac	

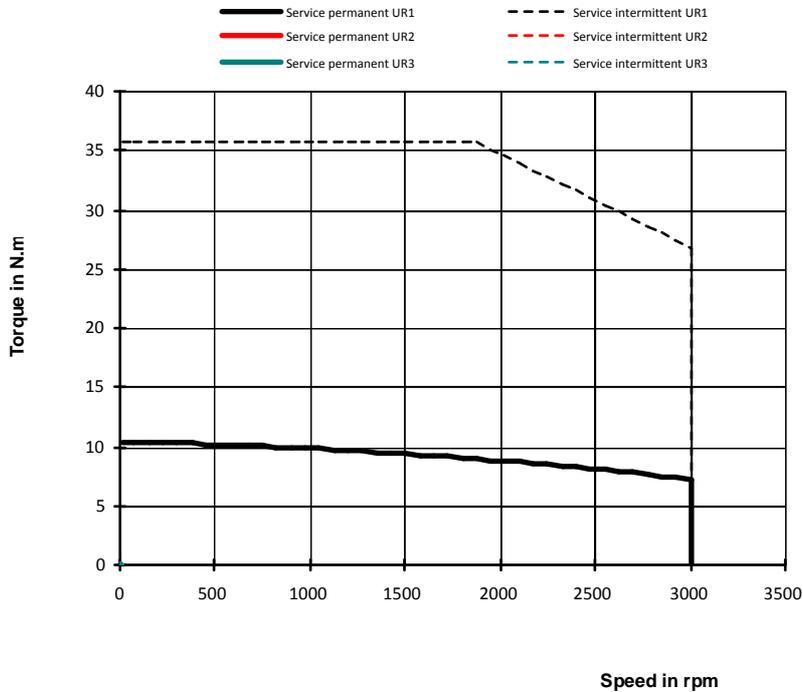
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	230		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M_o	Nm	10.4		
Permanent current at low speed	I_o	A_{rms}	9.28		
Peak torque	M_p	Nm	40.0	--	
Current for the peak torque	I_p	A_{rms}	42.2	--	
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	68.2		
Torque sensitivity	K_t	Nm/ A_{rms}	1.12		
Winding resistance (25°C)*	Rb	W	0.595		
Winding inductance*	L	mH	6.06		
Rotor inertia	J	kgm ² x10 ⁻⁵	147		
Thermal time constant	Tth	min	33		
Motor mass	M	kg	12.5		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	-	-
Rated speed	Nn1 Nn2 Nn3	t/min	3000	-	-
Rated torque	Mn1 Mn2 Mn3	Nm	7.24	-	-
Rated current	In1 In2 In3	A_{rms}	6.75	-	-
Rated power	Pn1 Pn2 Pn3	W	2270	-	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX630EAN	
ELECTRONIC DRIVE	
DRIVE 7/23 Arms 400 Vac	

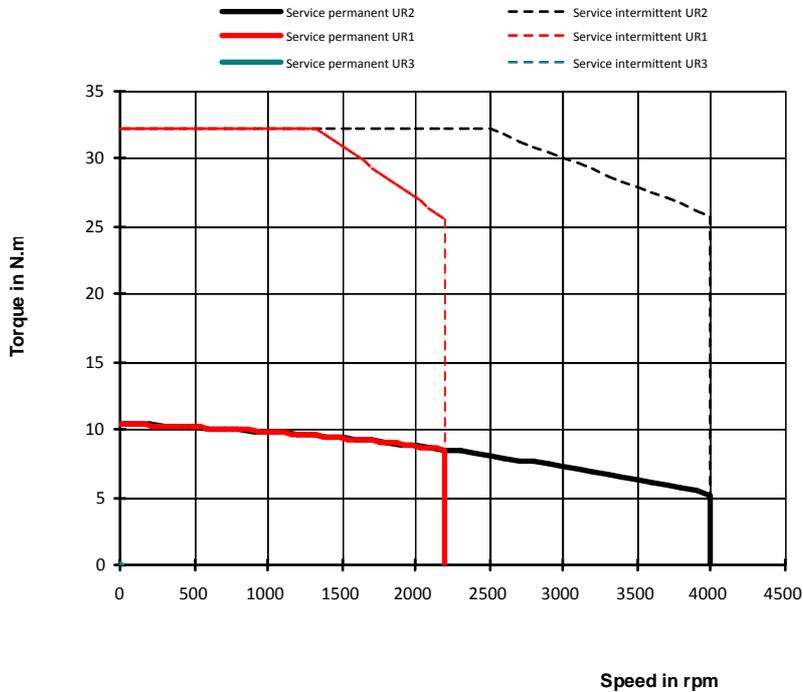
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M_o	Nm	10.4		
Permanent current at low speed	I_o	A_{rms}	6.92		
Peak torque	M_p	Nm	40.0	--	
Current for the peak torque	I_p	A_{rms}	31.4	--	
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	91.6		
Torque sensitivity	K_t	Nm/ A_{rms}	1.5		
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	Tth	min	33		
Motor mass	M	kg	12.5		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	-
Rated speed	Nn1 Nn2 Nn3	t/min	2200	4000	-
Rated torque	Mn1 Mn2 Mn3	Nm	8.52	5.20	-
Rated current	In1 In2 In3	A_{rms}	5.81	3.76	-
Rated power	Pn1 Pn2 Pn3	W	1960	2180	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX630EAY	
ELECTRONIC DRIVE	
DRIVE 6/23 Arms 400 Vac	

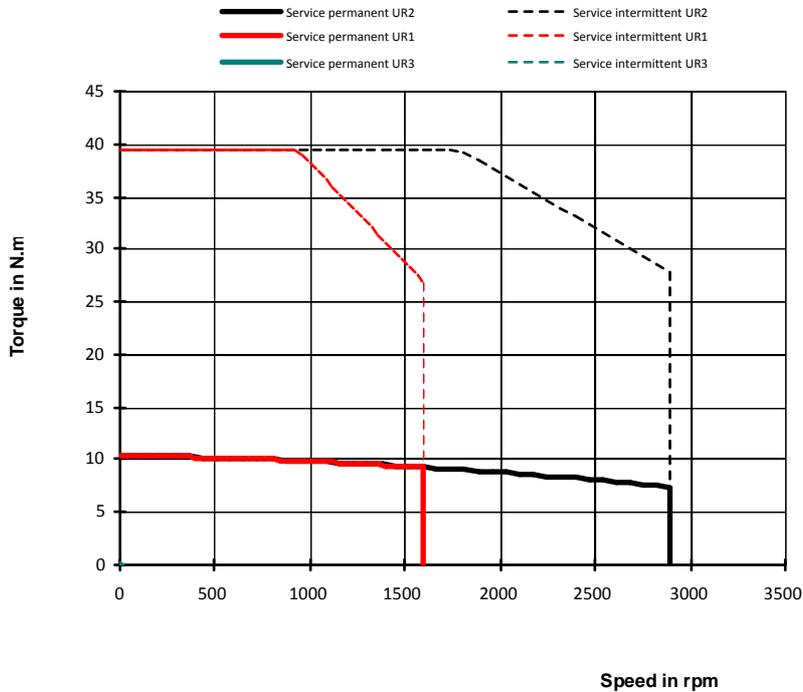
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400	
Max mechanical speed	Nmax	t/min	10000	
Torque at low speed	M_o	Nm	10.4	
Permanent current at low speed	I_o	A_{rms}	5.11	
Peak torque	M_p	Nm	40.0	--
Current for the peak torque	I_p	A_{rms}	23.2	--
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	124	
Torque sensitivity	K_t	Nm/ A_{rms}	2.03	
Winding resistance (25°C)*	R_b	W	1.94	
Winding inductance*	L	mH	20	
Rotor inertia	J	$kgm^2 \times 10^{-5}$	147	
Thermal time constant	Tth	min	33	
Motor mass	M	kg	12.5	
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400
Rated speed	Nn1 Nn2 Nn3	t/min	1600	2900
Rated torque	Mn1 Mn2 Mn3	Nm	9.27	7.42
Rated current	In1 In2 In3	A_{rms}	4.63	3.80
Rated power	Pn1 Pn2 Pn3	W	1550	2250

