

## BRUSHLESS MOTOR

**EY310EAK**

ELECTRONIC DRIVE

**DRIVE 3/7**

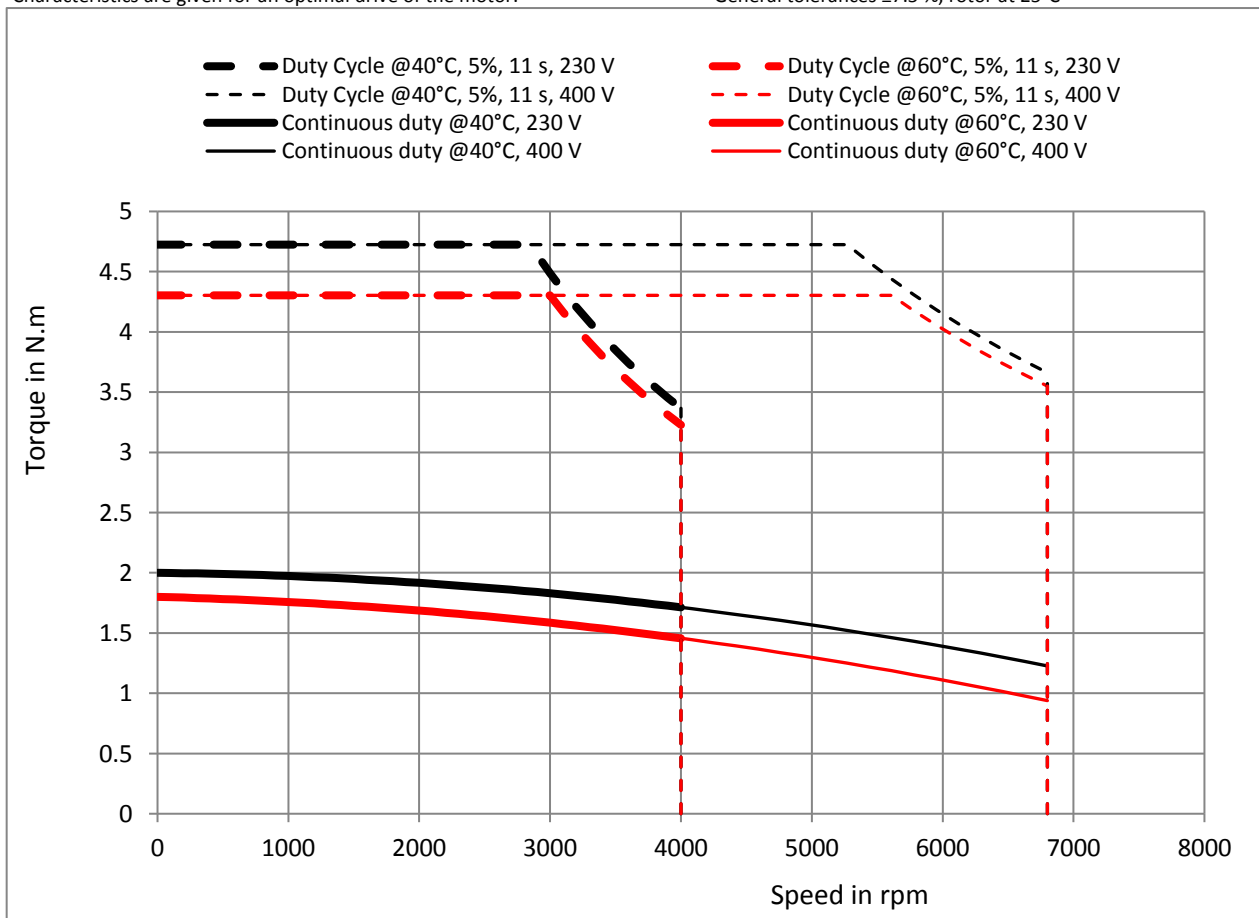
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
		Voltage of the mains: $V_{rms}$				
$P_n$	<b>Rated power **</b>	$kW$	0.718	0.874	0.61	0.669
$M_n$	<b>Rated torque **</b>	$N.m$	1.71	1.23	1.46	0.939
$N_n$	<b>Rated speed</b>	$/min$	4000	6800	4000	6800
$I_n$	<b>Rated current</b>	$A_{rms}$	2.2	1.63	1.88	1.28
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	223	357	218	352
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	2	2	1.8	1.8
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	2.5	2.5	2.25	2.25
$M_p$	Max. torque **	$N.m$	4.72	4.72	4.3	4.3
$I_p$	Max. current	$A_{rms}$	6.25	6.25	5.62	5.62
$N_{max}$	Max. speed	$/min$	4000	6800	4000	6800
$F_{max}$	Electrical frequency @max. speed:	$Hz$	333	567	333	567
$\eta$	Efficiency at rated torque:	%	87	87.1	87.4	85.4
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	87.9	85.3	87.5	82.7
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.8 $kg.cm^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	50.6 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	0.8 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	6.58 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	19.2 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY310EAP**

ELECTRONIC DRIVE

**DRIVE 2/4**

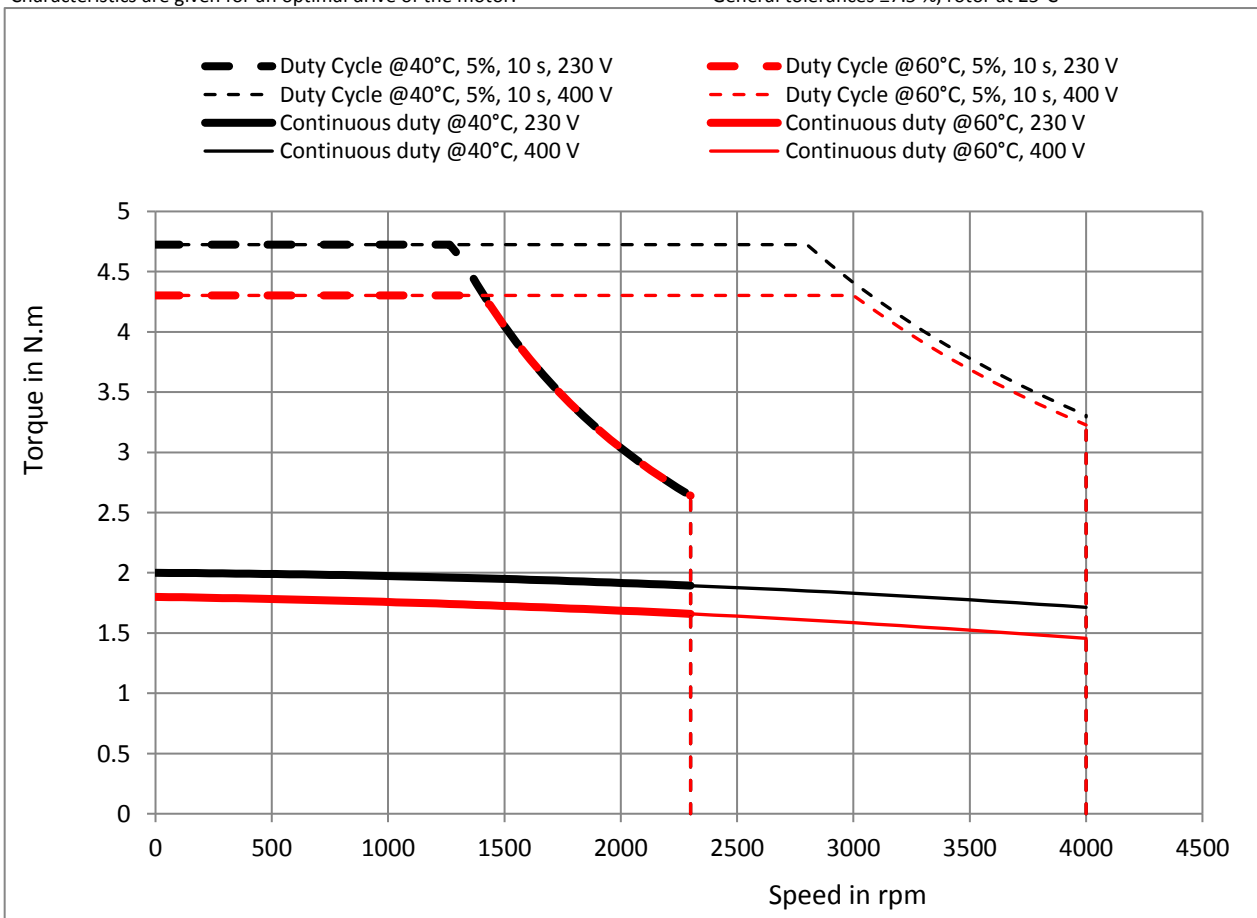
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
P <sub>n</sub>	<b>Rated power **</b>	$kW$	0.456	0.718	0.4	0.61
M <sub>n</sub>	<b>Rated torque **</b>	$N.m$	1.89	1.71	1.66	1.46
N <sub>n</sub>	<b>Rated speed</b>	$/min$	2300	4000	2300	4000
I <sub>n</sub>	<b>Rated current</b>	$A_{rms}$	1.37	1.26	1.2	1.07
U <sub>n</sub>	<b>Rated voltage *</b>	$V_{rms}$	243	391	236	383
U <sub>bus</sub>	DC voltage supply when motor is loaded	$V$	310	540	310	540
M <sub>o</sub>	<b>Low speed torque **</b>	$N.m$	2	2	1.8	1.8
I <sub>o</sub>	<b>Permanent current at low speed</b>	$A_{rms}$	1.43	1.43	1.29	1.29
M <sub>p</sub>	Max. torque **	$N.m$	4.72	4.72	4.3	4.3
I <sub>p</sub>	Max. current	$A_{rms}$	3.58	3.58	3.21	3.21
N <sub>max</sub>	Max. speed	$/min$	2300	4000	2300	4000
F <sub>max</sub>	Electrical frequency @max. speed:	$Hz$	192	333	192	333
$\eta$	Efficiency at rated torque:	%	81.6	86.7	83.1	87.2
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	85.3	87.7	85.7	87.4
2p	Number of poles:	10	<b>Environment:</b>			
J	Rotor inertia	0.8 $kg.cm^2$	Altitude: <1000m			
K <sub>e</sub>	Back emf constant at 1000 rpm (25°C)*	88.4 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
K <sub>t</sub>	Torque sensitivity (25°C)	1.4 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
R <sub>b</sub>	Winding resistance(25°C) *	20.7 $\Omega$	Flange 400*400*12mm(ALU)			
L	Winding inductance *	58.6 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY420EAJ**

