

TORQUE MOTOR - MK-CI 93-090 WA

Motor specification	Symbol	Unit	
Number of pole	P		22
Peak Torque	Tpk	Nm	40
Continuos Torque (Water Cooling Dt100)	Twc	Nm	20,5
Continuos Torque (Air Cooling Dt100)	Tac	Nm	9
Stall Torque (Water Cooling)	Twsc	Nm	16,2
Stall Torque (Air Cooling)	Tsac	Nm	6,7
Ripple Torque (Cogging Torque)	Tr	Nm	0,1
Power Loss at Twc	Pwc	Kw	0,72
Power Loss at Tac	Pac	Kw	0,13
Termal Resistance Water Cooling	RthWc	Kw	0,138
Termal Resistance Air Cooling	RthAc	Kw	0,762
Torque Constant	Kt	Nm/a	4,9
Back EMF Constant	Ke	V/1000 Rpm	297
Maximum Speed at Ipk at 600 Vdc	Npk	rpm	420
Maximum Speed at Iwc at 600 Vdc	Nwc	rpm	950
Maximum Speed at Iac at 600 Vdc	Nac	rpm	1200
Winding Resistance (Phase to Phase)	R20	Ω	17,8
Winding Inductance (Phase to Phase)	L	mh	26,5
Peak Current	Ipk	Arms	11,6
Continuos Current (Water Cooling Dt100)	Iwc	Arms	4,4
Continuos Current (Air Cooling Dt100)	Iac	Arms	1,8
Stall Current at 0 Speed (Water Cooling)	Iswc	Arms	3,4
Stall Current at 0 Speed (Air Cooling)	Isac	Arms	1,4
Maximum Winding Temperature		$^{\circ}\text{C}$	130
Height of Rotor		mm	90
Height of Stator		mm	125
Stator jacket outer diameter		mm	110

Torque diagram