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX820EAL	
ELECTRONIC DRIVE	
DRIVE 15/67 Arms 230 Vac	 

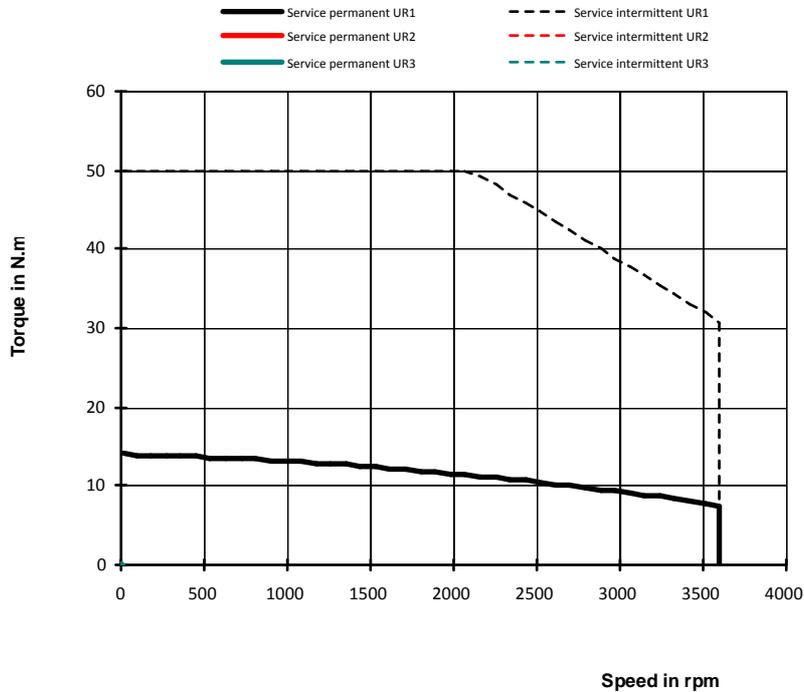
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	230	
Max mechanical speed	Nmax	t/min	8000	
Torque at low speed	M _o	Nm	14	
Permanent current at low speed	I _o	A _{rms}	14.9	
Peak torque	M _p	Nm	50.0	--
Current for the peak torque	I _p	A _{rms}	66.9	--
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	58.1	
Torque sensitivity	Kt	Nm/A _{rms}	0.943	
Winding resistance (25°C)*	Rb	W	0.379	
Winding inductance*	L	mH	3.35	
Rotor inertia	J	kgm ² x10 ⁻⁵	320	
Thermal time constant	Tth	min	34	
Motor mass	M	kg	24	
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	- -
Rated speed	Nn1 Nn2 Nn3	t/min	3600	- -
Rated torque	Mn1 Mn2 Mn3	Nm	7.53	- -
Rated current	In1 In2 In3	A _{rms}	8.30	- -
Rated power	Pn1 Pn2 Pn3	W	2840	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX820EAR	
ELECTRONIC DRIVE	
DRIVE 10/42 Arms 400 Vac	

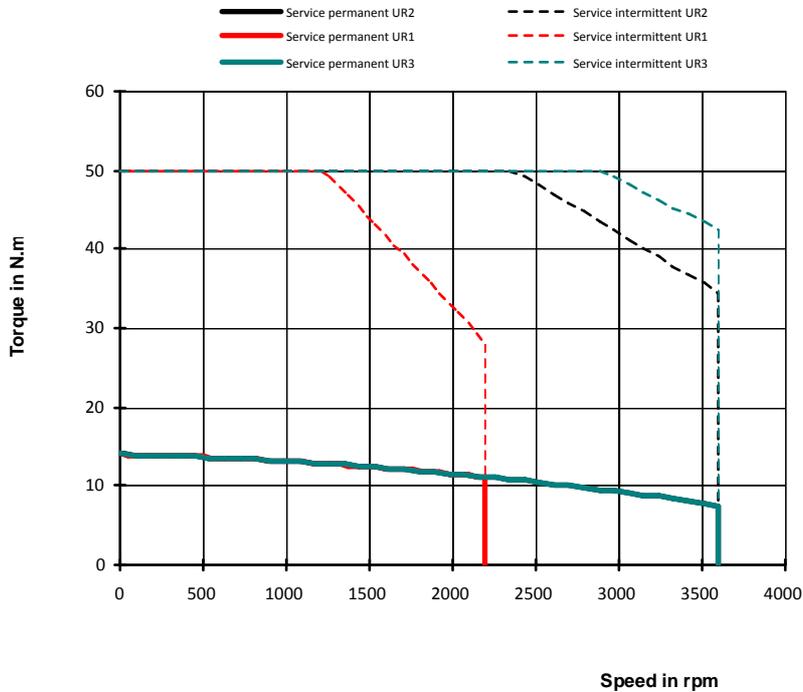
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M _o	Nm	14		
Permanent current at low speed	I _o	A _{rms}	9.28		
Peak torque	M _p	Nm	50.0	--	
Current for the peak torque	I _p	A _{rms}	41.8	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	93		
Torque sensitivity	Kt	Nm/A _{rms}	1.51		
Winding resistance (25°C)*	Rb	W	1.01		
Winding inductance*	L	mH	8.57		
Rotor inertia	J	kgm ² x10 ⁻⁵	320		
Thermal time constant	Tth	min	34		
Motor mass	M	kg	24		
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2200	3600	3600
Rated torque	Mn1 Mn2 Mn3	Nm	11.16	7.53	7.53
Rated current	In1 In2 In3	A _{rms}	7.49	5.19	5.19
Rated power	Pn1 Pn2 Pn3	W	2570	2840	2840