ELECTRONIC DRIVE

**DRIVE 5/13**

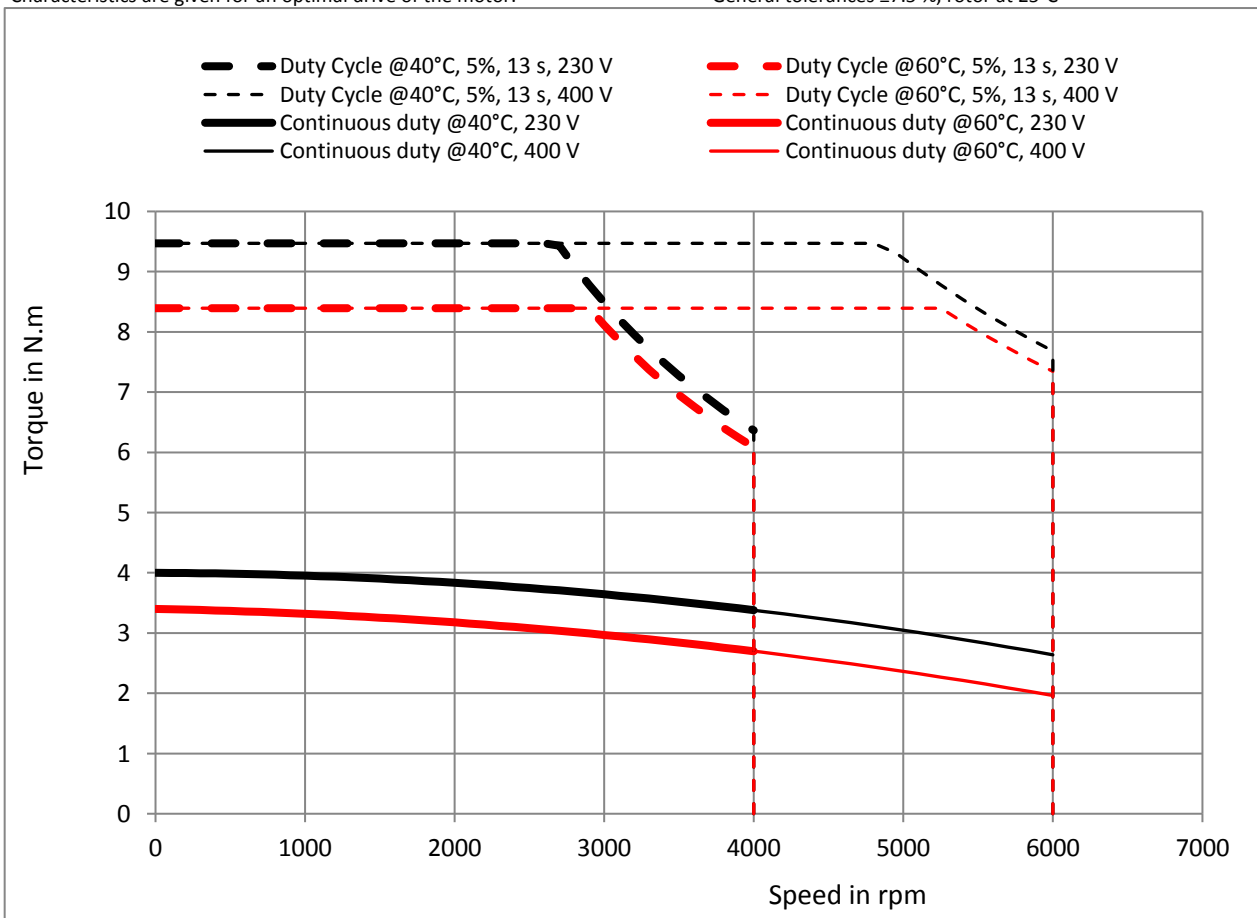
No UL certification

$T_a$	Max ambient temperature: °C	@40°C				@60°C			
		Voltage of the mains: $V_{rms}$		230 VAC	400 VAC	230 VAC	400 VAC		
$P_n$	<b>Rated power **</b>	$kW$	1.42	1.66	1.13	1.23			
$M_n$	<b>Rated torque **</b>	$N.m$	3.38	2.64	2.7	1.96			
$N_n$	<b>Rated speed</b>	$/min$	4000	6000	4000	6000			
$I_n$	<b>Rated current</b>	$A_{rms}$	4.21	3.36	3.38	2.55			
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	225	324	219	318			
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540			
$M_o$	<b>Low speed torque **</b>	$N.m$	4	4	3.5	3.5			
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	4.87	4.87	4.25	4.25			
$M_p$	Max. torque **	$N.m$	9.47	9.47	8.39	8.39			
$I_p$	Max. current	$A_{rms}$	12.2	12.2	10.6	10.6			
$N_{max}$	Max. speed	$/min$	4000	6000	4000	6000			
$F_{max}$	Electrical frequency @max. speed:	$Hz$	333	500	333	500			
$\eta$	Efficiency at rated torque:	%	88.1	86.8	87.9	85			
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	87.8	84.7	86.8	82			
$2p$	Number of poles:	10	<b>Environment:</b>						
$J$	Rotor inertia	0.00029 $kg.m^2$	Altitude: <1000m						
$K_e$	Back emf constant at 1000 rpm (25°C)*	51.7 $V_{rms}$	Thermal class F (according to IEC 60034-1)						
$K_t$	Torque sensitivity (25°C)	0.821 $Nm/A_{rms}$	Cooling type: Natural Air cooling						
$R_b$	Winding resistance(25°C) *	2.31 $\Omega$	Flange 400*400*12mm(ALU)						
$L$	Winding inductance *	11 $mH$	with flange temperature $\leq T_a$						

