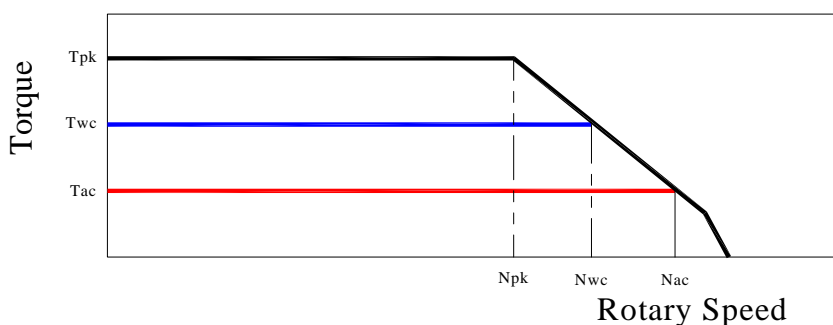


## TORQUE MOTOR - MK-CI 290-100 WA

Motor specification	Symbol	Unit	
Number of pole	P		66
Peak Torque	Tpk	Nm	868
Continuos Torque (Water Cooling Dt100)	Twc	Nm	455
Continuos Torque (Air Cooling Dt100)	Tac	Nm	186
Stall Torque (Water Cooling)	Twsc	Nm	347
Stall Torque (Air Cooling)	Tsac	Nm	141
Ripple Torque (Cogging Torque)	Tr	Nm	4
Power Loss at Twc	Pwc	Kw	4,1
Power Loss at Tac	Pac	Kw	0,7
Termal Resistance Water Cooling	RthWc	Kw	0,03
Termal Resistance Air Cooling	RthAc	Kw	0,17
Torque Constant	Kt	Nm/a	27,1
Back EMF Constant	Ke	V/1000 Rpm	1661
Maximum Speed at Ipk at 600 Vdc	Npk	rpm	25
Maximum Speed at Iwc at 600 Vdc	Nwc	rpm	145
Maximum Speed at Iac at 600 Vdc	Nac	rpm	215
Winding Resistance (Phase to Phase)	R20	Ω	6,5
Winding Inductance (Phase to Phase)	L	mh	20,8
Peak Current	ipk	Arms	46
Continuos Current (Water Cooling Dt100)	ivc	Arms	17
Continuos Current (Air Cooling Dt100)	iac	Arms	7,1
Stall Current at 0 Speed (Water Cooling)	iswc	Arms	13
Stall Current at 0 Speed (Air Cooling)	Isac	Arms	5,4
Maximum Winding Temperature		°C	130
Height of Rotor		mm	100
Height of Stator		mm	140
Stator jacket outer diameter		mm	310

