

BRUSHLESS MOTOR  
**EX310UAU**  
 ELECTRONIC DRIVE  
**DRIVE 2.5/7 Arms 400 Vac**



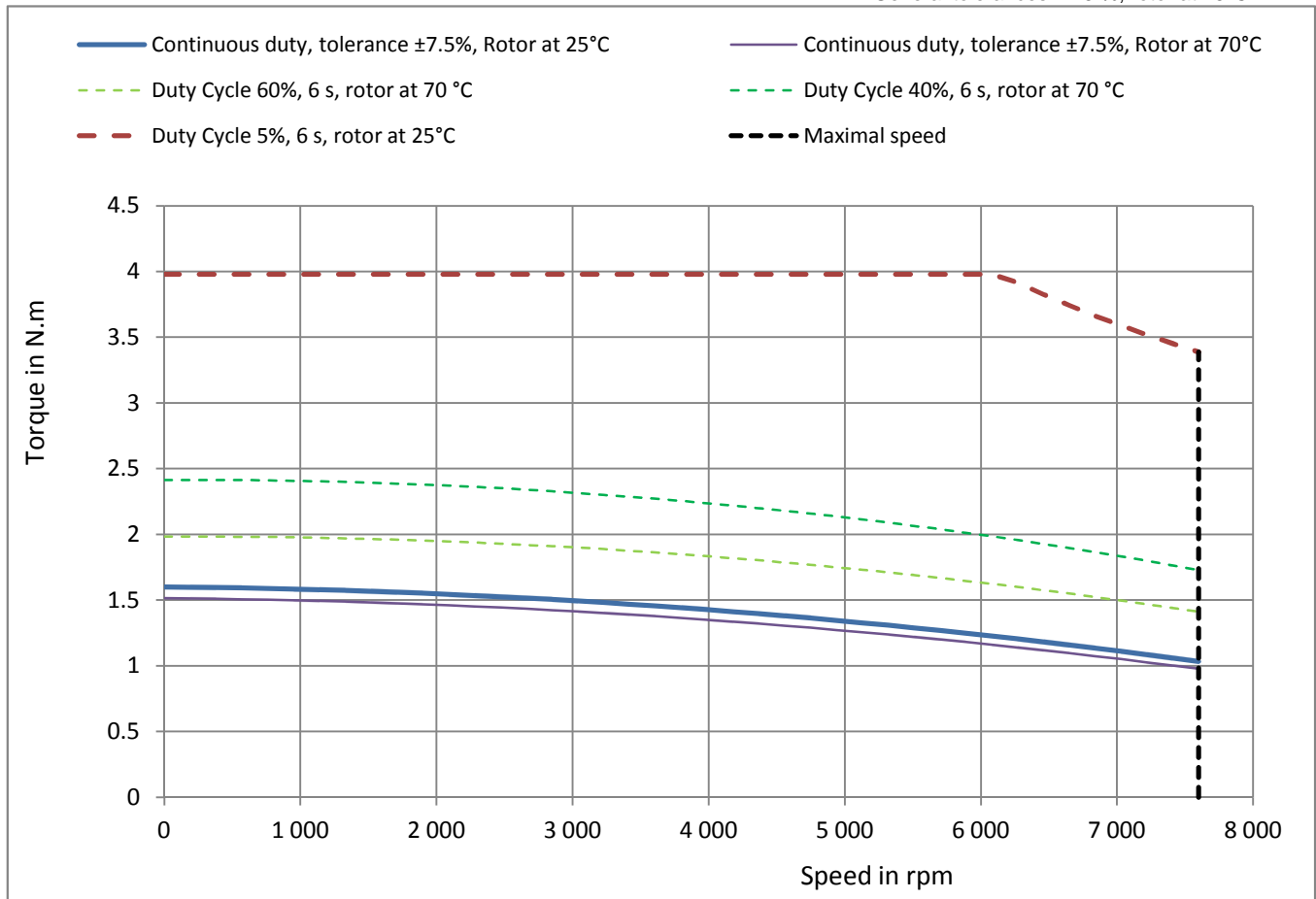
UL certified

P <sub>n</sub>	<b>Rated power **</b>	0.822	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	1.03	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	7600	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	1.74	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	309	<i>V<sub>rms</sub></i>	
UR	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	1.6	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	2.46	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	3.98	<i>Nm</i>	
I <sub>p</sub>	Max. current	6.34	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	7600	<i>rpm</i>	
J	Rotor inertia	0.79	<i>kg.cm<sup>2</sup></i>	Number of poles : 10
Ke	Back emf constant at 1000 rpm (25°C)*	41	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 90.3 % at 75% of rated torque : 89 %
Kt	Torque sensitivity (25°C) *	0.652	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	4.29	<i>Ω</i>	
L	Winding inductance *	13.2	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX420UAI**  
 ELECTRONIC DRIVE  
**DRIVE 4.5/11 Arms 400 Vac**



