

BALDOR® • RELIANCE®

Customer information packet
ECR586004-PPN

M3BN 587MLA 4P 600HP

ABB Oy
Motors & Generators**PERFORMANCE DATA OF MOTOR**

Department/author MLA000/TISA	Date of issue 3.4.2020	Lang EN	Rev. date Rev. date	Our ref. 20200402-2844964-TISA1
Customer ref. MLA000/TISA	Saving Ident 20200402-2844964-TISA1		Rev./Changed by A	Pages 1/3

Driven Motor:

Motor type code	M3BN 587 MLA 4K			
Motor product code	3GBN982410-ADK			
Motor type	Squirrel cage Motor			
Mounting designation	IM 1001			
Protected by enclosure	TEFC			
Method of cooling	TEFC			
Insulation	Class F (Shock Resistant)			
Service factor	SF1.15 TEMP RISE CLASS F			
Standards	NEMA			
International efficiency classification (IEC 60034-30)	IE3			
Ambient temperature, max.	40 °C			
Altitude, max.	3280 ft.a.s.l.			
Duty type	Continuous			
Temp. rise	Class B			
Connection of stator winding	Delta			
Rated output	600 HP			
Voltage	460 V			
Frequency	60 Hz			
Speed	1789 r/min			
Current	679 Amps			
Locked rotor Amps	740 %			
Locked rotor torque	240 %			
Breakdown torque	260 %			
No load current	204 Amps			
Rated torque	1763 lb-ft			
Code H				
Load characteristics				
	Load %	Current Amps	Efficiency %	Power Factor
	100	679	96.2	0.86
	75	530	95.8	0.83
	50	383	95.3	0.77

