Customer information packet

EMM18222-S-AP

M3AA 180MLA 2 B3 22KW

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ABB MOTORS AND GENERATORS

Motor data sheet

M3AA 180MLA 2

Definition	Data	Unit	Remarks
Product code	3GAA181410-**K		CA501 Catalog number EMM18222-S-AP
Voltage code	S		Can be used at 230VD/60Hz
Type/Frame	M3AA 180MLA 2		
Design	CENELEC		
Efficiency class	IE3		
Rated output P_N	22	kW	
Rated voltage U_N	460	V	± 5 % (IEC 60034-1)
Rated frequency f_N	60	Hz	± 2 % (IEC 60034-1)
Rated speed n_N	3560	r/min	
Rated current I_N	33	A	
Starting current I_S/I_N	9.2		
Nominal torque T_N	58.96	Nm	
Locked rotor torque T_l/T_N	4.08		
Maximum torque T_b/T_N	4.72		
Efficiency - full load 100%	91.75	%	Acc. to IEC 60034-2-1
Efficiency - 75%	91.75	%	
Efficiency - 50%	90.39	%	
Power factor - full load 100%	0.89		
Bearing DE/NDE	6310-2Z/C3 6209-2Z/C3		
Sound pressure level L_{PA} dB	76.7	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD^2 kgm^2	0.11	kg-m²	
Weight	176	kg	

All data subject to tolerances in accordance with IEC. Data subject to changes.

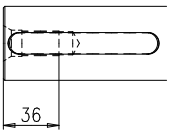
ABB MOTORS AND GENERATORS

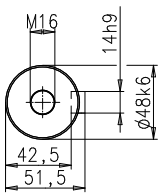
Motor data sheet

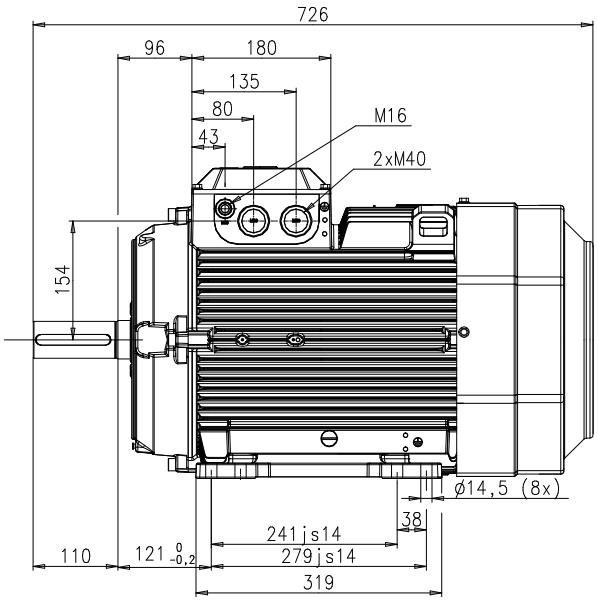
M3AA 180MLA 2

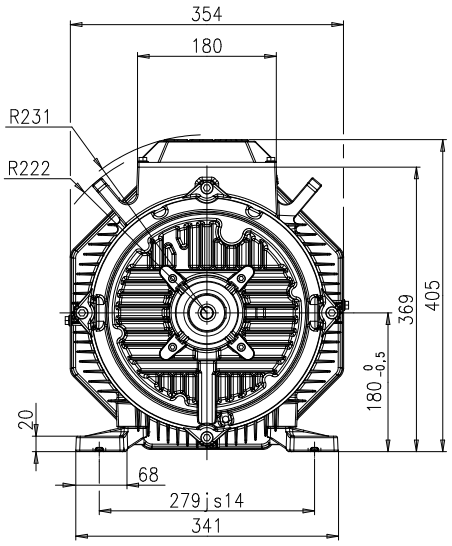
Definition	Data	Unit	Remarks
Product code	3GAA181410-**K		CA501 Catalog number EMM18222-S-AP
Voltage code	S		
Type/Frame	M3AA 180MLA 2		
Design	CENELEC		
Efficiency class	IE3		
Rated output P_N	22	kW	
Rated voltage U_N	400	V	± 5 % (IEC 60034-1)
Rated frequency f_N	50	Hz	± 2 % (IEC 60034-1)
Rated speed n_N	2956	r/min	
Rated current I_N	37.7	A	
Starting current I_S/I_N	7.8		
Nominal torque T_N	70.98	Nm	
Locked rotor torque T_l/T_N	3		
Maximum torque T_b/T_N	3.83		
Efficiency - full load 100%	92.65	%	Acc. to IEC 60034-2-1
Efficiency - 75%	93.12	%	
Efficiency - 50%	92.65	%	
Power factor - full load 100%	0.9		
Bearing DE/NDE	6310-2Z/C3 6209-2Z/C3		
Sound pressure level L_{PA} dB	72.9	dB(A)	+3dB(A)
Moment of inertia J = ¼ GD^2 kgm^2	0.11	kg-m²	
Weight	176	kg	