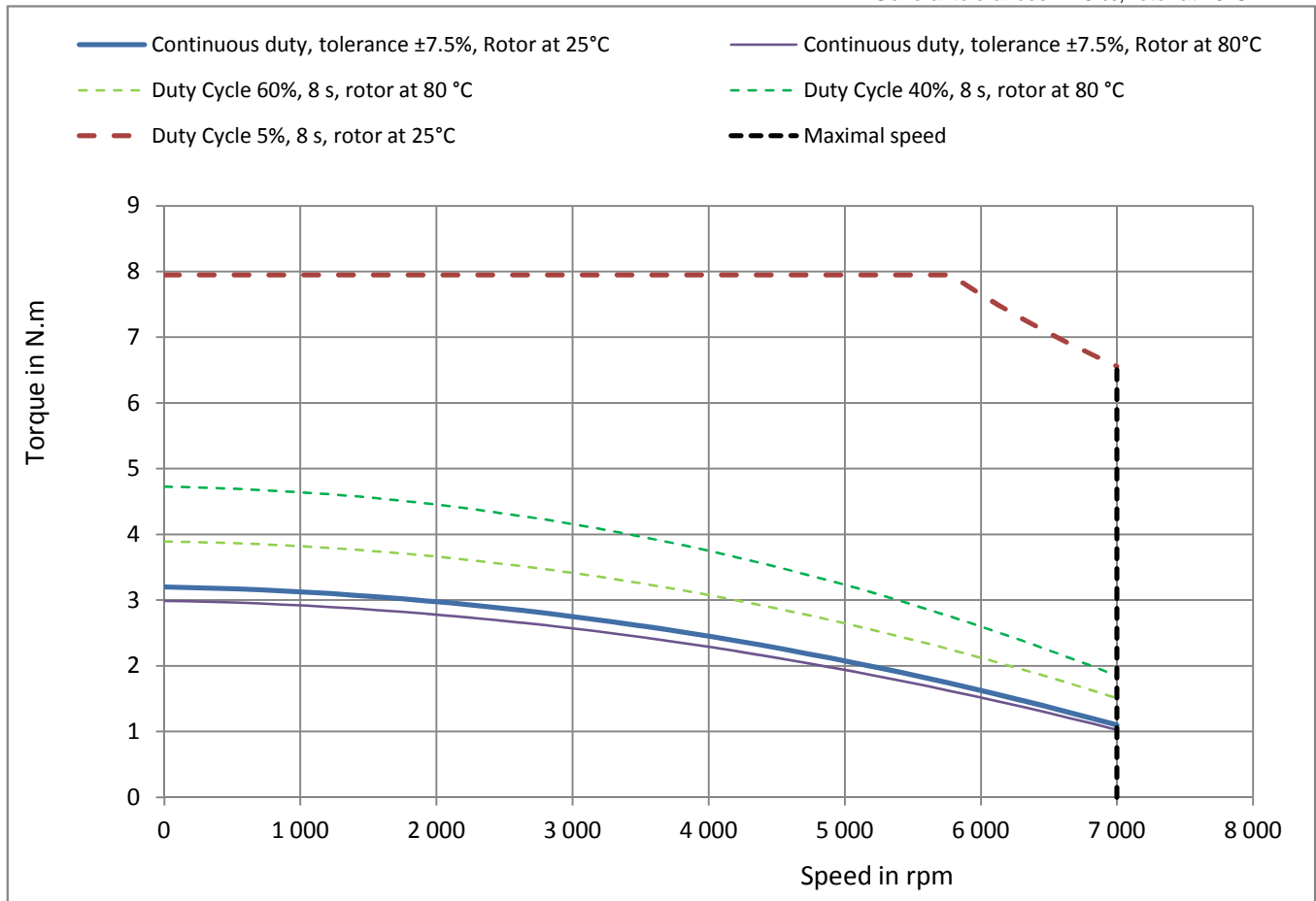
UL certified

P <sub>n</sub>	<b>Rated power **</b>	0.805	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	1.1	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	7000	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	1.58	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	330	<i>V<sub>rms</sub></i>	
U <sub>R</sub>	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	3.2	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	4.15	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	7.95	<i>Nm</i>	
I <sub>p</sub>	Max. current	10.8	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	7000	<i>rpm</i>	
J	Rotor inertia	0.00029	<i>kg.m<sup>2</sup></i>	Number of poles : 10
K <sub>e</sub>	Back emf constant at 1000 rpm (25°C)*	48.3	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 86.9 % at 75% of rated torque : 83.8 %
K <sub>t</sub>	Torque sensitivity (25°C) *	0.772	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	1.94	<i>Ω</i>	
L	Winding inductance *	9.72	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX430UAG**  
 ELECTRONIC DRIVE  
**DRIVE 5/12 Arms 400 Vac**



