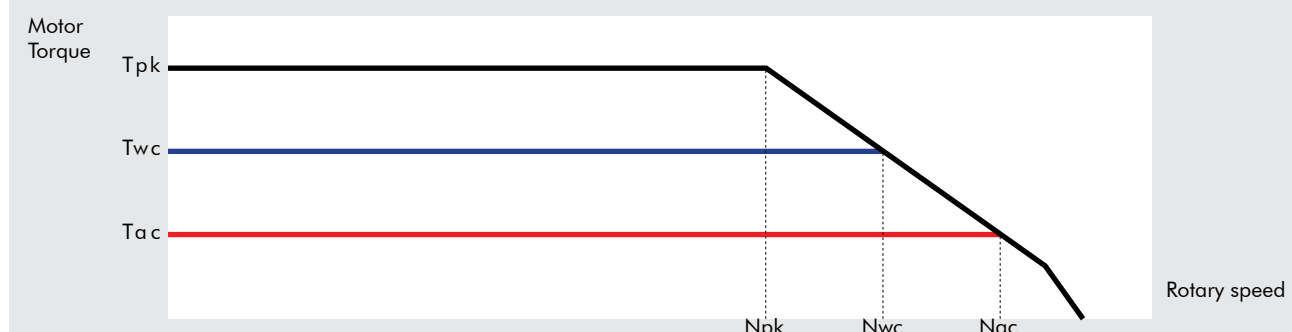
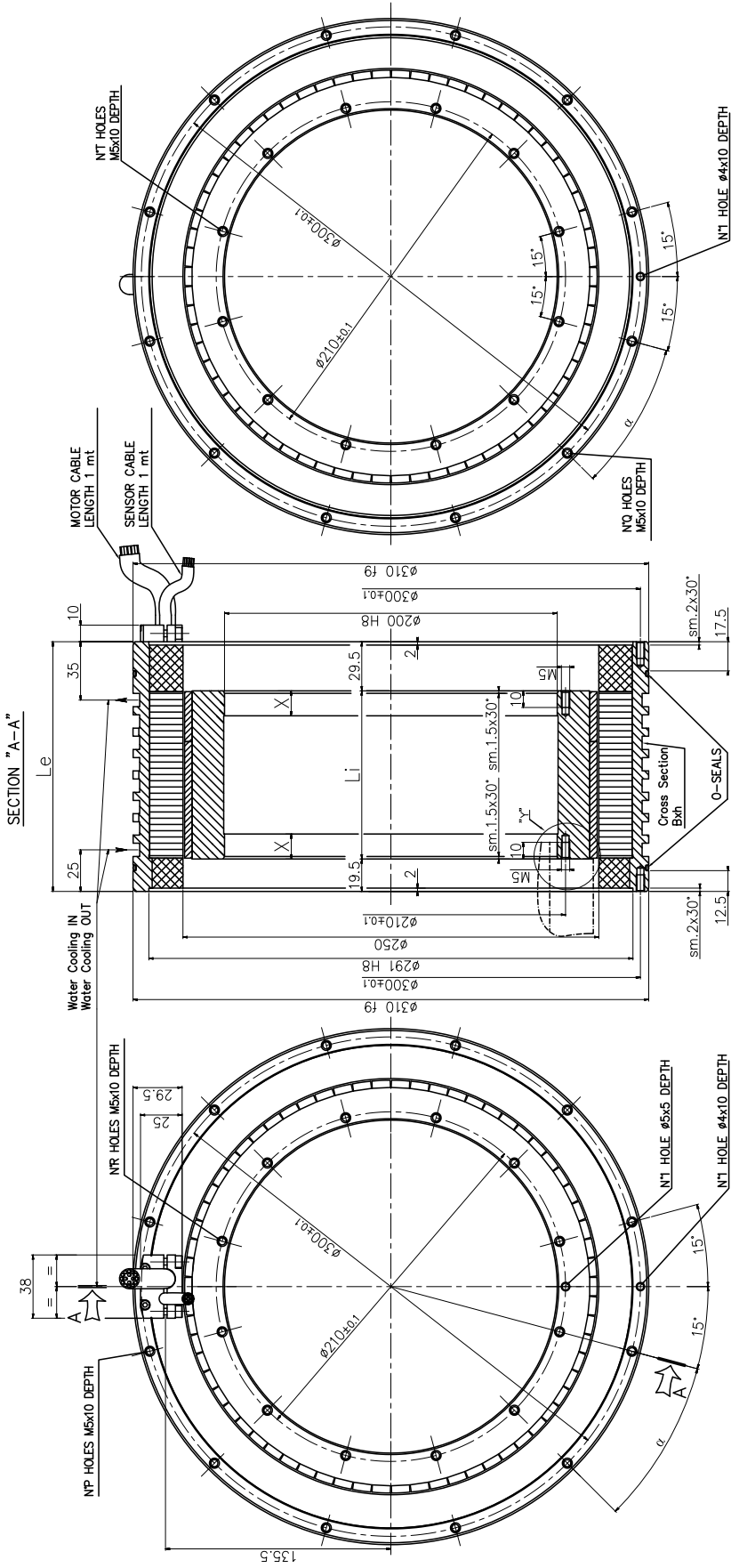


