Customer information packet

SSEWDM10224-B

M3MA 100LA 4P B3 2.2

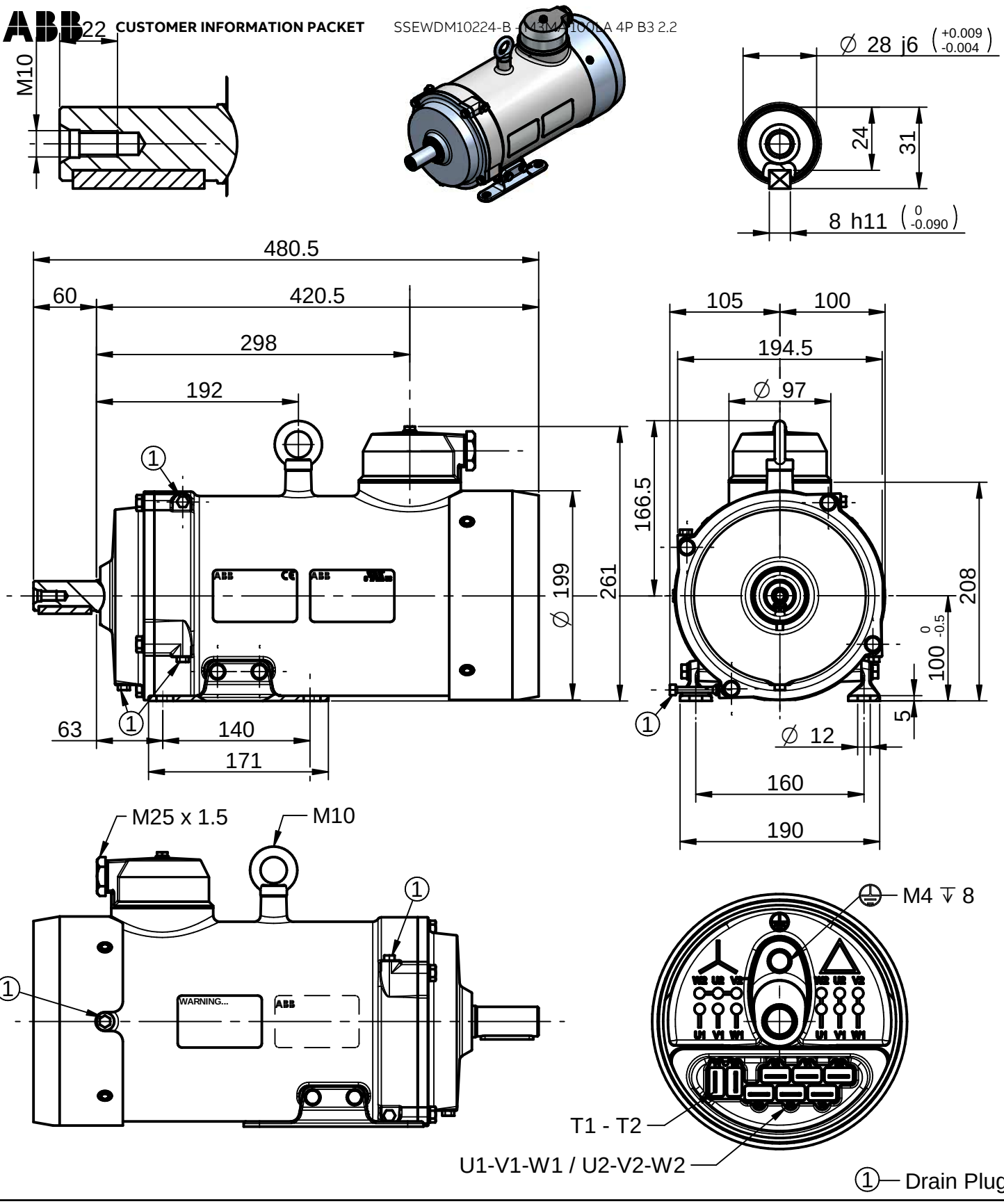
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ABB Motors and Generators	**Technical Data Sheet - DOL**			
	Project		Location	
Department/Author **D Cruz**	Customer name **ABB US Stock**		Customer ref.	Item name
Our ref.	Rev/Changed by **A**	Date of issue **9/9/2020**	Saving ident	Pages

