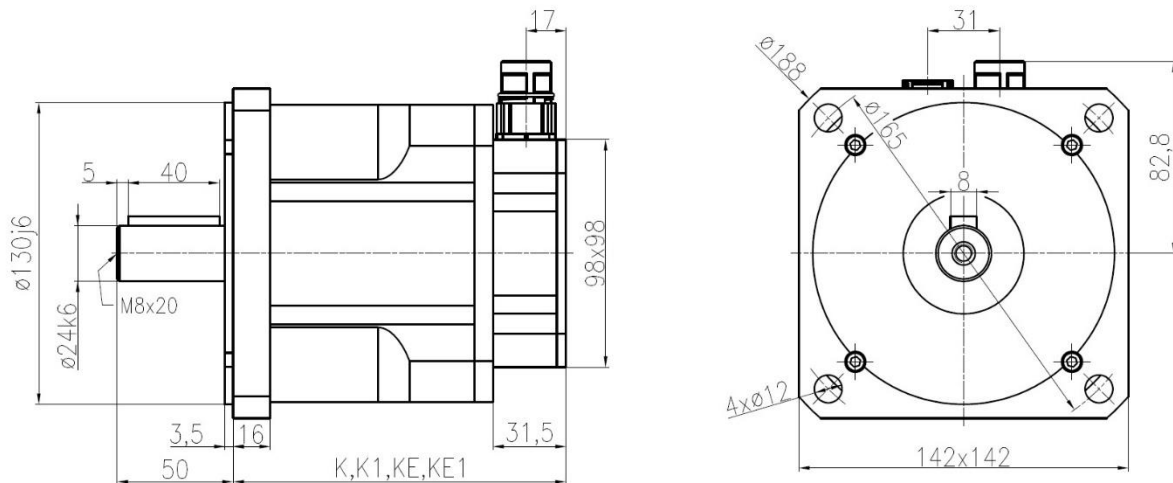


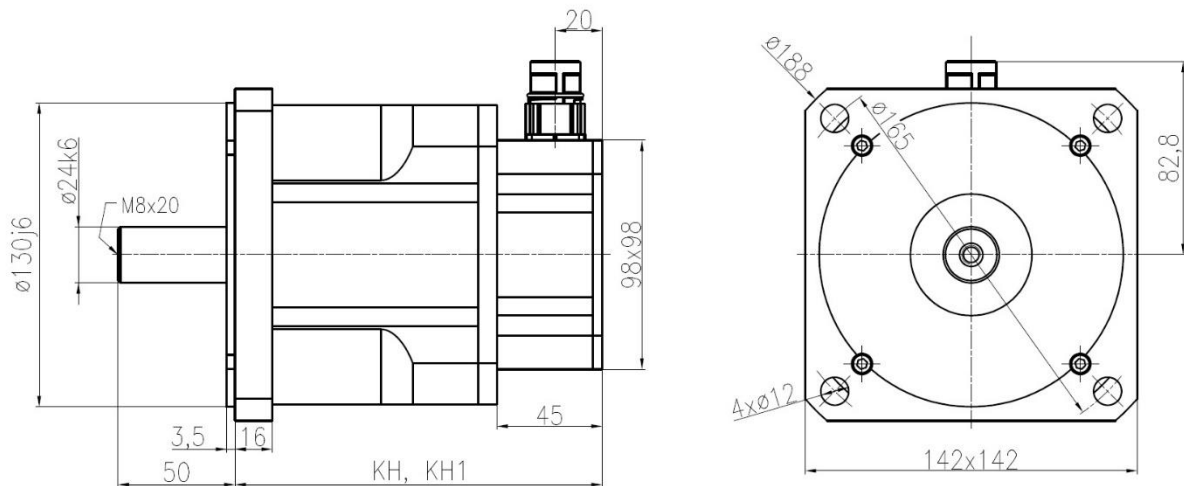
Dimensionen



Art	K (Resolver)	K1 (Resolver+Bremse)	KE (EnDAT)	KE1 (EnDAT+Bremse)
TGN5-1200	143,5 mm	179,5 mm	177 mm	222 mm
TGN5-1600	173,5 mm	209,5 mm	207 mm	252 mm
TGN5-2000	203,5 mm	239,5 mm	237 mm	282 mm
TGN5-2400	233,5 mm	269,5 mm	267 mm	312 mm

Die Länge des Motors mit Hiperface-Sensor ist die gleiche wie die Länge des Motors mit EnDat-Sensor. Bei einigen Motortypen kann es kleiner sein.

Servomotoren mit integriertem Stecker



Art	KH (DSL)	KH1 (DSL+Bremse)
TGN5-1200	157 mm	206 mm
TGN5-1600	187 mm	236 mm
TGN5-2000	217 mm	266 mm
TGN5-2400	247 mm	296 mm

RATED DATA

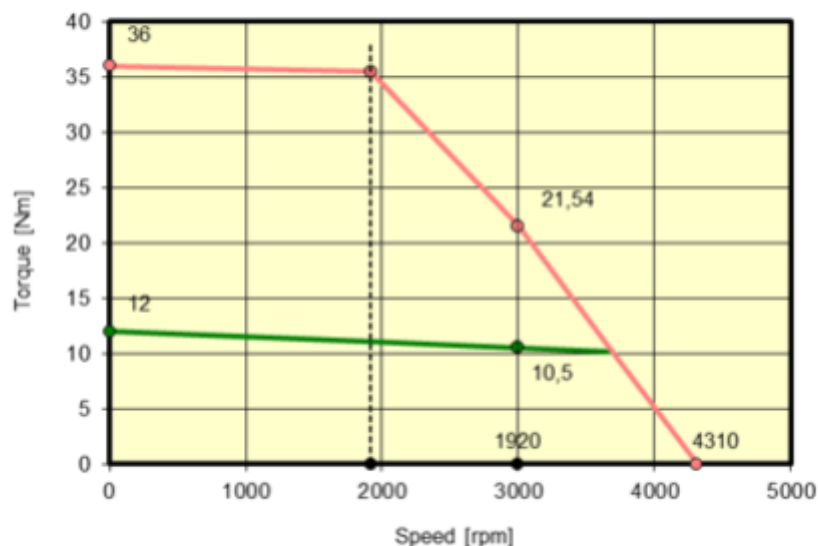
Motor type	N5-1200-30-320
Winding number	01-00728

Rated Speed	n_n	3000 min^{-1}
DC Bus Voltage	U_{dc}	320 V
Nominal AC Voltage	U_n	220 V
Rated Motor Voltage	U_m	164 V
Rated Torque	M_n	10,5 Nm
Rated AC Current	I_n	14,7 A
Stall Torque	M_o	12,0 Nm
Stall AC Current	I_o	14,2 A
Peak Torque	M_{max}	36 Nm
Peak Current	I_{max}	53 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	51,0 V/1000
Torque Constant	K_T	0,84 Nm/A
Terminal Resistance	R_{2ph}	0,42 Ω
Terminal Inductance	L_{2ph}	3,4 mH
Number of poles	$2p$	10

No Load Speed	n_o	4310 min^{-1}
Torque at I_{max}/U_n	M_z	36 Nm
Speed at I_{max}/U_n	n_z	1920 min^{-1}
Max. Torque at n_n	M_x	22 Nm

El. Time Constant	T_{el}	8,1 ms
Mech. Time Constant	T_{mech}	0,81 ms
Thermal Time Constant	T_{th}	45 min
Rotor Inertia	J	7,90 kgcm^2

Torque/speed curves



RATED DATA

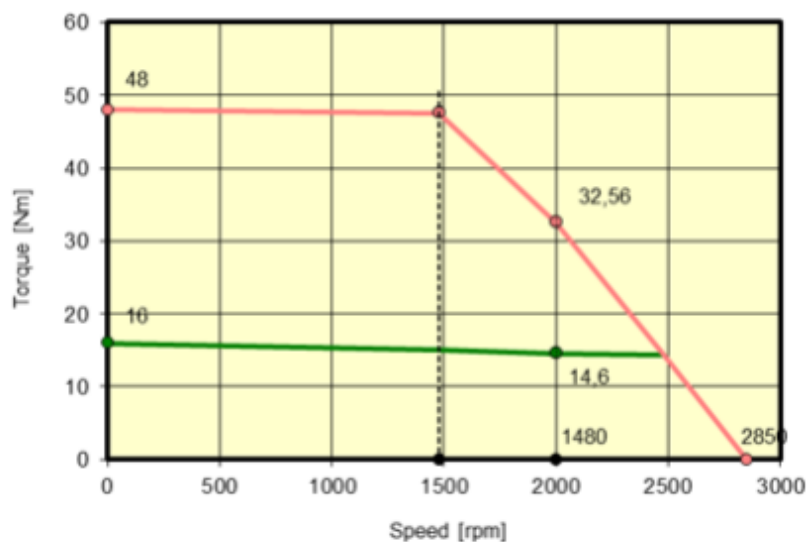
Motor type	N5-1600-20-320
Winding number	01-00730

