

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



Motor type : 1AV3162B

SIMOTICS GP - 160 M - IM B5 - 4p

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

## Electrical data

## Safe Area

U [V]	$\Delta / Y$	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	$\eta^{3)}$			$\cos\phi^{3)}$			$I_A/I_N$ $I_i/I_N$	$M_A/M_N$ $T_i/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
<b>DOL duty (S1) - 155(F) to 130(B)</b>																	
400	$\Delta$	50	11.00	-/-	21.00	1470	71.0	91.4	91.9	91.9	0.82	0.76	0.65	8.0	2.5	3.5	IE3
690	Y	50	11.00	-/-	12.30	1470	71.0	91.4	91.9	91.9	0.82	0.76	0.65	8.0	2.5	3.5	IE3
460	$\Delta$	60	12.60	-/-	20.50	1765	68.0	92.4	92.9	92.6	0.83	0.78	0.68	8.1	3.3	3.5	IE3
460	$\Delta$	60	11.00	-/-	18.40	1775	59.0	92.4	92.6	92.0	0.81	0.75	0.63	9.0	3.8	4.0	IE3
IM B5 / IM 3001		FS 160 M		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 26.5 s   34.3 s							

## Mechanical data



Sound level (SPL / SWL) at 50Hz 60Hz	67 / 75 dB(A) <sup>2) 3)</sup>	70 / 75 dB(A) <sup>2) 3)</sup>	Vibration severity grade	A
Moment of inertia	0.0583 kg m <sup>2</sup>		Thermal class	F
Bearing DE   NDE	6209 2Z C3	6209 2Z C3	Duty type	S1
<b>bearing lifetime</b> L <sub>10mh</sub> , F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Direction of rotation	bidirectional
Regreasing device	Without		Frame material	aluminum
Grease nipple	-/-		Net weight of the motor (IM B3)	78 kg
Type of bearing	Locating bearing NDE		Coating (paint finish)	Standard paint finish C2
Condensate drainage holes	Without		Color, paint shade	RAL7030
External earthing terminal	Without		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
			Method of cooling	IC411 - self ventilated, surface cooled

## Terminal box

Terminal box position	top	Max. cross-sectional area	16 mm <sup>2</sup>
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  
 $M_A/M_N$  = locked rotor torque / torque nominal  
 $M_K/M_N$  = break down torque / nominal torque  
 1) L10mh 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. 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.	<a href="#">Link documents</a> 
	document type datasheet	document status released		document number	
	title 1LE1003-1DB23-4FB4-Z Q11	rev. 943	creation date 2023-07-20		
© Siemens AG 2023					

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



Motor type : 1AV3162B

SIMOTICS GP - 160 M - IM B5 - 4p

**Special design**

Q11 1/3 PTC thermistors - for tripping (2 terminals)



**Notes:**

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	<a href="#">Link documents</a>
	document type datasheet		document status released		
	title 1LE1003-1DB23-4FB4-Z		document number		
© Siemens AG 2023	Q11		rev. 943	creation date 2023-07-20	language en Page 2/2