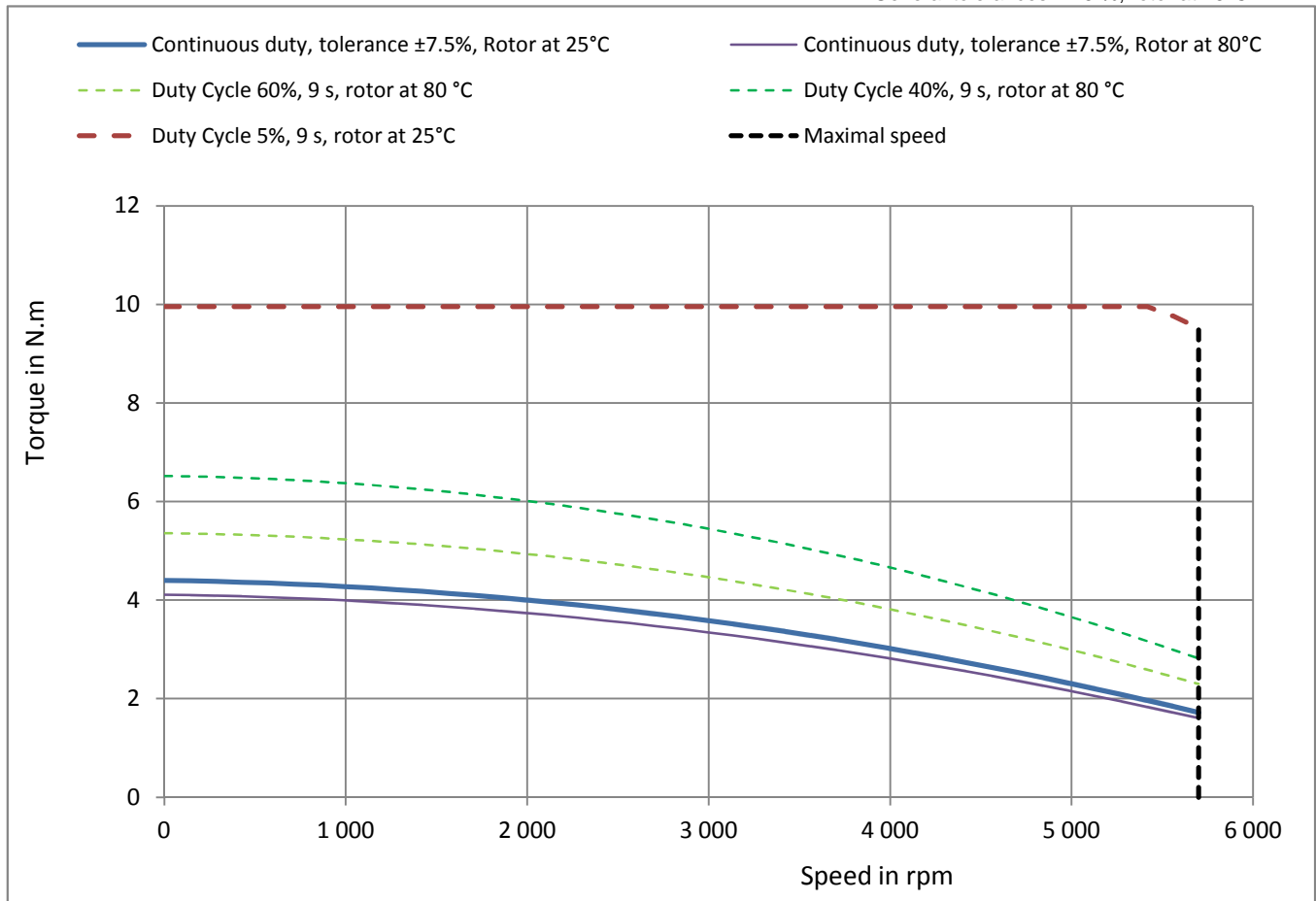
UL certified

P <sub>n</sub>	<b>Rated power **</b>	1.02	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	1.72	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	5700	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	2.07	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	314	<i>V<sub>rms</sub></i>	
UR	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	4.4	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	4.88	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	9.95	<i>Nm</i>	
I <sub>p</sub>	Max. current	11.3	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	5700	<i>rpm</i>	
J	Rotor inertia	0.00043	<i>kg.m<sup>2</sup></i>	Number of poles : 10
K <sub>e</sub>	Back emf constant at 1000 rpm (25°C)*	56.4	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 88.5 % at 75% of rated torque : 85.8 %
K <sub>t</sub>	Torque sensitivity (25°C) *	0.902	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	1.55	<i>Ω</i>	
L	Winding inductance *	8.07	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX620UAM**  
 ELECTRONIC DRIVE  
**DRIVE 6/17 Arms 400 Vac**



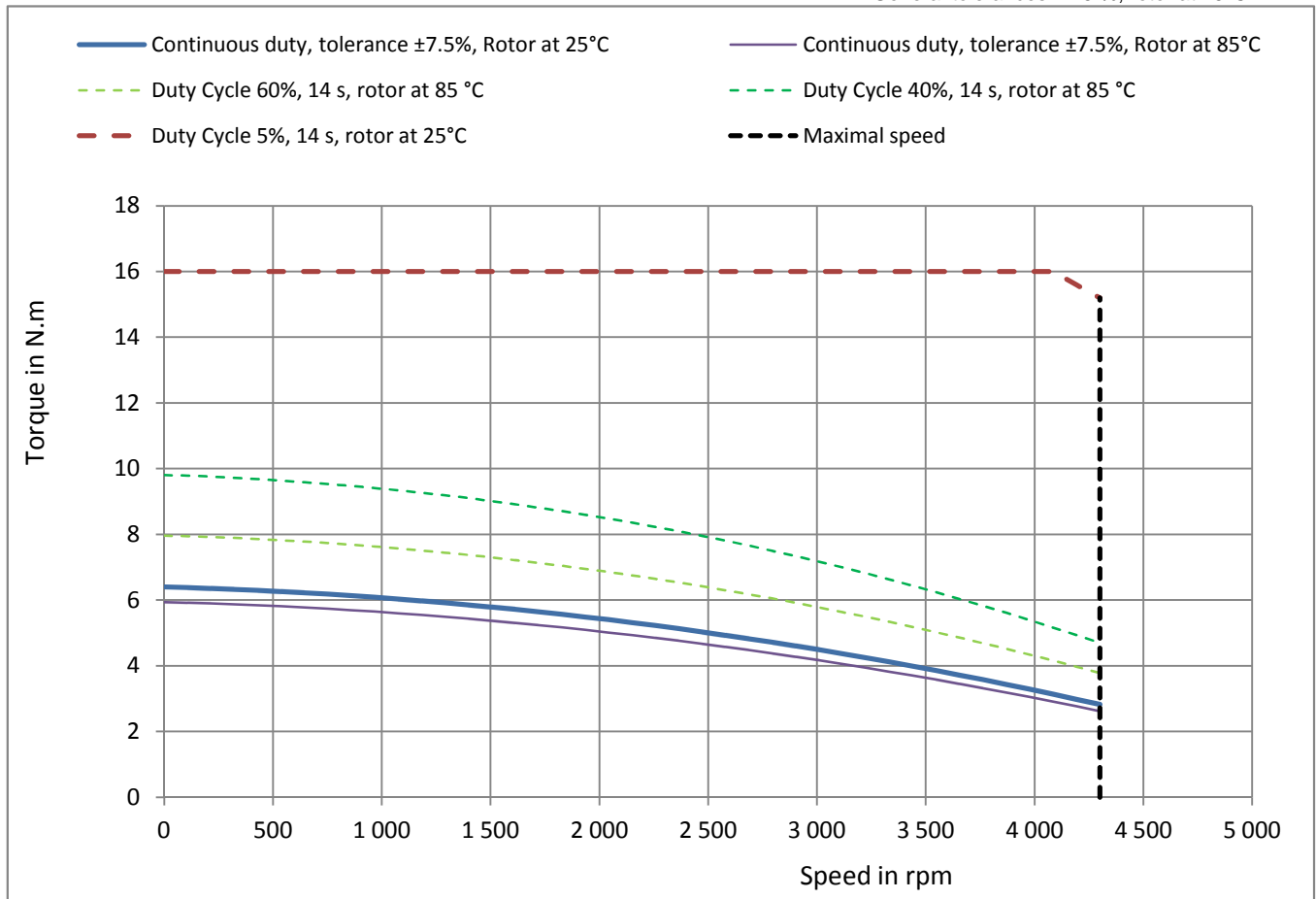
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P <sub>n</sub>	<b>Rated power **</b>	1.27	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	2.82	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	4300	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	2.97	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	270	<i>V<sub>rms</sub></i>	
UR	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	6.4	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	6.02	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	16	<i>Nm</i>	
I <sub>p</sub>	Max. current	14.8	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	4300	<i>rpm</i>	
J	Rotor inertia	0.00098	<i>kg.m<sup>2</sup></i>	Number of poles : 10
Ke	Back emf constant at 1000 rpm (25°C)*	68.8	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 92.8 % at 75% of rated torque : 91.3 %
Kt	Torque sensitivity (25°C) *	1.06	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	1.08	<i>Ω</i>	
L	Winding inductance *	9.92	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX630UAK**  
 ELECTRONIC DRIVE  
**DRIVE 8/20 Arms 400 Vac**



