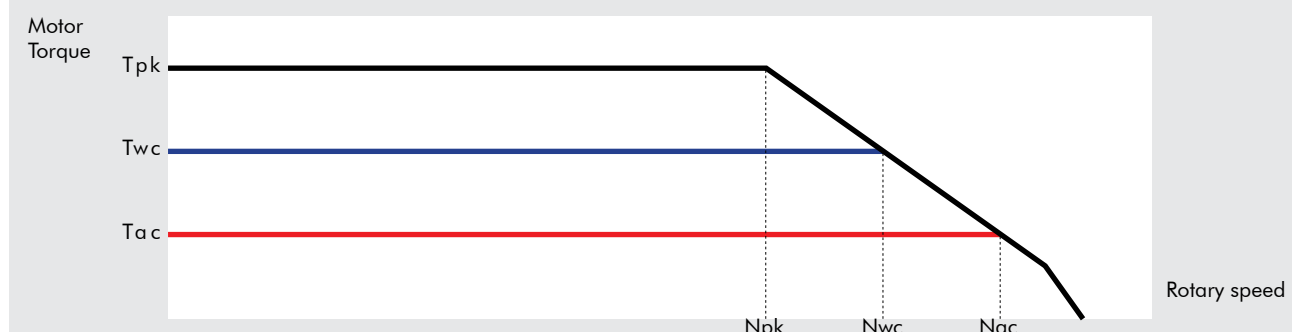
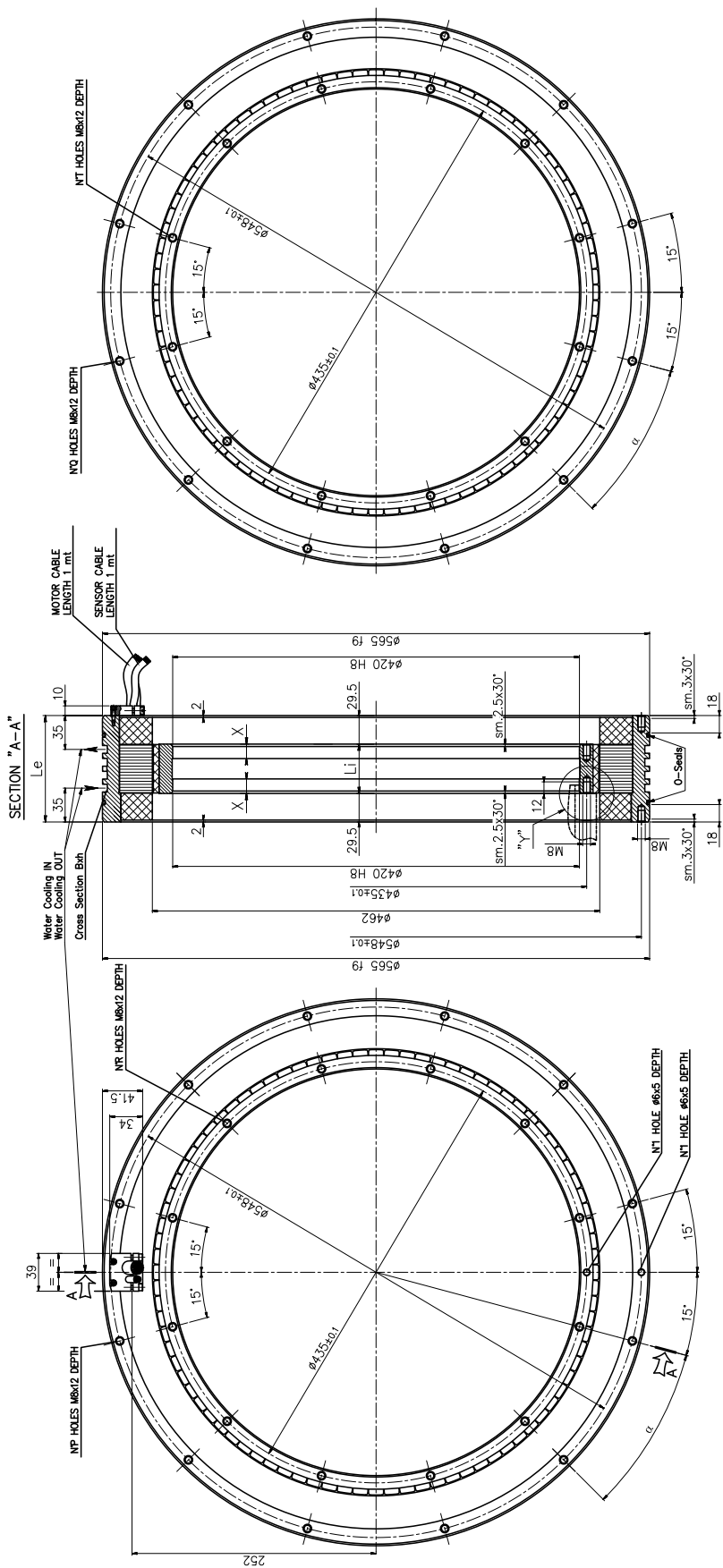


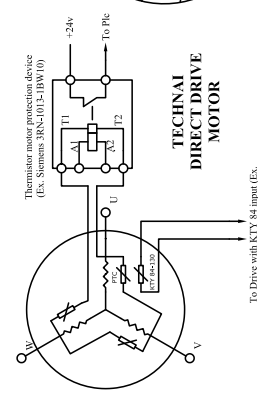
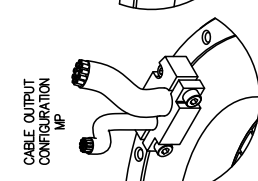
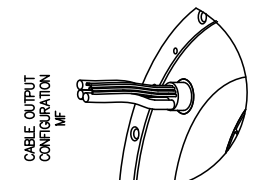
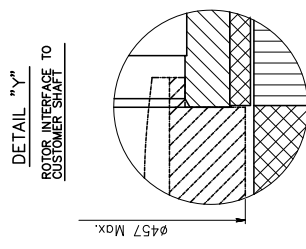
Motor Specifications TECHNAI MK-CI 500 WA/WB

Motor Specifications	Symbol	Unit	MK-CI 500-030		MK-CI 500-050		MK-CI 500-070		MK-CI 500-100		MK-CI 500-150	
			WA	WB	WA	WB	WA	WB	WA	WB	WA	WB
Number of pole	P		88	88	88	88	88	88	88	88	88	8
Peak Torque	T _{pk}	Nm	760	760	1460	1460	1750	1750	2400	2400	3600	3600
Continuos Torque (Water Cooling Dt100)	T _{wc}	Nm	450	450	790	790	1100	1100	1530	1530	2390	2390
Continuos Torque (Air Cooling Dt100)	T _{ac}	Nm	220	219	340	341	435	433	615	615	922	924
Stall Torque (Water Cooling)	T _{swc}	Nm	345	345	600	600	844	844	1134	1134	1820	1820
Stall Torque (Air Cooling)	T _{sac}	Nm	170	167	260	260	331	331	470	470	696	704
Ripple Torque (Cogging Torque)	T _r	Nm	5,1	5,1	8,5	8,5	12	12	17	17	25,5	25,5
Power Loss at T _{wc}	P _{wc}	KW	3,4	3,4	4,7	4,7	5,2	5,2	7	7	10	10
Power Loss at T _{ac}	P _{ac}	KW	0,7	0,7	0,82	0,82	0,85	0,85	1	1	1,4	1,4
Termal Resistance Water Cooling	R _{thWc}	K/W	0,037	0,037	0,024	0,024	0,022	0,022	0,016	0,016	0,010	0,010
Termal Resistance Air Cooling	R _{thAc}	K/W	0,170	0,170	0,140	0,140	0,120	0,120	0,100	0,100	0,062	0,062
Torque Constant	K _t	Nm/A	21,8	12,3	32,6	16,7	45,7	23,4	53,2	27,3	54,6	27,3
Back EMF Constant	K _e	V/1000 Rpm	1321	743	1973	1009	2762	1413	3212	1652	3304	1652
Maximum Speed at I _{pk} at 600 Vdc	N _{pk}	RPM	70	150	35	100	30	70	25	60	25	60
Maximum Speed at I _{wc} at 600 Vdc	N _{wc}	RPM	170	300	105	225	75	160	65	130	60	130
Maximum Speed at I _{ac} at 600 Vdc	N _{ac}	RPM	245	400	164	330	118	240	100	200	95	200
Winding Resistance (Phase to Phase)	R ₂₀	Ω	3,2	0,99	3,3	0,86	4	1,05	3,4	0,9	2,2	0,55
Winding Inductance (Phase to Phase)	L	mH	16,5	5	21	5,5	28	7,3	26,8	7,72	19	5
Peak Current	I _{pk}	Arms	50	89	46	127	55	109	67	134,5	99	190
Continuos Current (Water Cooling Dt100)	I _{wc}	Arms	22,6	39,6	26,3	51,6	25	50,9	31	61,5	47	94,7
Continuos Current (Air Cooling Dt100)	I _{ac}	Arms	10,2	19,5	11	22,12	9,8	19,8	12	23,7	17,3	34,7
Stall Current at 0 Speed (Water Cooling)	I _{swc}	Arms	17,3	30,3	20	39,4	19	38,8	23,5	47	36	72,3
Stall Current at 0 Speed (Air Cooling)	I _{sac}	Arms	7,8	14,9	8,4	16,9	7,5	15,1	9,2	18	13,2	26,5
Maximum Winding Temperature		°C	130	130	130	130	130	130	130	130	130	130
Height of Rotor		mm	30	30	50	50	70	70	100	100	150	150
Height of Stator		mm	90	90	110	110	130	130	160	160	210	210
Outer Diameter of Stator		mm	535	535	535	535	535	535	535	535	535	535





TYPE MK-CI 500	030	050	070	100	150	
ROTOR LENGTH	Le	90	110	130	160	210
ROTOR LENGTH	Li	31	51	71	101	151
CENTERING LENGTH	X	10	15	15	15	15
COOLING GROOVE WIDTH	B	8	8	9	8	9
COOLING GROOVE DEPTH	h	5	5	5	5	5
COOLING GROOVES	No	2	4	4	8	8
STATOR HOLES	P	22	22	22	22	22
	Q	24	24	24	24	24
ROTOR HOLES	R	23	23	23	23	23
	T	24	24	24	24	24
HOLES PITCH ANGLE	a	15°	15°	15°	15°	15°



To Drive with 12V 34 Input (Ex. Shunt).
 30Amp
 with the appropriate rating.