Typical calculated values to NEMA. –

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Motors & Generators

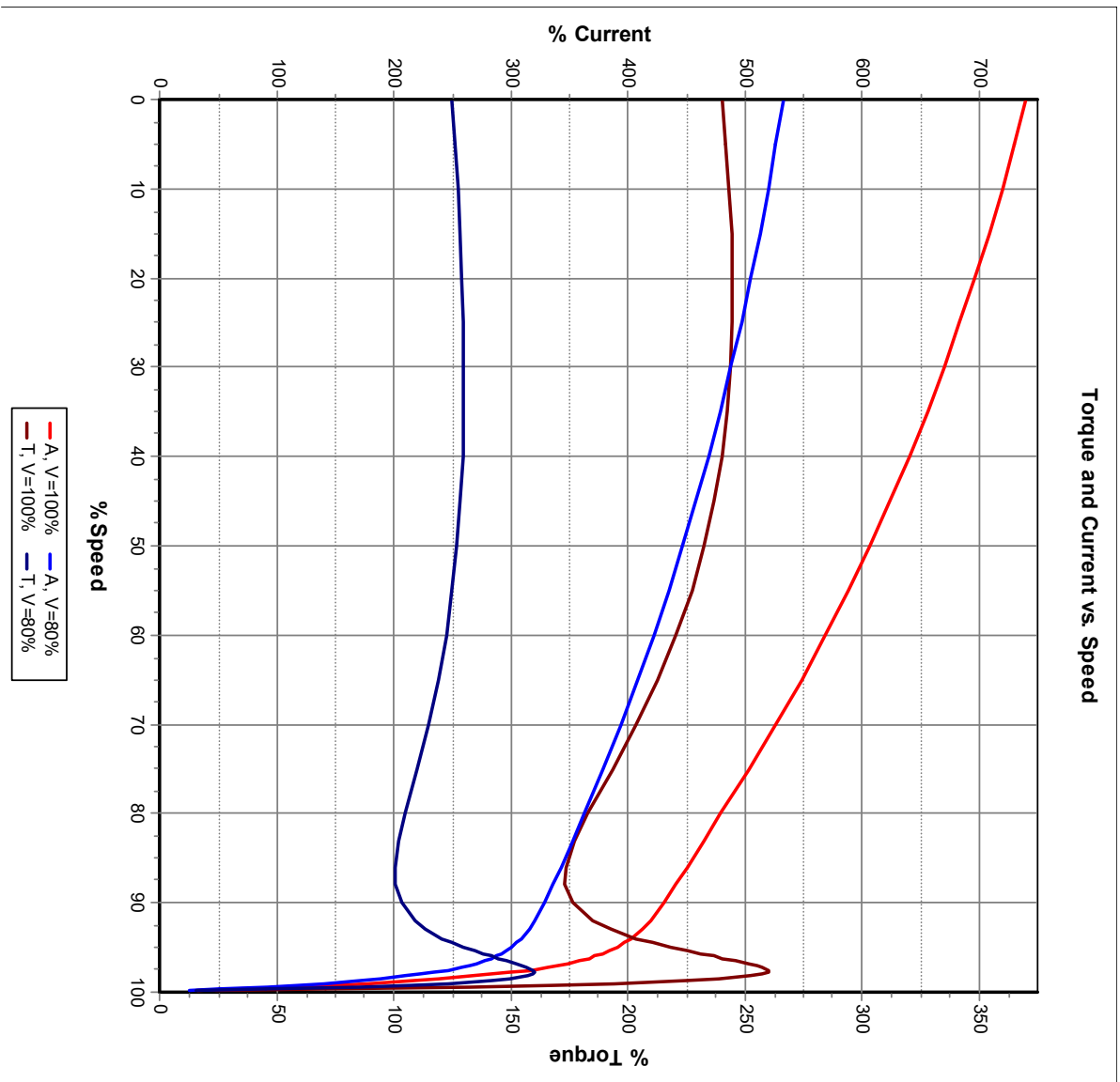
PERFORMANCE DATA OF MOTOR



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Motor type code: M3BN 587 MLA 4K			
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Voltage	460 V	Rated torque	1763 lb-ft
Frequency	60 Hz	Locked rotor Amps	740 %
Speed	1789 r/min	Locked rotor torque	240 %
Current	679 Amps	Breakdown torque	260 %

Torque and Current vs. Speed



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			Pages 3/3



PWM
Switch. freq. 3KHz
FWP 460VD 60Hz
VSD-duty: Temp. rise class F

Drive1

Rated power	150 HP
Rated voltage	118 V
Nominal frequency	15,4 Hz
Type of connection	Delta
Rated torque	1752 lb-ft
Speed	450 rpm
Current	675 Amps

Drive2

Rated power	600 HP
Rated voltage	460 V
Nominal frequency	60,4 Hz
Type of connection	Delta
Rated torque	1752 lb-ft
Speed	1800 rpm
Current	735 Amps