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX820EAW	
ELECTRONIC DRIVE	
DRIVE 6/25 Arms 400 Vac	 

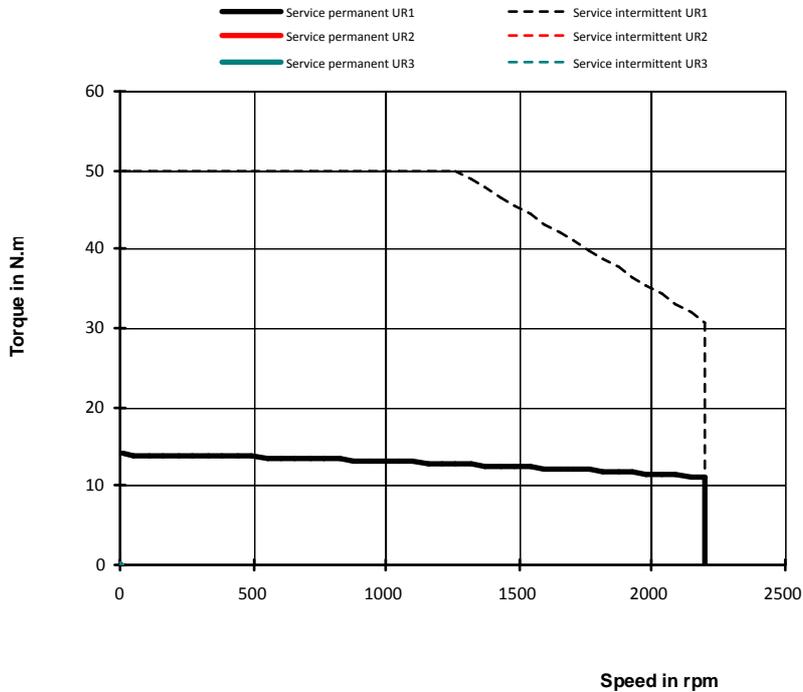
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	400	
Max mechanical speed	Nmax	t/min	8000	
Torque at low speed	M _o	Nm	14	
Permanent current at low speed	I _o	A _{rms}	5.4	
Peak torque	M _p	Nm	50.0	--
Current for the peak torque	I _p	A _{rms}	24.3	--
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	160	
Torque sensitivity	Kt	Nm/A _{rms}	2.59	
Winding resistance (25°C)*	Rb	W	2.96	
Winding inductance*	L	mH	25.3	
Rotor inertia	J	kgm ² x10 ⁻⁵	320	
Thermal time constant	Tth	min	34	
Motor mass	M	kg	24	
Voltage of the mains	UR1 UR2 UR3	V _{rms}	400	- -
Rated speed	Nn1 Nn2 Nn3	t/min	2200	- -
Rated torque	Mn1 Mn2 Mn3	Nm	11.16	- -
Rated current	In1 In2 In3	A _{rms}	4.36	- -
Rated power	Pn1 Pn2 Pn3	W	2570	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX840EAJ	
ELECTRONIC DRIVE	
DRIVE 16/73 Arms 230 Vac	

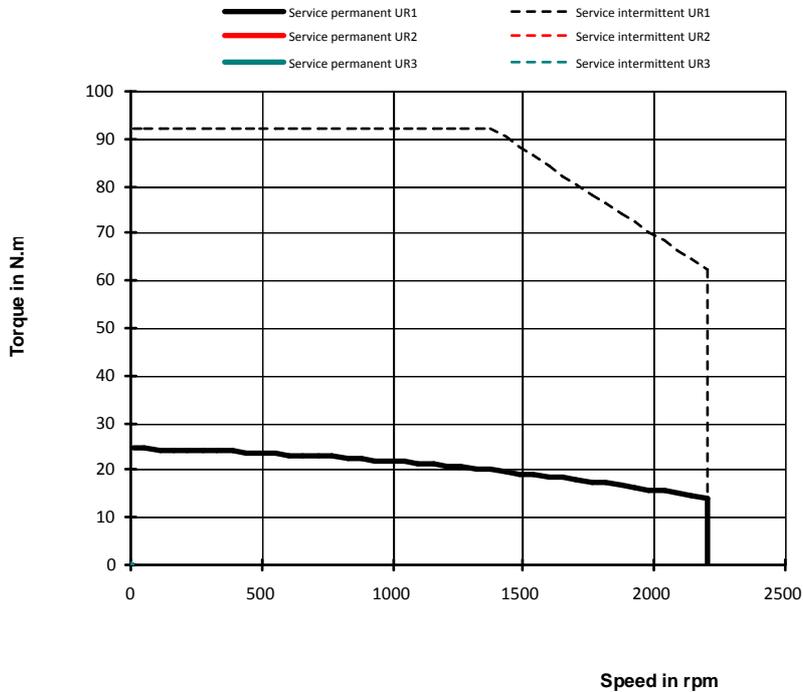
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	230	
Max mechanical speed	Nmax	t/min	8000	
Torque at low speed	M _o	Nm	24.5	
Permanent current at low speed	I _o	A _{rms}	16	
Peak torque	M _p	Nm	92.0	--
Current for the peak torque	I _p	A _{rms}	72.7	--
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	94.2	
Torque sensitivity	Kt	Nm/A _{rms}	1.53	
Winding resistance (25°C)*	Rb	W	0.371	
Winding inductance*	L	mH	4.28	
Rotor inertia	J	kgm ² x10 ⁻⁵	620	
Thermal time constant	Tth	min	52	
Motor mass	M	kg	32	
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	- -
Rated speed	Nn1 Nn2 Nn3	t/min	2200	- -
Rated torque	Mn1 Mn2 Mn3	Nm	14.18	- -
Rated current	In1 In2 In3	A _{rms}	9.54	- -
Rated power	Pn1 Pn2 Pn3	W	3270	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX840EAK	
ELECTRONIC DRIVE	
DRIVE 15/70 Arms 400 Vac	