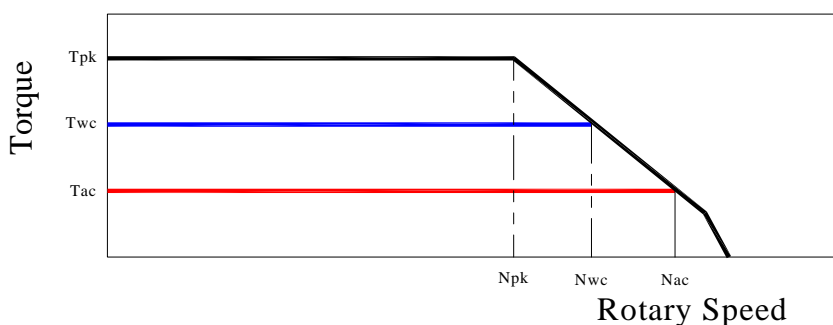
### Torque diagram

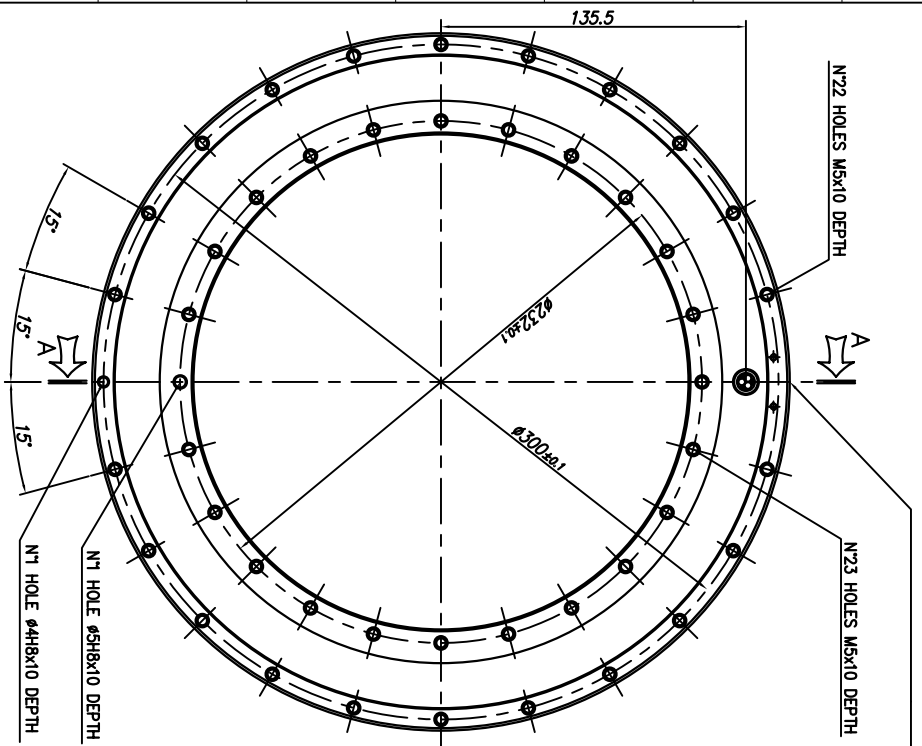


## TORQUE MOTOR - MK-CI 290-100 WB

Motor specification	Symbol	Unit	
Number of pole	P		66
Peak Torque	T <sub>pk</sub>	Nm	868
Continuos Torque (Water Cooling Dt100)	T <sub>wc</sub>	Nm	460
Continuos Torque (Air Cooling Dt100)	T <sub>ac</sub>	Nm	181
Stall Torque (Water Cooling)	T <sub>wsc</sub>	Nm	351
Stall Torque (Air Cooling)	T <sub>sac</sub>	Nm	138
Ripple Torque (Cogging Torque)	T <sub>r</sub>	Nm	4
Power Loss at T <sub>wc</sub>	P <sub>wc</sub>	Kw	4,1
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	0,17
Torque Constant	K <sub>t</sub>	Nm/a	13,55
Back EMF Constant	K <sub>e</sub>	V/1000 Rpm	830
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	490
Winding Resistance (Phase to Phase)	R <sub>20</sub>	Ω	1,62
Winding Inductance (Phase to Phase)	L	mh	5,2
Peak Current	I <sub>pk</sub>	Arms	92
Continuos Current (Water Cooling Dt100)	I <sub>wc</sub>	Arms	35
Continuos Current (Air Cooling Dt100)	I <sub>ac</sub>	Arms	13,8
Stall Current at 0 Speed (Water Cooling)	I <sub>wsc</sub>	Arms	26,7
Stall Current at 0 Speed (Air Cooling)	I <sub>sac</sub>	Arms	10,5
Maximum Winding Temperature		°C	130
Height of Rotor		mm	100
Height of Stator		mm	140
Stator jacket outer diameter		mm	310