No.	Definition	Data	Unit	Remarks	
1	Product	***TEFC, 3-phase, squirrel cage induction motor***			
2	Product code	***3GMA 102 510-ASB***		Calc. ref.	3GZF021010-590
3	Type/Frame	***M3MA 100LA 4***			
4	Mounting	***IM1001, B3(foot)***		data also applicable to B5 (-BSB) and	
5	Rated output P_N	***2.2***	kW	B14 (-CSB) flange mount	
6	Service factor	***1***			
7	Type of duty	***S1(IEC) 100%***			
8	Rated voltage U_N	***460***	VY	± 5 % (IEC 60034-1)	
9	Rated frequency f_N	***60***	Hz	± 2 % (IEC 60034-1)	
10	Rated speed n_N	***1769***	r/min	Usable at 230VD/60Hz	
11	Rated current I_N	***4.6***	A		
12	No-load current	***3.3***	A		
13	Starting current I_s/I_N	***10.3***		Not within IEC 60034-12 design	
14	Nominal torque T_N	***11.9***	Nm		
15	Locked rotor torque T_S/T_N	***3.4***			
16	Maximum torque T_{max}/T_N	***6.3***			
17	Minimum torque T_{min}/T_N	***3.2***			
18	Speed at minimum torque	***306***	r/min		
	Load characteristics (IEC 60034-2-1:2014)	Load %	Current A	Efficiency %	Power factor
19	PLL determined from residual loss	*100*	**4.6**	**89.5 / IE3**	**0.67**
20		*75*	**4.1**	**87.7**	**0.57**
21		*50*	**3.6**	**84.1**	**0.45**
22		*Start*	**47**		**0.48**
23	Maximum starting time from hot	***15***	s		
24	Maximum starting time from cold	***27***	s		
25	Insulation class / Temperature class	***F / B***			
26	Ambient temperature	***40***	°C		
27	Altitude	***1000***	m.a.s.l.		
28	Enclosure	***IP69***			
29	Cooling system	***IC411/TEFC***			
30	Bearing DE/NDE	***6206-2Z/C3 - 6205-2Z/C3***			
31	Type of Grease	***H1 Food Grade***			
32	Sound pressure level (LP dB(A) 1m)	***62***	dB(A)	at load	
33	Moment of inertia J = ¼ GD2	***0.01779***	kg-m2		
34	Balancing	***Half Key***			
35	Vibration class	***Grade A***			
36	Position of terminal box	***Top***			
37	Terminal box entries; no, dimens.	***M25 X 1.5***			
38	Number of power terminals	***6***			
39	Direction of rotation	***CW or CCW***			
40	Weight of rotor	***13***	kg		
41	Total weight of motor	***57***	kg		
42	Dimension drawing no.				
43					
44					
45					

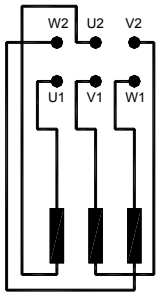
Remarks:

Data based on situation 5/21/2019
All data subject to tolerances in accordance with IEC
Guaranteed values on request

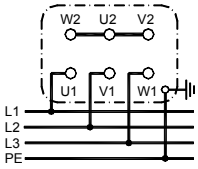


Motor Dimension Print	Motor Type: M3MA 100 Lx - IM B3	Document No: 3GZF500610-75 A
Description: IEC Food safe stainless steel motor 3GMA10x5x0-AxB		
Unit: FIMOT Date: 14/03/2019	Issued by: PGS Approved by: G.Secondo	Replaces: Replaced by:
ABB Oy	Customer Reference:	

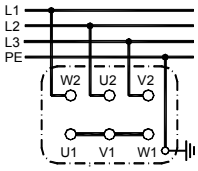
Diagram of connection
Anschluss-Schema
Schema de branchement

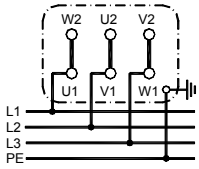


Connection of terminals
Anschluss des Motors
Branchement des bornes

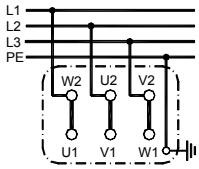


Y-connection
Y-Schaltung
Connection etoile





D-connection
D-Schaltung
Connection triangle





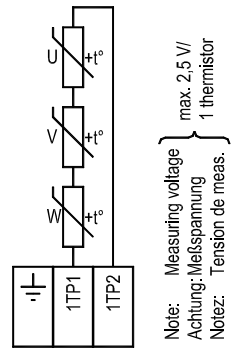
Direction of rotation with phase sequence shown in picture
Drehrichtung nach Schaltbild
Direction de rotation avec branchement ci-dessus



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:

EU Declaration of Conformity

The products: 3-phase electric motors of the series

M3MA with center heights 71, 80, 90, 100, 112 and 132 mm

The Manufacturer:

ABB Oy, Motors and Generators
P.O. Box 633
Strömbergin Puistotie 5A
FI-65101 Vaasa, Finland

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The products of the declaration described above are in conformity with the relevant Union harmonization legislation:

Directive 2014/35/EU

The motors are in conformity with provisions of the harmonized standards which thus comply with Principal Elements of the Safety Objectives for Electrical Equipment stated in Annex I of said directive.

Directive 2009/125/EC (ErP, November 20, 2009)

The motors that are marked as IE2, IE3 or IE4 are in conformity with the requirements set in the Commission Regulation (EU) No. 4/2014 of 5 January 2014 amending Regulation (EC) No. 640/2009.

Directive 2011/65/EU

Motors are in conformity with the Directive 2011/65/EU and the amending Annex II to Directive 2011/65/EU of the Delegated Directive (EU) 2015/863 of the European Parliament of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

The following applied standards are used in relation to which conformity is declared:

EN 60034-1:2010, EN 60034-2-1:2007, EN 60034-5:2001/A1:2007, EN 60034-6:1993, EN 60034-7:1993/A1:2001, EN 60034-8:2007/A1:2014, EN 60034-9:2005/A1:2007, EN 60034-12:2002/A1:2007, EN 60034-14:2004:/A1:2007, EN 60034-30:2009 and EN 50581:2012.

Notes:

When installing motors for converter supply applications, additional requirements must be respected regarding the motor as well as the installation, as described in installation manual delivered with converters.

The conformity of the end product according to the Directive 2006/42/EC has to be established by the commissioning party when the motor is fitted to the machinery.

Signed for and on behalf of: ABB Oy, Motors and Generators

Place and date of issue: Vaasa, Finland, 2019-01-29

Harri Mykkänen

Vice President

3GZF500930-892C