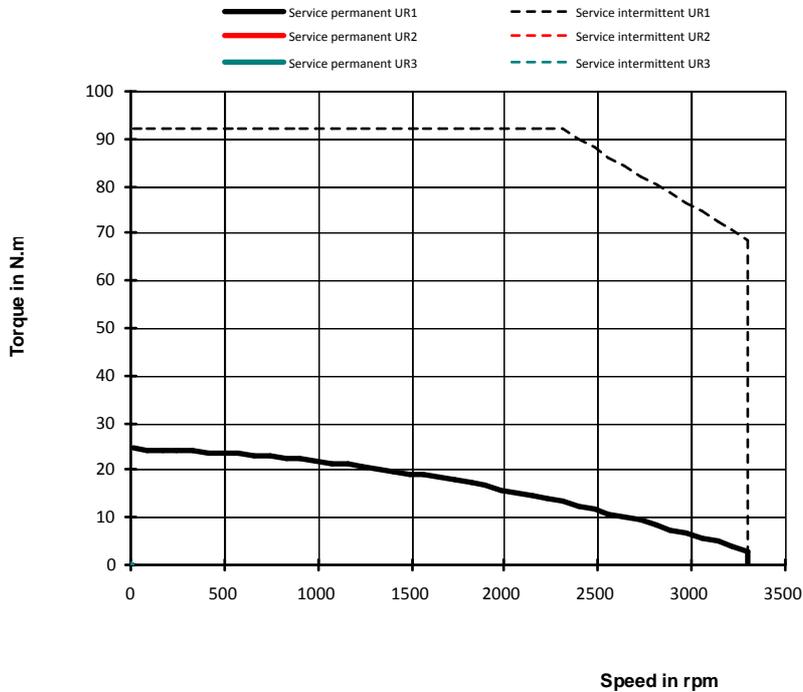
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V _{rms}	400		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M _o	Nm	24.5		
Permanent current at low speed	I _o	A _{rms}	14.3		
Peak torque	M _p	Nm	92.0	--	
Current for the peak torque	I _p	A _{rms}	64.7	--	
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	106		
Torque sensitivity	Kt	Nm/A _{rms}	1.72		
Winding resistance (25°C)*	Rb	W	0.493		
Winding inductance*	L	mH	5.42		
Rotor inertia	J	kgm ² x10 ⁻⁵	620		
Thermal time constant	Tth	min	52		
Motor mass	M	kg	32		
Voltage of the mains	UR1 UR2 UR3	V _{rms}	400	-	-
Rated speed	Nn1 Nn2 Nn3	t/min	3300	-	-
Rated torque	Mn1 Mn2 Mn3	Nm	2.85	-	-
Rated current	In1 In2 In3	A _{rms}	2.07	-	-
Rated power	Pn1 Pn2 Pn3	W	990	-	-

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX840EAQ	
ELECTRONIC DRIVE	
DRIVE 10/40 Arms 400 Vac	

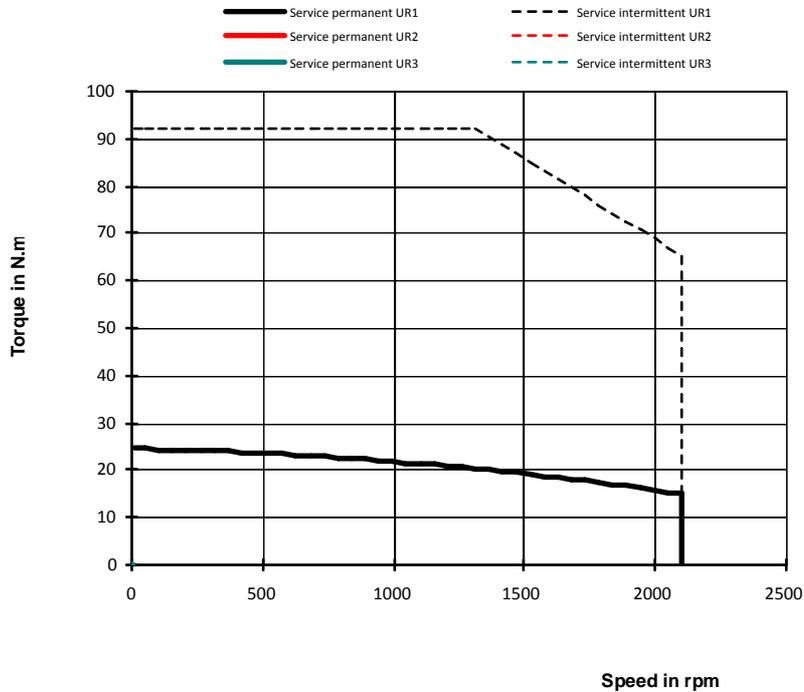
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	400	
Max mechanical speed	Nmax	t/min	8000	
Torque at low speed	M_o	Nm	24.5	
Permanent current at low speed	I_o	A_{rms}	8.55	
Peak torque	M_p	Nm	92.0	--
Current for the peak torque	I_p	A_{rms}	38.8	--
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	177	
Torque sensitivity	K_t	Nm/A_{rms}	2.87	
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	Tth	min	52	
Motor mass	M	kg	32	
Voltage of the mains	UR1 UR2 UR3	V_{rms}	400	- -
Rated speed	Nn1 Nn2 Nn3	t/min	2100	- -
Rated torque	Mn1 Mn2 Mn3	Nm	15.01	- -
Rated current	In1 In2 In3	A_{rms}	5.37	- -
Rated power	Pn1 Pn2 Pn3	W	3300	- -

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS

EX860EAD

ELECTRONIC DRIVE

DRIVE 30/135 Arms 230 Vac



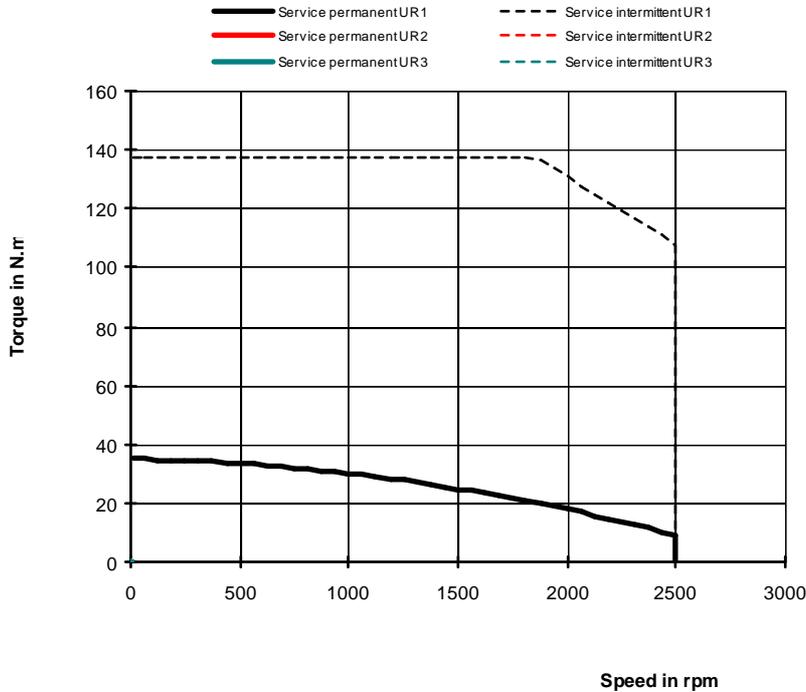
Characteristics are given for an optimal drive of the motor and an adaptive phase advance