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY420EAP**

ELECTRONIC DRIVE

**DRIVE 3/8**

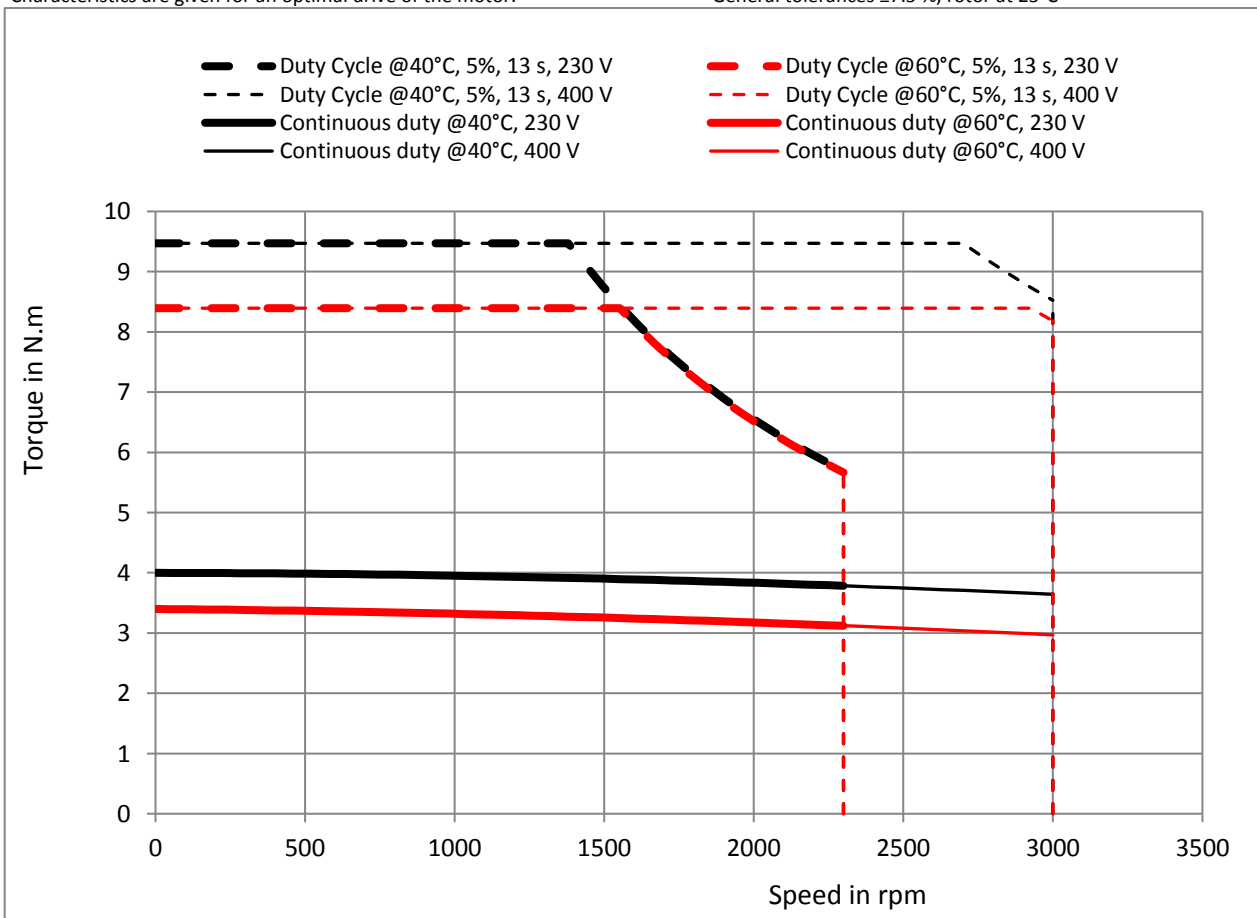
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
P <sub>n</sub>	<b>Rated power **</b>	$kW$	0.911	1.14	0.752	0.933
M <sub>n</sub>	<b>Rated torque **</b>	$N.m$	3.78	3.64	3.12	2.97
N <sub>n</sub>	<b>Rated speed</b>	$/min$	2300	3000	2300	3000
I <sub>n</sub>	<b>Rated current</b>	$A_{rms}$	2.69	2.6	2.22	2.13
U <sub>n</sub>	<b>Rated voltage *</b>	$V_{rms}$	238	302	229	292
U <sub>bus</sub>	DC voltage supply when motor is loaded	$V$	310	540	310	540
M <sub>o</sub>	<b>Low speed torque **</b>	$N.m$	4	4	3.5	3.5
I <sub>o</sub>	<b>Permanent current at low speed</b>	$A_{rms}$	2.81	2.81	2.46	2.46
M <sub>p</sub>	Max. torque **	$N.m$	9.47	9.47	8.39	8.39
I <sub>p</sub>	Max. current	$A_{rms}$	7.03	7.03	6.14	6.14
N <sub>max</sub>	Max. speed	$/min$	2300	3000	2300	3000
F <sub>max</sub>	Electrical frequency @max. speed:	$Hz$	192	250	192	250
$\eta$	Efficiency at rated torque:	%	85.3	87	86.5	87.6
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	87.3	87.9	87.4	87.5
2p	Number of poles:	10	<b>Environment:</b>			
J	Rotor inertia	0.00029 $kg.m^2$	Altitude: <1000m			
K <sub>e</sub>	Back emf constant at 1000 rpm (25°C)*	89.5 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
K <sub>t</sub>	Torque sensitivity (25°C)	1.42 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
R <sub>b</sub>	Winding resistance(25°C) *	7.2 $\Omega$	Flange 400*400*12mm(ALU)			
L	Winding inductance *	33 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY430EAF**