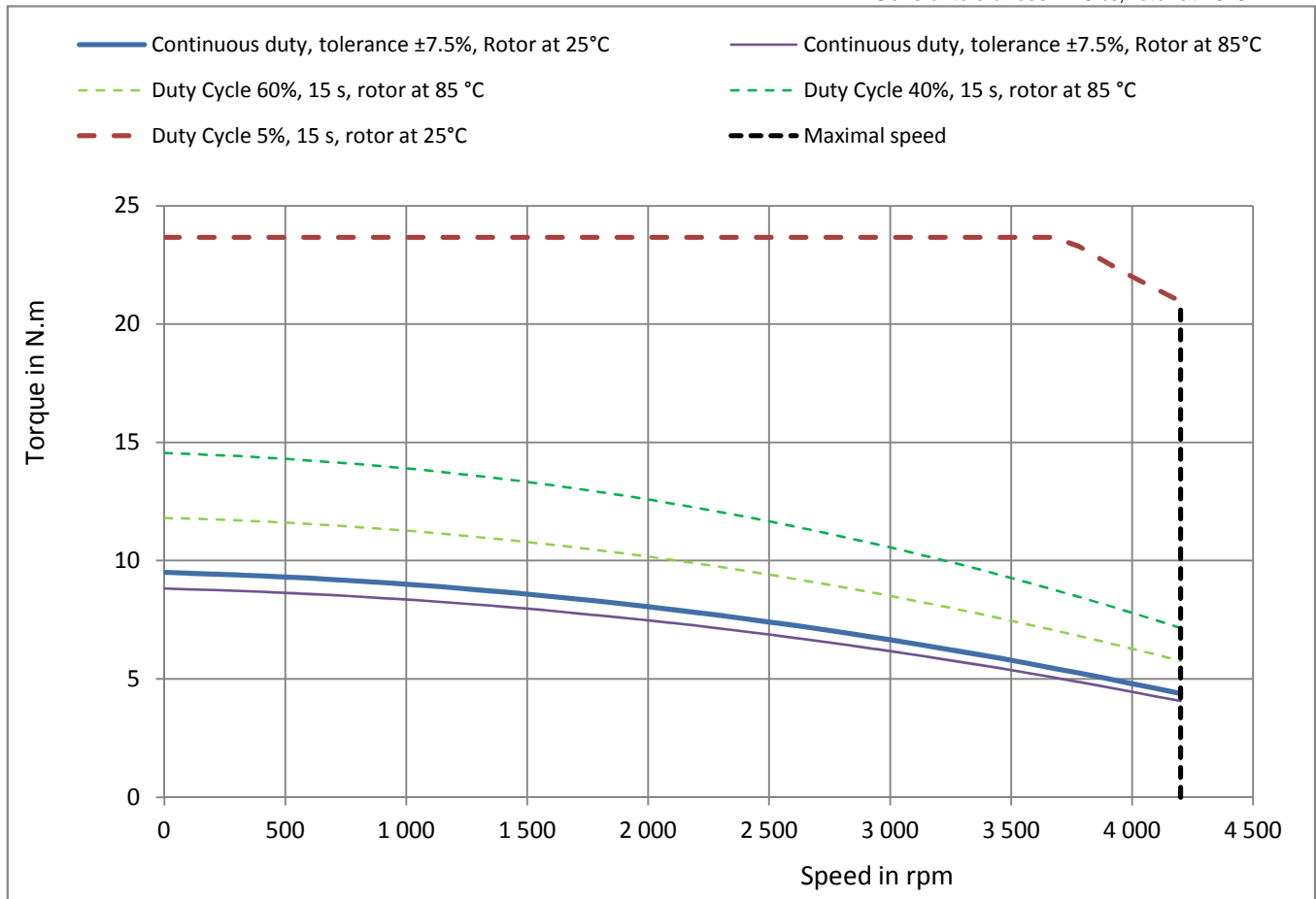
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P <sub>n</sub>	Rated power **	1.92	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	Rated torque **	4.38	<i>Nm</i>	
N <sub>n</sub>	Rated speed	4200	<i>rpm</i>	
I <sub>n</sub>	Rated current	4.02	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	Rated voltage	296	<i>V<sub>rms</sub></i>	
U <sub>R</sub>	Voltage of the mains	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	Low speed torque **	9.5	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	Permanent current at low speed	7.92	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	23.7	<i>Nm</i>	
I <sub>p</sub>	Max. current	19.4	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	4200	<i>rpm</i>	
J	Rotor inertia	0.0015	<i>kg.m<sup>2</sup></i>	Number of poles : 10  <b>Efficiency :</b> at rated torque : 92.6 % at 75% of rated torque : 90.9 %
K <sub>e</sub>	Back emf constant at 1000 rpm (25°C)*	73.6	<i>V<sub>rms</sub></i>	
K <sub>t</sub>	Torque sensitivity (25°C) *	1.2	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	0.674	<i>Ω</i>	
L	Winding inductance *	7.06	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX820UAQ**  
 ELECTRONIC DRIVE  
**DRIVE 10/23 Arms 400 Vac**



