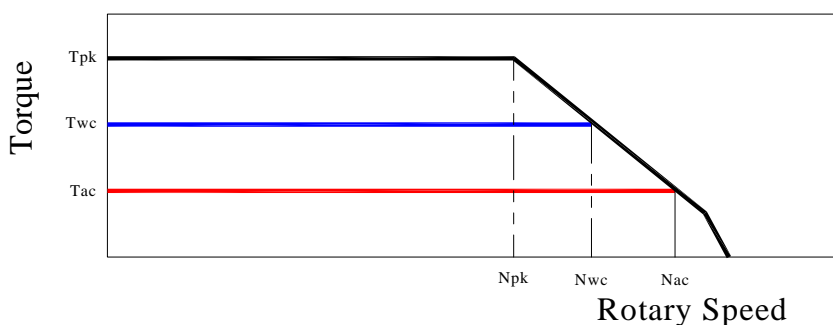


## TORQUE MOTOR - MK-CI 450-050 WA

Motor specification	Symbol	Unit	
Number of pole	P		88
Peak Torque	Tpk	Nm	1219
Continuos Torque (Water Cooling Dt100)	Twc	Nm	670
Continuos Torque (Air Cooling Dt100)	Tac	Nm	290
Stall Torque (Water Cooling)	Twsc	Nm	528
Stall Torque (Air Cooling)	Tsac	Nm	222
Ripple Torque (Cogging Torque)	Tr	Nm	7
Power Loss at Twc	Pwc	Kw	3,6
Power Loss at Tac	Pac	Kw	0,7
Termal Resistance Water Cooling	RthWc	Kw	0,03
Termal Resistance Air Cooling	RthAc	Kw	0,15
Torque Constant	Kt	Nm/a	26,06
Back EMF Constant	Ke	V/1000 Rpm	1606
Maximum Speed at Ipk at 600 Vdc	Npk	rpm	70
Maximum Speed at Iwc at 600 Vdc	Nwc	rpm	180
Maximum Speed at Iac at 600 Vdc	Nac	rpm	240
Winding Resistance (Phase to Phase)	R20	$\Omega$	2,4
Winding Inductance (Phase to Phase)	L	mh	13,8
Peak Current	Ipk	Arms	68
Continuos Current (Water Cooling Dt100)	Iwc	Arms	27
Continuos Current (Air Cooling Dt100)	Iac	Arms	11,5
Stall Current at 0 Speed (Water Cooling)	Iswc	Arms	20,5
Stall Current at 0 Speed (Air Cooling)	Isac	Arms	8,8
Maximum Winding Temperature		$^{\circ}\text{C}$	130
Height of Rotor		mm	50
Height of Stator		mm	110
Stator jacket outer diameter		mm	485

