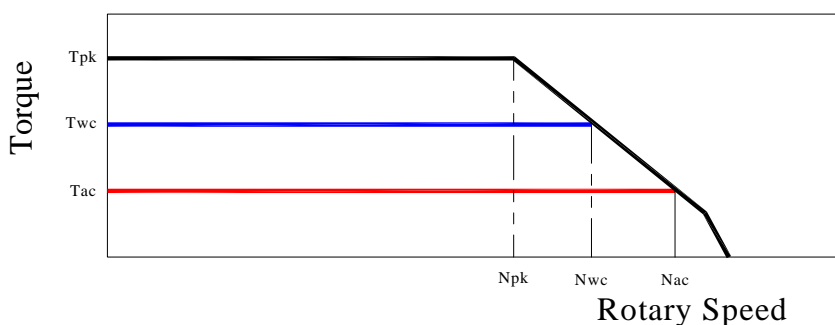


## TORQUE MOTOR - MK-CI 450-100 WA

Motor specification	Symbol	Unit	
Number of pole	P		88
Peak Torque	T <sub>pk</sub>	Nm	2439
Continuos Torque (Water Cooling Dt100)	T <sub>wc</sub>	Nm	1355
Continuos Torque (Air Cooling Dt100)	T <sub>ac</sub>	Nm	570
Stall Torque (Water Cooling)	T <sub>wsc</sub>	Nm	1070
Stall Torque (Air Cooling)	T <sub>sac</sub>	Nm	437
Ripple Torque (Cogging Torque)	T <sub>r</sub>	Nm	14
Power Loss at T <sub>wc</sub>	P <sub>wc</sub>	Kw	6,2
Power Loss at T <sub>ac</sub>	P <sub>ac</sub>	Kw	1,1
Termal Resistance Water Cooling	R <sub>thWc</sub>	Kw	0,02
Termal Resistance Air Cooling	R <sub>thAc</sub>	Kw	0,1
Torque Constant	K <sub>t</sub>	Nm/a	52,12
Back EMF Constant	K <sub>e</sub>	V/1000 Rpm	3212
Maximum Speed at I <sub>pk</sub> at 600 Vdc	N <sub>pk</sub>	rpm	20
Maximum Speed at I <sub>wc</sub> at 600 Vdc	N <sub>wc</sub>	rpm	80
Maximum Speed at I <sub>ac</sub> at 600 Vdc	N <sub>ac</sub>	rpm	110
Winding Resistance (Phase to Phase)	R <sub>20</sub>	Ω	4
Winding Inductance (Phase to Phase)	L	mh	26,7
Peak Current	I <sub>pk</sub>	Arms	68
Continuos Current (Water Cooling Dt100)	I <sub>wc</sub>	Arms	27,3
Continuos Current (Air Cooling Dt100)	I <sub>ac</sub>	Arms	11,3
Stall Current at 0 Speed (Water Cooling)	I <sub>wsc</sub>	Arms	20,8
Stall Current at 0 Speed (Air Cooling)	I <sub>sac</sub>	Arms	8,6
Maximum Winding Temperature		°C	130
Height of Rotor		mm	100
Height of Stator		mm	160
Stator jacket outer diameter		mm	485

### Torque diagram



## TORQUE MOTOR - MK-CI 450-100 WB

Motor specification	Symbol	Unit	
Number of pole	P		88
Peak Torque	T <sub>pk</sub>	Nm	2445
Continuos Torque (Water Cooling Dt100)	T <sub>wc</sub>	Nm	1355
Continuos Torque (Air Cooling Dt100)	T <sub>ac</sub>	Nm	570
Stall Torque (Water Cooling)	T <sub>wsc</sub>	Nm	1070
Stall Torque (Air Cooling)	T <sub>sac</sub>	Nm	437
Ripple Torque (Cogging Torque)	T <sub>r</sub>	Nm	14
Power Loss at T <sub>wc</sub>	P <sub>wc</sub>	Kw	6,2
Power Loss at T <sub>ac</sub>	P <sub>ac</sub>	Kw	1,1
Termal Resistance Water Cooling	R <sub>thWc</sub>	Kw	0,02
Termal Resistance Air Cooling	R <sub>thAc</sub>	Kw	0,1
Torque Constant	K <sub>t</sub>	Nm/a	26,8
Back EMF Constant	K <sub>e</sub>	V/1000 Rpm	1652
Maximum Speed at I <sub>pk</sub> at 600 Vdc	N <sub>pk</sub>	rpm	85
Maximum Speed at I <sub>wc</sub> at 600 Vdc	N <sub>wc</sub>	rpm	170
Maximum Speed at I <sub>ac</sub> at 600 Vdc	N <sub>ac</sub>	rpm	230
Winding Resistance (Phase to Phase)	R <sub>20</sub>	Ω	1
Winding Inductance (Phase to Phase)	L	mh	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
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	16,8
Maximum Winding Temperature		°C	130
Height of Rotor		mm	100
Height of Stator		mm	160
Stator jacket outer diameter		mm	485

### Torque diagram

