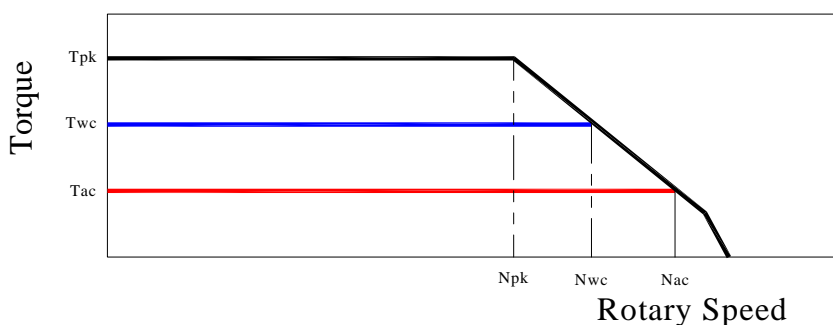
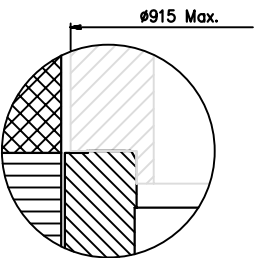
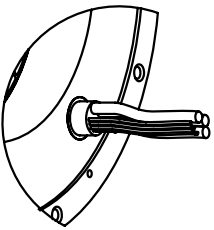
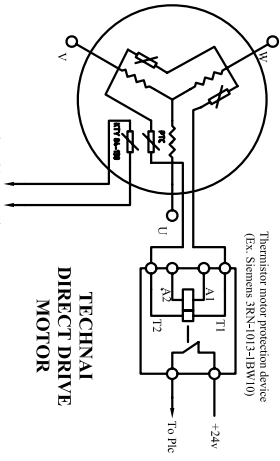
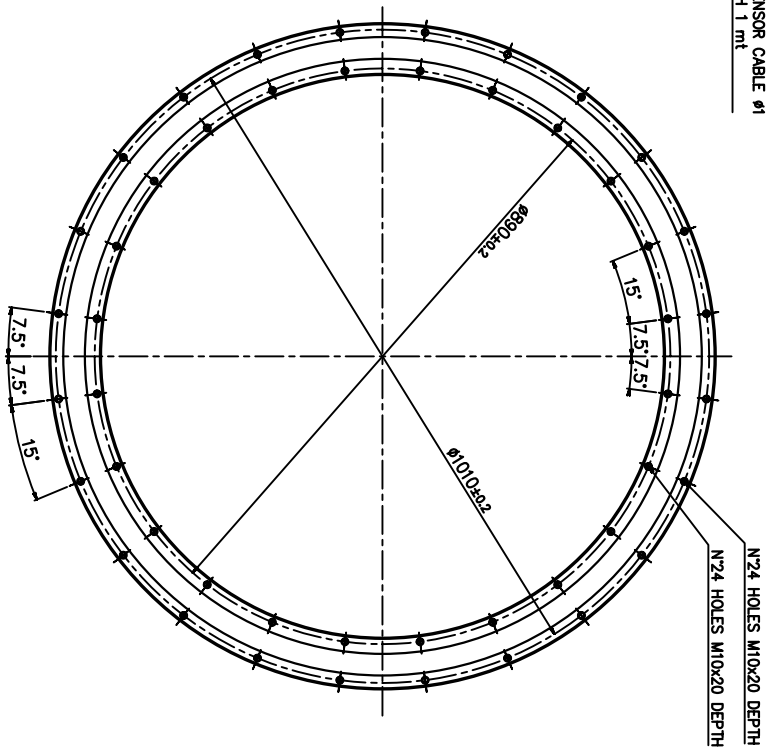
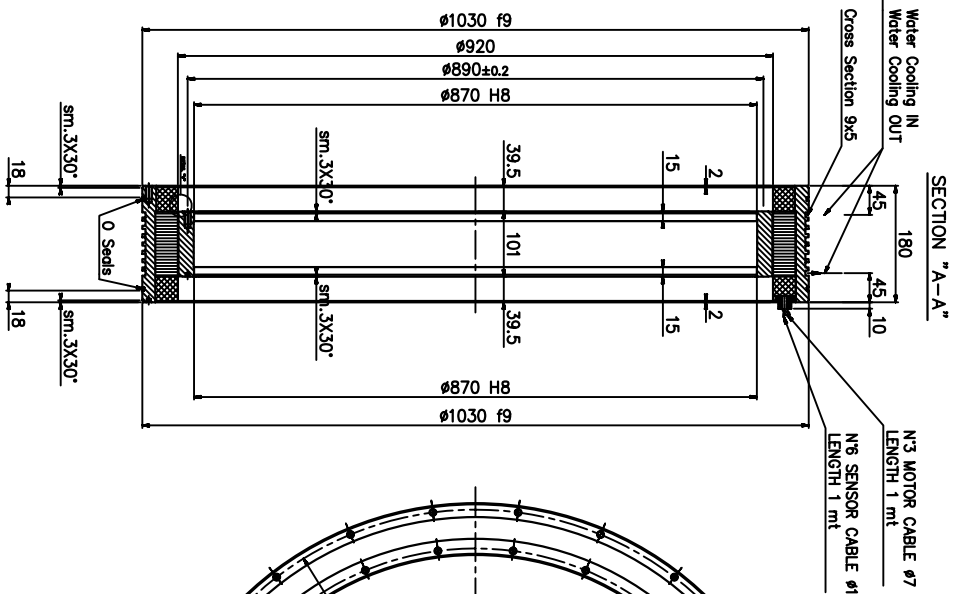
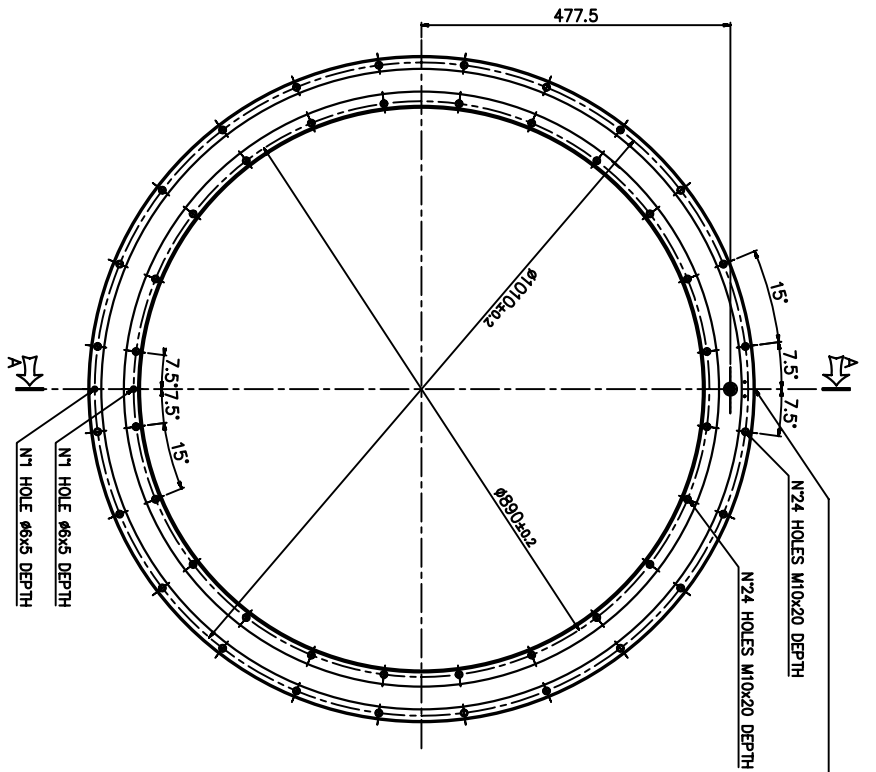


