

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



Motor type : 1AV2105B

SIMOTICS GP - 100 L - IM B14 - 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]	$\eta$ <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				
230	$\Delta$	50	3.00	-/-	10.70	1455	19.7	85.5	86.4	85.6	0.82	0.76	0.64	6.9	2.0	3.1	IE2
400	Y	50	3.00	-/-	6.20	1455	19.7	85.5	86.4	85.6	0.82	0.76	0.64	6.9	2.0	3.1	IE2
460	Y	60	3.45	-/-	6.00	1755	18.8	87.5	88.2	87.3	0.82	0.77	0.65	7.5	2.0	3.1	IE2
460	Y	60	3.00	-/-	5.40	1765	16.2	87.5	87.5	86.0	0.79	0.72	0.60	8.3	2.4	3.7	IE2
IM B14 / IM 3601		FS 100 L		25 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

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

Locked rotor time (hot / cold) : 9.57 s | 14.6 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	60.0 / 72.0 dB(A) <sup>2)</sup>	62.0 / 74.0 dB(A) <sup>2)</sup>	External earthing terminal	No
Moment of inertia	0.0140 kg m <sup>2</sup>		Vibration severity grade	A
Bearing DE   NDE	6206 2Z C3	6206 2Z C3	Insulation	155(F) to 130(B)
<b>bearing lifetime</b>			Duty type	S1
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
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	Preloaded bearing DE		Motor protection	(A) without (Standard)
Condensate drainage holes	-/-		Method of cooling	IC411 - self ventilated, surface cooled

## Terminal box


Terminal box position	top	Max. cross-sectional area	4.0 mm <sup>2</sup>
Material of terminal box	Aluminium	Cable diameter from ... to ...	11.0 mm - 21.0 mm
Type of terminal box	TB1 F00	Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread	M4	Cable gland	3 plugs

### Notes:

$I_A/I_N$  = locked rotor current / current nominal  
 $M_K/M_N$  = 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>			
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**Special design**

F01	Mounting a brake	H08	Terminal box at the NDE
F11	Brake supply voltage, 230 V AC, 50/60 Hz		

**Additional information:**

**Brake:**

Description:	BFK458-12	Current:	.2 A
Voltage:	AC 230 V	Moment of inertia:	.00036 Nm

**Notes:**

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