Rated Speed	n_n	2000 min^{-1}
DC Bus Voltage	U_{dc}	320 V
Nominal AC Voltage	U_n	220 V
Rated Motor Voltage	U_m	166 V
Rated Torque	M_n	14,6 Nm
Rated AC Current	I_n	12,6 A
Stall Torque	M_o	16,0 Nm
Stall AC Current	I_o	12,6 A
Peak Torque	M_{max}	48 Nm
Peak Current	I_{max}	44 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	77,0 V/1000
Torque Constant	K_T	1,27 Nm/A
Terminal Resistance	R_{2ph}	0,57 Ω
Terminal Inductance	L_{2ph}	4,9 mH
Number of poles	$2p$	10

No Load Speed	n_o	2850 min^{-1}
Torque at I_{max}/U_n	M_z	48 Nm
Speed at I_{max}/U_n	n_z	1480 min^{-1}
Max. Torque at n_n	M_x	33 Nm

El. Time Constant	T_{el}	8,6 ms
Mech. Time Constant	T_{mech}	0,70 ms
Thermal Time Constant	T_{th}	55 min
Rotor Inertia	J	11,50 kgcm^2

Torque/speed curves



RATED DATA

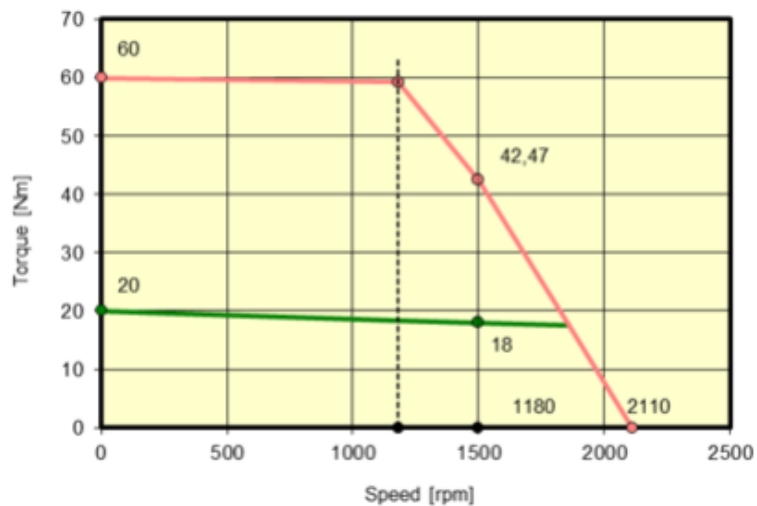
Motor type	N5-2000-15-320
Winding number	01-00732

Rated Speed	n_n	1500 min^{-1}
DC Bus Voltage	U_{dc}	320 V
Nominal AC Voltage	U_n	220 V
Rated Motor Voltage	U_m	165 V
Rated Torque	M_n	18,0 Nm
Rated AC Current	I_n	11,8 A
Stall Torque	M_o	20,0 Nm
Stall AC Current	I_o	11,6 A
Peak Torque	M_{max}	60 Nm
Peak Current	I_{max}	40 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	104,0 V/1000
Torque Constant	K_T	1,72 Nm/A
Terminal Resistance	R_{2ph}	0,72 Ω
Terminal Inductance	L_{2ph}	6,3 mH
Number of poles	$2p$	10

No Load Speed	n_o	2110 min^{-1}
Torque at I_{max}/U_n	M_z	59 Nm
Speed at I_{max}/U_n	n_z	1180 min^{-1}
Max. Torque at n_n	M_x	42 Nm