Max voltage of the mains	Ur max	V_{rms}	230		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M_b	Nm	35		
Permanent current at low speed	I_o	A_{rms}	27.9		
Peak torque	M_p	Nm	137.0	--	
Current for the peak torque	I_p	A_{rms}	133	--	
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	78.7		
Torque sensitivity	K_t	Nm/ A_{rms}	1.26		
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	40		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	-	-
Rated speed	Nn1 Nn2 Nn3	t/min	2500	-	-
Rated torque	Mn1 Mn2 Mn3	Nm	9.00	-	-
Rated current	In1 In2 In3	A_{rms}	7.82	-	-
Rated power	Pn1 Pn2 Pn3	W	2360	-	-

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

Création: 18 mai 2004

Edition:

03/nov/2010

EX860EAD

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BRUSHLESS MOTORS	
EX860EAJ	
ELECTRONIC DRIVE	
DRIVE 16/70 Arms 400 Vac	

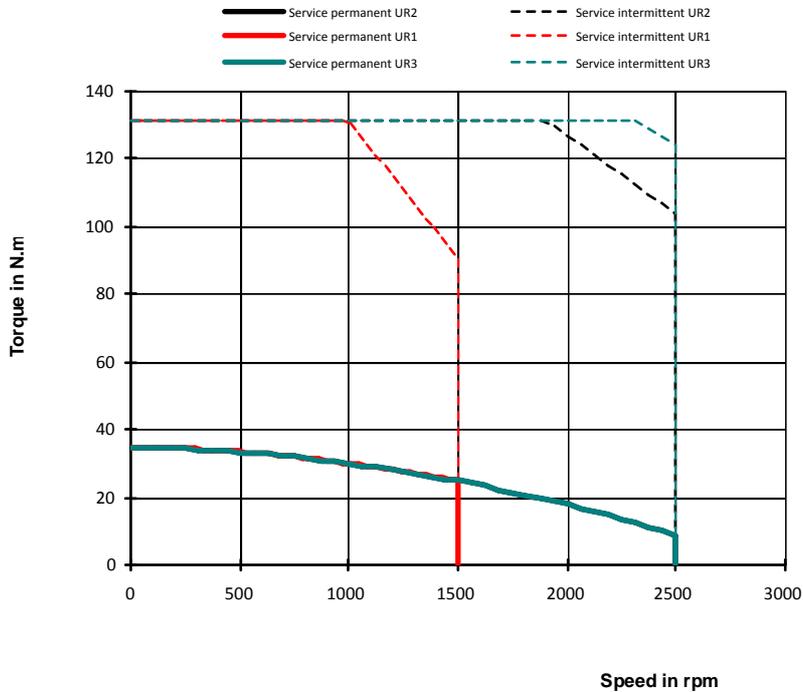
Characteristics are given for an optimal drive of the motor and an adaptative phase advance

Max voltage of the mains	Ur max	V_{rms}	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M_o	Nm	35		
Permanent current at low speed	I_o	A_{rms}	15.7		
Peak torque	M_p	Nm	137.0	--	
Current for the peak torque	I_p	A_{rms}	75	--	
Back emf constant at 1000 rpm (25°C)*	K_e	V_{rms}	140		
Torque sensitivity	K_t	Nm/ A_{rms}	2.23		
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	Tth	min	60		
Motor mass	M	kg	40		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1500	2500	2500
Rated torque	Mn1 Mn2 Mn3	Nm	24.80	9.00	9.00
Rated current	In1 In2 In3	A_{rms}	11.28	4.40	4.40
Rated power	Pn1 Pn2 Pn3	W	3900	2360	2360

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX310UUAU	
ELECTRONIC DRIVE	
DRIVE 2.5/7 Arms 400 Vac	

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

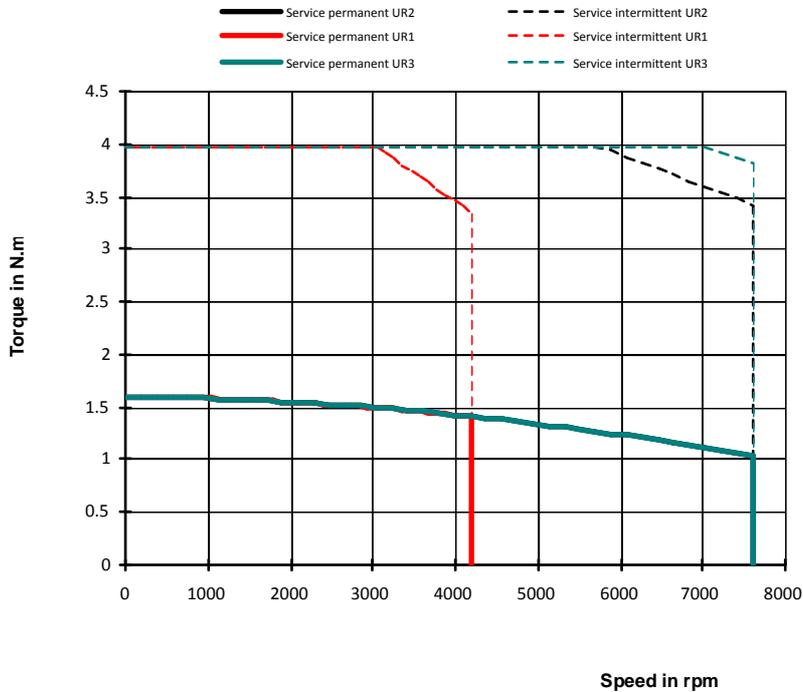
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V _{rms}	480		
Max mechanical speed	Nmax	t/min	15000		
Torque at low speed	M _o	Nm	1.6		
Permanent current at low speed	I _o	A _{rms}	2.46		
Peak torque	M _p	Nm	4.0	à Nn/2, Ip S3 :	
Current for the peak torque	I _p	A _{rms}	6.29	1% de 60s	
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	41		
Torque sensitivity	Kt	Nm/A _{rms}	0.652		
Winding resistance (25°C)*	Rb	W	4.29		
Winding inductance*	L	mH	13.2		
Rotor inertia	J	kgm ² x10 ⁻⁵	7.9		
Thermal time constant	Tth	min	20		
Motor mass	M	kg	2.4		
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4200	7600	7600
Rated torque	Mn1 Mn2 Mn3	Nm	1.41	1.03	1.03
Rated current	In1 In2 In3	A _{rms}	2.24	1.74	1.74
Rated power	Pn1 Pn2 Pn3	W	620	820	820

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX420UAI	
ELECTRONIC DRIVE	
DRIVE 4.5/11 Arms 400 Vac	