ELECTRONIC DRIVE

**DRIVE 7/17**

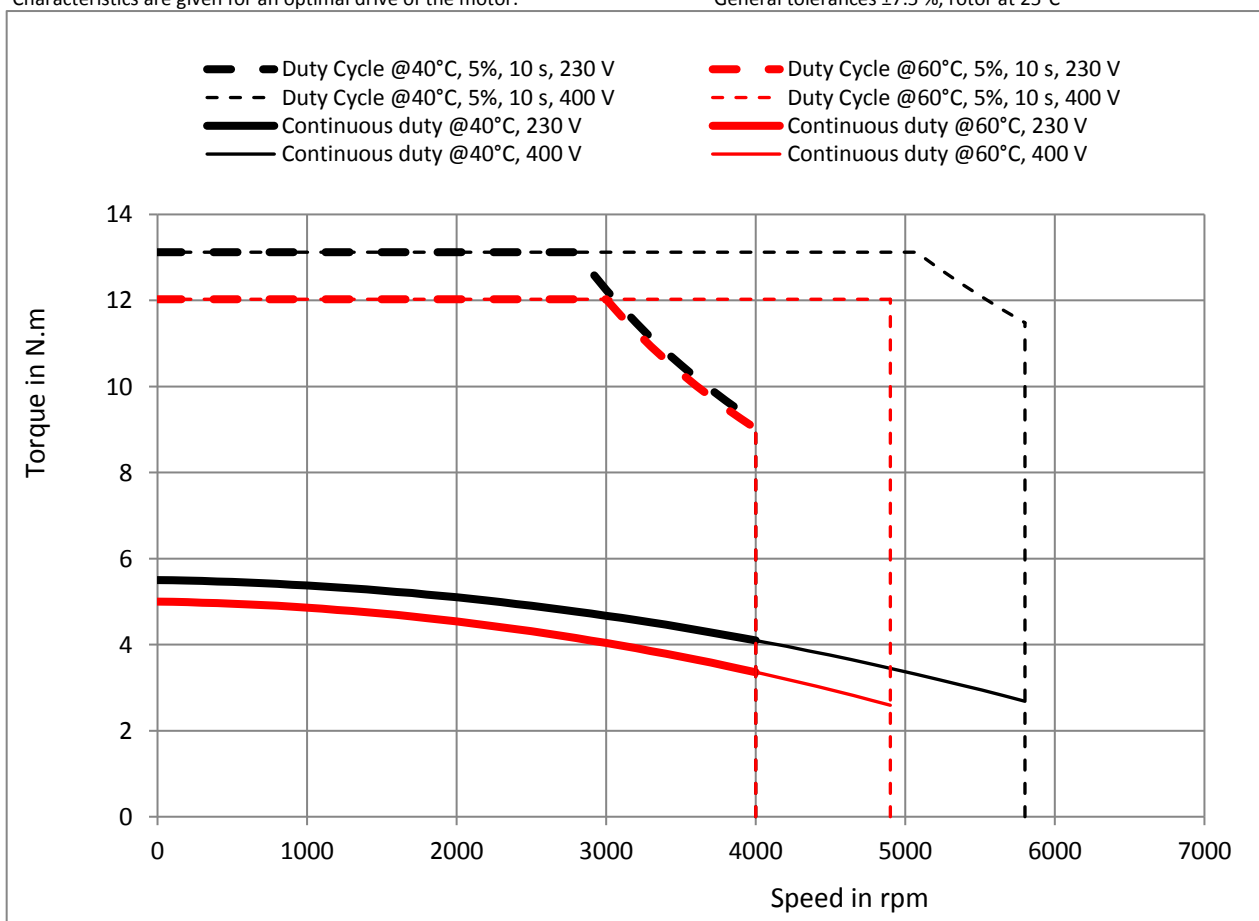
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
		Voltage of the mains: $V_{rms}$				
$P_n$	<b>Rated power **</b>	$kW$	1.72	1.63	1.41	1.33
$M_n$	<b>Rated torque **</b>	$N.m$	4.1	2.68	3.36	2.59
$N_n$	<b>Rated speed</b>	$/min$	4000	5800	4000	4900
$I_n$	<b>Rated current</b>	$A_{rms}$	5.05	3.42	4.16	3.28
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	220	308	217	261
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	5.5	5.5	5	5
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	6.6	6.6	5.99	5.99
$M_p$	Max. torque **	$N.m$	13.1	13.1	12	12
$I_p$	Max. current	$A_{rms}$	16.5	16.5	15	15
$N_{max}$	Max. speed	$/min$	4000	5800	4000	4900
$F_{max}$	Electrical frequency @max. speed:	$Hz$	333	483	333	408
$\eta$	Efficiency at rated torque:	%	91.1	89	90.8	89.4
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	90.7	86.8	89.9	87.4
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.00043 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	52.3 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	0.833 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	1.38 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	7.34 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY430EAL**

ELECTRONIC DRIVE

**DRIVE 4/10**

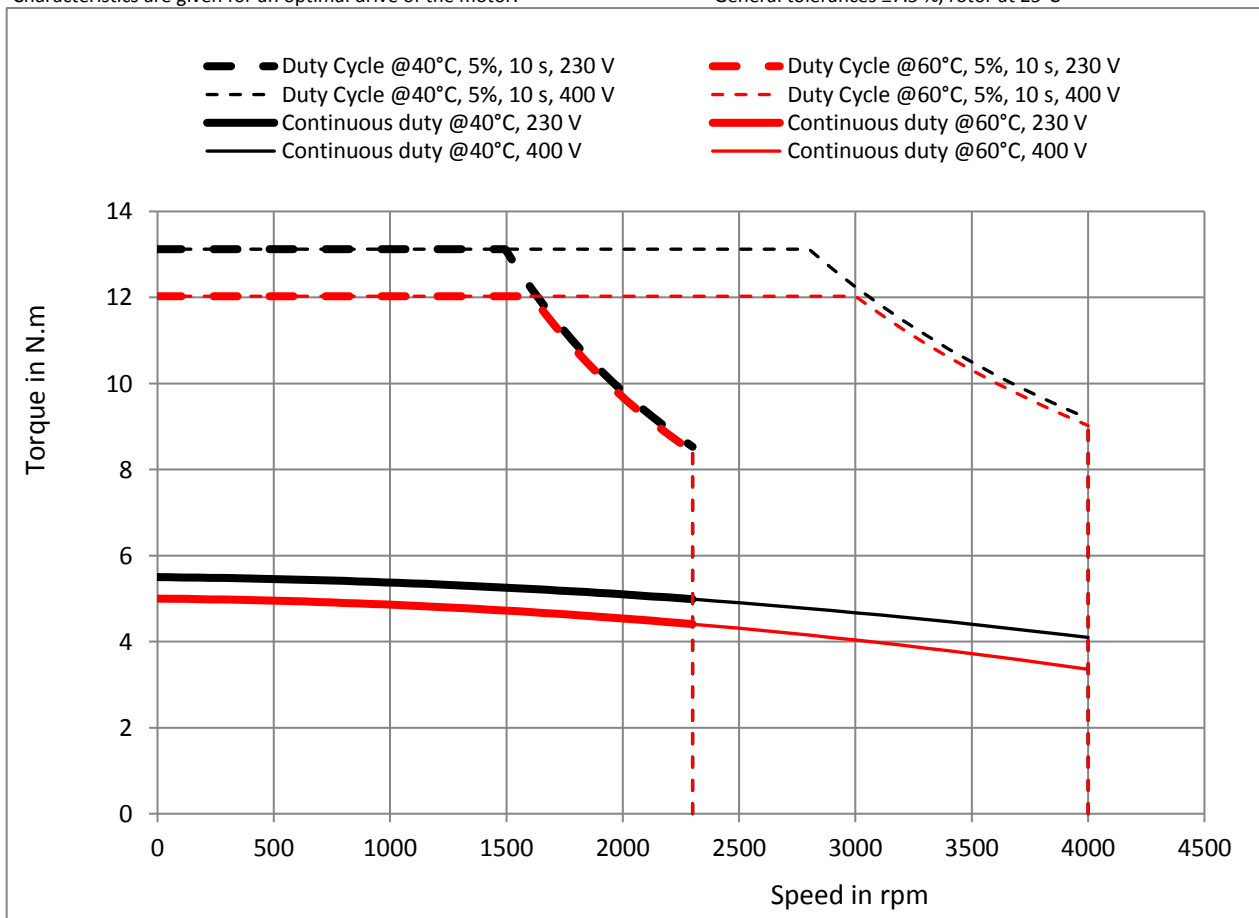
No UL certification

$T_a$	Max ambient temperature: °C	@40°C		@60°C	
		230 VAC	400 VAC	230 VAC	400 VAC
UR	Voltage of the mains: $V_{rms}$				
$P_n$	<b>Rated power **</b> $kW$	1.2	1.72	1.06	1.41
$M_n$	<b>Rated torque **</b> $N.m$	4.99	4.1	4.41	3.36
$N_n$	<b>Rated speed</b> $/min$	2300	4000	2300	4000
$I_n$	<b>Rated current</b> $A_{rms}$	3.45	2.87	3.05	2.37
$U_n$	<b>Rated voltage *</b> $V_{rms}$	233	386	229	380
$U_{bus}$	DC voltage supply when motor is loaded $V$	310	540	310	540
$M_o$	<b>Low speed torque **</b> $N.m$	5.5	5.5	5	5
$I_o$	<b>Permanent current at low speed</b> $A_{rms}$	3.76	3.76	3.41	3.41
$M_p$	Max. torque ** $N.m$	13.1	13.1	12	12
$I_p$	Max. current $A_{rms}$	9.4	9.4	8.54	8.54
$N_{max}$	Max. speed $/min$	2300	4000	2300	4000
$F_{max}$	Electrical frequency @max. speed: $Hz$	192	333	192	333
$\eta$	Efficiency at rated torque: %	89.1	91.1	89.6	90.9
$\eta_{75\%}$	Efficiency at 75% of rated torque: %	90.6	90.7	90.6	89.9
$2p$	Number of poles: 10	<b>Environment:</b>			
$J$	Rotor inertia 0.00043 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)* 91.8 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C) 1.46 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) * 4.22 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance * 22.6 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY620EAR**

ELECTRONIC DRIVE

**DRIVE 6/14**

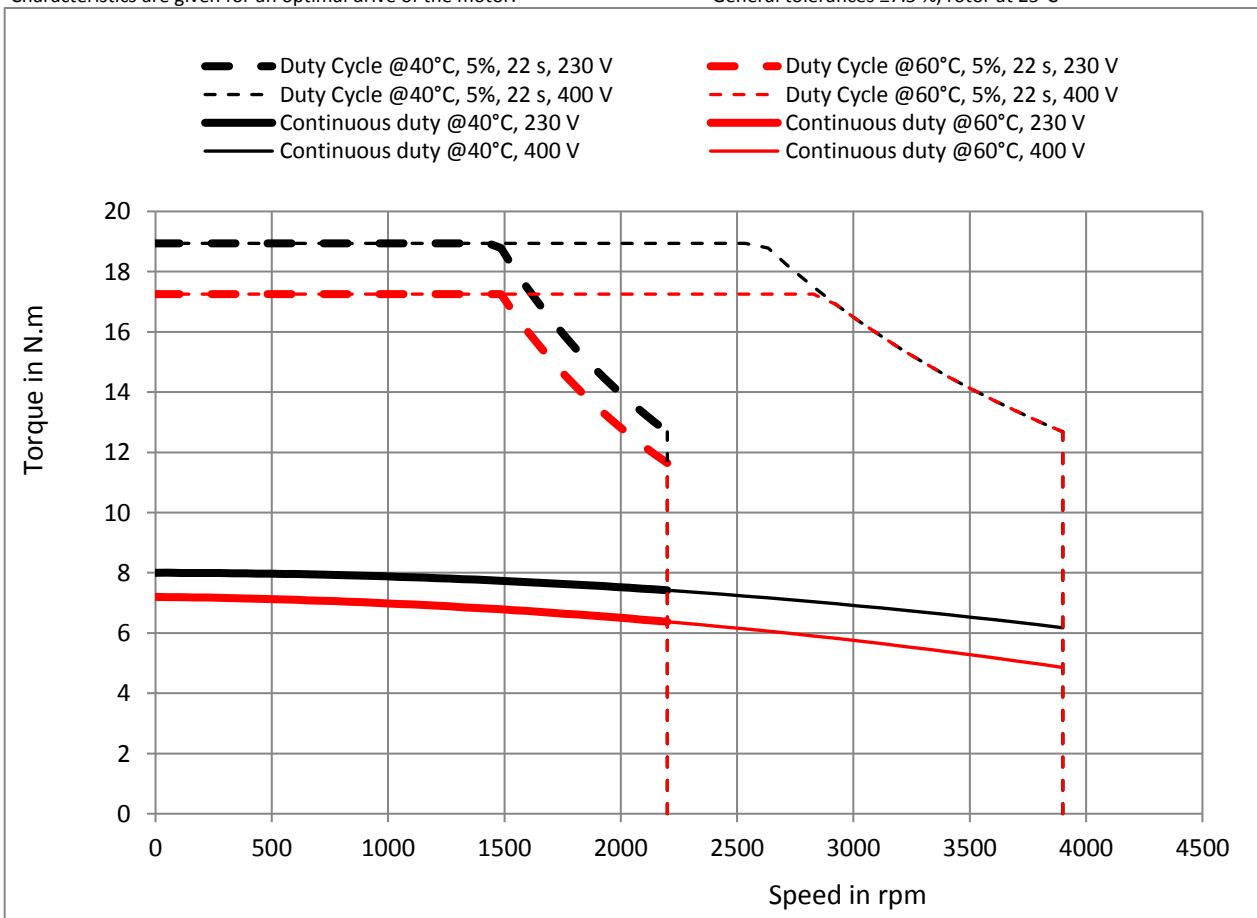
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
$P_n$	<b>Rated power **</b>	$kW$	1.71	2.52	1.47	1.98
$M_n$	<b>Rated torque **</b>	$N.m$	7.42	6.17	6.38	4.86
$N_n$	<b>Rated speed</b>	$/min$	2200	3900	2200	3900
$I_n$	<b>Rated current</b>	$A_{rms}$	4.95	4.16	4.25	3.29
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	230	388	224	379
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	8	8	7.2	7.2
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	5.29	5.29	4.75	4.75
$M_p$	Max. torque **	$N.m$	18.9	18.9	17.3	17.3
$I_p$	Max. current	$A_{rms}$	13.2	13.2	11.9	11.9
$N_{max}$	Max. speed	$/min$	2200	3900	2200	3900
$F_{max}$	Electrical frequency @max. speed:	$Hz$	183	325	183	325
$\eta$	Efficiency at rated torque:	%	91.8	93.8	92.5	93.7
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	93.2	93.7	93.3	93.2
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.00098 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	94.4 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	1.51 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	2.24 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	19.2 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY620EAV**

ELECTRONIC DRIVE

**DRIVE 3/8**

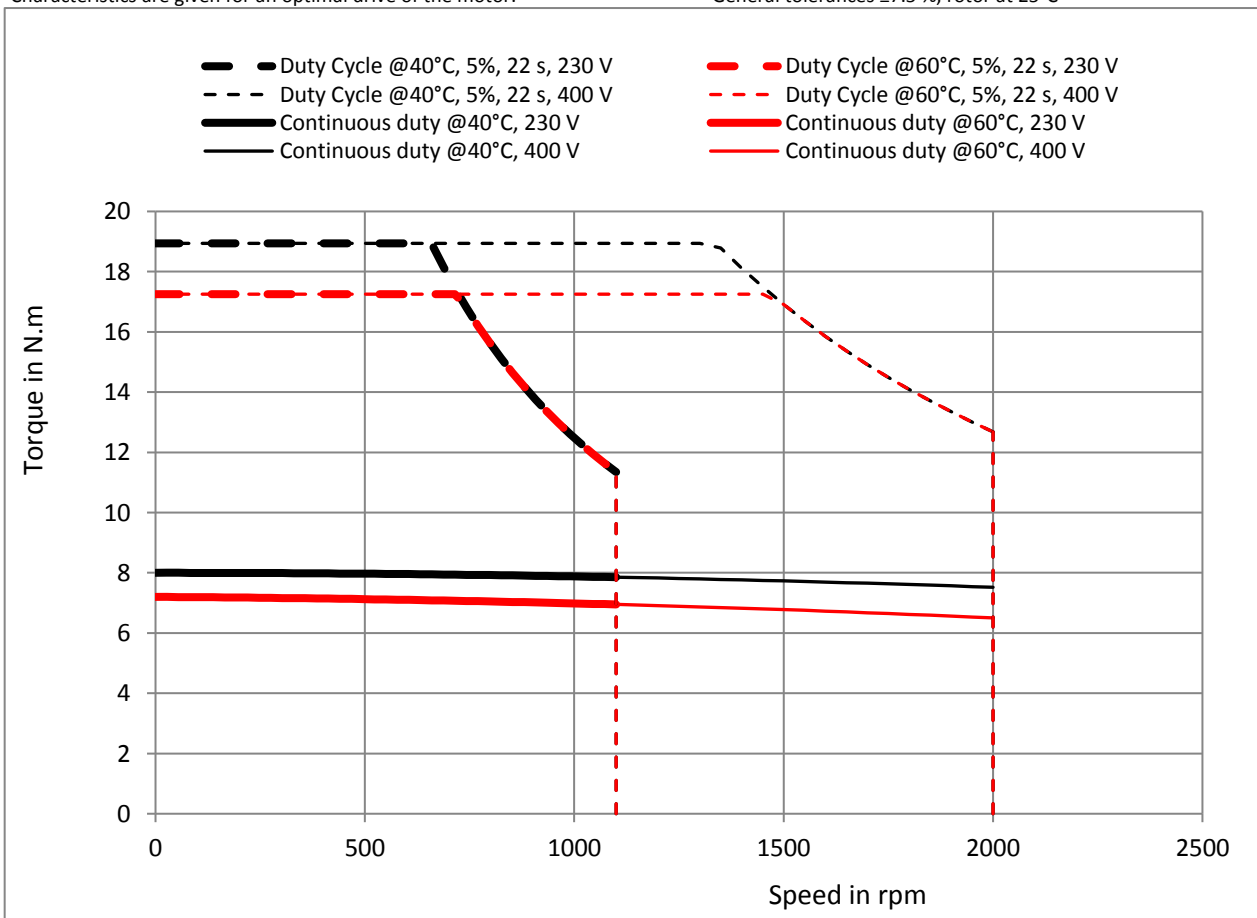
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
$P_n$	<b>Rated power **</b>	$kW$	0.905	1.57	0.8	1.36
$M_n$	<b>Rated torque **</b>	$N.m$	7.85	7.52	6.95	6.5
$N_n$	<b>Rated speed</b>	$/min$	1100	2000	1100	2000
$I_n$	<b>Rated current</b>	$A_{rms}$	2.78	2.67	2.46	2.31
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	231	396	225	386
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	8	8	7.2	7.2
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	2.82	2.82	2.53	2.53
$M_p$	Max. torque **	$N.m$	18.9	18.9	17.3	17.3
$I_p$	Max. current	$A_{rms}$	7.04	7.04	6.33	6.33
$N_{max}$	Max. speed	$/min$	1100	2000	1100	2000
$F_{max}$	Electrical frequency @max. speed:	$Hz$	92	167	92	167
$\eta$	Efficiency at rated torque:	%	86.3	91.3	87.6	92
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	89.8	92.9	90.3	93.1
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.00098 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	177.0 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	2.84 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	7.9 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	67.6 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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



