

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

Data sheet for three-phase Squirrel-Cage-Motors



Motor type / Motor type : 1CV3163A

SIMOTICS SD - 160 M - IM B14 - 2p

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

Remarks / Remarks

## Safe Area

-/-

## Electrical data / Electrical data

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>			$I_A/I_N$ $I_f/I_N$	$M_A/M_N$ $T_f/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
<b>DOL duty (S1) / DOL duty (S1) - 155(F) to 130(B)</b>																	
400	$\Delta$	50	15.00	-/-	27.50	2955	48.5	91.9	91.9	90.8	0.86	0.81	0.71	10.2	3.5	4.4	IE3
690	Y	50	15.00	-/-	15.90	2955	48.5	91.9	91.9	90.8	0.86	0.81	0.71	10.2	3.5	4.4	IE3
460	$\Delta$	60	17.30	-/-	27.00	3550	46.5	91.7	91.4	90.2	0.88	0.84	0.75	10.1	3.3	4.5	IE3
460	$\Delta$	60	15.00	-/-	24.00	3560	40.0	91.0	90.4	88.5	0.86	0.81	0.71	11.8	4.0	5.2	IE3
IM B14 / IM 3601			FS 160 M			IP55	UKCA	IEC/EN 60034	IEC, DIN, ISO, VDE, EN								

Environmental conditions / Environmental conditions : -20 °C - +40 °C / 1000 m Locked rotor time (hot / cold) / Locked rotor time (hot / cold) : 13.3 s | 18.9 s

## Mechanical data / Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz Sound level (SPL / SWL) at 50Hz 60Hz	77   85 dB(A) <sup>2) 3)</sup>	81   89 dB(A) <sup>2) 3)</sup>	Vibration severity grade Vibration severity grade	A A
Moment of inertia Moment of inertia	0.0430 kg m <sup>2</sup>		Thermal class Thermal class	F F
Bearing DE   NDE Bearing DE   NDE	6209 2Z C3	6209 2Z C3	Duty type Duty type	S1
<b>bearing lifetime / bearing lifetime</b>			Direction of rotation Direction of rotation	bidirectional bidirectional
$L_{10mh}$ $F_{Rad min}$ for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Frame material Frame material	cast iron cast iron
$L_{10mh}$ $F_{Rad min}$ for coupling operation 50 60Hz <sup>1)</sup>			Net weight of the motor (IM B3) Net weight of the motor (IM B3)	104 kg
Regreasing device Regreasing device	Without		Coating (paint finish) Coating (paint finish)	Standard paint finish C2 Standard paint finish C2
Grease nipple Grease nipple	-/-		Color, paint shade Color, paint shade	RAL7030
Type of bearing Type of bearing	Locating bearing NDE		Motor protection Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals) (B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes Condensate drainage holes	With (standard)		Method of cooling Method of cooling	IC411 - self ventilated, surface cooled IC411 - self ventilated, surface cooled
External earthing terminal External earthing terminal	Without			

## Terminal box / Terminal box

Terminal box position Terminal box position	top	Max. cross-sectional area Max. cross-sectional area	16 mm <sup>2</sup>
Material of terminal box Material of terminal box	cast iron	Cable diameter from ... to ... Cable diameter from ... to ...	19 mm - 28 mm
Type of terminal box Type of terminal box	TB1 J01	Cable entry Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread Contact screw thread	M5	Cable gland Cable gland	3 plugs 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)  $L_{10mh}$  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. IN LVM	technical reference	created by SPC	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents 
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