

THREE-PHASE-ASYNCHRONOUS-MOTOR FCM 280 S 4 /PHE

IE3AC28S4035

General data

Type of motor	3~
Type designation	FCM
Frame size	280
Mounting	B5
Frame execution	S
Frame material	Grauguß
Insulationclass	F/B
Terminal box location	top DE
Terminal box orientation	cable gland to the right side
Weight (kg)	569
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)	75
Power 1 60Hz (kW)	75
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 (%)	95,0
Efficiency 75% 50Hz (%)	95,0
Efficiency 50% 50Hz (%)	93,1
Efficiency 100% 60Hz (%)	95,4
Efficiency 75% 60Hz (%)	95,4
Efficiency 50% 60Hz (%)	93,5
Power factor	0,88
Starting current factor	7,4
Starting torque factor	2,2
Tilting moment factor	2,3
Rated current 50Hz (A)	129,49/75,06
Rated current 60Hz (A)	112,13/65,04
Eff.Cl.50Hz	IE3

Electrical specification

Eff.Cl.60Hz	IE3
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Mechanical data

Torque (Nm)	482,00/401,78
Rotation speed (1/min)	1486/1783
Bearing DE	NU317.C3
Bearing NDE	6317.C3
Mounting of bearing DE	loose bearing
Mounting of bearing NDE	fixed bearing
Bearing lifetime	20000
allow. Radial load (X/2)	7787
allow. Radial load (X0)	8550
allow. Radial load (Xmax)	7025
allow. Axial load B3,B5,B35,B14,B34	6900
allow. Axial load V1,V3,V19,V18	5450
Moment of inertia	1,21

Motor properties

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	75 x 140
Shaft material	C45
Specification NDE	Plastic fan
Flange	550

Additional operating points

Voltage operating point 2	460/795
Power operating point 2 (kW)	90
Connection operating point 2	Δ/Y
Frequency operating point 2	60
Efficiency class operating point 2	IE2

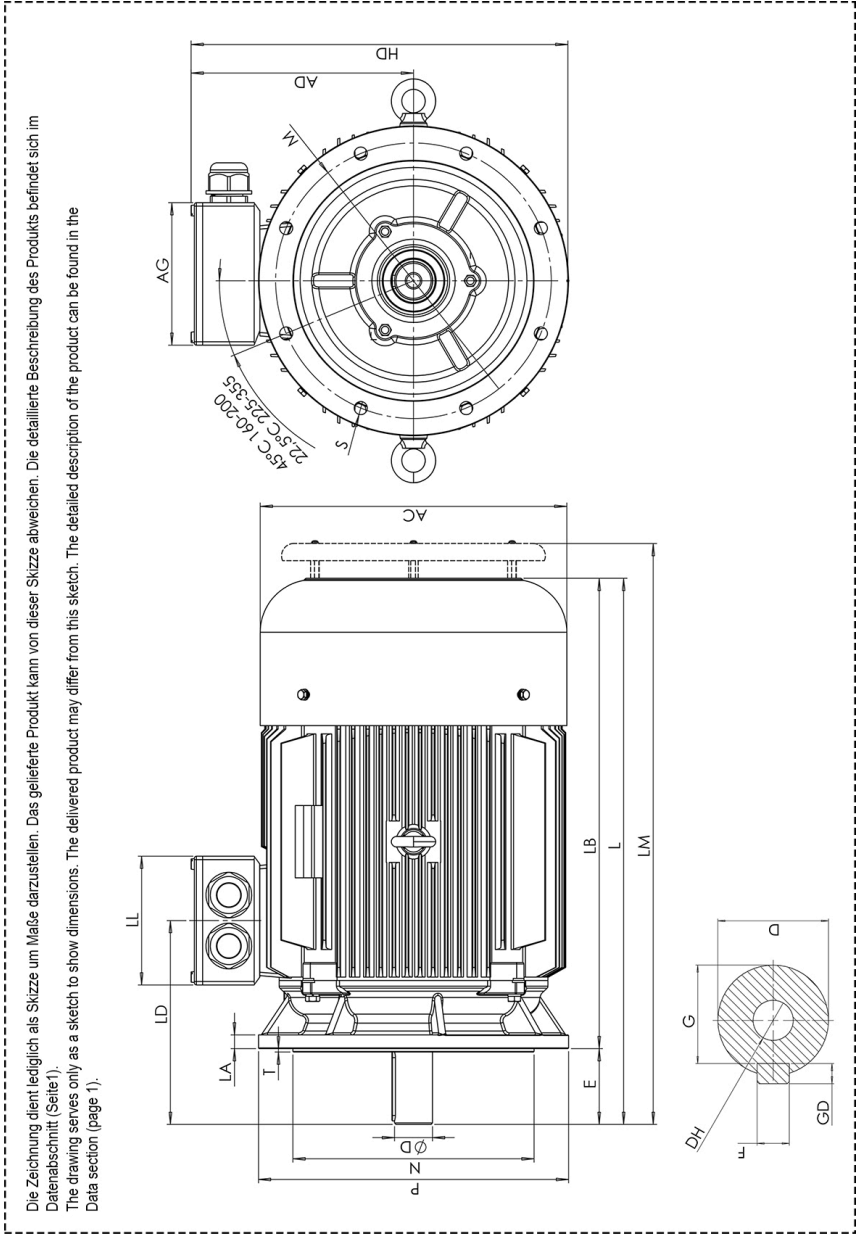
Additional option

Protection winding	PTC 150°C
Regreasing device	AS+BS

Dimension drawings

Three-Phase-Asynchronous- Motor FCM 280 S 4 /PHE

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AC	AD	AG	D	E	HD	L	LM	LA	LB	LD	LL	M	N	P	S	T	F	G	DH	EB	ED	GD
547	387	248	75	140	662	961	1026	22	821	355	218	500	450	550	8x18,5	5	20	67,5	M20x42	125	7,5	12