## BRUSHLESS MOTOR

**EY630EAN**

ELECTRONIC DRIVE

**DRIVE 9/21**

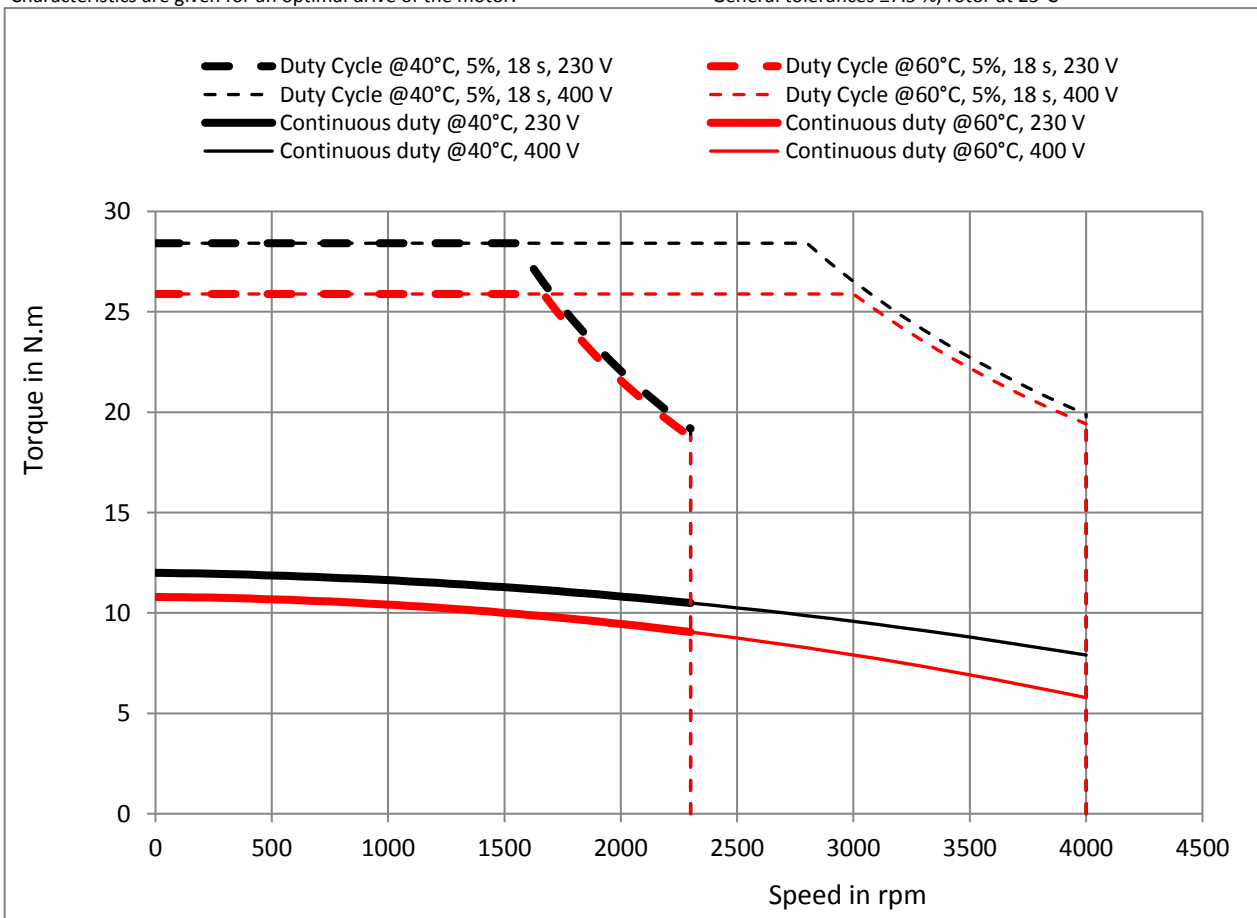
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
		Voltage of the mains: $V_{rms}$				
$P_n$	<b>Rated power **</b>	$kW$	2.53	3.31	2.18	2.42
$M_n$	<b>Rated torque **</b>	$N.m$	10.5	7.9	9.05	5.78
$N_n$	<b>Rated speed</b>	$/min$	2300	4000	2300	4000
$I_n$	<b>Rated current</b>	$A_{rms}$	7.29	5.57	6.3	4.12
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	225	374	221	367
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	12	12	10.8	10.8
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	8.26	8.26	7.43	7.43
$M_p$	Max. torque **	$N.m$	28.4	28.4	25.9	25.9
$I_p$	Max. current	$A_{rms}$	20.6	20.6	18.6	18.6
$N_{max}$	Max. speed	$/min$	2300	4000	2300	4000
$F_{max}$	Electrical frequency @max. speed:	$Hz$	192	333	192	333
$\eta$	Efficiency at rated torque:	%	92.9	93.7	93.3	93
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	93.6	93	93.6	91.7
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.00147 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	90.7 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	1.45 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	1.12 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	11.2 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY630EAR**

