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# Customer information packet

## ECR583504-PPN

M3BN 587MLA 4P B3 350HP

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

Department/Author MLA000/TISA	Date of Issue 11.10.2018	Lang. En	Rev. date	Our ref. 3GZFE021035-1239	Rev./Changed by A	Pages 1/3
Customer ref.	Saving Ident TMAA-ASUG9J-TISA29					

## Driven Motor:

Catalog Number	<b>ECR583504-PPN</b>		
Motor type code	M3BN 587 MLA 4K		
Motor product code	3GBN982410-ADKBA02		
Motor type	Squirrel cage Motor		
Mounting designation	IM 1001 (B3)		
Protected by enclosure	IP66		
Method of cooling	TEFC		
Insulation	Class F (Shock Resistant)		
Service factor	SF1.15 TEMP RISE CLASS B		
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	350 HP		
Voltage	460 V		
Frequency	60 Hz		
Speed	1792 r/min		
Current	396 Amps		
Locked rotor Amps	780 %	Code H	
Locked rotor torque	240 %		
Breakdown torque	300 %		
No load current	131 Amps		
Rated torque	1025 lb-ft		
Load characteristics	Load %	Current Amps	Efficiency %
	100	396	96,2
	75	311	96,4
	50	231	96,0
			Power Factor
			0,86
			0,82
			0,74

Typical calculated values to NEMA.  
-NEMA Nominal Efficiency 96.2%

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Strömbergin puistotie 5 A  
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**PERFORMANCE DATA OF MOTOR**