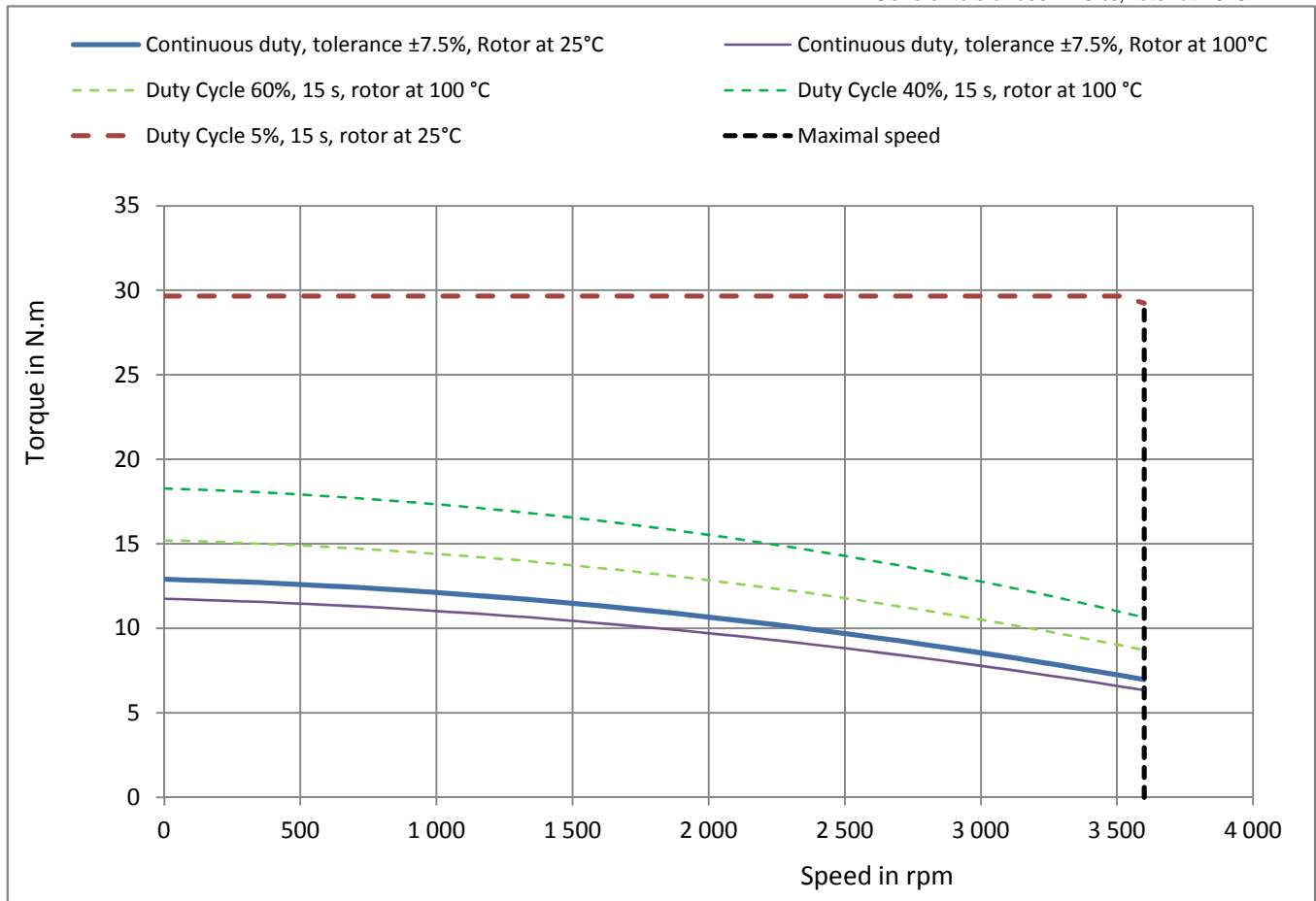
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P <sub>n</sub>	<b>Rated power **</b>	2.62	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	6.96	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	3600	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	5.08	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	322	<i>V<sub>rms</sub></i>	
UR	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	12.9	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	9.1	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	29.7	<i>Nm</i>	
I <sub>p</sub>	Max. current	22.8	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	3600	<i>rpm</i>	
J	Rotor inertia	0.0032	<i>kg.m<sup>2</sup></i>	Number of poles : 10
Ke	Back emf constant at 1000 rpm (25°C)*	87.2	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 93.1 % at 75% of rated torque : 91.8 %
Kt	Torque sensitivity (25°C) *	1.42	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	0.889	<i>Ω</i>	
L	Winding inductance *	7.53	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX840UAL**  
 ELECTRONIC DRIVE  
**DRIVE 13/35 Arms 400 Vac**