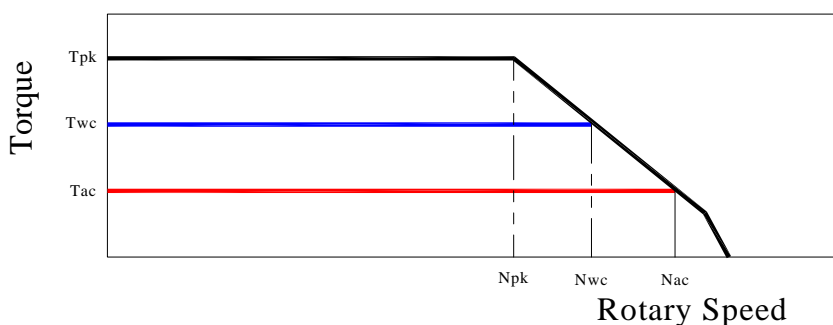
### Torque diagram



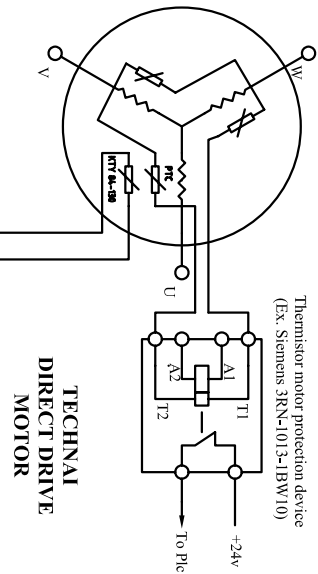
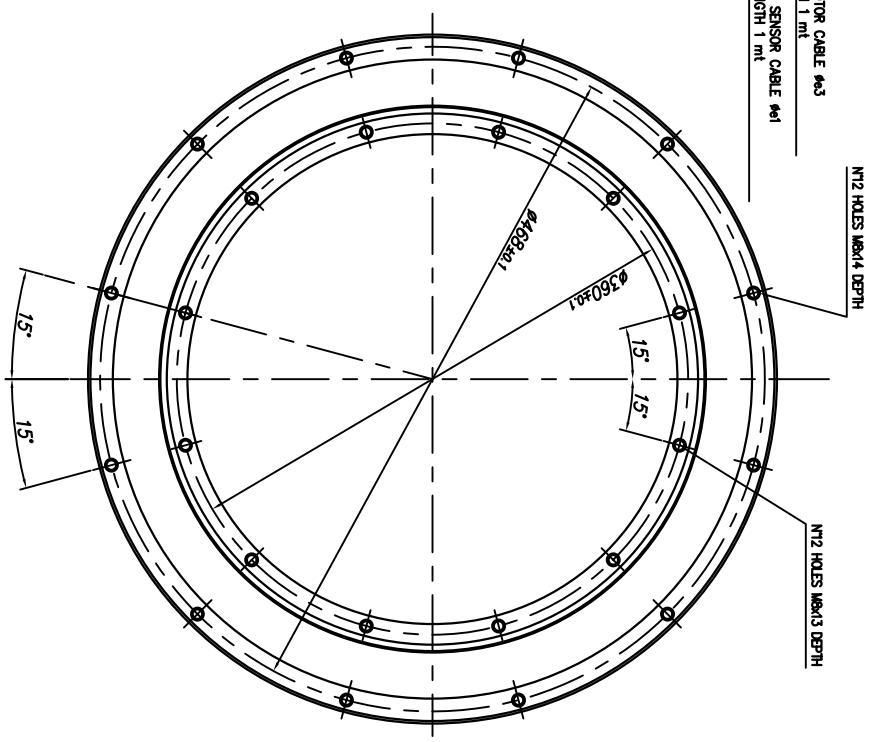
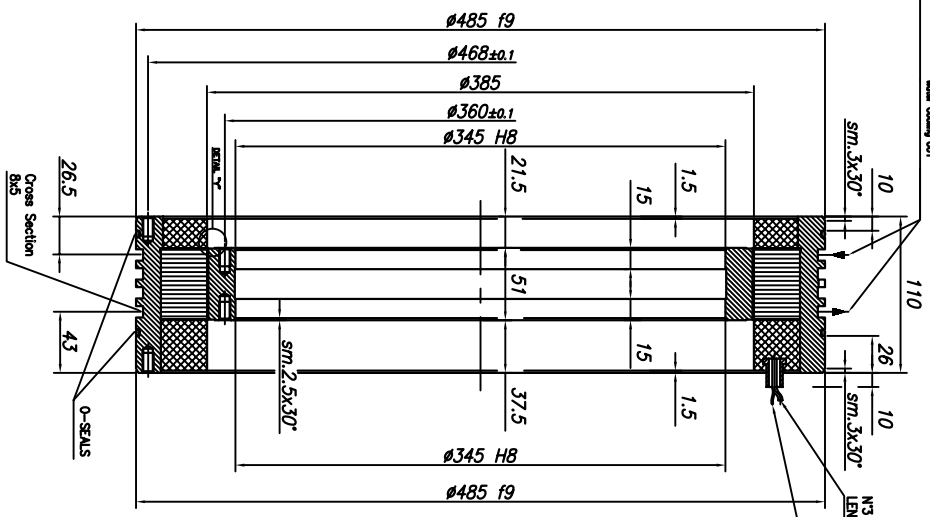
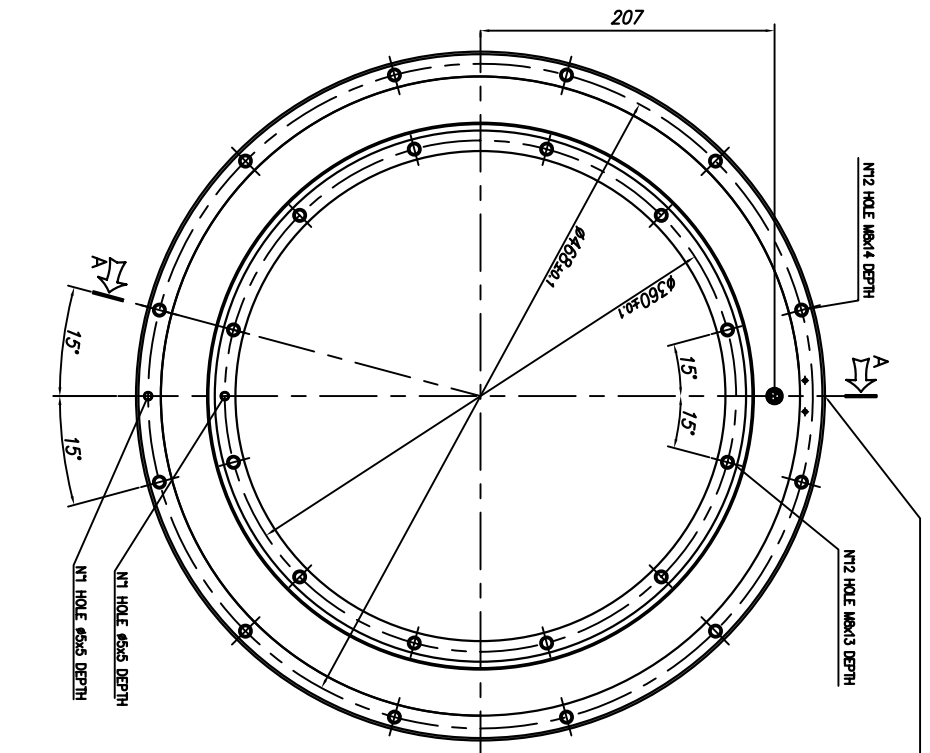
## TORQUE MOTOR - MK-CI 450-050 WB