## TORQUE MOTOR - MK-CI 990-100 WA

Motor specification	Symbol	Unit	
Number of pole	P		176
Peak Torque	T <sub>pk</sub>	Nm	13400
Continuos Torque (Water Cooling Dt100)	T <sub>wc</sub>	Nm	7490
Continuos Torque (Air Cooling Dt100)	T <sub>ac</sub>	Nm	3290
Stall Torque (Water Cooling)	T <sub>wsc</sub>	Nm	5718
Stall Torque (Air Cooling)	T <sub>sac</sub>	Nm	2514
Ripple Torque (Cogging Torque)	T <sub>r</sub>	Nm	43
Power Loss at T <sub>wc</sub>	P <sub>wc</sub>	Kw	13
Power Loss at T <sub>ac</sub>	P <sub>ac</sub>	Kw	2,3
Termal Resistance Water Cooling	R <sub>thWc</sub>	Kw	0,07
Termal Resistance Air Cooling	R <sub>thAc</sub>	Kw	0,04
Torque Constant	K <sub>t</sub>	Nm/a	109
Back EMF Constant	K <sub>e</sub>	V/1000 Rpm	6576
Maximum Speed at I <sub>pk</sub> at 600 Vdc	N <sub>pk</sub>	rpm	13
Maximum Speed at I <sub>wc</sub> at 600 Vdc	N <sub>wc</sub>	rpm	33
Maximum Speed at I <sub>ac</sub> at 600 Vdc	N <sub>ac</sub>	rpm	49
Winding Resistance (Phase to Phase)	R <sub>20</sub>	Ω	1,1
Winding Inductance (Phase to Phase)	L	mh	13,6
Peak Current	I <sub>pk</sub>	Arms	177
Continuos Current (Water Cooling Dt100)	I <sub>wc</sub>	Arms	73
Continuos Current (Air Cooling Dt100)	I <sub>ac</sub>	Arms	31,2
Stall Current at 0 Speed (Water Cooling)	I <sub>wsc</sub>	Arms	56
Stall Current at 0 Speed (Air Cooling)	I <sub>sac</sub>	Arms	23,8
Maximum Winding Temperature		°C	130
Height of Rotor		mm	100
Height of Stator		mm	180
Stator jacket outer diameter		mm	1030