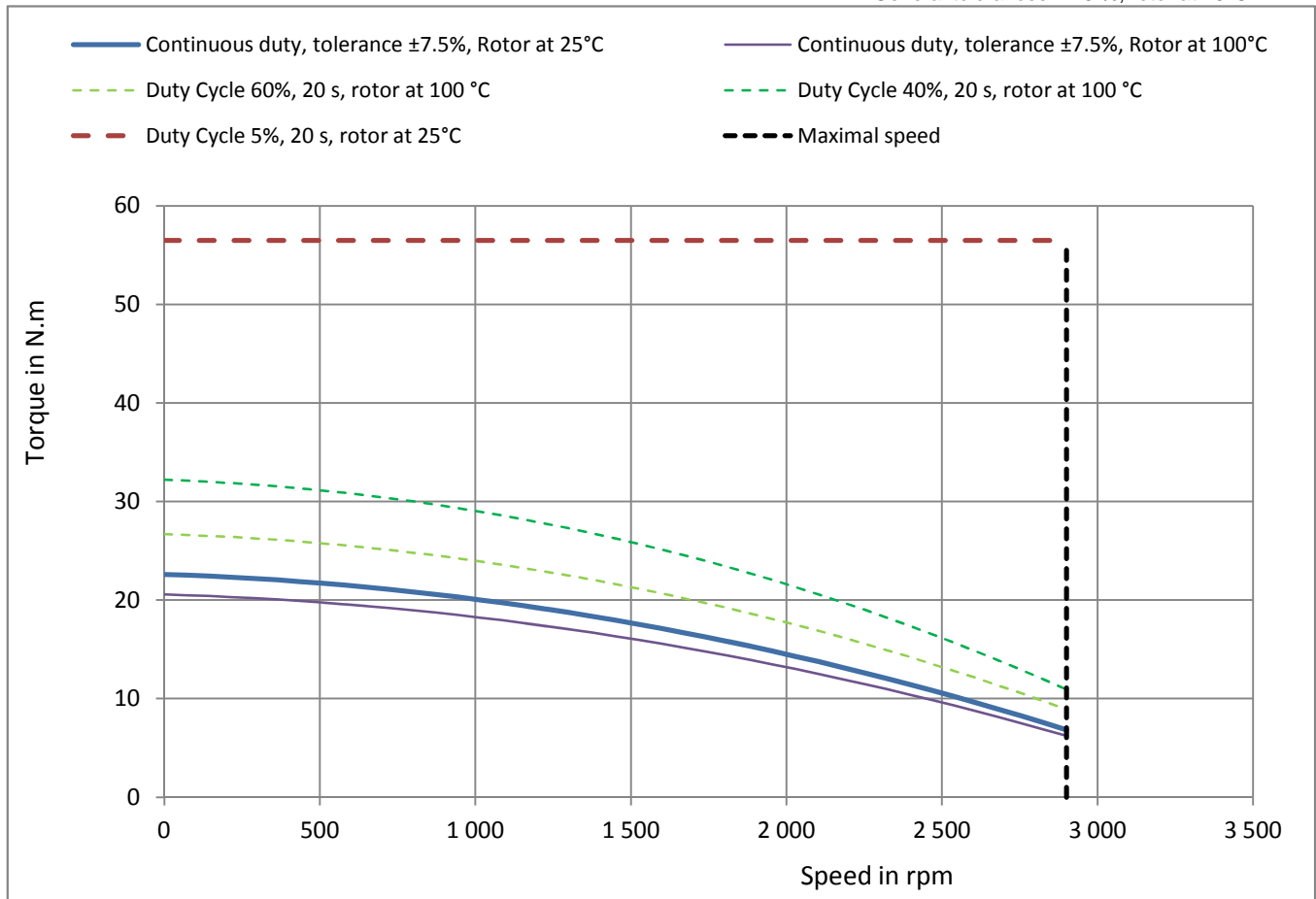
UL certified

P <sub>n</sub>	<b>Rated power **</b>	2.08	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	6.84	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	2900	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	3.9	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	340	<i>V<sub>rms</sub></i>	
UR	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	22.6	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	12	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	56.5	<i>Nm</i>	
I <sub>p</sub>	Max. current	32.3	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	2900	<i>rpm</i>	
J	Rotor inertia	0.0062	<i>kg.m<sup>2</sup></i>	Number of poles : 10
K <sub>e</sub>	Back emf constant at 1000 rpm (25°C)*	118	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 89.8 % at 75% of rated torque : 87.2 %
K <sub>t</sub>	Torque sensitivity (25°C) *	1.89	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	0.579	<i>Ω</i>	
L	Winding inductance *	6.69	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C



BRUSHLESS MOTOR  
**EX860UAJ**  
 ELECTRONIC DRIVE  
**DRIVE 15/45 Arms 400 Vac**



UL certified

P <sub>n</sub>	<b>Rated power **</b>	2.18	<i>kW</i>	<b>Cooling type :</b> Natural Air cooling Flange 400*400*12mm(ALU)