ELECTRONIC DRIVE

**DRIVE 6/14**

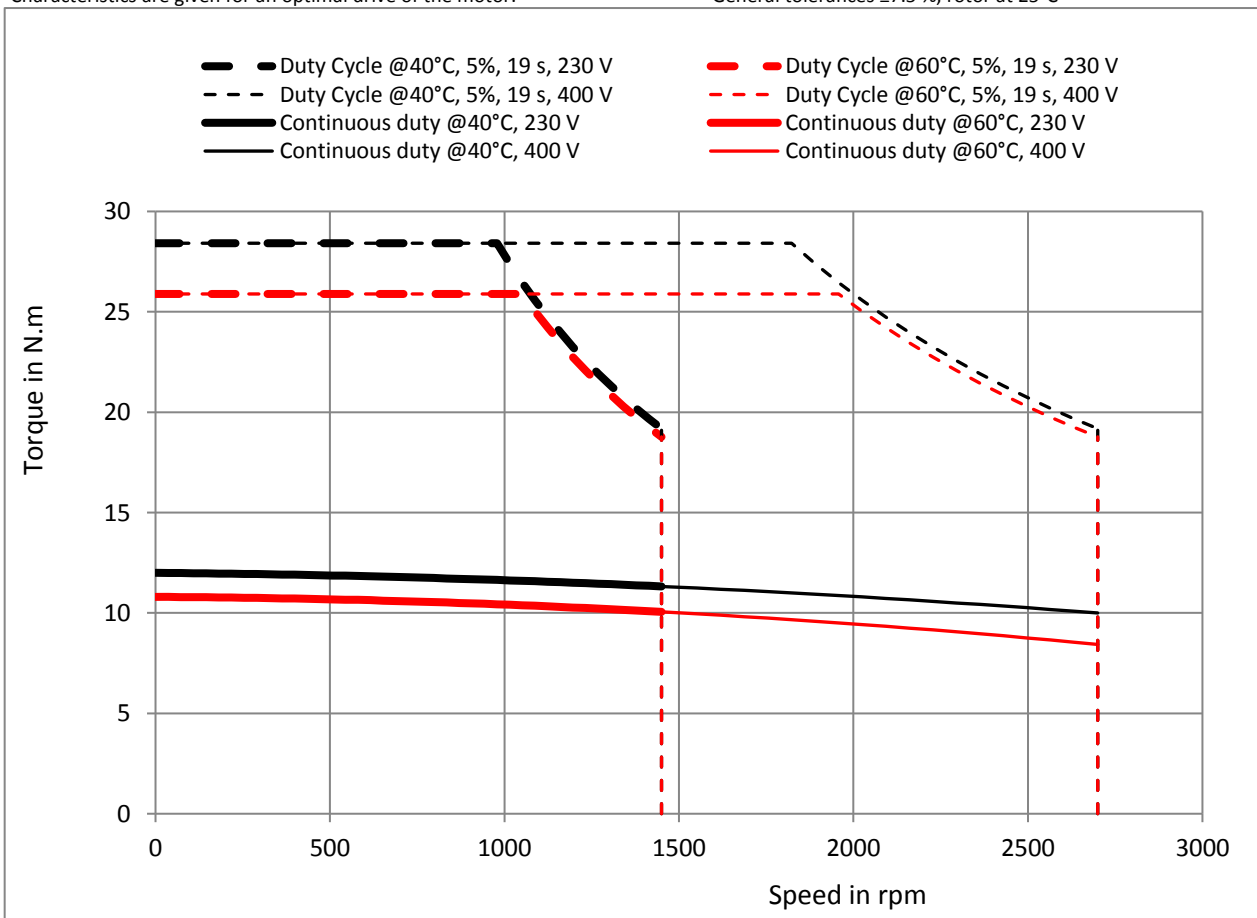
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
		Voltage of the mains: $V_{rms}$				
$P_n$	<b>Rated power **</b>	$kW$	1.72	2.83	1.53	2.38
$M_n$	<b>Rated torque **</b>	$N.m$	11.3	10	10.1	8.43
$N_n$	<b>Rated speed</b>	$/min$	1450	2700	1450	2700
$I_n$	<b>Rated current</b>	$A_{rms}$	5.19	4.61	4.61	3.9
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	221	393	217	386
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	12	12	10.8	10.8
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	5.47	5.47	4.92	4.92
$M_p$	Max. torque **	$N.m$	28.4	28.4	25.9	25.9
$I_p$	Max. current	$A_{rms}$	13.7	13.7	12.3	12.3
$N_{max}$	Max. speed	$/min$	1450	2700	1450	2700
$F_{max}$	Electrical frequency @max. speed:	$Hz$	121	225	121	225
$\eta$	Efficiency at rated torque:	%	90.8	93.6	91.5	93.8
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	92.6	93.9	92.8	93.7
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.00147 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	137.0 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	2.19 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	2.43 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	25.6 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY820EAR**

ELECTRONIC DRIVE

**DRIVE 11/27**

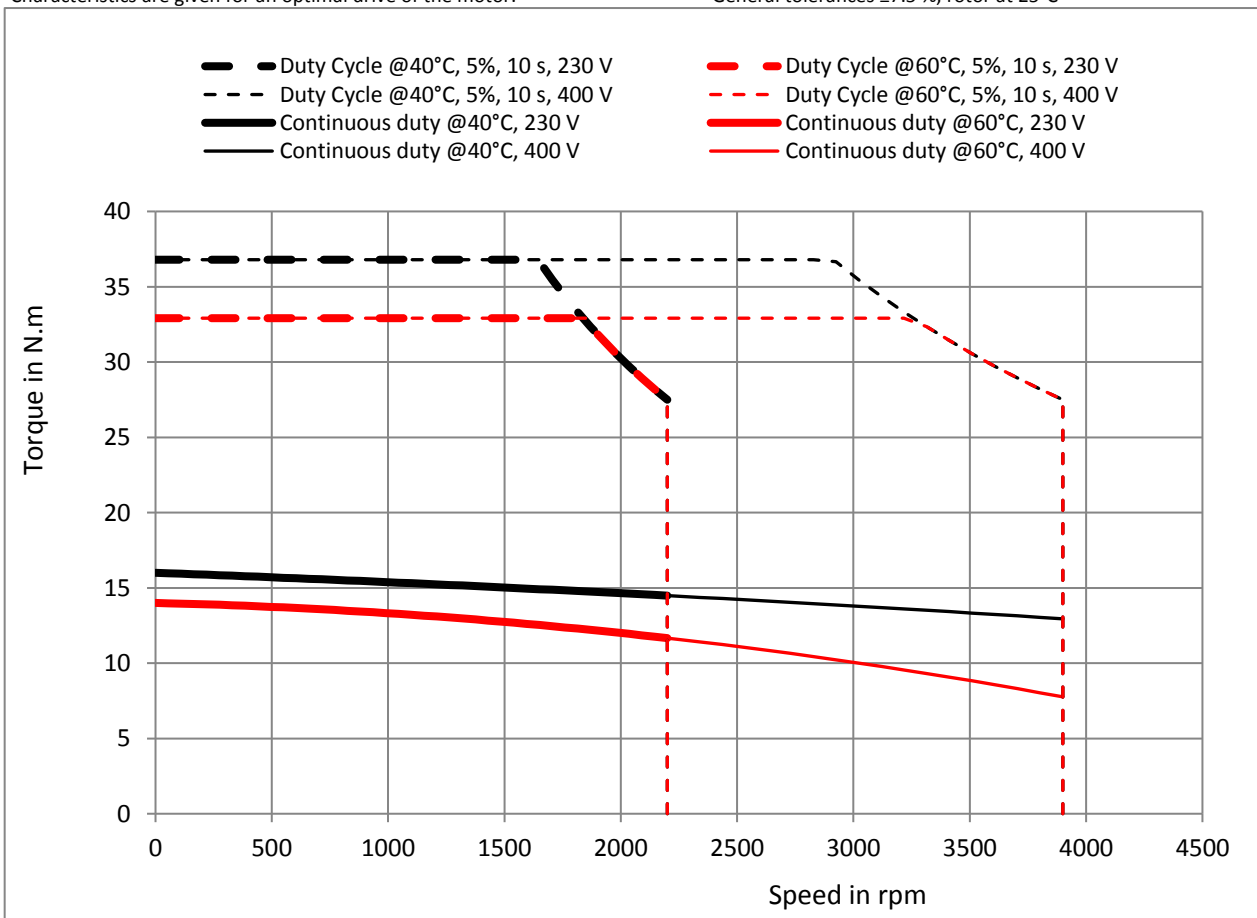
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
		Voltage of the mains: $V_{rms}$				
$P_n$	<b>Rated power **</b>	$kW$	3.34	5.29	2.69	3.17
$M_n$	<b>Rated torque **</b>	$N.m$	14.5	12.9	11.7	7.76
$N_n$	<b>Rated speed</b>	$/min$	2200	3900	2200	3900
$I_n$	<b>Rated current</b>	$A_{rms}$	9.74	8.78	7.85	5.35
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	219	377	214	367
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	16	16	14	14
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	10.7	10.7	9.32	9.32
$M_p$	Max. torque **	$N.m$	36.8	36.8	32.9	32.9
$I_p$	Max. current	$A_{rms}$	26.7	26.7	23.3	23.3
$N_{max}$	Max. speed	$/min$	2200	3900	2200	3900
$F_{max}$	Electrical frequency @max. speed:	$Hz$	183	325	183	325
$\eta$	Efficiency at rated torque:	%	92	93.4	92.8	92.9
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	93.1	93.3	93.3	91.8
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.0032 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	93.7 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	1.5 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	1.01 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	8.57 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY840EAK**