El. Time Constant	T_{el}	8,8 ms
Mech. Time Constant	T_{mech}	0,64 ms
Thermal Time Constant	T_{th}	65 min
Rotor Inertia	J	15,10 kgcm^2

Torque/speed curves



RATED DATA

Motor type

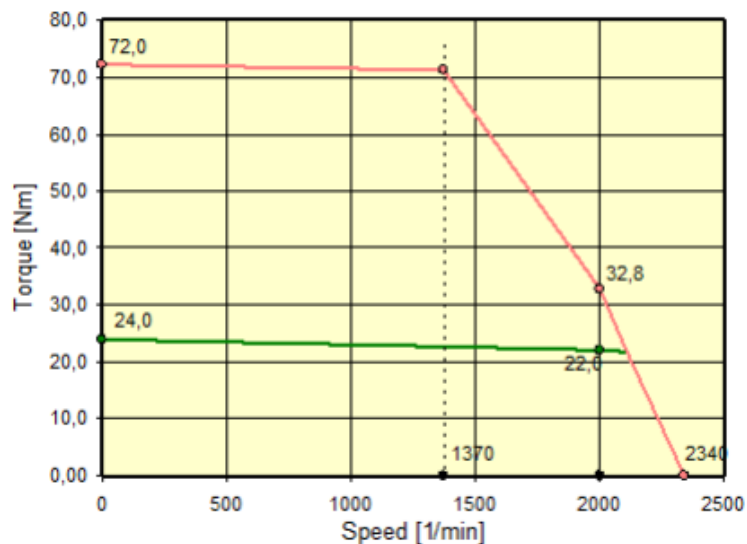
N5	2400	20	320
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Rated Speed	n_n	2000 min^{-1}
DC Bus Voltage	U_{dc}	320 V
Nominal AC Voltage	U_n	220 V
Rated Motor Voltage	U_m	191 V
Rated Torque	M_n	22,0 Nm
Rated AC Current	I_n	16,4 A
Stall Torque	M_o	24,0 Nm
Stall AC Current	I_o	15,4 A
Peak Torque	M_{max}	72 Nm
Peak Current	I_{max}	53 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	94,0 V/1000
Torque Constant	K_T	1,55 Nm/A
Terminal Resistance	R_{2ph}	0,45 Ω
Terminal Inductance	L_{2ph}	4,1 mH
Number of poles	$2p$	10

No Load Speed	n_o	2340 min^{-1}
Torque at I_{max}/U_n	M_z	71 Nm
Speed at I_{max}/U_n	n_z	1370 min^{-1}
Max. Torque at n_n	M_x	33 Nm

El. Time Constant	T_{el}	9,0 ms
Mech. Time Constant	T_{mech}	0,67 ms
Thermal Time Constant	T_{th}	70 min
Rotor Inertia	J	21 kgcm^2

Torque/speed curves



RATED DATA

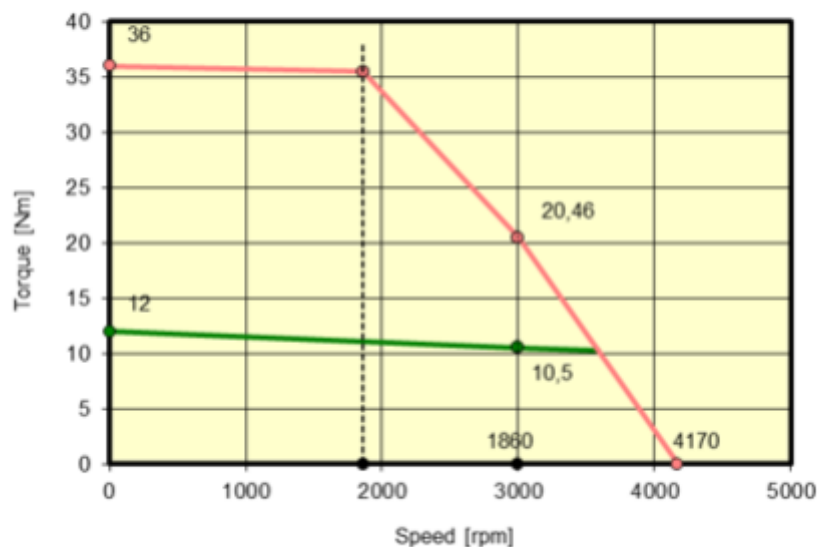
Motor type	N5-1200-30-560
Winding number	01-00729