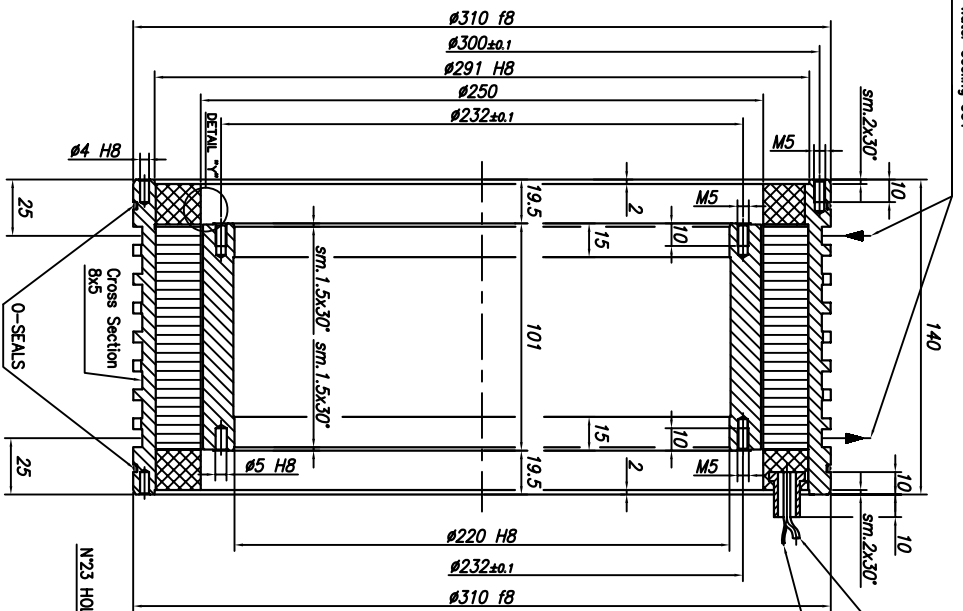
### Torque diagram





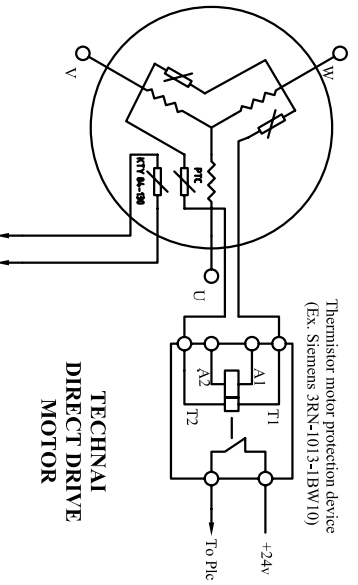
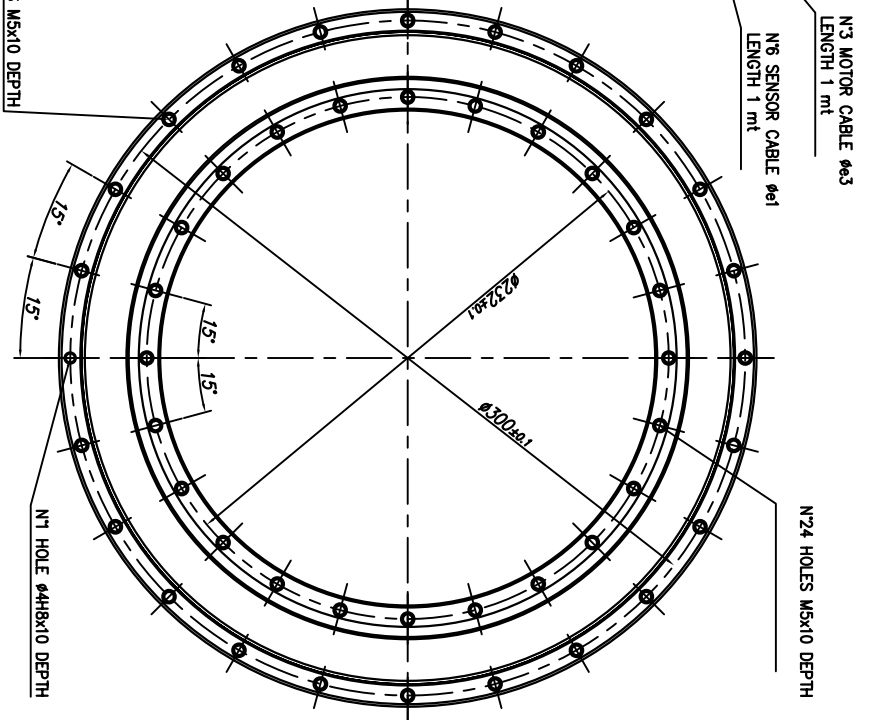
Water Cooling IN  
Water Cooling OUT

SECTION "A-A"

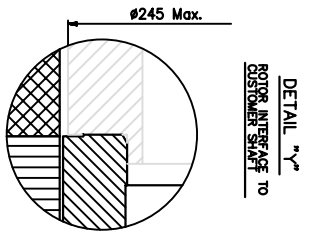
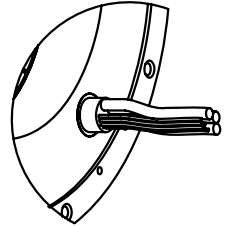


