

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



Motor type : 1AV2164C

SIMOTICS GP - 160 L - IM V6 - 6p

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

Remarks

## Electrical data

## Safe Area

U	$\Delta / Y$	f	P	P	I	n	M	$\eta^{3)}$			$\cos\phi^{3)}$			$I_A/I_N$	$M_A/M_N$	$M_K/M_N$	IE-CL
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	$I_i/I_N$	$T_i/T_N$	$T_B/T_N$	
415	$\Delta$	50	10.12	-/-	21.50	975	99.1	89.0	89.6	89.0	0.74	0.68	0.56	5.2	2.1	2.4	IE2
480	$\Delta$	60	11.59	-/-	20.50	1175	94.2	90.5	91.0	90.4	0.75	0.70	0.59	5.3	2.1	2.4	IE2
480	$\Delta$	60	11.00	-/-	19.80	1180	89.0	90.2	90.5	89.5	0.74	0.69	0.58	5.5	2.2	2.5	IE2
IM V6 / IM 1031		FS 160 L		93 kg		IP55		IEC/EN 60034			IEC, DIN, ISO, VDE, EN						

Environmental conditions : -20 °C - +50 °C / 1,000 m

Locked rotor time (hot / cold) : 33.6 s | 54.2 s

These values are calculated. The final rating plate data will be calculated when the order is placed

The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67.0 / 79.0 dB(A) <sup>2)</sup>	70.0 / 82.0 dB(A) <sup>2)</sup>	External earthing terminal	No
Moment of inertia	0.0980 kg m <sup>2</sup>		Vibration severity grade	A
Bearing DE   NDE	6309 2Z C3	6309 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			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	Locating 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	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
Contact screw thread	M5	Cable gland	2 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.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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### Special design

L20	Locating bearing, DE	N06	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 50°C, power reduced
L25	Double sides reinforced bearings for DE and NDE, Type 63	Y80	Supplementary rating plate with different data
M10	Additional rating plate, loose		

### Notes:

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