

THREE-PHASE-ASYNCHRONOUS-MOTOR FCM 180 L 4 /PHE

IE3AC18L4004

General data

Type of motor	3~
Type designation	FCM
Frame size	180
Mounting	B5
Frame execution	L
Frame material	Grauguß
Insulationclass	F/B
Terminal box location	top DE
Terminal box orientation	cable gland to the right side
Weight (kg)	209
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)	22
Power 1 60Hz (kW)	22
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 (%)	93,0
Efficiency 75% 50Hz (%)	93,0
Efficiency 50% 50Hz (%)	91,1
Efficiency 100% 60Hz (%)	93,6
Efficiency 75% 60Hz (%)	93,6
Efficiency 50% 60Hz (%)	91,7
Power factor	0,86
Starting current factor	7,7
Starting torque factor	2,2
Tilting moment factor	2,3
Rated current 50Hz (A)	39,70/23,02
Rated current 60Hz (A)	34,30/19,80
Eff.Cl.50Hz	IE3

Electrical specification

Eff.Cl.60Hz	IE3
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Mechanical data

Torque (Nm)	142,93/119,10
Rotation speed (1/min)	1470/1764
Bearing DE	6311.ZZ.C3
Bearing NDE	6311.ZZ.C3
Mounting of bearing DE	loose bearing
Mounting of bearing NDE	fixed bearing
Bearing lifetime	20000
allow. Radial load (X/2)	4862
allow. Radial load (X0)	5375
allow. Radial load (Xmax)	4350
allow. Axial load B3,B5,B35,B14,B34	4525
allow. Axial load V1,V3,V19,V18	4425
Moment of inertia	0,168

Motor properties

Color	RAL7030
Paint surface	shiny
Protection class	IP55
Cable gland size (cable connection)	2xM40x1,5
Cable gland size (option)	M20x1,5
Cable gland type	Standard
Shaft end	48 x 110
Shaft material	C45
Specification NDE	Plastic fan
Flange	350

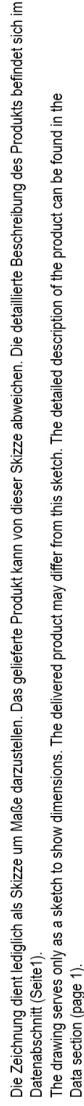
Additional operating points

Voltage operating point 2	460/795
Power operating point 2 (kW)	26.4
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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ac motore



AC	AD	AG	D	E	HD	L	LM	LA	LB	LD	LL	M	N	P	S	T	F	G	DH	EB	ED	GD
355	271	162	48	110	444,5	699	744	15	589	271	152	300	250	350	4x18,5	5	14	42,5	M16x36	90	10	9