N3 MOTOR CABLE  $\phi 6.3$   
LENGTH 1 mt

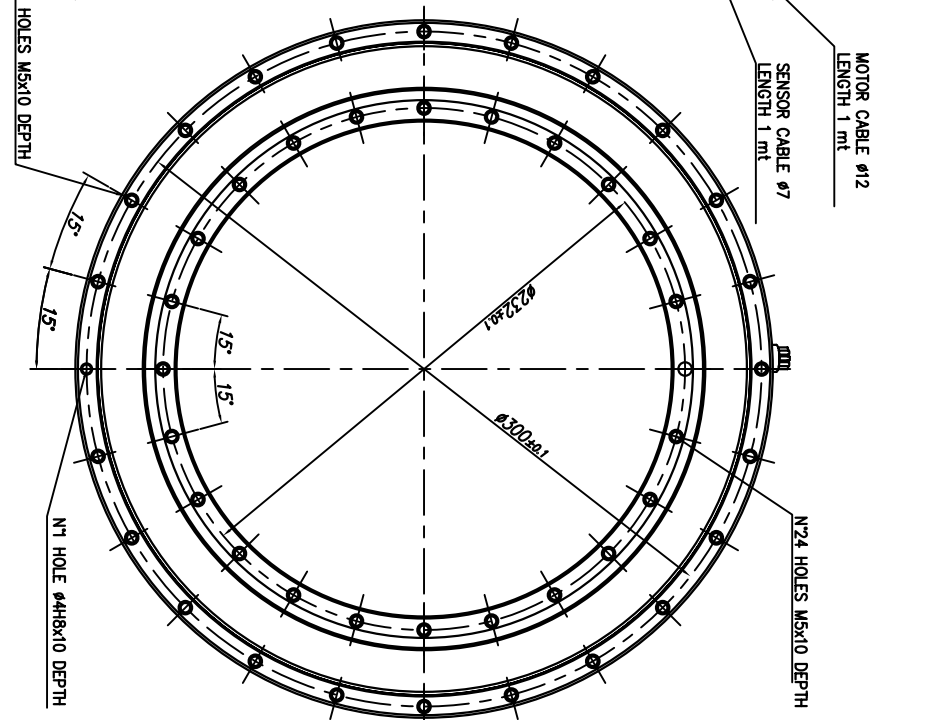
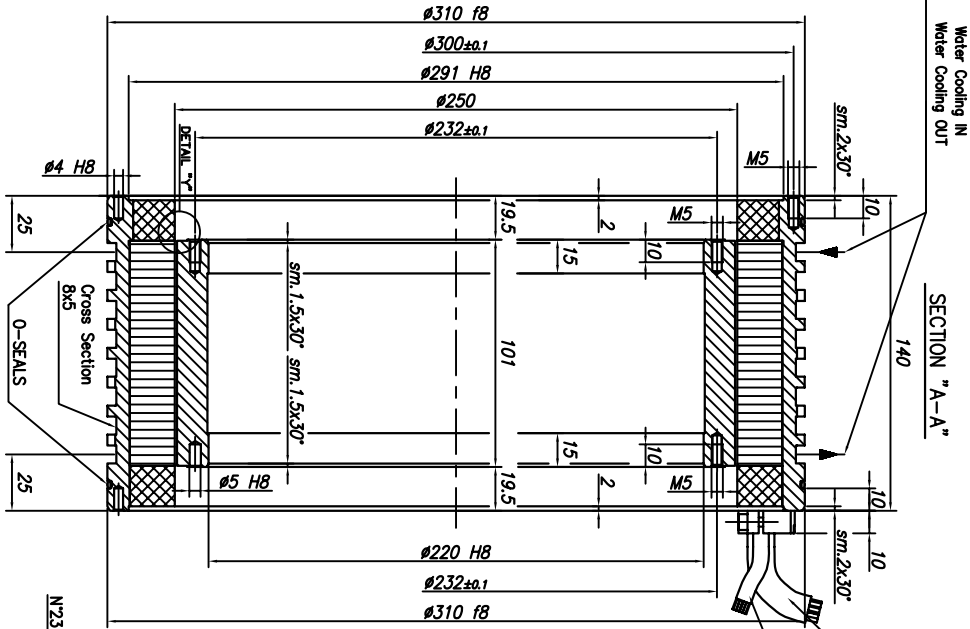
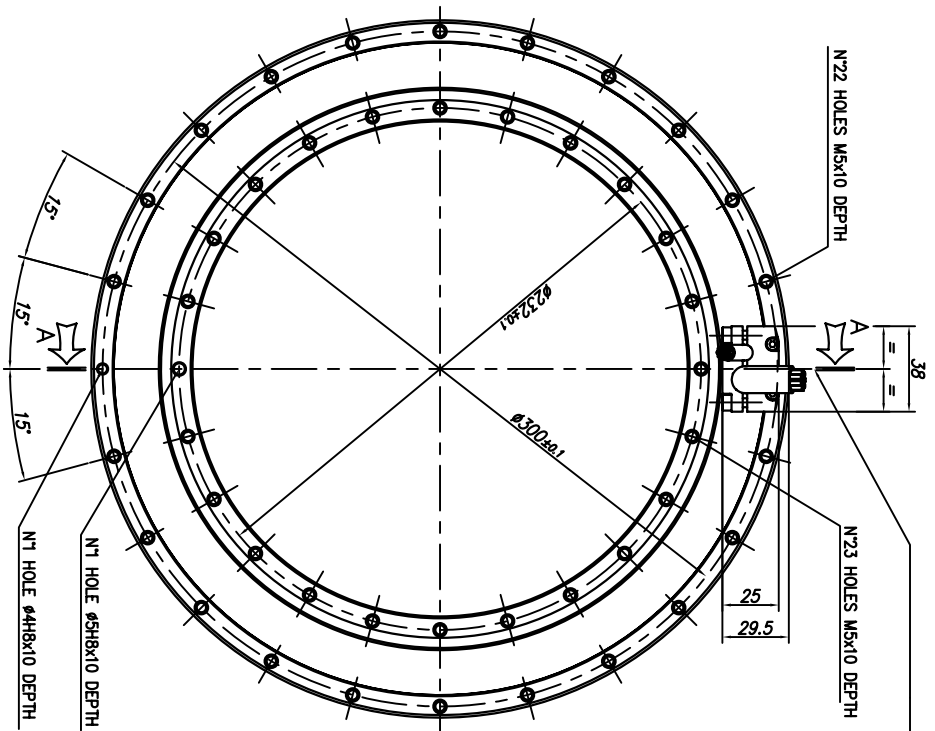
N6 SENSOR CABLE  $\phi 6.1$   
LENGTH 1 mt



