

Data sheet for three-phase Squirrel-Cage-Motors



Motor type : 1AV1164A 1TZ9 A - 160 L - IM B5 – 2PM

Client order no.	Item-No. 6450353	Offer no.
Order no.	Consignment no.	Project

Remarks

Electrical data														Safe Area			
U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 155(F)																	
690	Y	60	21.30	-/-	22.50	3530	57.6	89.5	89.5	88.3	0.88	0.85	0.77	7.8	2.7	3.4	IE1
IM B5 / IM 3001			FS 160 L				IP55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +45 °C / 1000 m									Locked rotor time (hot / cold) : 10.10 s 19.50 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	78.0 / 85.0 dB(A) ²⁾	83.0 / 90.0 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0440 kg m²		Thermal class	F
Bearing DE NDE	6209 2Z C3	6209 2Z C3	Duty type	S1
Bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	78 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Locating bearing NDE		Color, paint shade	RAL7030
Condensate drainage holes	With		Motor protection	(A) without (Standard)
External earthing terminal	Without		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm²
Material of terminal box	Aluminium	Main cable entry	2xM40x1.5
Type of terminal box	TB1 J00	Main cable gland	2 plugs
Contact screw thread	6xM5		

I_A/I_N = locked rotor current / current nominal
M_A/M_N = locked rotor torque / torque nominal
M_K/M_N = break down torque / nominal torque
1) L_{10mh} according to DIN ISO 28110/2010
2) at rated power / at full load
3) Value is valid only for DOL operation with motor design IC411

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Responsible department	Technical reference	Created by	Approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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Special design

H03	Condensation drain holes in end shield	Y52	Temperature class 155(F), utilized acc. to 155(F), customer indication of coolant temperature and/or installation altitude
M1Y	Non-standard winding: 690VY_60HZ_21.3KW-premium insulation for inverter drive		1000M_KT45°C_21.3KW

I_L/I_N = locked rotor current / current nominal
 M_L/M_N = locked rotor torque / torque nominal

1) L_{0min} according to DIN ISO 28110/2010
2) at rated power / at full load

3) Value is valid only for DOL operation with motor design IC411

M_L/M_N = break down torque / nominal torque

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