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

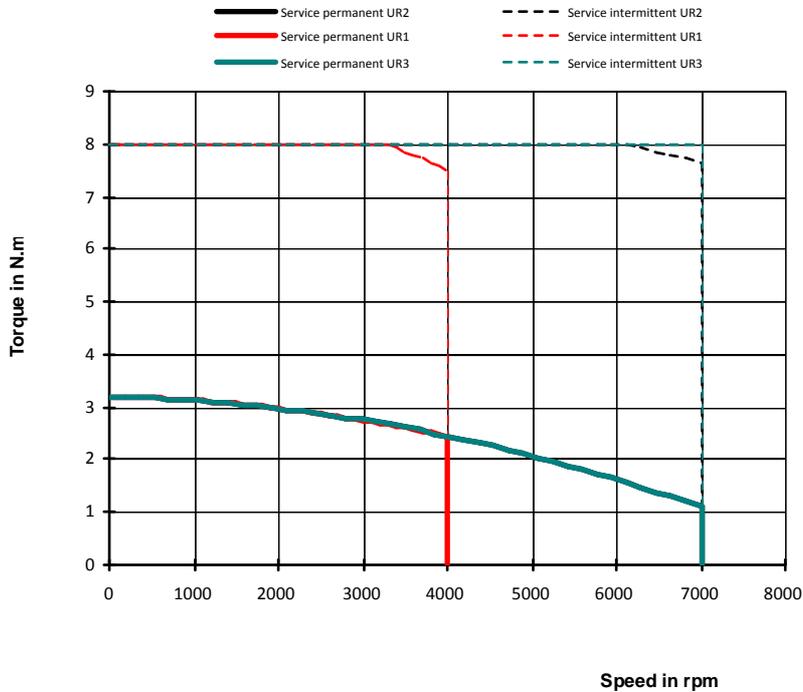
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V_{rms}	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	M_o	Nm	3.2		
Permanent current at low speed	I_o	A_{rms}	4.15		
Peak torque	M_p	Nm	8.0	à Nn/2, Ip S3 :	
Current for the peak torque	I_p	A_{rms}	10.8	1% de 60s	
Back emf constant at 1000 rpm (25°C)*	Ke	V_{rms}	48.3		
Torque sensitivity	Kt	Nm/ A_{rms}	0.772		
Winding resistance (25°C)*	Rb	W	1.94		
Winding inductance*	L	mH	9.72		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	29		
Thermal time constant	Tth	min	12		
Motor mass	M	kg	5.8		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	4000	7000	7000
Rated torque	Mn1 Mn2 Mn3	Nm	2.45	1.10	1.10
Rated current	In1 In2 In3	A_{rms}	3.25	1.58	1.58
Rated power	Pn1 Pn2 Pn3	W	1030	800	800

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX430UAG	
ELECTRONIC DRIVE	
DRIVE 5/12 Arms 400 Vac	

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

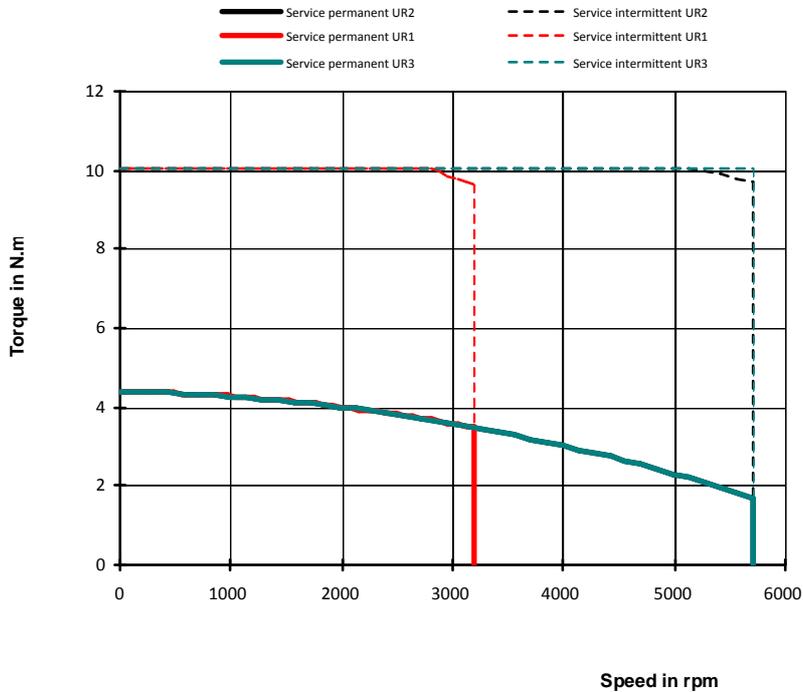
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V_{rms}	480		
Max mechanical speed	Nmax	t/min	12000		
Torque at low speed	M_o	Nm	4.4		
Permanent current at low speed	I_o	A_{rms}	4.88		
Peak torque	M_p	Nm	11.0		à Nn/2, Ip S3 :
Current for the peak torque	I_p	A_{rms}	12.6		1% de 60s
Back emf constant at 1000 rpm (25°C)*	Ke	V_{rms}	56.4		
Torque sensitivity	Kt	Nm/A_{rms}	0.902		
Winding resistance (25°C)*	Rb	W	1.5		
Winding inductance*	L	mH	8.07		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	42.6		
Thermal time constant	Tth	min	18		
Motor mass	M	kg	7		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	3200	5700	5700
Rated torque	Mn1 Mn2 Mn3	Nm	3.48	1.72	1.72
Rated current	In1 In2 In3	A_{rms}	3.94	2.07	2.07
Rated power	Pn1 Pn2 Pn3	W	1170	1020	1020

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 adaptative phase advance

FICHE-009

Création: 27 août 2007	Edition: 03/nov/2010	EX430UAG	.b
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BRUSHLESS MOTORS	
EX620UAM	
ELECTRONIC DRIVE	
DRIVE 6/17 Arms 400 Vac	