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



GENERAL ASSEMBLY	
REV	DATE
1	1.1.1
<b>TECHNAI</b> ROTOR-STATOR KIT MK-CI 290 MK-CI 290-100 MF	



Water Cooling IN  
Water Cooling OUT

SECTION "A-A"

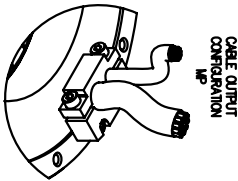
MOTOR CABLE #12  
LENGTH 1 mt

SENSOR CABLE #7  
LENGTH 1 mt

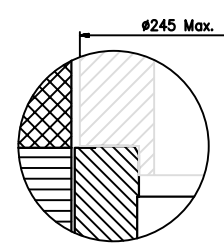
Thermistor motor protection device  
(Ex: Siemens 3RN-1013-1BW10)

TECHNAI  
DIRECT DRIVE  
MOTOR

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

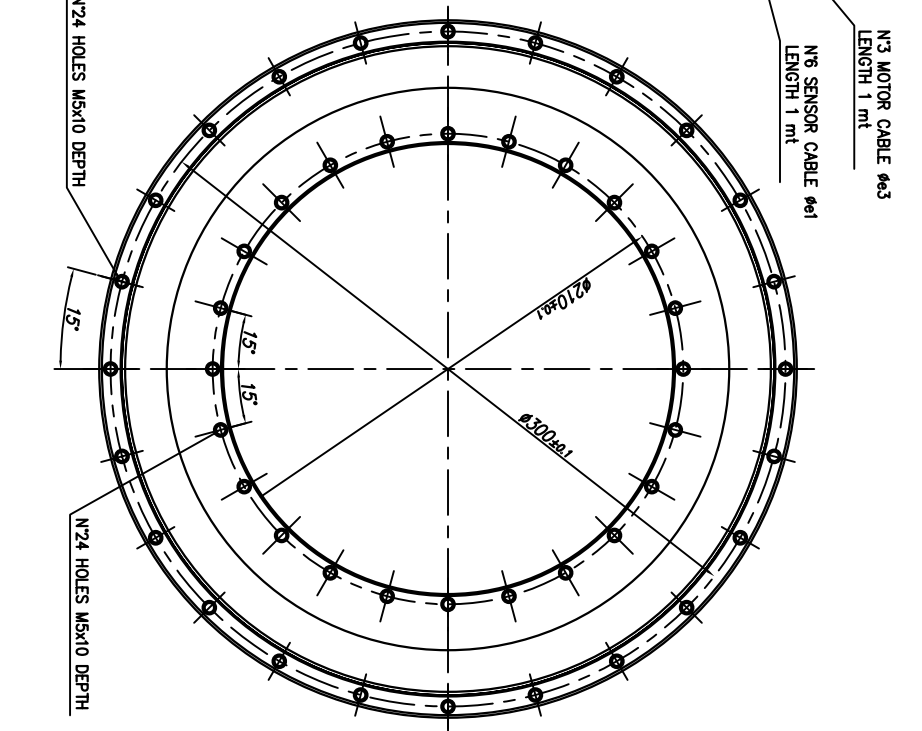
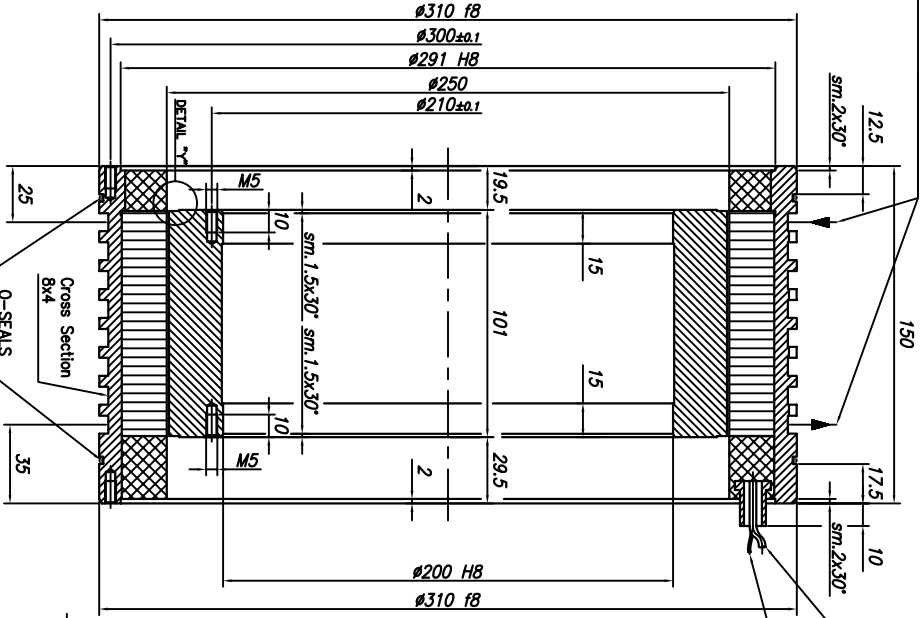
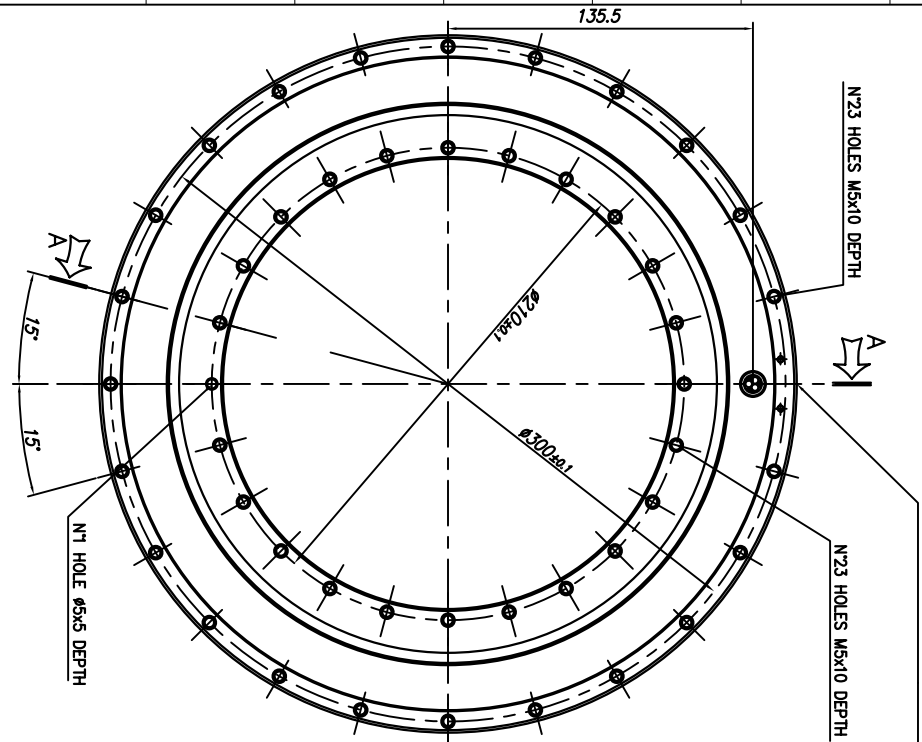


DETAIL "Y"



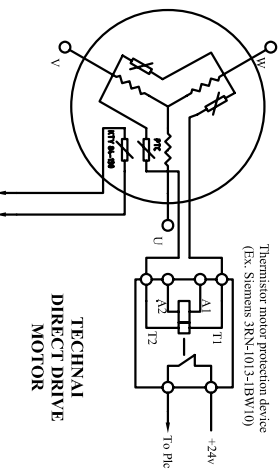
GENERAL ASSEMBLY	
TECHNAI	ROTOR-STATOR KIT MK-CI 290
CON.	MK-CI 290-100 MP
SHEET 1 of 1	

SECTION "A-A"

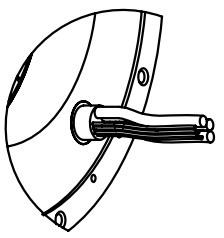


Water Cooling IN  
Water Cooling OUT

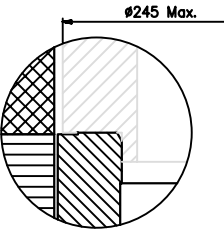
N3 MOTOR CABLE  $\phi 6.3$   
LENGTH 1 m  
N6 SENSOR CABLE  $\phi 6.1$   
LENGTH 1 m