### Torque diagram

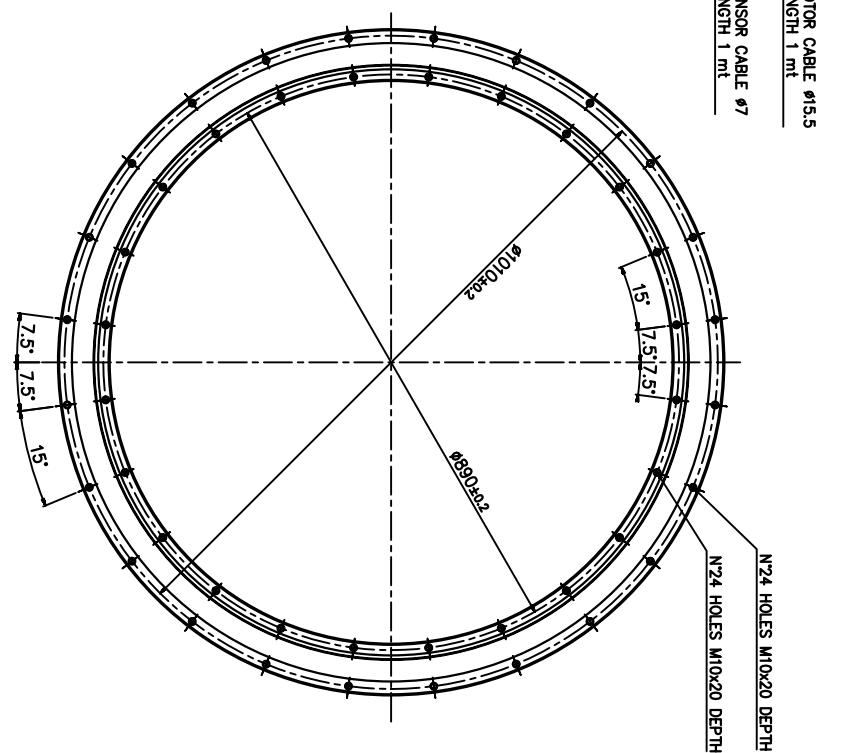
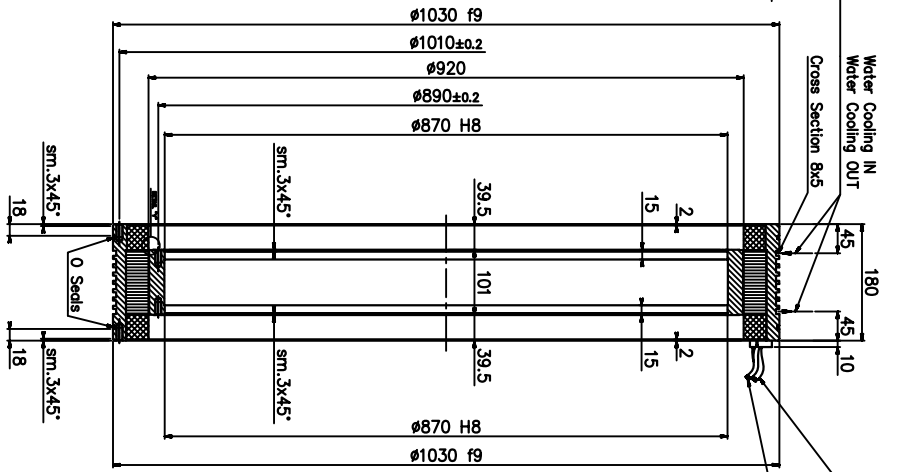
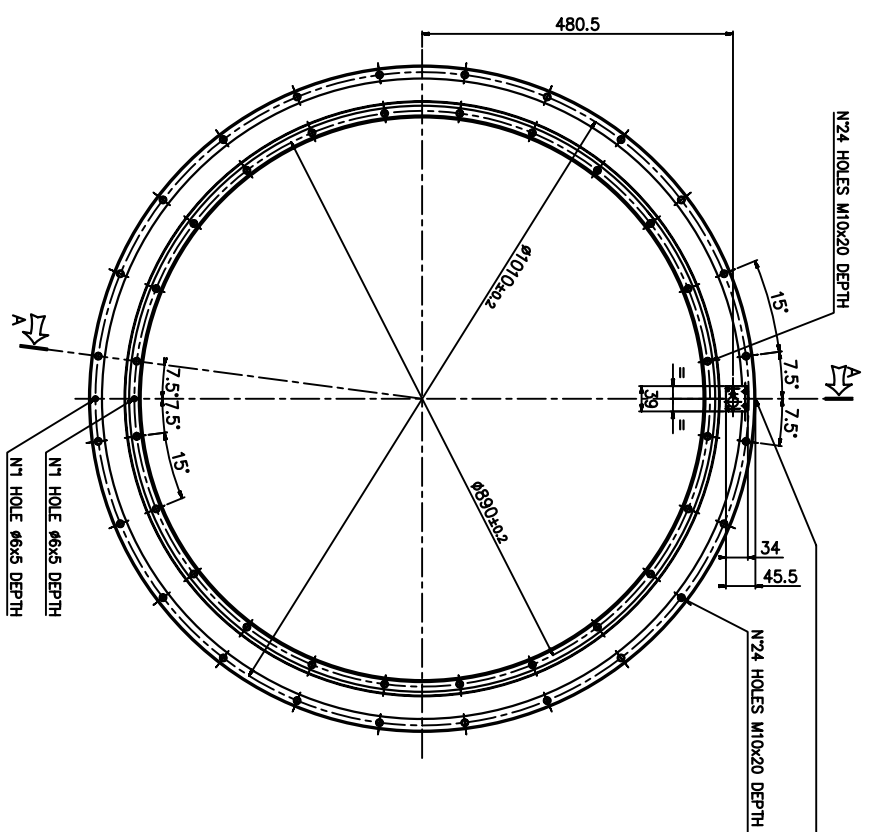