Constant torque 450 – 1800rpm


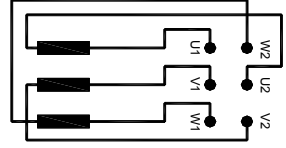
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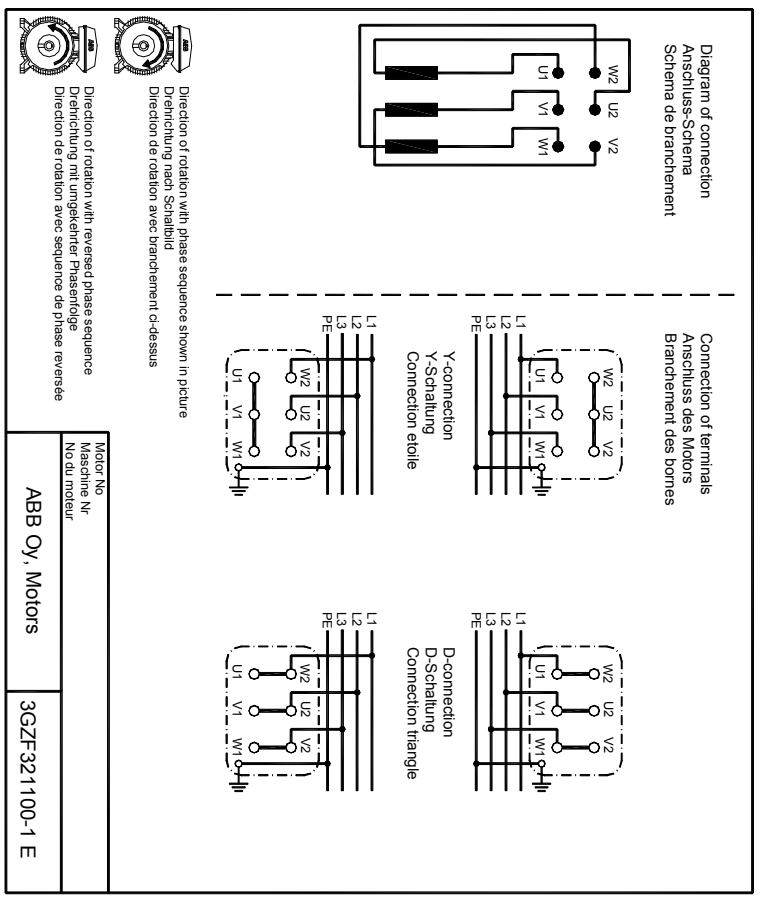
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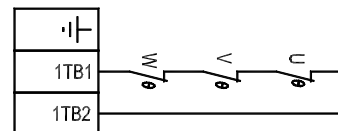
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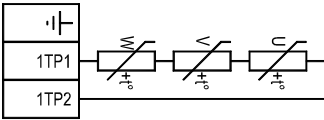
<p>Connection Diagram</p>		<p>Document No: 3GZF321100-1 E</p>	
		<p>Description: 3-PHASE SQUIRREL-CAGE MOTOR</p>	
<p>Unit: Motors</p>	<p>Issued by: M Prusi</p>	<p>Replaces:</p>	
<p>Date: 21.09.2005</p>	<p>Approved by: Jari Raitila</p>	<p>Replaced by:</p>	
<p>ABB Oy</p>		<p>Customer Reference:</p>	



<h2 style="margin: 0;">Accessory Connection Diagram</h2>				Document No: 3GZF321200-35 B
Description: BIMETAL DETECTORS				
Unit:	Electrical Machines, LV Motors	Issued by:	K. Höglkvist	Replaces:
Date:	16.01.2002	Approved by:	M. Prusi	Replaced by:
ABB Oy		Customer Reference:		