To Drive with KTY 84 Input (Ex: Simodrive 611D(U) or multimeter with the appropriate rating)

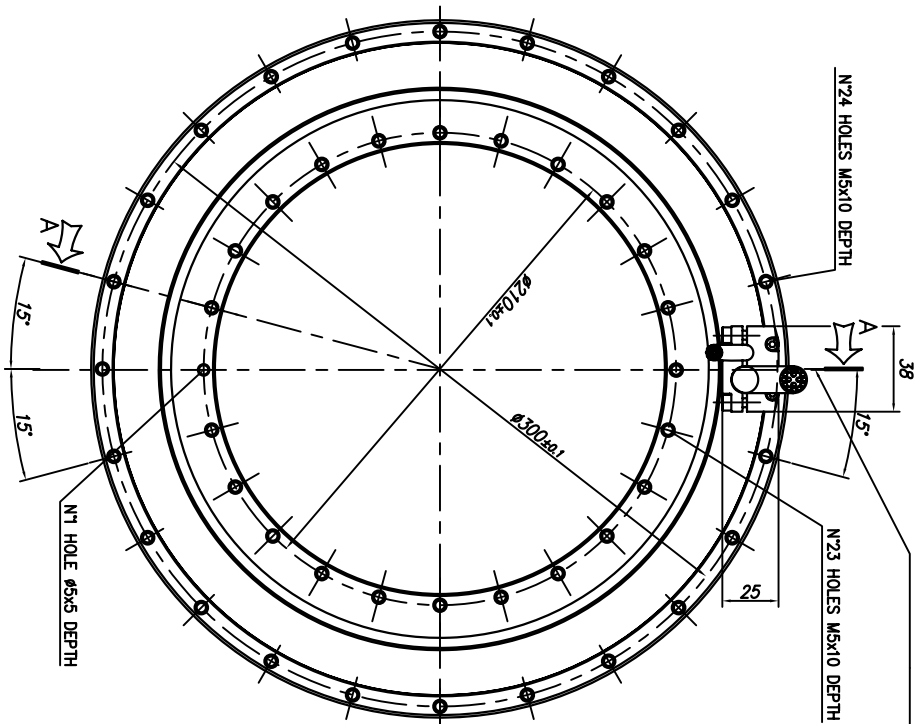


CABLE OUTPUT CONFIGURATION MF



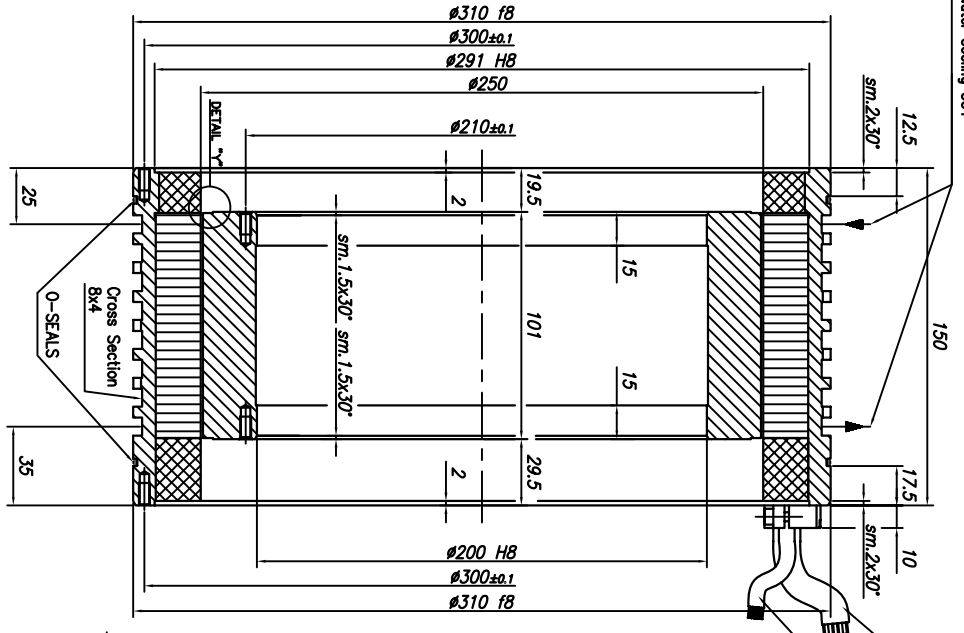
DETAIL "Y"  
ROTOR INTERFACE TO CUSTOMER SHAFT

GENERAL ASSEMBLY	
ITEM	DESCRIPTION
1	ROTOR-STATOR KIT MK-CI 2905
2	MK-CI 2905-100 MF
3	1.01
4	1.01
5	1.01
6	1.01
7	1.01
8	1.01
9	1.01
10	1.01
11	1.01
12	1.01
13	1.01
14	1.01
15	1.01
16	1.01
17	1.01
18	1.01
19	1.01
20	1.01
21	1.01
22	1.01
23	1.01
24	1.01
25	1.01
26	1.01
27	1.01
28	1.01
29	1.01
30	1.01
31	1.01
32	1.01
33	1.01
34	1.01
35	1.01
36	1.01
37	1.01
38	1.01
39	1.01
40	1.01
41	1.01
42	1.01
43	1.01
44	1.01
45	1.01
