

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

Motor type: **7CV4316B** SIMOTICS SD - 315L - IM B3 - 4 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	200.00	-/-	331.00	1490	131.0	1282.0	96.7	96.8	96.6	0.87	0.84	0.76	8.9	3.6	4.0	IE4
IM B3 / IM 1001			FS 315L		1337 kg		SF:1		IS 12615 / IEC 60034-1									

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

Locked rotor time (hot / cold) : 11 s | 21 s

## Mechanical data

Sound pressure level 50Hz   60Hz	80 dB(A)   83 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia   Rotor GD <sup>2</sup>	4.7200 kg m <sup>2</sup>   18.8800 kgf.m <sup>2</sup>	Vibration severity grade	A (Standard)
Bearing DE   NDE	6319 C3   6319 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	40 g   40 g 6.000 h	Net weight of the motor (IM B3)	1337 kg
Type of construction	IM B3 / IM 1001	Rotor weight	415 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

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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