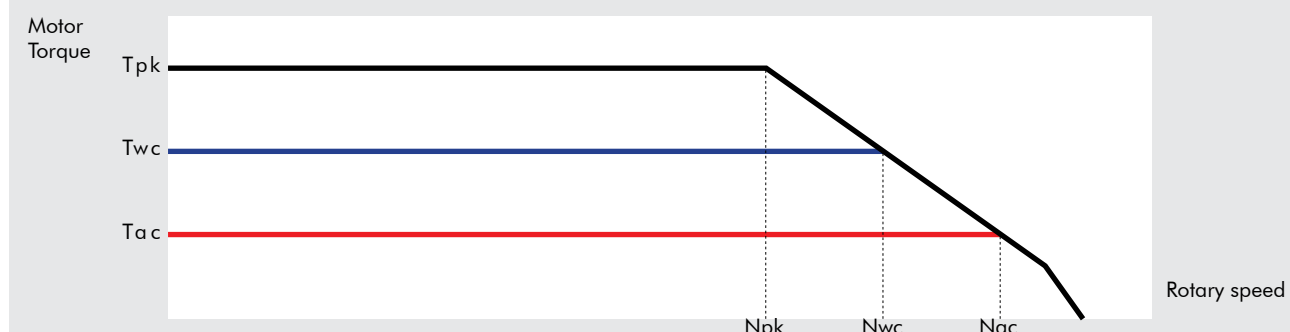
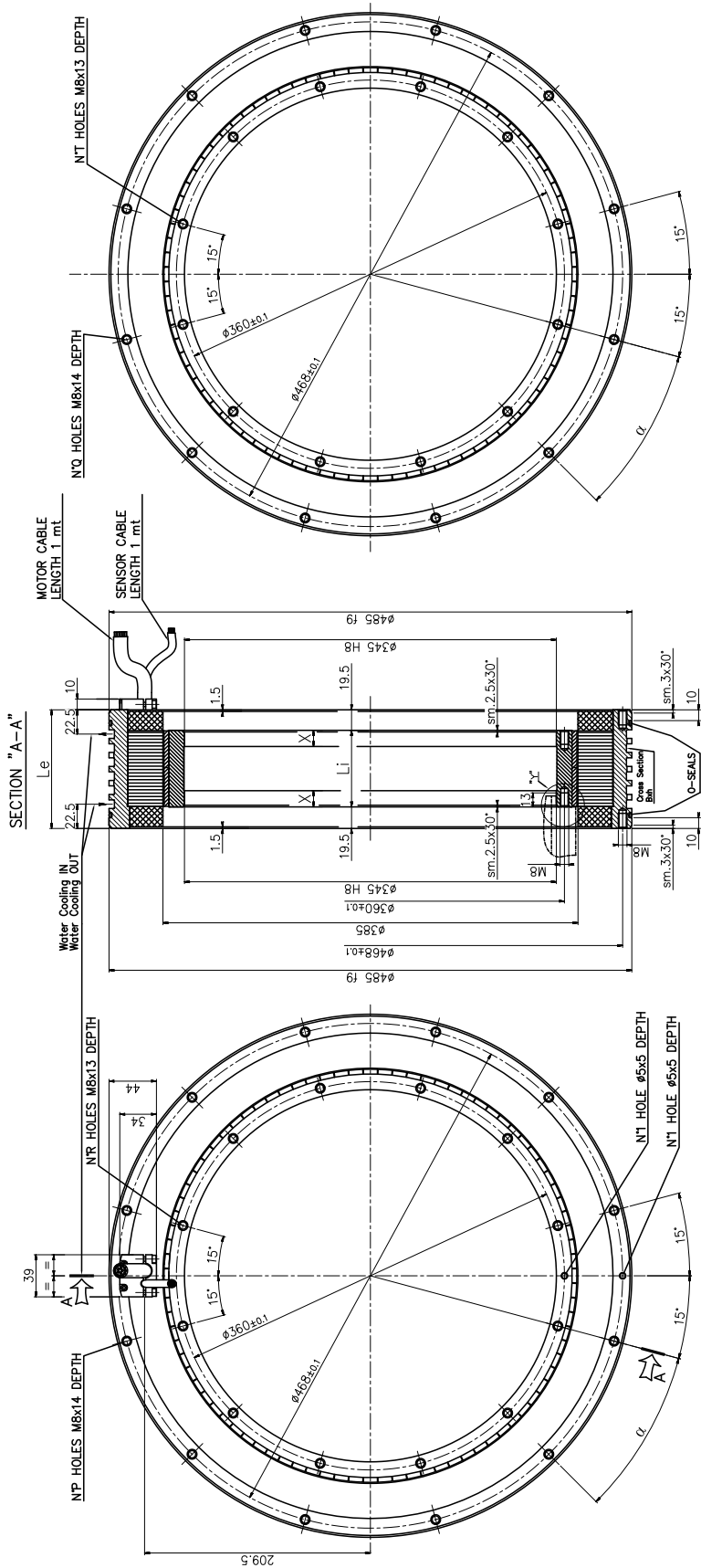