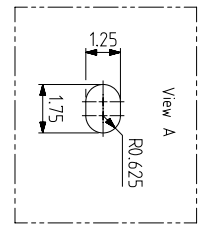
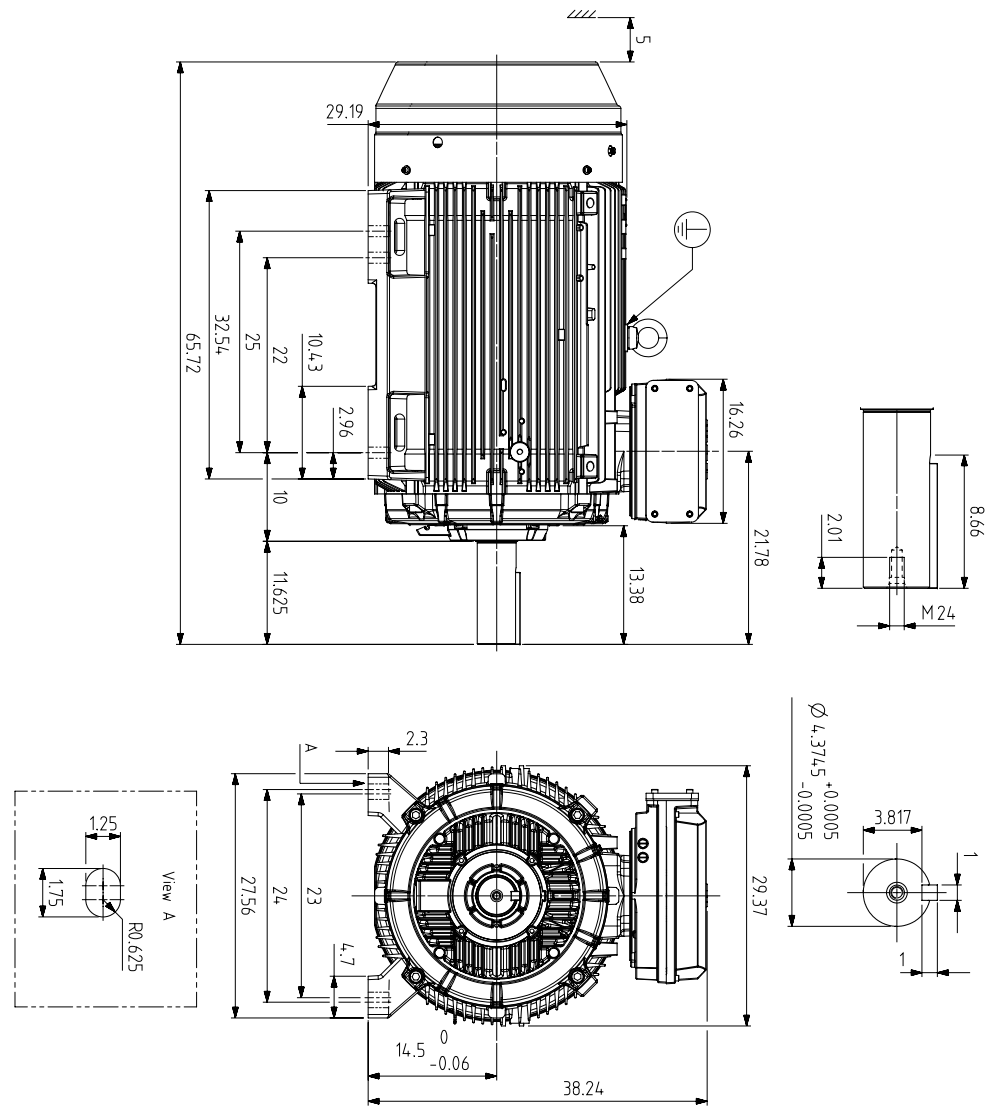
<p style="margin: 0;"> BIMETAL DETECTORS, TYPE NCC 1TB1...1TB2 BIMETALL-THERMOSCHALTER, TYP NCC SONDES BIMETALLIQUES, TYPE NCC </p>	
Motor No Maschine Nr Moteur No	ABB Oy, Electrical Machines LV Motors
3GZF321200-35 B	B

Accessory Connection Diagram		Document No: 3GZF321200-1 D
Description: PTC-THERMISTORS		
Unit: Motors	Issued by: K. Höglkvist	Replaces:
Date: 30.11.2005	Approved by: M. Prusi	Replaced by:
ABB Oy	Customer Reference:	

Motor No Maschine Nr Moteur No ABB Oy, Motors	 <p>PTC-THERMISTORS PTC-TEMPERATURFÜHLER SONDES THERMIQUE PTC</p> <p>Note: Measuring voltage } max. 2,5 V/ Achtung: Meßspannung } 1 thermistor Notez: Tension de meas. }</p>
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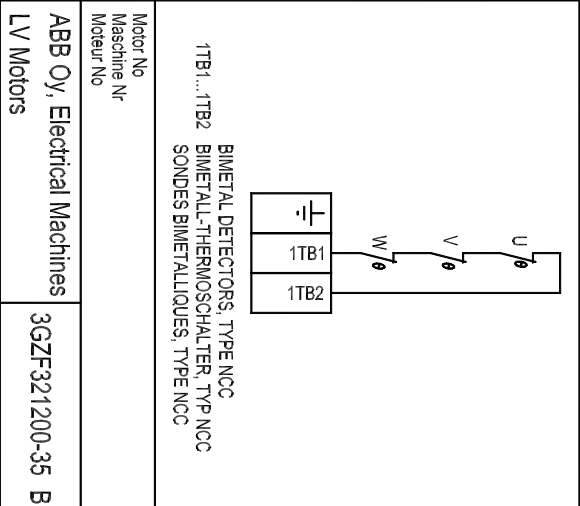
<p>Dimension Print</p>		<p>Motor Type: M3BN 587ML_4.. B3, B6, B7, B8, V5, V6</p>	<p>Document No: 3GZF500098-174 A 14 BN 587 A</p>
<p>Description: SQUIRREL CAGE MOTOR, CABLE ENTRY LHS, SPECIAL SHAFT, SLOTTED FEET HOLES. DIMENSIONS IN INCHES, MOTOR SIZES 586/587.</p>			
<p>Unit: ABB Oy, Motors and Generators</p>	<p>Date: 21.11.2019</p>	<p>Issued by: N.Palokangas</p>	<p>Approved by: S.Tikkanen</p>
<p>Customer Reference: ABB Oy</p>		<p>Replaces: ABB Oy</p>	<p>Replaced by: ABB Oy</p>

