

THREE-PHASE-ASYNCHRONOUS-MOTOR FCM 160 M 4 /PHE

IE3AC16M4001

General data

Type of motor	3~
Type designation	FCM
Frame size	160
Mounting	B5
Frame execution	M
Frame material	Grauguß
Insulationclass	F/B
Terminal box location	top DE
Terminal box orientation	cable gland to the right side
Weight (kg)	121
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)	11
Power 1 60Hz (kW)	11
Frequency (Hz)	50/60
Voltage 50Hz (V)	400/690
Voltage 60Hz (V)	460/795
Voltage/Frequency tolerance (not valid for range voltage)	+/-10%
Connection	Δ/Y
Poles	4
Efficiency 100% 50Hz (%)	91,4
Efficiency 75% 50Hz (%)	91,4
Efficiency 50% 50Hz (%)	89,6
Efficiency 100% 60Hz (%)	92,4
Efficiency 75% 60Hz (%)	92,4
Efficiency 50% 60Hz (%)	90,6
Power factor	0,85
Starting current factor	7,4
Starting torque factor	2,2
Tilting moment factor	2,3
Rated current 50Hz (A)	20,44/11,85
Rated current 60Hz (A)	17,57/10,14
Eff.Cl.50Hz	IE3

Electrical specification

Eff.Cl.60Hz	IE3
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Mechanical data

Torque (Nm)	71,71/59,75
Rotation speed (1/min)	1465/1758
Bearing DE	6309.ZZ.C3
Bearing NDE	6309.ZZ.C3
Mounting of bearing DE	loose bearing
Mounting of bearing NDE	fixed bearing
Bearing lifetime	20000
allow. Radial load (X/2)	2900
allow. Radial load (X0)	3275
allow. Radial load (Xmax)	2525
allow. Axial load B3,B5,B35,B14,B34	2850
allow. Axial load V1,V3,V19,V18	2770
Moment of inertia	0,081

Motor properties

Color	RAL7030
Paint surface	shiny
Protection class	IP55
Cable gland size (cable connection)	1xM40x1,5 1xblind plug
Cable gland size (option)	M20x1,5
Cable gland type	Standard
Shaft end	42 x 110
Shaft material	C45
Specification NDE	Plastic fan
Flange	350

Additional operating points

Voltage operating point 2	460/795
Power operating point 2 (kW)	13.2
Connection operating point 2	Δ/Y
Frequency operating point 2	60
Efficiency class operating point 2	IE2

Additional option

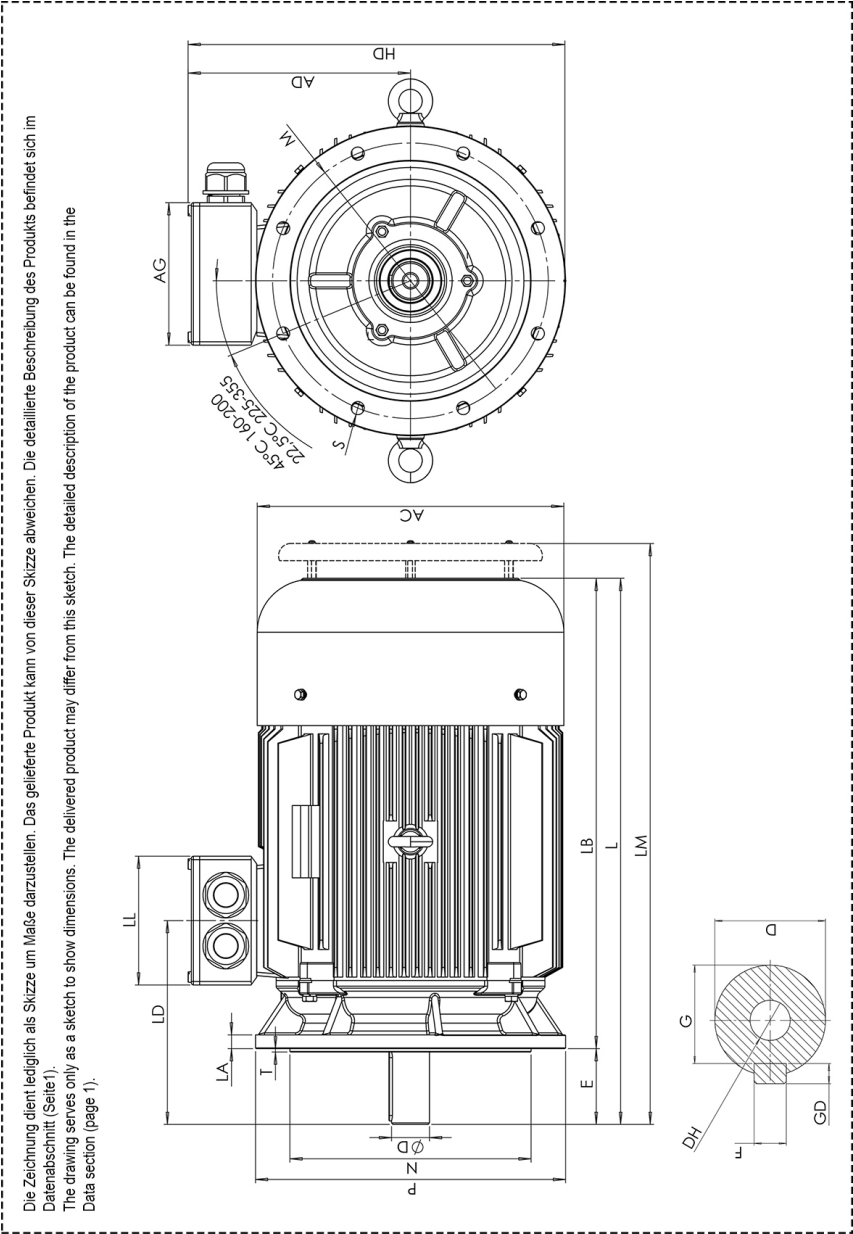
Protection winding	PTC 150°C
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Dimension drawings

Three-Phase-Asynchronous-Motor FCM 160 M 4 /PHE

IE3AC16M4001

ac motoren



AC	AD	AG	D	E	HD	L	LM	LA	LB	LD	LL	M	N	P	S	T	F	G	DH	EB	ED	GD
314	250	162	42	110	426	589	634	15	479	256	152	300	250	350	4x18,5	5	12	37	M16x36	90	10	8