

# Three-Phase-Asynchronous-Motor FCMP 250 M 4/PHE

## IE3AC25M4001

### General data

Type of motor	3~
Type designation	FCMP
Frame size	250
Mounting	B35
Frame execution	M
Frame material	Cast iron
Insulation class	F/B
Terminal box location	top DE
Terminal box orientation	cable gland to the right side
Weight (kg)	442,00
Rotation Direction	right /left
Vibration level	A
Balancing method	half key
cooling type	IC411
Executed acc. to noise level	IEC 60034-1 IEC 60034-9

### Electrical data

Power 1 50Hz (kW)	55,00
Power 1 60Hz (kW)	55,00
Frequency (Hz)	50/60
Voltage 50Hz (V)	400/690
Voltage 60Hz (V)	460/795
Voltage/Frequency tolerance (not valid for range voltage)	range B
Connection	Δ/Y
Poles	4
Efficiency 100% 50Hz (%)	94,6
Efficiency 75% 50Hz (%)	94,6
Efficiency 50% 50Hz (%)	92,7
Efficiency 100% 60Hz (%)	95,4
Efficiency 75% 60Hz (%)	95,4
Efficiency 50% 60Hz (%)	93,5
Power factor	0,86
Starting current (Ia/In)	7,4
Starting torque (Ma/Mn)	2,2
Breakdown torque (Mk/Mn)	2,3
Current 50Hz (A)	97,58/56,57
Current 60Hz (A)	84,14/48,80
Eff.Cl.50Hz	IE3
Eff.Cl.60Hz	IE3
power loss 90:100 (%)	5,77
power loss 90:50 (%)	3,13
power loss 50:100 (%)	4,15
power loss 50:50 (%)	2,15
power loss 50:25 (%)	1,29
power loss 25:100 (%)	3,36
power loss 25:25 (%)	0,59

### additional operating points

Power operating point 2 (kW)	66,00
Voltage operating point 2 (V)	460/795
Frequency operating point 2 (Hz)	60
Efficiency operating point 2	94,5
Power factor operating point 2	0,86
Current operating point 2 (A)	101,93/58,98
Efficiency class operating point 2	IE2
Speed operating point 2 (1/min)	1782
Connection operating point 2	Δ/Y

### Motor characteristics

Color	RAL7030
Paint surface	shiny
Protection class	IP55
Cable gland size (cable connection)	2xM63x1,5
Cable gland size (option)	M20x1,5
Cable gland type	Standard
Shaft end (mm)	65 x 140
Shaft material	C45
Specification NDE	Plastic fan
Flange size	550

### Mechanical data

Torque (Nm)	353,70/294,80
Rotation speed (1/min)	1485/1782
Bearing DE	6314.ZZ.C3
Bearing NDE	6314.ZZ.C3
Mounting of bearing DE	loose bearing
Mounting of bearing NDE	fixed bearing
Bearing lifetime (h)	20000
allow. Radial load (X/2) (N)	6100
allow. Radial load (X0) (N)	6750
allow. Radial load (Xmax) (N)	5450
allow. Axial load B3,B5,B35,B14,B34 (N)	5500
allow. Axial load V1,V3,V19,V18 (N)	4420
Moment of inertia (kgm <sup>2</sup> )	0,69

### Influencing factors

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

### Additional options

Protection winding	PTC 150°C
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Technical changes and errors reserved.

AC Motoren GmbH  
Einsteinstr. 17  
D-64859 Eppertshausen

+49 6071 49 887 -0  
team@ac-motoren.de  
www.ac-motoren.com

Sparkasse Dieburg  
IBAN: DE87 5085 2651 0148 0115 21  
BIC: HELADEFIDIE

Postbank Frankfurt 05.09.2024  
IBAN: DE80 5001 0060 0750 8446 04  
BIC: PBNKDEFF