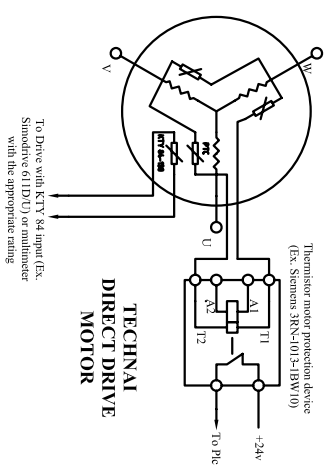
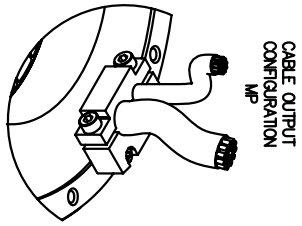
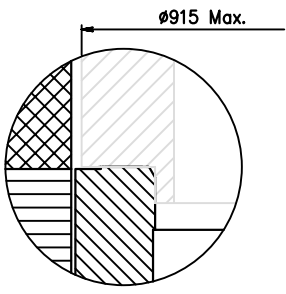
<b>TECHNAI</b> ROTOR-STATOR KIT MK-CI 990 MK-CI 990-100 MF		<b>GENERAL ASSEMBLY</b> SHEET 1 OF 1	
1. NAME 2. MATERIAL 3. DIMENSIONS 4. WEIGHT 5. PART NUMBER 6. DATE	7. DRAWN 8. CHECKED 9. APPROVED 10. DATE	11. SCALE 12. SHEET	13. PROJECT 14. CLIENT 15. DATE

Proprietà esclusiva di TECHNAI Team s.r.l. - Riproduzione e diffusione vietata, salvo autorizzazione scritta.

SECTION "A-A"



DETAIL "Y-Y"  
ROTOR INTERFACE TO  
CUSTOMER SHAFT



TECHNAL  
DIRECT DRIVE  
MOTOR

TECHNAL		GENERAL ASSEMBLY	
MODEL	MK-CI 990-100 MP	SHEET	1 OF 1
DATE	2023.08.20	DESIGNER	
REVISION		CHECKER	
Proposed evolution of TECHNAL Team s.r.l. - Riproduzione e distribuzione vietata, salvo autorizzazione esplicita.			