

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



Motor type : 1CV4312A SIMOTICS SD - 315 M - IM B3 - 2p

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

Remarks

## Safe Area

### 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) - 155(F) to 130(B)</b>																	
400	$\Delta$	50	132.00	-/-	220.00	2988	420.0	96.2	96.2	95.6	0.90	0.88	0.81	9.8	2.6	3.9	IE4
690	Y	50	132.00	-/-	128.00	2988	420.0	96.2	96.2	95.6	0.90	0.88	0.81	9.8	2.6	3.9	IE4
460	$\Delta$	60	132.00	-/-	192.00	3590	350.0	95.8	95.5	94.4	0.90	0.87	0.80	11.0	2.9	4.3	IE4
460	$\Delta$	60	148.00	-/-	215.00	3588	395.0	95.8	95.6	94.8	0.90	0.88	0.82	9.8	2.6	3.9	IE4

IM B3 / IM1001	FS 315 M	IP55	UKCA	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
Environmental conditions : -20 °C - +40 °C / 1,000 m				Locked rotor time (hot / cold) : 27.2 s   41.3 s	

### Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	73 / 88 dB(A) <sup>2) 3)</sup>	77 / 92 dB(A) <sup>2) 3)</sup>	External earthing terminal	(Standard) Yes
Moment of inertia	2.0800 kg m <sup>2</sup>		Vibration severity grade	Grade A
Bearing DE   NDE	6316 C3		Thermal class	F
permissible lateral force on (N)	$X_{0:}$ 5800	$X_{0.5:}$ 5500	$X_{max:}$ 5200	Duty type
<b>bearing lifetime</b>	40000 h		32000 h	Direction of rotation
$L_{10mh}$ $F_{Rad, min}$ for coupling operation 50 60Hz <sup>1)</sup>	40000 h		32000 h	Frame material
Relubrication interval/quantity DE   NDE	30 g   30 g		3000 h	Net weight of the motor
Lubricants	UNIREX N3		Standard paint finish C2	Coating (paint finish)
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		RAL7030	Color, paint shade
Grease nipple	M10x1 DIN 3404 A		3 PTC thermistors - for tripping (2 terminals)	Motor protection
Type of bearing	Locating bearing NDE		IC411 - self ventilated, surface cooled	Method of cooling
Condensate drainage holes	(Standard) Yes			

### Terminal box

Terminal box position	at the right	Max. cross-sectional area	240 mm <sup>2</sup>
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box	TB1Q01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 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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