

TECHNICAL CHARACTERISTICS

Motors wound for 330 Vac phase to phase

		190STK2M		190STK4M		190STK6M		190STK8M		
NATURAL CONVECTION	Rated speed	Rpm	500	1,500	500	1,500	500	1,000	500	1,000
	Continuous torque	(1)(4) N.m	36		63		89		111	
	Current at continuous torque	(1) A	5	11.7	8	20	11.5	19	14	23.3
	Peak torque	(2)(3) N.m	119		238		357		476	
	Current at peak torque	(2) A	18.6	48.9	34.2	93.2	56.9	102.5	73.2	128.1
	Rater power	(1) W	1,600	3,780	2,504	3,307	2,940	4,570	3,780	5,355
	Inertia	10 ⁻³ kg.m ²	4.12		7.5		10.88		14.26	
	Weight	kg	13		22		31		40	
	Thermal time constant	(1) s	1,506		2,129		2,559		2,865	
	Thermal resistance	(1) °C / W	0.25		0.2		0.17		0.15	
	Phase resistance at 20°C	(2) Ω	4.76	0.69	2.12	0.28	1.02	0.31	0.77	0.25
	Phase inductance at I continuous	mH	48.2	7.0	28.8	3.9	15.7	4.8	12.7	4.1
	Electrical time constant	(2) ms	10.1		13.6		15.6		16.5	
	Power cable square section	(7) nxmm ²	4x1.5		4x1.5	4x2.5	4x1.5	4x2.5	4x1.5	4x4
Power cable diameter	(7) mm	Ø10.2		Ø10.2	Ø11.4	Ø10.2	Ø11.4	Ø10.2	Ø13.1	

		190STK2M		190STK4M		190STK6M		190STK8M		
COMPLEMENTARY DATA FOR FLUID-COOLED MOTORS WINDING AT 60°C	Continuous torque	(4) N.m	57		109		162		209	
	Current at continuous torque	A	8	18.5	14.1	35.2	21.3	34.6	26.6	44.3
	Fluid input temperature	(5)(6) °C	20		20		20		20	
	Fluid temperature rise	°C	6		8		10		10	
	Housing temperature	°C	< 30		< 30		< 30		< 30	
	Fluid flow	l / mn	3		3		3		5	
	Losse	W	1,020		1,440		1,880		2,200	
	Pressure	Bar	0.12		0.2		0.27		0.8	
	Power cable square section	(7) nxmm ²	4x1.5	4x2.5	4x1.5	4x6	4x2.5	4x6	4x4	4x10
	Power cable diameter	(7) mm	Ø10.2	Ø11.4	Ø10.2	Ø15.9	Ø11.4	Ø15.9	Ø13.1	Ø18.8

		190STK2M		190STK4M		190STK6M		190STK8M		
COMPLEMENTARY DATA FOR FLUID-COOLED MOTORS WINDING AT 140°C	Continuous torque	(4) N.m	71.4		141		210		274	
	Current at continuous torque	A	11.9	27.5	21.7	54.3	33	53.6	41.5	69.2
	Fluid input temperature	(5)(6) °C	20		20		20		20	
	Fluid temperature rise	°C	7		7		7		11	
	Housing temperature	°C	32		29		28		31	
	Fluid flow	l / mn	5		7		9		9	
	Losse	W	2,102		3,08		4,06		4,9	
	Pressure	Bar	0.3		0.85		1.8		2.3	
	Power cable square section	(7) nxmm ²	4x1.5	4x4	4x2.5	4x10	4x6	4x10	4x10	4x10
	Power cable diameter	(7) mm	Ø10.2	Ø13.1	Ø11.4	4xØ9.5	Ø15.9	4xØ9.5	Ø18.8	4xØ9.5

- (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) For curensts lower than 53 Amps, one shielded cable
For curensts over 53 Amps, four single shielded wires output (highlighted in the table)

Other speed characteristics are available, please contact us.