

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



Motor type : 1AV3164A

SIMOTICS GP - 160 L - IM V1 - 2p

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]	$\eta$ <sup>3)</sup>			$\cos\phi$ <sup>3)</sup>			$I_A/I_N$ $I_i/I_N$	$M_A/M_N$ $T_i/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
400	$\Delta$	50	18.50	-/-	32.00	2955	60.0	92.4	92.8	92.4	0.90	0.87	0.80	9.0	2.8	4.2	IE3
690	Y	50	18.50	-/-	18.60	2955	60.0	92.4	92.8	92.4	0.90	0.87	0.80	9.0	2.8	4.2	IE3
460	$\Delta$	60	21.30	-/-	32.00	3555	57.0	91.7	91.5	90.3	0.91	0.88	0.80	9.0	2.6	4.2	IE3
460	$\Delta$	60	18.50	-/-	28.50	3560	49.5	91.7	91.5	90.3	0.89	0.86	0.78	10.2	3.0	4.8	IE3

IM V1 / IM 3011	FS 160 L	94 kg	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
-----------------	----------	-------	------	--------------	------------------------

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 13.3 s | 19.7 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	70.0 / 82.0 dB(A) <sub>2)</sub>	77.0 / 89.0 dB(A) <sub>2)</sub>	External earthing terminal	No
Moment of inertia	0.0680 kg m <sup>2</sup>		Vibration severity grade	A
Bearing DE   NDE	6209 2Z C3	6209 2Z C3 INS	Insulation	155(F) to 130(B)
<b>bearing lifetime</b>			Duty type	S1
$L_{10mh}$ $F_{Rad, min}$ for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	3 Bi-metallic sensors (opener) for tripping (2 terminals)
Condensate drainage holes	No		Method of cooling	IC411 - self ventilated, surface cooled

## Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm <sup>2</sup>
Material of terminal box	Aluminium	Cable diameter from ... to ...	19.0 mm - 28.0 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	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>
-------------------------------	---------------------	-------------------------------	-------------	---

	document type datasheet	document status released	customer	
	title 1LE1003-1DA43-4GZ4-Z L51+Q3A	document number	rev. 01	creation date 2021-07-08 11:57
© Siemens AG 2021				Page 1/2

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



Motor type : 1AV3164A

SIMOTICS GP - 160 L - IM V1 - 2p

**Special design**

L51	Bearing insulation NDE	Q3A	1/3 Bi-metallic sensors (opener) 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>
-------------------------------	---------------------	-------------------------------	-------------	---

<b>SIEMENS</b>	document type datasheet	document status released	customer	
	title 1LE1003-1DA43-4GZ4-Z L51+Q3A	document number		
© Siemens AG 2021	rev. 01	creation date 2021-07-08 11:57	language en	Page 2/2