Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS

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Motor type / Motor type : 1CV4163A **SIMOTICS SD - 160 M - IM B3 - 2p**

Client order no. / Client order no.	Item-No. / Item-No.	Offer no. / Offer no.
Order no. / Order no.	Consignment no. / Consignment no.	Project / Project
Remarks / Remarks		

Safe Area

Electrical data / *Electrical data* **-/-**

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η 3) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	I_A/I_N I_I/I_N	M_A/M_N T_I/T_N	M_K/M_N T_B/T_N	IE-CL
DOL duty (S1) / *DOL duty (S1)* - 155(F) to 130(B)																	
400	Δ	50	15.00	-/-	26.00	2955	48.5	93.3	93.5	92.9	0.90	0.87	0.80	9.0	3.1	4.5	IE4
690	Y	50	15.00	-/-	14.90	2955	48.5	93.3	93.5	92.9	0.90	0.87	0.80	9.0	3.1	4.5	IE4
460	Δ	60	17.30	-/-	26.00	3555	46.5	93.0	93.0	92.1	0.90	0.88	0.81	8.8	3.0	4.3	IE4
460	Δ	60	15.00	-/-	23.00	3560	40.0	92.4	92.1	90.9	0.89	0.86	0.78	10.0	3.5	5.0	IE4
IM B3 / IM 1001		FS 160 M			IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions / *Environmental conditions* : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) / *Locked rotor time (hot / cold)* : 24.9 s | 32.3 s

Mechanical data / *Mechanical data*

Sound level (SPL / SWL) at 50Hz|60Hz *Sound level (SPL / SWL) at 50Hz|60Hz*	74 / 87 dB(A) 2) 3)	79 / 92 dB(A) 2) 3)	External earthing terminal *External earthing terminal*	Without *Without*
Moment of inertia *Moment of inertia*	0.0680 kg m²		Vibration severity grade *Vibration severity grade*	A *A*
Bearing DE | NDE *Bearing DE | NDE*	6309 Z C3	6309 Z C3	Thermal class *Thermal class*	F *F*
bearing lifetime / *bearing lifetime*			Duty type *Duty type*	S1
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1) *L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)*	40000 h	32000 h	Direction of rotation *Direction of rotation*	bidirectional *bidirectional*
Relubrication interval/quantity DE | NDE *Relubrication interval/quantity DE | NDE*	10 g | 10 g 8000 h		Frame material *Frame material*	cast iron *cast iron*
Lubricants *Lubricants*	Unirex N3		Net weight of the motor (IM B3) *Net weight of the motor (IM B3)*	130 kg
Regreasing device *Regreasing device*	With (standard) *With (standard)*		Coating (paint finish) *Coating (paint finish)*	Special paint finish C3 *Special paint finish C3*
Grease nipple *Grease nipple*	M8x1 DIN 71412		Color, paint shade *Color, paint shade*	RAL7030
Type of bearing *Type of bearing*	Locating bearing NDE *Locating bearing NDE*		Motor protection *Motor protection*	(B) 3 PTC thermistors - for tripping (standard) (2 terminals) *(B) 3 PTC thermistors - for tripping (standard) (2 terminals)*
Condensate drainage holes *Condensate drainage holes*	With (standard) *With (standard)*		Method of cooling *Method of cooling*	IC411 - self ventilated, surface cooled *IC411 - self ventilated, surface cooled*

Terminal box / *Terminal box*

Terminal box position *Terminal box position*	top *top*	Max. cross-sectional area *Max. cross-sectional area*	16 mm²
Material of terminal box *Material of terminal box*	cast iron *cast iron*	Cable diameter from ... to ... *Cable diameter from ... to ...*	19 mm - 28 mm
Type of terminal box *Type of terminal box*	TB1 J01	Cable entry *Cable entry*	2xM40x1,5-1xM16x1,5
Contact screw thread *Contact screw thread*	M5	Cable gland *Cable gland*	3 plugs 3 plugs

Notes:

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 281 10/2010
2) at rated power / at full load
3) Value is valid only for DOL operation with motor design IC411

responsible dep.	technical reference	created by	approved by		
IN LVM		SPC		***Technical data are subject to change! There may be discrepancies between calculated and rating plate values.***	Link documents

SIEMENS

document type	document status			
datasheet	released			
title	document number			
1LE1604-1DA33-4AB4				
	rev.	creation date	language	Page
	953	2024-02-13	en/en	1/1