ELECTRONIC DRIVE

**DRIVE 17/41**

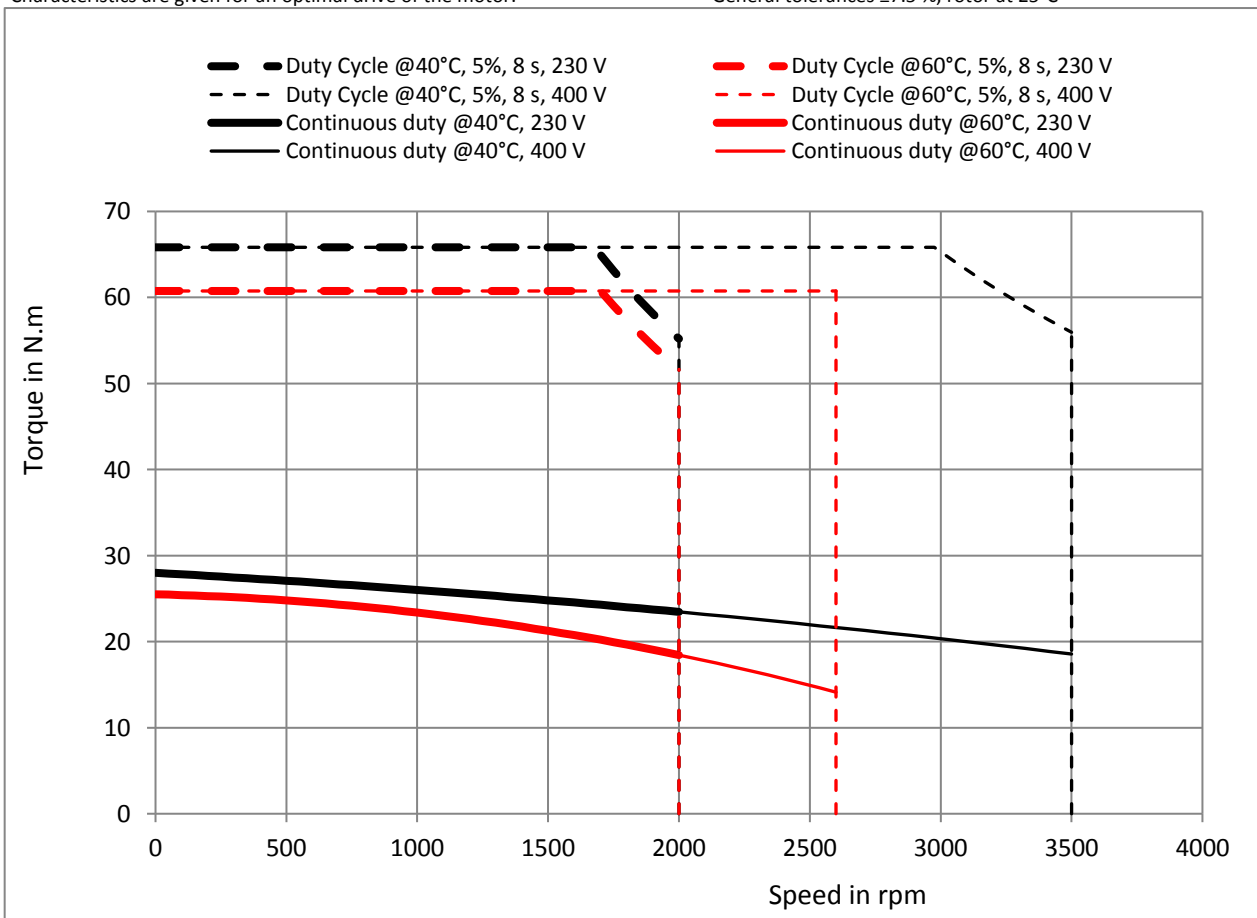
No UL certification

$T_a$	UR	Max ambient temperature: °C	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
$P_n$	<b>Rated power **</b>	$kW$	4.91	6.8	3.86	3.85
$M_n$	<b>Rated torque **</b>	$N.m$	23.5	18.6	18.4	14.1
$N_n$	<b>Rated speed</b>	$/min$	2000	3500	2000	2600
$I_n$	<b>Rated current</b>	$A_{rms}$	13.7	11	10.8	8.38
$U_n$	<b>Rated voltage *</b>	$V_{rms}$	223	380	220	282
$U_{bus}$	DC voltage supply when motor is loaded	$V$	310	540	310	540
$M_o$	<b>Low speed torque **</b>	$N.m$	28	28	25.5	25.5
$I_o$	<b>Permanent current at low speed</b>	$A_{rms}$	16.2	16.2	14.7	14.7
$M_p$	Max. torque **	$N.m$	65.8	65.8	60.8	60.8
$I_p$	Max. current	$A_{rms}$	40.4	40.4	36.8	36.8
$N_{max}$	Max. speed	$/min$	2000	3500	2000	2600
$F_{max}$	Electrical frequency @max. speed:	$Hz$	167	292	167	217
$\eta$	Efficiency at rated torque:	%	93.7	93.9	93.9	93.7
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	94	93.1	93.8	92.7
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.0062 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	108.0 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	1.73 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	0.493 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	5.42 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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

## BRUSHLESS MOTOR

**EY860EAJ**

ELECTRONIC DRIVE

**DRIVE 18/45**

No UL certification

$T_a$	Max ambient temperature: °C	$V_{rms}$	@40°C		@60°C	
			230 VAC	400 VAC	230 VAC	400 VAC
UR	Voltage of the mains:					
$P_n$	Rated power **	kW	5.23	6.27	4.4	4.8
$M_n$	Rated torque **	N.m	34.4	23	29	21.8
$N_n$	Rated speed	/min	1450	2600	1450	2100
$I_n$	Rated current	$A_{rms}$	14.9	10.2	12.6	9.61
$U_n$	Rated voltage *	$V_{rms}$	217	377	215	306
$U_{bus}$	DC voltage supply when motor is loaded	V	310	540	310	540
$M_o$	Low speed torque **	N.m	41	41	37	37
$I_o$	Permanent current at low speed	$A_{rms}$	17.7	17.7	15.9	15.9
$M_p$	Max. torque **	N.m	96.7	96.7	88.5	88.5
$I_p$	Max. current	$A_{rms}$	44.2	44.2	39.8	39.8
$N_{max}$	Max. speed	/min	1450	2600	1450	2100
$F_{max}$	Electrical frequency @max. speed:	Hz	121	217	121	175
$\eta$	Efficiency at rated torque:	%	93.5	94.1	93.8	94.1
$\eta_{75\%}$	Efficiency at 75% of rated torque:	%	94.1	93.3	94	93.4
$2p$	Number of poles:	10	<b>Environment:</b>			
$J$	Rotor inertia	0.0092 $kg.m^2$	Altitude: <1000m			
$K_e$	Back emf constant at 1000 rpm (25°C)*	145.0 $V_{rms}$	Thermal class F (according to IEC 60034-1)			
$K_t$	Torque sensitivity (25°C)	2.32 $Nm/A_{rms}$	Cooling type: Natural Air cooling			
$R_b$	Winding resistance(25°C) *	0.499 $\Omega$	Flange 400*400*12mm(ALU)			
$L$	Winding inductance *	6.76 $mH$	with flange temperature $\leq T_a$			

All data are given in typical values under standard conditions.

\* Phase to Phase

Characteristics are given for an optimal drive of the motor.

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