

TECHNICAL CHARACTERISTICS

Motors wound for 330 Vac phase to phase

		400STK2M		400STK4M		400STK6M		400STK8M		
NATURAL CONVECTION	Rated speed	Rpm	200	800	200	800	200	800	200	-
	Continuous torque	(1)(4) N.m	225		400		550		700	-
	Current at continuous torque	(1) A	15.8	53.3	26.8	94.7	35.7	128.1	45.6	-
	Peak torque	(2)(3) N.m	880		1,760		2,640		3,520	-
	Current at peak torque	(2) A	78.1	252.3	149.1	468.6	218.7	656	273.3	-
	Rater power	(1) kW	4.30	15.50	7.60	25.20	9.50	35.0	11.30	-
	Inertia	10^{-3}kg.m^2	163		325		488		650	-
	Weight	kg	35		58		81		104	-
	Thermal time constant	(1) s	1,307		1,756		2,218		2,547	-
	Thermal resistance	(1) °C / W	0.098		0.078		0.071		0.063	-
	Phase resistance at 20°C	(2) Ω	0.981	0.094	0.390	0.040	0.236	0.026	0.187	-
	Phase inductance at I continuous	mH	8.7	0.83	4.8	0.49	3.4	0.37	2.9	-
	Electrical time constant	(2) ms	8.9		12.3		14.4		15.5	-
	Power cable square section	nxmm ²	4x1.5	4x16	4x4	4x25	4x6	4x35	4x10	-
Power cable diameter	mm	Ø10.2	Ø24	Ø13.1	4xØ13.5	Ø15.9	4xØ15.1	Ø18.8	-	

		400STK2M		400STK4M		400STK6M		400STK8M		
COMPLEMENTARY DATA FOR FLUID-COOLED MOTORS WINDING AT 60°C	Continuous torque	(4) N.m	396		780		1,133		1,428	-
	Current at continuous torque	A	27.5	92.7	52.5	151.2	73.6	264.0	97.4	-
	Fluid input temperature	(5)(6) °C	20		20		20		20	-
	Fluid temperature rise	°C	10		10		10		10	-
	Housing temperature	°C	< 30		< 30		< 30		< 30	-
	Fluid flow	l / mn	5		7		8		9	-
	Losse	W	2,400		3,550		4,400		5,540	-
	Pressure	Bar	0.6		1.8		2.6		5.1	-
	Power cable square section	nxmm ²	4x4	4x16	4x10	4x35	4x16	4x95	4x25	-
	Power cable diameter	mm	Ø13.1	4xØ11	Ø18.8	4xØ15.1	4xØ11	4xØ22.6	4xØ13.5	-

		400STK2M		400STK4M		400STK6M		400STK8M		
COMPLEMENTARY DATA FOR FLUID-COOLED MOTORS WINDING AT 140°C	Continuous torque	(4) N.m	467		935		1,384	-	1,846	-
	Current at continuous torque	A	36	121	69	243	94	-	126	-
	Fluid input temperature	(5)(6) °C	20		20		20	-	20	-
	Fluid temperature rise	°C	8		17		17	-	17	-
	Housing temperature	°C	30		34		33	-	32	-
	Fluid flow	l / mn	11		8		10	-	10	-
	Losse	W	5,040		7,220		9,400	-	11,580	-
	Pressure	Bar	1.9		2		4.4	-	5.5	-
	Power cable square section	nxmm ²	4x6	4x25	4x16	4x70	4x16	-	4x25	-
	Power cable diameter	mm	Ø15.9	4xØ13.5	Ø24	4xØ20.1	4xØ11	-	4xØ13.5	-

- (1) Thermal conditions:
Ambient temperature 20°C
Winding temperature rise 120°C
Stator housing in contact with the ambient air or integral on all its peripheral area with a metallic armature in contact with the ambient air.
Stator housing secured on a metallic frame having an area equal to twice the cross section of the housing.
- (2) Cold motor at 20°C
- (3) See torque vs speed characteristics on :
<http://www.alxion.com/CFN>
- (4) Torque at stall or low speed.
- (5) Fluid input temperature should not be lower for avoiding condensation inside the motor.
- (6) For cooling fluid, use softened glycol-added water or fluids approved for closed cooling circuits.
- (7) From 72 Amps continuous, motors are supplied through 4 single wire shielded cables.

Other speed characteristics are available, please contact us.