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

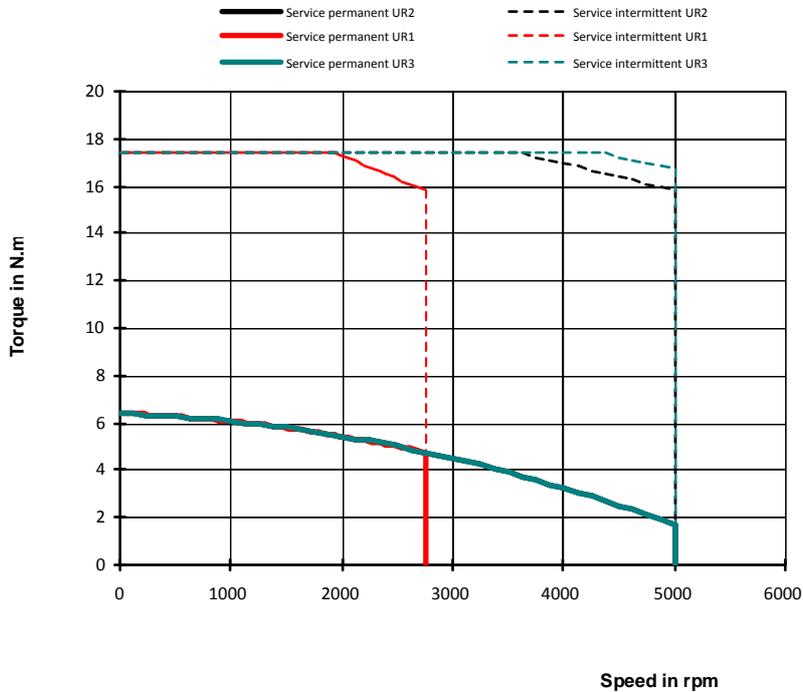
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V_{rms}	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M_o	Nm	6.4		
Permanent current at low speed	I_o	A_{rms}	6.02		
Peak torque	M_p	Nm	17.4	à Nn/2, Ip S3 :	
Current for the peak torque	I_p	A_{rms}	16.2	1% de 60s	
Back emf constant at 1000 rpm (25°C)*	Ke	V_{rms}	68.8		
Torque sensitivity	Kt	Nm/ A_{rms}	1.06		
Winding resistance (25°C)*	Rb	W	1.08		
Winding inductance*	L	mH	9.92		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	98		
Thermal time constant	Tth	min	27		
Motor mass	M	kg	11.3		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2750	5000	5000
Rated torque	Mn1 Mn2 Mn3	Nm	4.76	1.71	1.71
Rated current	In1 In2 In3	A_{rms}	4.67	1.95	1.95
Rated power	Pn1 Pn2 Pn3	W	1370	890	890

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 adaptative phase advance

FICHE-009

Création: 18 nov 2008	Edition: 03/nov/2010	EX620UAM	.a
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BRUSHLESS MOTORS	
EX630UAK	
ELECTRONIC DRIVE	
DRIVE 8/20 Arms 400 Vac	

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

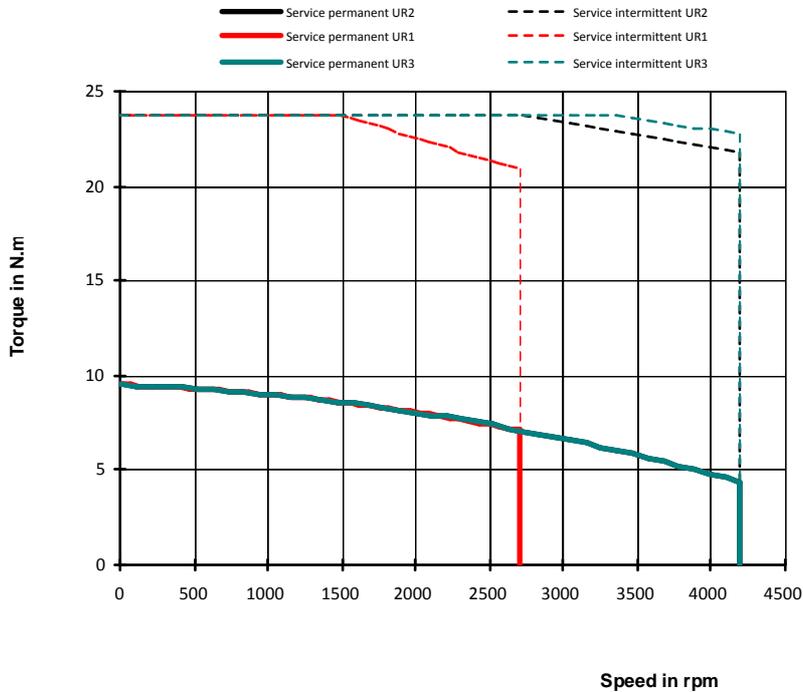
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V_{rms}	480		
Max mechanical speed	Nmax	t/min	10000		
Torque at low speed	M_o	Nm	9.5		
Permanent current at low speed	I_o	A_{rms}	7.91		
Peak torque	M_p	Nm	23.8		à Nn/2, Ip S3 :
Current for the peak torque	I_p	A_{rms}	19.4		1% de 60s
Back emf constant at 1000 rpm (25°C)*	Ke	V_{rms}	73.6		
Torque sensitivity	Kt	Nm/ A_{rms}	1.2		
Winding resistance (25°C)*	Rb	W	0.674		
Winding inductance*	L	mH	7.06		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	147		
Thermal time constant	Tth	min	33		
Motor mass	M	kg	12.5		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2700	4200	4200
Rated torque	Mn1 Mn2 Mn3	Nm	7.12	4.38	4.38
Rated current	In1 In2 In3	A_{rms}	6.16	4.02	4.02
Rated power	Pn1 Pn2 Pn3	W	2010	1920	1920

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX820UAQ	
ELECTRONIC DRIVE	
DRIVE 10/23 Arms 400 Vac	

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

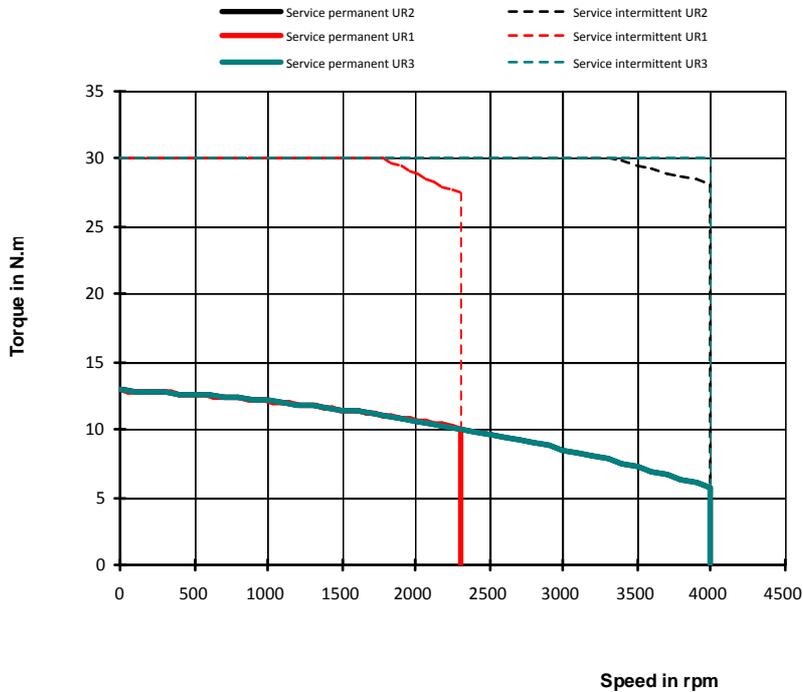
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V _{rms}	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M _o	Nm	12.9		
Permanent current at low speed	I _o	A _{rms}	9.1		
Peak torque	M _p	Nm	30.0	à Nn/2, Ip S3 :	
Current for the peak torque	I _p	A _{rms}	22.8	1% de 60s	
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	87.2		
Torque sensitivity	Kt	Nm/A _{rms}	1.42		
Winding resistance (25°C)*	Rb	W	0.889		
Winding inductance*	L	mH	7.53		
Rotor inertia	J	kgm ² x10 ⁻⁵	320		
Thermal time constant	Tth	min	34		
Motor mass	M	kg	24		
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	2300	4000	4000
Rated torque	Mn1 Mn2 Mn3	Nm	10.10	5.77	5.77
Rated current	In1 In2 In3	A _{rms}	7.21	4.27	4.27
Rated power	Pn1 Pn2 Pn3	W	2430	2410	2410

