

THREE-PHASE-ASYNCHRONOUS-MOTOR ACA 90 S 2 /PHE

IE3AC09S2002N

General data

Type of motor	3~
Type designation	ACA
Frame size	90
Mounting	B3
Frame execution	S
Frame material	Aluminium
Insulationclass	F/B
Terminal box location	top DE
Terminal box orientation	cable gland to the right side
Weight (kg)	13.5
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)	1.5
Power 1 60Hz (kW)	1.5
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	2
Efficiency 100% 50Hz (%)	84,2
Efficiency 75% 50Hz (%)	84,2
Efficiency 50% 50Hz (%)	82,5
Efficiency 100% 60Hz (%)	88,5
Efficiency 75% 60Hz (%)	85,5
Efficiency 50% 60Hz (%)	83,8
Power factor	0,84
Starting current factor	7,6
Starting torque factor	2,3
Tilting moment factor	2,3
Rated current 50Hz (A)	5,32/3,06
Rated current 60Hz (A)	4,56/2,64
Eff.Cl.50Hz	IE3

Electrical specification

Eff.Cl.60Hz	IE3
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Mechanical data

Torque (Nm)	4,95/4,12
Rotation speed (1/min)	2895/3474
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)	600
allow. Radial load (X0)	675
allow. Radial load (Xmax)	525
allow. Axial load B3,B5,B35,B14,B34	500
allow. Axial load V1,V3,V19,V18	460
Moment of inertia	0,0015

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

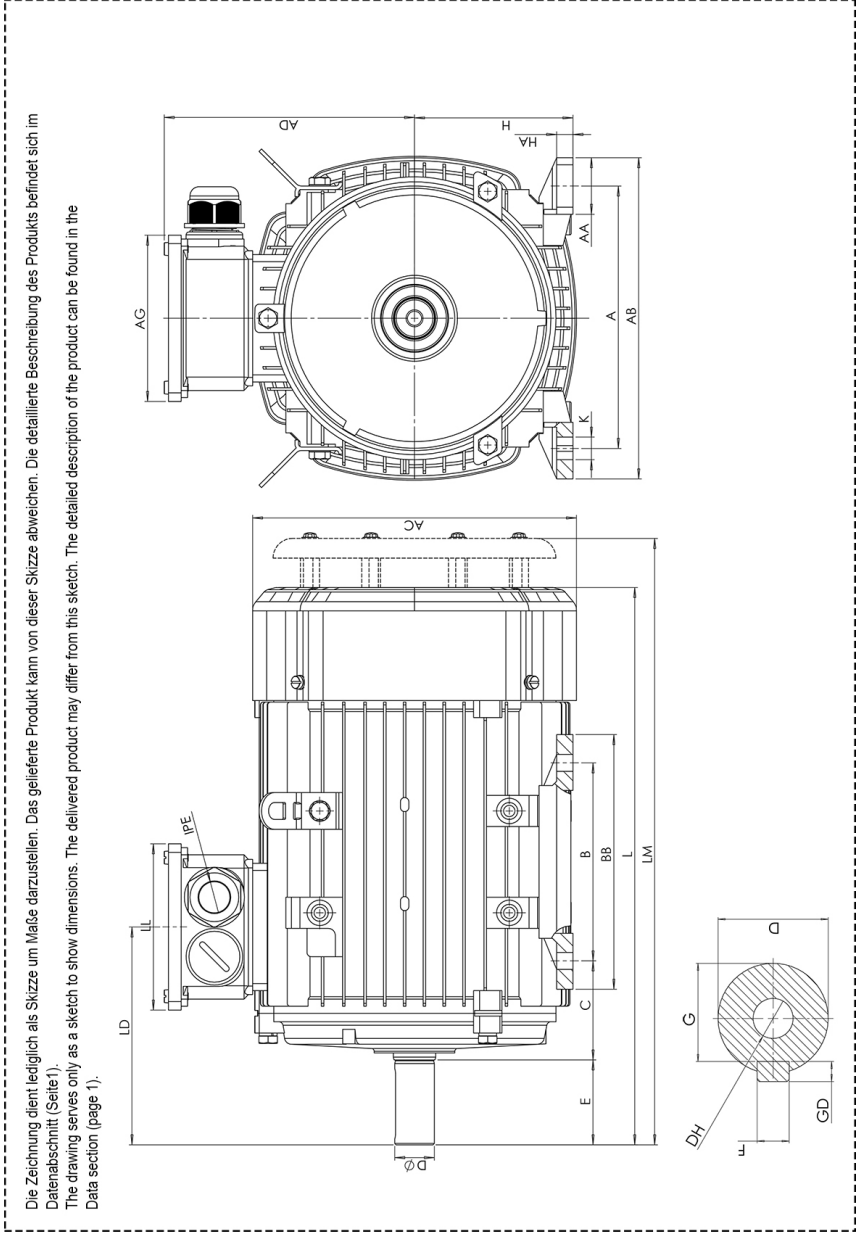
Additional operating points

Voltage operating point 2	265/460
Power operating point 2 (kW)	1.8
Connection operating point 2	Δ/Y
Frequency operating point 2	60
Efficiency class operating point 2	IE2

Dimension drawings

Three-Phase-Asynchronous- Motor ACA 90 S 2 /PHE

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A	AA	AB	AC	AD	AG	B	BB	C	D	E	H	HD	HA	K	L	LM	LD	LL	F	G	DH	EB	ED	GD
140	37	173	165	138	109	100	125	56	24	50	90	228	10	10x14	313	343	136	109	8	20	M8x19	40	5	7