

THREE-PHASE-ASYNCHRONOUS-MOTOR FCA 90 LC 4 /PHE

IE3AC09LC451

General data

Type of motor	3~ progressiv
Type designation	FCA
Frame size	90
Mounting	B14a
Frame execution	L
Frame material	Aluminium
Insulationclass	F/B
Terminal box location	top DE
Terminal box orientation	cable gland to the right side
Weight (kg)	19.7
Rotation Direction	right /left
Vibration level	A
Balancing method	half key
cooling type	IC411
Executed acc. to	IEC 60034-1
noise level	IEC 60034-9

Influential factors

Duty	S1
Ambient temperature (°C)	-20 up to +40
Height of location (m)	1000

Electrical specification

Power 1 50Hz (kW)	2.2
Power 1 60Hz (kW)	2.2
Frequency (Hz)	50/60
Voltage 50Hz (V)	230/400
Voltage 60Hz (V)	265/460
Voltage/Frequency tolerance (not valid for range voltage)	+/-10%
Connection	Δ/Y
Poles	4
Efficiency 100% 50Hz (%)	86,7
Efficiency 75% 50Hz (%)	86,7
Efficiency 50% 50Hz (%)	85,0
Efficiency 100% 60Hz (%)	89,5
Efficiency 75% 60Hz (%)	89,5
Efficiency 50% 60Hz (%)	87,7
Power factor	0,78
Starting current factor	6,9
Starting torque factor	2,3
Tilting moment factor	2,3
Rated current 50Hz (A)	8,17/4,70
Rated current 60Hz (A)	6,88/3,99
Eff.Cl.50Hz	IE3

Electrical specification

Eff.Cl.60Hz	IE3
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Mechanical data

Torque (Nm)	14,69/12,25
Rotation speed (1/min)	1430/1716
Bearing DE	6205.ZZ.C3
Bearing NDE	6205.ZZ.C3
Mounting of bearing DE	loose bearing
Mounting of bearing NDE	loose bearing
Bearing lifetime	20000
allow. Radial load (X/2)	787
allow. Radial load (X0)	875
allow. Radial load (Xmax)	700
allow. Axial load B3,B5,B35,B14,B34	675
allow. Axial load V1,V3,V19,V18	635
Moment of inertia	0,0053

Motor properties

Color	RAL7030
Paint surface	shiny
Protection class	IP55
Cable gland size (cable connection)	1xM25x1,5 1xblind plug
Cable gland type	Standard
Shaft end	24 x 50
Shaft material	C45
Specification NDE	Plastic fan
Flange	140

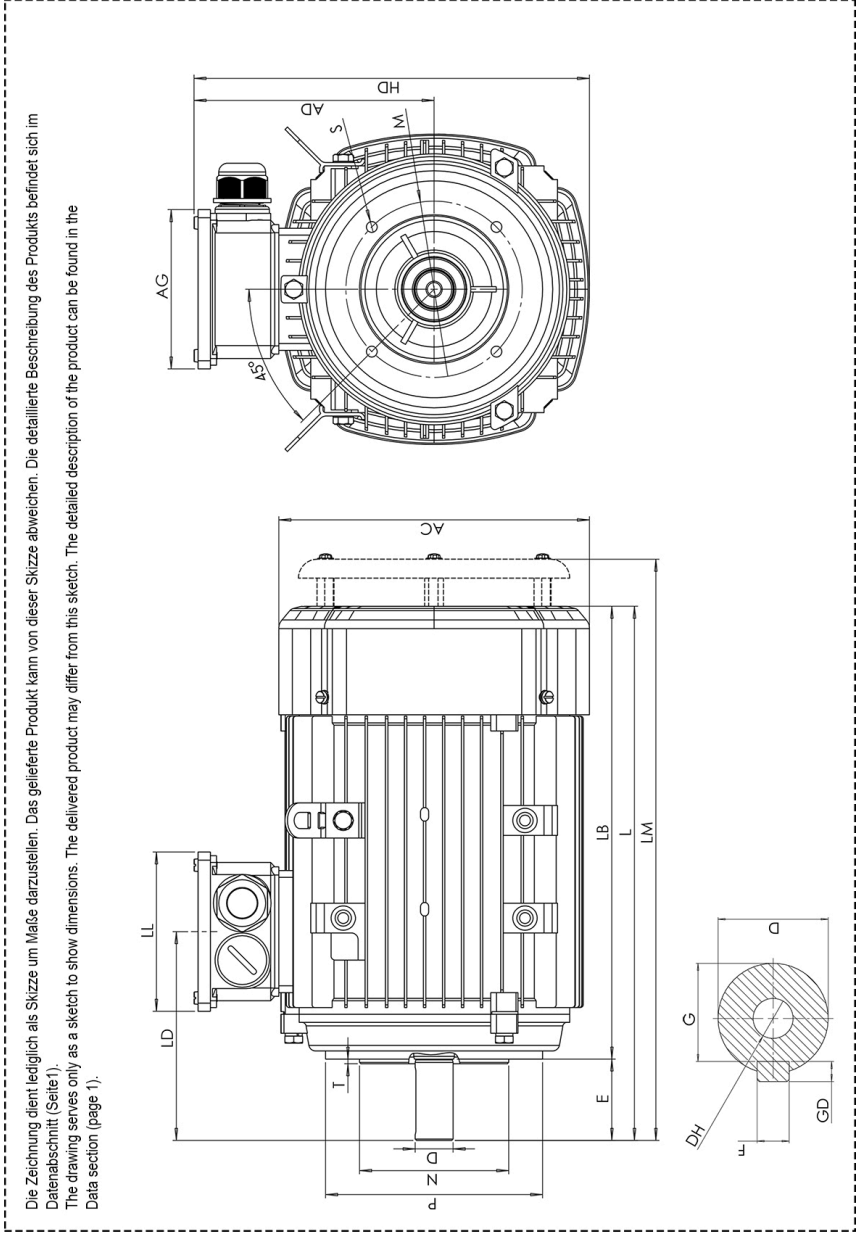
Additional operating points

Voltage operating point 2	265/460
Power operating point 2 (kW)	2.64
Connection operating point 2	Δ/Y
Frequency operating point 2	60
Efficiency class operating point 2	IE2

Dimension drawings

Three-Phase-Asynchronous- Motor FCA 90 LC 4 /PHE

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AC	AD	AG	D	E	HD	L	LM	LA	LB	LD	LL	M	N	P	S	T	F	G	DH	EB	ED	GD
175	140	109	24	50	227,5	344	374	12	294	145	109	115	95	140	M8	3,5	8	20	M8x19	40	5	7