Rated Speed	n_n	3000 min^{-1}
DC Bus Voltage	U_{dc}	560 V
Nominal AC Voltage	U_n	380 V
Rated Motor Voltage	U_m	291 V
Rated Torque	M_n	10,5 Nm
Rated AC Current	I_n	8,3 A
Stall Torque	M_o	12,0 Nm
Stall AC Current	I_o	8,0 A
Peak Torque	M_{max}	36 Nm
Peak Current	I_{max}	29 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	91,0 V/1000
Torque Constant	K_T	1,51 Nm/A
Terminal Resistance	R_{2ph}	1,33 Ω
Terminal Inductance	L_{2ph}	10,9 mH
Number of poles	$2p$	10

No Load Speed	n_o	4170 min^{-1}
Torque at I_{max}/U_n	M_z	36 Nm
Speed at I_{max}/U_n	n_z	1860 min^{-1}
Max. Torque at n_n	M_x	20 Nm

El. Time Constant	T_{el}	8,2 ms
Mech. Time Constant	T_{mech}	0,80 ms
Thermal Time Constant	T_{th}	45 min
Rotor Inertia	J	7,90 kgcm^2

Torque/speed curves



RATED DATA

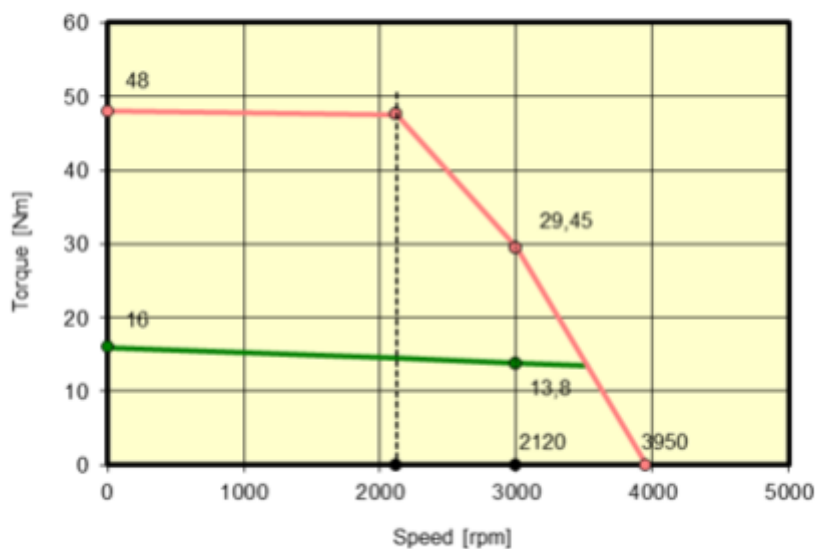
Motor type	N5-1600-30-560
Winding number	01-00731

Rated Speed	n_n	3000 min^{-1}
DC Bus Voltage	U_{dc}	560 V
Nominal AC Voltage	U_n	380 V
Rated Motor Voltage	U_m	296 V
Rated Torque	M_n	13,8 Nm
Rated AC Current	I_n	9,9 A
Stall Torque	M_o	16,0 Nm
Stall AC Current	I_o	10,1 A
Peak Torque	M_{max}	48 Nm
Peak Current	I_{max}	36 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	96,0 V/1000
Torque Constant	K_T	1,59 Nm/A
Terminal Resistance	R_{2ph}	0,88 Ω
Terminal Inductance	L_{2ph}	7,5 mH
Number of poles	$2p$	10

No Load Speed	n_o	3950 min^{-1}
Torque at I_{max}/U_n	M_z	48 Nm
Speed at I_{max}/U_n	n_z	2120 min^{-1}
Max. Torque at n_n	M_x	29 Nm

El. Time Constant	T_{el}	8,5 ms
Mech. Time Constant	T_{mech}	0,70 ms
Thermal Time Constant	T_{th}	55 min
Rotor Inertia	J	11,50 kgcm^2