Motor Specifications TECHNAI MK-CI 290S WA/WB

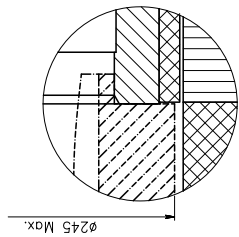
Motor Specifications	Symbol	Unit	MK-CI 290-030		MK-CI 290-050		MK-CI 290-070		MK-CI 290-100		MK-CI 290-150	
			WA	WB	WA	WB	WA	WB	WA	WB	WA	WB
Number of pole	P		66	66	66	66	66	66	66	66	66	66
Peak Torque	T _{pk}	Nm	260	260	433	432	646	606	868	868	1290	1290
Continuos Torque (Water Cooling Dt100)	T _{wc}	Nm	134	134	227	227	322	320	455	460	695	695
Continuos Torque (Air Cooling Dt100)	T _{ac}	Nm	59	54	96	96	132	132	186	181	275	272
Stall Torque (Water Cooling)	T _{swc}	Nm	102	102	173	173	246	244	347	351	530	531
Stall Torque (Air Cooling)	T _{sac}	Nm	45	41	73	73	101	101	141	138	210	207
Ripple Torque (Cogging Torque)	T _r	Nm	1,2	1	2	1,7	2,8	2,8	4	4	6	6,1
Power Loss at T _{wc}	P _{wc}	KW	1,7	1,7	2,35	2,35	3	3	4,1	4,1	5,7	5,7
Power Loss at T _{ac}	P _{ac}	KW	0,35	0,35	0,45	0,45	0,55	0,55	0,7	0,7	0,95	0,95
Termal Resistance Water Cooling	R _{thWc}	K/W	0,067	0,067	0,047	0,047	0,037	0,037	0,027	0,027	0,019	0,019
Termal Resistance Air Cooling	R _{thAc}	K/W	0,314	0,314	0,264	0,264	0,215	0,215	0,169	0,169	0,124	0,124
Torque Constant	K _t	Nm/A	8,1	3,7	13,5	6,8	15,9	9,5	27,1	13,6	40,6	20,3
Back EMF Constant	K _e	V/1000 Rpm	494	227	827	413	975	579	1661	830	2492	1246
Maximum Speed at I _{pk} at 600 Vdc	N _{pk}	RPM	330	750	180	450	130	300	25	200	10	110
Maximum Speed at I _{wc} at 600 Vdc	N _{wc}	RPM	660	1430	370	850	310	575	145	380	85	250
Maximum Speed at I _{ac} at 600 Vdc	N _{ac}	RPM	760	1700	460	960	390	700	215	490	130	310
Winding Resistance (Phase to Phase)	R ₂₀	Ω	2,9	0,72	3,9	1	3,44	1,2	6,5	1,62	9,1	2,27
Winding Inductance (Phase to Phase)	L	mH	6,8	1,7	10,8	2,7	10,5	3,7	20,8	5,2	31	7,7
Peak Current	I _{pk}	Arms	46	92	46	92	58	92	46	92	45,6	91,3
Continuos Current (Water Cooling Dt100)	I _{wc}	Arms	16,9	33,5	17	34,2	20,5	34,3	17	35	17,3	34,7
Continuos Current (Air Cooling Dt100)	I _{ac}	Arms	7,5	15	7,4	14,5	8,5	14,6	7,1	13,8	7	13,8
Stall Current at 0 Speed (Water Cooling)	I _{swc}	Arms	12,9	25,5	12,9	26	15,7	26,2	13	26,7	13,22	26,5
Stall Current at 0 Speed (Air Cooling)	I _{sac}	Arms	5,7	11,5	5,6	11,1	6,5	11,1	5,4	10,5	5,4	10,5
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	70	70	90	90	110	110	140	140	190	190
Outer Diameter of Stator		mm	310	310	310	310	310	310	310	310	310	310



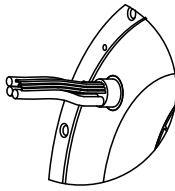


TYPE	MK-CI-290S	030	050	070	100	150
ROTOR LENGTH	Le	80	100	120	150	200
CENTERING LENGTH	X	31	51	71	101	151
COOLING GROOVE WIDTH	B	8	8	9	8	9
COOLING GROOVE DEPTH	h	4	4	4	4	4
COOLING GROOVES	No	2	4	4	8	8
STATOR HOLES	P	12	12	12	23	23
ROTOR HOLES	Q	12	12	12	24	24
ROTOR HOLES	R	12	12	12	23	23
ROTOR HOLES	T	12	12	12	24	24
HOLES PITCH ANGLE	α	30°	30°	30°	15°	15°

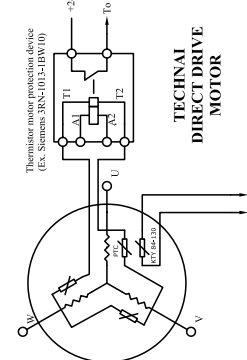
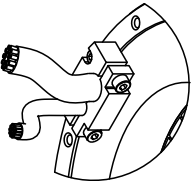
DETAIL "y-y"
ROTOR INTERFACE TO
CUSTOMER SHAFT



CABLE OUTPUT
CONFIGURATION
MF



CABLE OUTPUT
CONFIGURATION
MP



To Drive with KTY 84 inner Ex. Standard 01(D)U or multimeter with the appropriate rating