

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	cabl 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 tolerance	+/-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 (Ia/In)	7,6
Starting torque factor (Ma/Mn)	2,3
Breakdown torque (Mk/Mn)	2,3
Rated current 50Hz (A)	5,32/3,06
Rated current 60Hz (A)	4,56/2,64
Eff.Cl.50Hz	IE3
Eff.Cl.60Hz	IE3

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 (h)	20000
allow. Radial load (X/2)	600
allow. Radial load (X0)	675
allow. Radial load (Xmax)	525
allow. Axial load	500
allow. Axial load (V1)	460
Moment of inertia (kgm ²)	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 (mm)	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