Torque/speed curves



RATED DATA

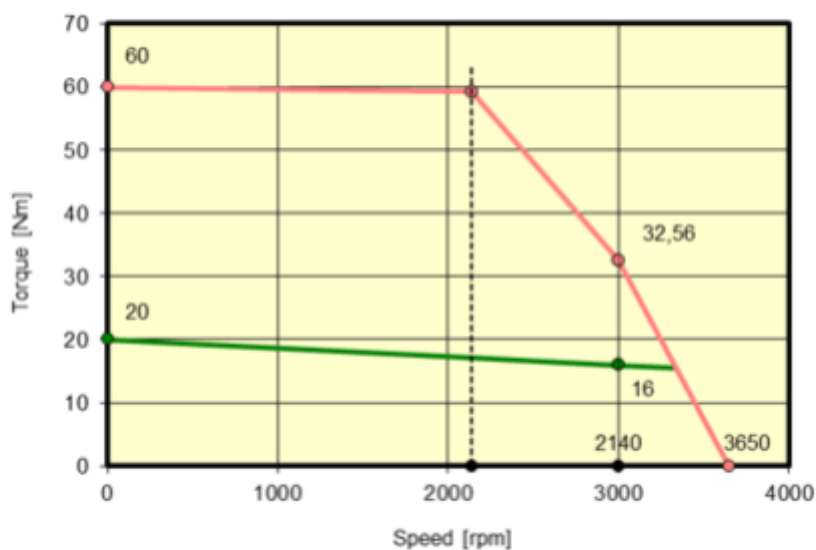
Motor type	N5-2000-30-560
Winding number	01-00733

Rated Speed	n_n	3000 min^{-1}
DC Bus Voltage	U_{dc}	560 V
Nominal AC Voltage	U_n	380 V
Rated Motor Voltage	U_m	297 V
Rated Torque	M_n	16,0 Nm
Rated AC Current	I_n	11,5 A
Stall Torque	M_o	20,0 Nm
Stall AC Current	I_o	11,6 A
Peak Torque	M_{max}	60 Nm
Peak Current	I_{max}	40 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	104,0 V/1000
Torque Constant	K_T	1,72 Nm/A
Terminal Resistance	R_{2ph}	0,72 Ω
Terminal Inductance	L_{2ph}	6,3 mH
Number of poles	$2p$	10

No Load Speed	n_o	3650 min^{-1}
Torque at I_{max}/U_n	M_z	59 Nm
Speed at I_{max}/U_n	n_z	2140 min^{-1}
Max. Torque at n_n	M_x	33 Nm

El. Time Constant	T_{el}	8,8 ms
Mech. Time Constant	T_{mech}	0,64 ms
Thermal Time Constant	T_{th}	65 min
Rotor Inertia	J	15,10 kgcm^2

Torque/speed curves



RATED DATA

Motor type	N5-2400-30-560
Winding number	01-00863

Rated Speed	n_n	3000 min^{-1}
DC Bus Voltage	U_{dc}	560 V
Nominal AC Voltage	U_n	380 V
Rated Motor Voltage	U_m	296 V
Rated Torque	M_n	20,0 Nm
Rated AC Current	I_n	14,4 A
Stall Torque	M_o	24,0 Nm
Stall AC Current	I_o	14,0 A
Peak Torque	M_{max}	72 Nm
Peak Current	I_{max}	48 A
Max. Speed	n_{max}	9000 min^{-1}
EMF Constant	K_E	104,0 V/1000
Torque Constant	K_T	1,72 Nm/A
Terminal Resistance	R_{2ph}	0,56 Ω
Terminal Inductance	L_{2ph}	5,0 mH
Number of poles	$2p$	10

No Load Speed	n_o	3650 min^{-1}
Torque at I_{max}/U_n	M_z	71 Nm
Speed at I_{max}/U_n	n_z	2200 min^{-1}
Max. Torque at n_n	M_x	41 Nm

El. Time Constant	T_{el}	8,9 ms
Mech. Time Constant	T_{mech}	0,61 ms
Thermal Time Constant	T_{th}	75 min
Rotor Inertia	J	18,70 kgcm^2

Torque/speed curves