Motor specification	Symbol	Unit	
Number of pole	P		88
Peak Torque	T <sub>pk</sub>	Nm	1221
Continuos Torque (Water Cooling Dt100)	T <sub>wc</sub>	Nm	679
Continuos Torque (Air Cooling Dt100)	T <sub>ac</sub>	Nm	293
Stall Torque (Water Cooling)	T <sub>wsc</sub>	Nm	536
Stall Torque (Air Cooling)	T <sub>sac</sub>	Nm	224
Ripple Torque (Cogging Torque)	T <sub>r</sub>	Nm	7
Power Loss at T <sub>wc</sub>	P <sub>wc</sub>	Kw	3,6
Power Loss at T <sub>ac</sub>	P <sub>ac</sub>	Kw	0,7
Termal Resistance Water Cooling	R <sub>thWc</sub>	Kw	0,03
Termal Resistance Air Cooling	R <sub>thAc</sub>	Kw	0,15
Torque Constant	K <sub>t</sub>	Nm/a	13,4
Back EMF Constant	K <sub>e</sub>	V/1000 Rpm	826
Maximum Speed at I <sub>pk</sub> at 600 Vdc	N <sub>pk</sub>	rpm	200
Maximum Speed at I <sub>wc</sub> at 600 Vdc	N <sub>wc</sub>	rpm	380
Maximum Speed at I <sub>ac</sub> at 600 Vdc	N <sub>ac</sub>	rpm	470
Winding Resistance (Phase to Phase)	R <sub>20</sub>	Ω	0,61
Winding Inductance (Phase to Phase)	L	mh	3,7
Peak Current	I <sub>pk</sub>	Arms	131
Continuos Current (Water Cooling Dt100)	I <sub>wc</sub>	Arms	53
Continuos Current (Air Cooling Dt100)	I <sub>ac</sub>	Arms	22,6
Stall Current at 0 Speed (Water Cooling)	I <sub>wsc</sub>	Arms	40,5
Stall Current at 0 Speed (Air Cooling)	I <sub>sac</sub>	Arms	17,3
Maximum Winding Temperature		°C	130
Height of Rotor		mm	50
Height of Stator		mm	110
Stator jacket outer diameter		mm	485

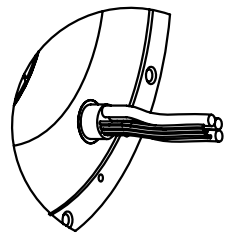
### Torque diagram



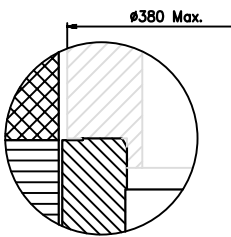
SEZIONE "A-A"



To Drive with KTY 84 input (Ex. Simodrive 611D/U) or multimeter with the appropriate rating



CABLE OUTPUT CONFIGURATION MF



DETAIL "Y-Y" ROTOR INTERFACE TO CUSTOMER SHAFT

<p>TECHNAI MK-CI 450-050 MF</p>	<p>GENERAL ASSEMBLY</p>
<p>001</p>	<p>1 OF 1</p>