Motor Specifications TECHNAI MK-CIC 450 WA/WB

Motor Specifications	Symbol	Unit	MK-CIC 450-050		MK-CIC 450-070	
			WA	WB	WA	WB
Number of pole	P		88	88	88	88
Peak Torque	T _{pk}	Nm	1219	1221	1707	1712
Continuos Torque (Water Cooling Dt100)	T _{wc}	Nm	670	679	938	950
Continuos Torque (Air Cooling Dt100)	T _{ac}	Nm	290	293	403	404
Stall Torque (Water Cooling)	T _{swc}	Nm	528	536	739	749
Stall Torque (Air Cooling)	T _{sac}	Nm	222	224	308	309
Ripple Torque (Cogging Torque)	T _r	Nm	7	7	10	10
Power Loss at T _{wc}	P _{wc}	KW	3,6	3,6	4,6	4,6
Power Loss at T _{ac}	P _{ac}	KW	0,7	0,7	0,85	0,85
Termal Resistance Water Cooling	R _{thWc}	K/W	0,028	0,028	0,022	0,022
Termal Resistance Air Cooling	R _{thAc}	K/W	0,154	0,154	0,127	0,127
Torque Constant	K _t	Nm/A	26,1	13,4	36,5	18,8
Back EMF Constant	K _e	V/1000 Rpm	1606	826	2248	1156
Maximum Speed at I _{pk} at 600 Vdc	N _{pk}	RPM	70	200	55	120
Maximum Speed at I _{wc} at 600 Vdc	N _{wc}	RPM	180	380	120	260
Maximum Speed at I _{ac} at 600 Vdc	N _{ac}	RPM	240	470	170	340
Winding Resistance (Phase to Phase)	R ₂₀	Ω	2,4	0,61	3	0,8
Winding Inductance (Phase to Phase)	L	mH	13,8	3,7	18,91	5
Peak Current	I _{pk}	Arms	68	131	68	131
Continuos Current (Water Cooling Dt100)	I _{wc}	Arms	27	53	26,8	53
Continuos Current (Air Cooling Dt100)	I _{ac}	Arms	11,5	22,6	11,4	22,3
Stall Current at 0 Speed (Water Cooling)	I _{swc}	Arms	20,5	40,5	20,5	40,5
Stall Current at 0 Speed (Air Cooling)	I _{sac}	Arms	8,8	17,3	8,7	17,1
Maximum Winding Temperature		°C	130	130	130	130
Height of Rotor		mm	50	50	70	70
Height of Stator		mm	90	90	110	110
Outer Diameter of Stator		mm	485	485	485	485





TYPE MK-CIC-450	050	070
STATOR LENGTH	Le	90
ROTOR LENGTH	Li	51
CENTERING LENGTH	X	15
COOLING GROOVE WIDTH	B	8
COOLING GROOVE DEPTH	h	5
COOLING GROOVES	N _g	4
STATOR HOLES	P	12
ROTOR HOLES	Q	12
HOLES PITCH ANGLE	α	30°