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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX840UAL	
ELECTRONIC DRIVE	
DRIVE 13/35 Arms 400 Vac	 

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

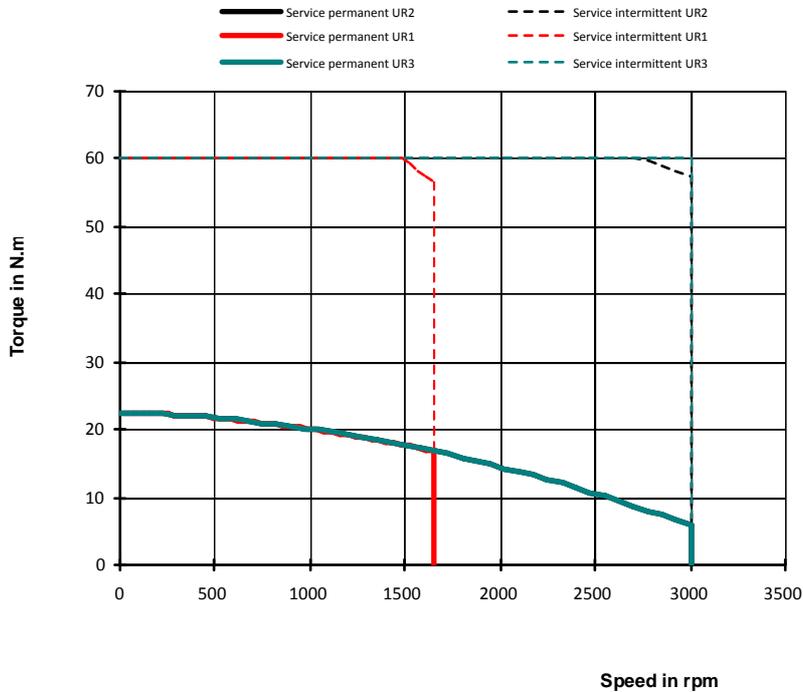
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V _{rms}	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M _o	Nm	22.6		
Permanent current at low speed	I _o	A _{rms}	12		
Peak torque	M _p	Nm	60.0	à Nn/2, Ip S3 :	
Current for the peak torque	I _p	A _{rms}	34.6	1% de 60s	
Back emf constant at 1000 rpm (25°C)*	Ke	V _{rms}	118		
Torque sensitivity	Kt	Nm/A _{rms}	1.89		
Winding resistance (25°C)*	Rb	W	0.579		
Winding inductance*	L	mH	6.69		
Rotor inertia	J	kgm ² x10 ⁻⁵	620		
Thermal time constant	Tth	min	52		
Motor mass	M	kg	32		
Voltage of the mains	UR1 UR2 UR3	V _{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1650	3000	3000
Rated torque	Mn1 Mn2 Mn3	Nm	16.80	5.84	5.84
Rated current	In1 In2 In3	A _{rms}	9.00	3.39	3.39
Rated power	Pn1 Pn2 Pn3	W	2900	1830	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 adaptative phase advance

FICHE-009

BRUSHLESS MOTORS	
EX860UAJ	
ELECTRONIC DRIVE	
DRIVE 15/45 Arms 400 Vac	

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

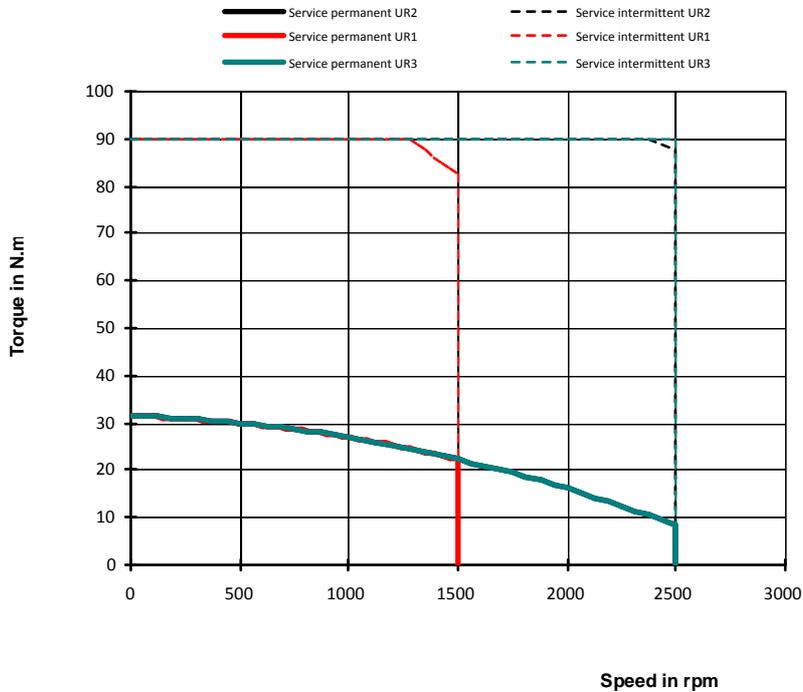
SAVE THESE INSTRUCTIONS

Max voltage of the mains	Ur max	V_{rms}	480		
Max mechanical speed	Nmax	t/min	8000		
Torque at low speed	M_o	Nm	31.4		
Permanent current at low speed	I_o	A_{rms}	13.9		
Peak torque	M_p	Nm	90.0	à Nn/2, Ip S3 :	
Current for the peak torque	I_p	A_{rms}	43.5	1% de 60s	
Back emf constant at 1000 rpm (25°C)*	Ke	V_{rms}	140		
Torque sensitivity	Kt	Nm/ A_{rms}	2.26		
Winding resistance (25°C)*	Rb	W	0.499		
Winding inductance*	L	mH	6.43		
Rotor inertia	J	$kgm^2 \times 10^{-5}$	920		
Thermal time constant	Tth	min	60		
Motor mass	M	kg	40		
Voltage of the mains	UR1 UR2 UR3	V_{rms}	230	400	480
Rated speed	Nn1 Nn2 Nn3	t/min	1500	2500	2500
Rated torque	Mn1 Mn2 Mn3	Nm	22.30	8.31	8.31
Rated current	In1 In2 In3	A_{rms}	10.01	4.01	4.01
Rated power	Pn1 Pn2 Pn3	W	3500	2180	2180

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 adaptative phase advance

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