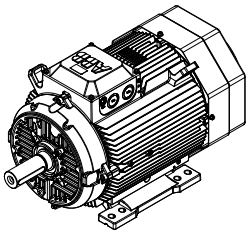
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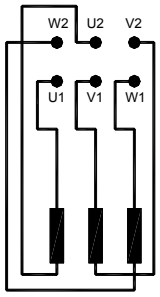




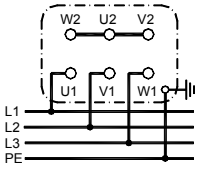


Motor Dimension Print	Motor Type: M3AA 180 IM 1001	Document No: 3GZV 102 027-A A1.5106
Description: **Three phase motor,**		
Unit: ABB AB, LV Motors, Sweden.	Issued by: B Abujheisha	Replaces:
Date: **2012-09-29**	Approved by: N Jonsson	Replaced by:
	Customer Reference:	

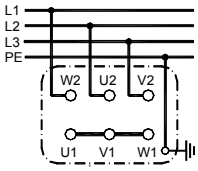
Diagram of connection
Anschluss-Schema
Schema de branchement

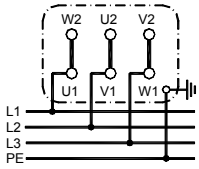


Connection of terminals
Anschluss des Motors
Branchement des bornes

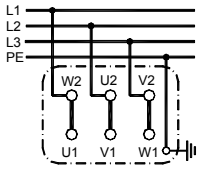


Y-connection
Y-Schaltung
Connection etoile





D-connection
D-Schaltung
Connection triangle





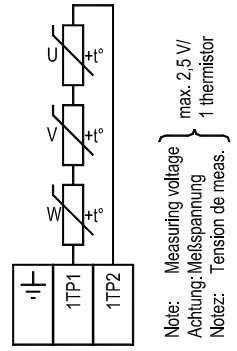
Direction of rotation with phase sequence shown in picture
Drehrichtung nach Schaltbild
Direction de rotation avec branchement ci-dessus



Direction of rotation with reversed phase sequence
Drehrichtung mit umgekehrter Phasenfolge
Direction de rotation avec sequence de phase reversée

Motor No Maschine Nr No du moteur	
ABB Oy, Motors	3GZF321100-1 E

Connection Diagram				Document No: 3GZF321100-1 E	
Description:	3-PHASE SQUIRREL-CAGE MOTOR				
Unit:	Motors	Issued by:	M Prusi	Replaces:	
Date:	21.09.2005	Approved by:	Jari Raittila	Replaced by:	
ABB Oy		Customer Reference:			



PTC-THERMISTORS
PTC-TEMPERATURFÜHLER
SONDES THERMIQUE PTC

Motor No
Maschine Nr
Moteur No

ABB Oy, Motors | 3GZF321200-1 D

Accessory Connection Diagram

Document No: 3GZF321200-1 D

Description: PTC-THERMISTORS

Unit:	Motors	Issued by:	K.Högkvist	Replaces:
Date:	30.11.2005	Approved by:	M.Prusi	Replaced by:

ABB Oy | Customer Reference: