

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

Motor type: **7CV4314A** SIMOTICS SD - 315L - IM B3 - 2 p

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	M	$\eta^{(3)}$			$\cos\phi^{(3)}$			$I_A/I_N$	$M_A/M_N$	$M_K/M_N$	IE-CL
[V]±10%		[Hz]±5%	[kW]	[hp]	[A]	[1/min]	[kgf.m]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4				
<b>Motordaten / Motor Data</b>																		
415	$\Delta$	50	160.00	-/-	254.00	2988	52.0	511.0	96.3	96.2	95.6	0.91	0.89	0.84	8.9	3.7	4.0	IE4
IM B3 / IM 1001			FS 315L		1169 kg		SF:1		IS 12615 / IEC 60034-1									

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

Locked rotor time (hot / cold) : 17 s | 33 s

## Mechanical data

Sound pressure level 50Hz   60Hz	84 dB(A)	89 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia   Rotor GD <sup>2</sup>	2.3800 kg m <sup>2</sup>   9.5200 kgf.m <sup>2</sup>		Vibration severity grade	A (Standard)
Bearing DE   NDE	6316 C3	6316 C3	Insulation	155(F) utilized to 130(B)
<b>bearing lifetime</b>			Duty type	S1
L <sub>10mh</sub> F <sub>Rad max</sub> according catalogue 50 60Hz <sup>1)</sup>	20.000 h	16.000 h	Direction of rotation	Bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	50.000 h	40.000 h	Frame material	Cast iron
Type of bearing	Locating (fixed) bearing, NDE		Forced ventilation motor details	- / -
Relubrication interval/quantity DE   NDE	30 g   30 g 3.000 h		Net weight of the motor (IM B3)	1169 kg
Type of construction	IM B3 / IM 1001		Rotor weight	274 kg
Degree of protection	IP55		Data of anti condensation heating	-/ V, -/ W
Lubricants	Esso Unirex N3		Coating (paint finish)	Standard paint finish
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(A) without
Condensate drainage holes	Yes		Method of cooling	IC411 - Self ventilated, surface cooled

## Terminal box

Terminal box position	Top	Cable diameter from ... to ...	38.0 mm - 45.0 mm
Material of terminal box	Cast iron	Cable entry	2xM63x1.5
Type of terminal box	TB1 Q01	Cable gland	2 Plugs
Contact screw thread	M12		
Max. cross-sectional area	185 mm <sup>2</sup>		




## 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

3) Value is valid only for DOL operation with motor design IC411

For VFD Operation, mandatorily parameterize the skip frequencies from 38Hz to 48Hz (both inclusive)

1) L10mh according to DIN ISO 281 10/2010

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>
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