

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



Motor type: 0AV3164A		SIMOTICS FL - 160 L - IM B3 - 2p	
Client order no.	Item-No.	Offer no.	
Order no.	Consignment no.	Project	
Remarks			

Electrical data								Safe area									
U	Δ / Y	f	P	P	I	n	M	η			cos φ			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	
400	Δ	50	18.5	-	32.5	2940	60.1	92.4	93	92.9	0.89	-	-	7.8	2.4	3.4	IE3
690	Y	50	18.5	-	18.8	2940	60.1	92.4	93	92.9	0.89	-	-	7.8	2.4	3.4	IE3
IM B3			FS 160 L				IP 55			IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20°C - +40°C / 1000 m																	

Mechanical data	
Sound level (SPL / SWL) at 50Hz 60Hz	69 / 81 dB(A) - / -
Moment of inertia	0.05773 kg m2
Bearing DE NDE	6209 2Z C3 6209 2Z C3
bearing lifetime	
L _{10mh} F _{Rad min} for coupling operation 50 60Hz	20000 h -
Lubricants	Unirex N3
Regreasing device	no
Grease nipple	
Type of bearing	floated bearing DE and NDE
Condensate drainage holes	no
External earthing terminal	no
Vibration severity grade	A
Insulation	155(F) to 130(B)
Duty type	S1
Direction of rotation	bidirectional
Frame material	aluminum
Net weight of the motor (IM B3)	109 kg
Coating (paint finish)	Standard paint finish C2
Color, paint shade	RAL7030
Motor protection	(A) without (Standard)
Method of cooling	IC411 - self ventilated, surface cooled

Terminal box	
Terminal box position	top
Material of terminal box	aluminum
Type of terminal box	-
Contact-screw thread	M5
Max. cross-sectional area	16 mm2
Cable diameter from ... to ...	18 mm - 25 mm
Cable entry	M36 x 2 + M36 x 2
Cable gland	2 glands

Special design	

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.	
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Efficiency documentation for 50/60Hz three-phase Squirrel-Cage-Motors SIMOTICS

MLFB: 1LE0323-1DA43-4AA4

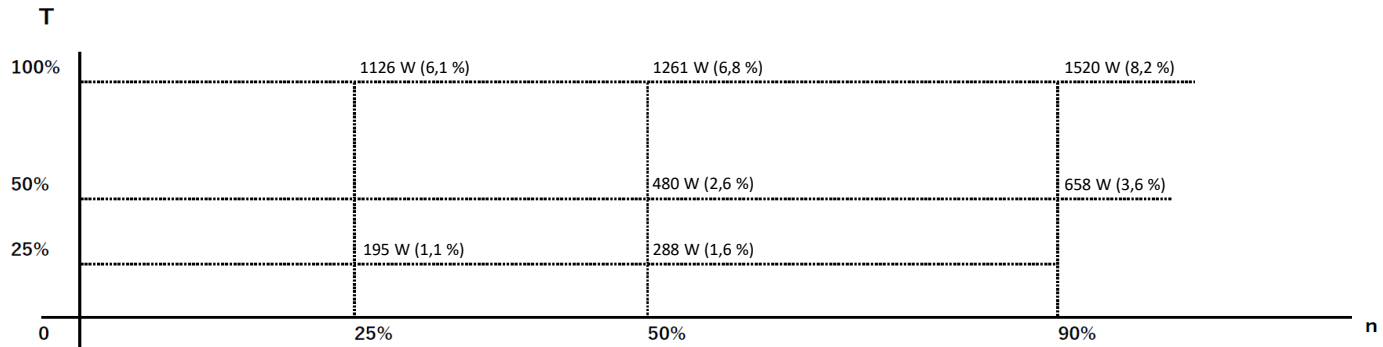
Motortype: 0AV3164A

motor rating						
U _N [V]	Δ / Y	f _N [Hz]	P _N [kW]	I _N [A]	n _N [1/min]	T _N [Nm]
400	Δ	50	18.5	32.5	2940	60.1

Power losses acc. to COMMISSION REGULATION (EU) 2019/1781


operating point (n:T)	losses P _L [W]	relative losses P _L /P _N [%]
P ₁ (90:100)	1520	8.2
P ₂ (50:100)	1261	6.8
P ₃ (25:100)	1126	6.1
P ₄ (90:50)	658	3.6
P ₅ (50:50)	480	2.6
P ₆ (50:25)	288	1.6
P ₇ (25:25)	195	1.1

Map of losses - relative losses P_L/P_N [%]



Notes / Definitions

T as relative T: T/T_N [%]
n as relative n: n/n_N [%]

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