46	1.01
47	1.01
48	1.01
49	1.01
50	1.01



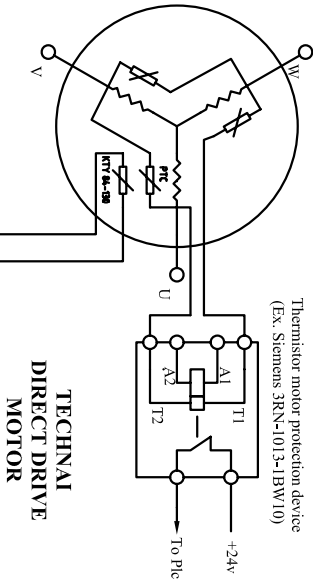
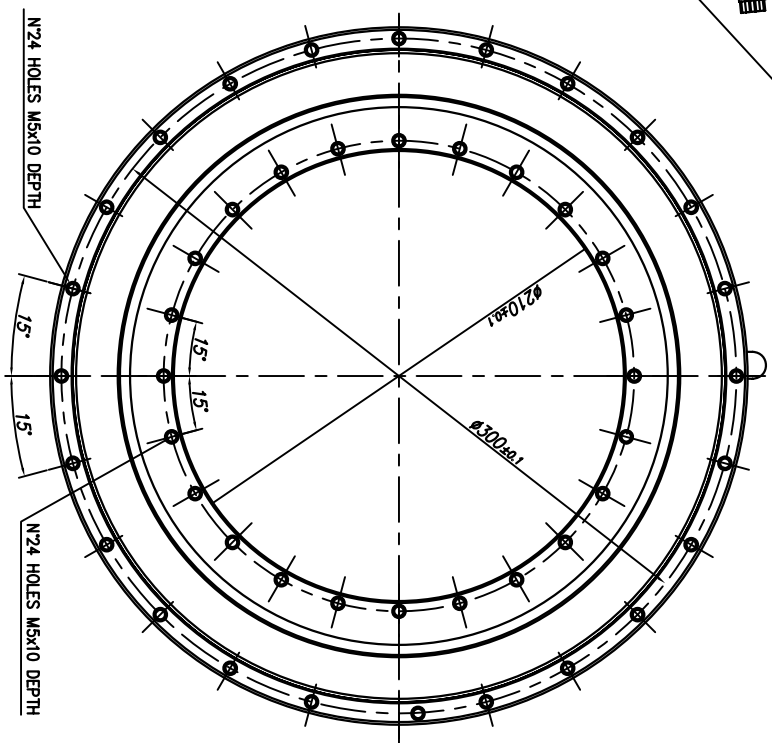
Water Cooling IN  
Water Cooling OUT

SECTION "A-A"



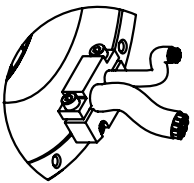
MOTOR CABLE  $\phi 12$   
LENGTH 1 m

SENSOR CABLE  $\phi 7$   
LENGTH 1 m

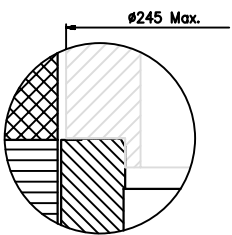


Thermistor motor protection device  
(Ex: Siemens 3RN-1013-1BWT10)

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



CABLE OUTPUT  
CONFIGURATION



DETAIL "A-A"  
ROTOR INTERFACE TO  
CUSTOMER SHAFT

GENERAL ASSEMBLY	
ITEM NO.	1
DESCRIPTION	ROTOR-STATOR KIT MK-CI 2905
QUANTITY	1
DATE	1.1.11
BY	TECHNAI
CHKD	TECHNAI
APPV	TECHNAI
REV	1.1