THREE-PHASE-ASYNCHRONOUS-MOTOR AWM 180 M 4 /PHE

IE3OM18M4001

General data

Type of motor	3~
Type designation	AWM
Frame size	180
Mounting	B3
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)	186
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)	18.5
Power 1 60Hz (kW)	18.5
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 (%)	92,6
Efficiency 75% 50Hz (%)	92,7
Efficiency 50% 50Hz (%)	89,8
Efficiency 100% 60Hz (%)	93,6
Power factor	0,82
Starting current factor	7,9
Starting torque factor	2,0
Tilting moment factor	2,3
Rated current 50Hz (A)	35,17/20,40
Rated current 60Hz (A)	30,25/17,55
Eff.Cl.50Hz	IE3
Eff.Cl.60Hz	IE3

Mechanical data

Torque (Nm)	119,80/99,83
Rotation speed (1/min)	1475/1770
Bearing DE	6311.ZZ.C3
Bearing NDE	6311.ZZ.C3
Mounting of bearing DE	fixed bearing
Mounting of bearing NDE	loose bearing
Bearing lifetime	20000
Moment of inertia	0,11704

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

Additional operating points

Voltage operating point 2	460/795
Power operating point 2 (kW)	22.2
Connection operating point 2	Δ/Y
Frequency operating point 2	60
Efficiency class operating point 2	IE2

Additional option

Protection winding	PTC 150°C
Condensate draining hole	✓
Condensate draining hole sealing screw	✓
Oil sealed	✓

Dimension drawings

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A	AA	AB	AC	AD	AG	B	B2	BB	C	D	E	H	HD	HA	K	L	LM	LA	LB	LD	LL	M	N	P
279	70	349	360	280	170	241	0	311	121	48	110	180	0	22	15	660	0	0	0	271	158	0	0	0

S	T	F	G	DH	EB	ED	GD
0	0	14	42,5	M16x36	0	0	9