

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



Motor type : 1AV3164B SIMOTICS GP - 160 L - IM B3 - 4p

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

Remarks

Electrical data Safe Area

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	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 130(B)																	
400	Δ	50	15.00	-/-	28.50	1465	98.0	92.1	92.7	92.0	0.83	0.78	0.67	7.9	2.8	3.4	IE3
690	Y	50	15.00	-/-	16.40	1465	98.0	92.1	92.7	92.0	0.83	0.78	0.67	7.9	2.8	3.4	IE3
460	Δ	60	17.30	-/-	28.50	1765	94.0	92.4	92.5	92.0	0.83	0.79	0.69	7.9	2.7	3.3	IE2
460	Δ	60	15.00	-/-	25.00	1775	81.0	93.0	92.9	92.1	0.81	0.75	0.64	8.9	3.1	3.8	IE3
IM B3 / IM 1001		FS 160 L				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 24.6 s 33.3 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	58 / 66 dB(A) ^{2) 3)}	66 / 74 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0890 kg m ²		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)	106 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Locating bearing NDE		Color, paint shade	RAL7030
Condensate drainage holes	Without		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 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	19 mm - 28 mm
Type of terminal box	TB1 J00	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	3 plugs

Notes: I_A/I_N = locked rotor current / current nominal 1) L10mh according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411
M_K/M_N = locked rotor torque / torque nominal 2) at rated power / at full load
M_K/M_N = break down torque / nominal torque

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents
SIEMENS	document type datasheet				document status released
	title 1LE1003-1DB43-4AA4-Z F01+F12+L05				document number
© Siemens AG 2023				rev. 943	creation date 2023-06-27
				language en	Page 1/2



SIMOTICS GP - 160 L - IM B3 - 4p

Special design

F01	Mounting of holding brake	L05	Second standard shaft extension
F12	Brake supply voltage 400 V AC, 50/60 Hz		

Additional information:

Brake:

Description:	BFK458-20	Current:	0.47 A
Voltage:	AC 400 V	Moment of inertia:	0.007300 kgm ²

Notes:

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
DI MC LVM		DT Configurator					
	document type			document status			
	datasheet			released			
	title			document number			
	1LE1003-1DB43-4AA4-Z						
	F01+F12+L05			rev.	creation date	language	Page
© Siemens AG 2023				943	2023-06-27	en	2/2