Additional Information:



<h2 style="margin: 0;">Connection Diagram</h2>		Document No: 3GZF321100-1 E
Description: 3-PHASE SQUIRREL-CAGE MOTOR		
Unit:	Motors	
Date:	21.09.2005	
Issued by:		M Pusi
Approved by:		Jari Raitila
Replaces:		
Replaced by:		
Customer Reference:		
<h1 style="margin: 0;">ABB Oy</h1>		

<p>Diagram of connection Anschluss-Schema Schéma de branchement</p>	<p>Connection of terminals Anschluss des Motors Branchement des bornes</p> <p>Y-connection Y-Schaltung Connection étoile</p>	<p>D-connection D-Schaltung Connection triangle</p>				
<p>Direction of rotation with phase sequence shown in picture Drehrichtung nach Schaltbild Direction de rotation avec branchement ci-dessus</p>	<p>Direction of rotation with reversed phase sequence Drehrichtung mit umgekehrter Phasenfolge Direction de rotation avec séquence de phase inversée</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Motor No Maschine Nr No du moteur</td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: center;">ABB Oy, Motors</td> <td style="text-align: center;">3GZF321100-1 E</td> </tr> </table>	Motor No Maschine Nr No du moteur		ABB Oy, Motors	3GZF321100-1 E
Motor No Maschine Nr No du moteur						
ABB Oy, Motors	3GZF321100-1 E					



Motor No
 Maschine Nr
 Moteur No

ABB Oy, Electrical Machines
 LV Motors

3GZF321200-35 B

Accessory Connection Diagram

Document No:
 3GZF321200-35 B

Description: BIMETAL DETECTORS



Unit: Electrical Machines, LV Motors
 Date: 16.01.2002

Issued by: K. Höglkvist
 Approved by: M. Piusi












Replaces:
 Replaced by:

ABB Oy

Customer Reference:



Accessory Connection Diagram		Document No: 3GZF321200-1 D
Description: PTC-THERMISTORS		
Unit: Motors	Issued by: K. Hogkvist	Replaces:
Date: 30.11.2005	Approved by: M. Piusi	Replaced by:
ABB Oy	Customer Reference:	ABB

Motor No Maschine Nr Moteur No ABB Oy, Motors	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; text-align: center;">  1TP1 1TP2 </td> <td style="width: 10%; text-align: center;">  </td> <td style="width: 10%; text-align: center;">  </td> <td style="width: 10%; text-align: center;">  </td> <td style="width: 5%; text-align: center;">  </td> </tr> </table> <p style="font-size: small; margin-top: 5px;"> PTC-THERMISTORS PTC-TEMPERATURDÜHLER SONDES THERMIQUE PTC </p> <p style="font-size: small; margin-top: 5px;"> Note: Measuring voltage } max. 2,5 V/ Achtung: Meßspannung } 1 thermistor Notez: Tension de meas. } </p>	 1TP1 1TP2				
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