M <sub>n</sub>	<b>Rated torque **</b>	8.31	<i>Nm</i>	
N <sub>n</sub>	<b>Rated speed</b>	2500	<i>rpm</i>	
I <sub>n</sub>	<b>Rated current</b>	4.01	<i>A<sub>rms</sub></i>	
U <sub>n</sub>	<b>Rated voltage</b>	350	<i>V<sub>rms</sub></i>	
UR	<b>Voltage of the mains</b>	400	<i>V<sub>rms</sub></i>	
U	DC voltage supply when motor is loaded	540	<i>V</i>	
M <sub>o</sub>	<b>Low speed torque **</b>	31.4	<i>N.m</i>	<b>Environment :</b> Ambient temperature : 40°C MAX Altitude : < 1000 m Thermal class : F (according to IEC 60034-1)
I <sub>o</sub>	<b>Permanent current at low speed</b>	13.9	<i>A<sub>rms</sub></i>	
M <sub>p</sub>	Max. torque **	78.5	<i>Nm</i>	
I <sub>p</sub>	Max. current	37.1	<i>A<sub>rms</sub></i>	
N <sub>p</sub>	Max. speed	2500	<i>rpm</i>	
J	Rotor inertia	0.0092	<i>kg.m<sup>2</sup></i>	Number of poles : 10
Ke	Back emf constant at 1000 rpm (25°C)*	140	<i>V<sub>rms</sub></i>	<b>Efficiency :</b> at rated torque : 87.3 % at 75% of rated torque : 84.1 %
Kt	Torque sensitivity (25°C) *	2.26	<i>Nm/A<sub>rms</sub></i>	
R <sub>b</sub>	Winding resistance(25°C) *	0.499	<i>Ω</i>	
L	Winding inductance *	6.43	<i>mH</i>	

All data are given in typical values under standard conditions

\* Phase to Phase

\*\* General tolerances ±7.5 %, rotor at 25°C