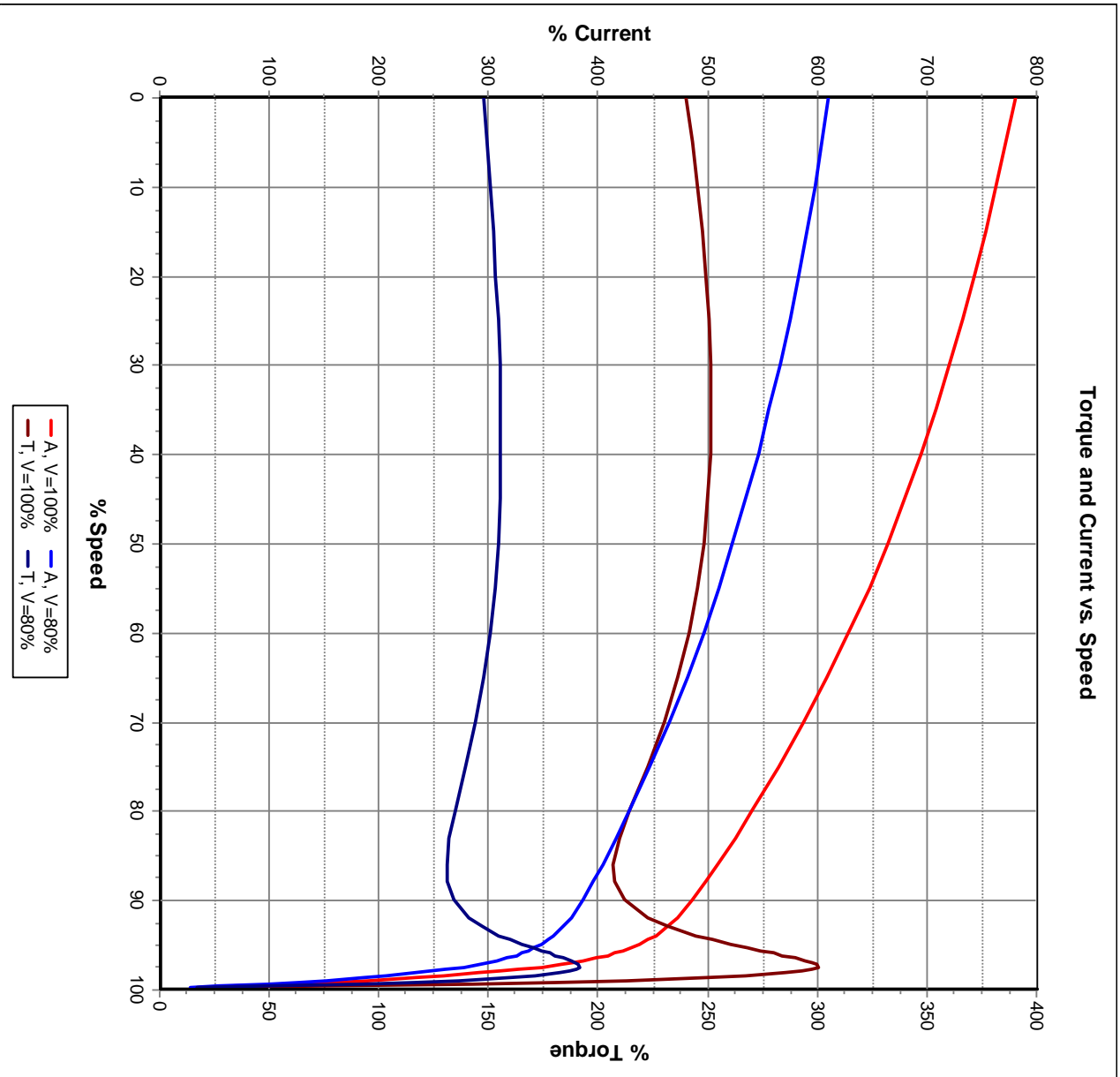


<b>ABB Oy</b> <b>Motors &amp; Generators</b>		Date of Issue		Lang.	Rev. date	Our ref.	Rev./Changed by	Pages
Department/Author MLA000/TISA		11.10.2018		En		3GZF021035-1239		2/3
Customer ref.		Saving Ident		TMAA-ASUG9J-TISA29		A		

Motor type code: M3BN 587 MLA 4K

Rated output	350 HP	Power Factor	0,86
Voltage	460 V	Rated torque	1025 lb-ft
Frequency	60 Hz	Locked rotor Amps	780 %
Speed	1792 r/min	Locked rotor torque	240 %
Current	396 Amps	Breakdown torque	300 %

**Torque and Current vs. Speed**




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				Rev./Changed by	A	Pages	3/3

PWM  
Switch. freq. 3KHz  
FWP 460VD 60Hz

<b>Drive1</b>	
Rated power	87 HP
Rated voltage	117 V
Nominal frequency	15,3 Hz
Type of connection	Delta
Rated torque	1017 lb-ft
Speed	450 rpm
Current	394 Amps

<b>Drive2</b>	
Rated power	350 HP
Rated voltage	460 V
Nominal frequency	60,4 Hz
Type of connection	Delta
Rated torque	1020 lb-ft
Speed	1800 rpm
Current	434 Amps

Constant torque 450 – 1800rpm

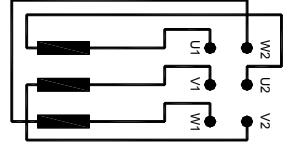
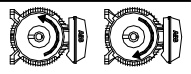
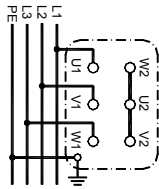
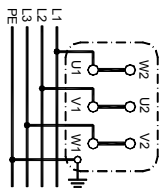
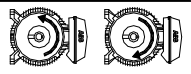

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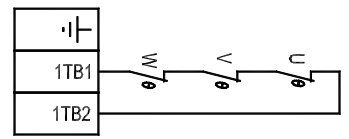
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<p><b>Diagram of connection</b> Anschluss-Schema Schema de branchement</p> 		<p><b>Direction of rotation with phase sequence shown in picture</b> Drehrichtung nach Schaltbild Direction de rotation avec branchement ci-dessus</p> 		<p><b>Diagram of terminals</b> Anschluss des Motors Branchement des bornes</p>  <p>Y-connection Y-Schaltung Connection étoile</p>		 <p>D-connection D-Schaltung Connection triangle</p>	
				<p><b>Direction of rotation with reversed phase sequence</b> Drehrichtung umgekehrt Phasefolge Direction de rotation avec séquence de phase renversé</p> 		<p>Motor No Machine Nr No du moteur</p> <p><b>ABB Oy, Motors</b></p>	
<p><b>Connection Diagram</b></p>							
<p>Description: <b>3-PHASE SQUIRREL-CAGE MOTOR</b></p>							
Unit:	Motors	Issued by:	M Prusi	Replaces:			
Date:	21.09.2005	Approved by:	Jari Raitila	Replaced by:			
Customer Reference:			<b>ABB Oy</b>				

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

<h2 style="margin: 0;">Accessory Connection Diagram</h2>		Document No: <b>3GZF321200-1 D</b>
Description: <b>PTC-THERMISTORS</b>		
Unit: <b>Motors</b> Date: <b>30.11.2005</b>	Issued by: <b>K. Höglkvist</b> Approved by: <b>M. Prusi</b>	Replaces: Replaced by:
<b>ABB Oy</b>	Customer Reference:	

Motor No Maschine Nr Moteur No <b>ABB Oy, Motors</b>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; border-right: 1px solid black; text-align: center;"> </td> <td style="width: 15%; text-align: center;"> <b>1TP1</b> </td> <td style="width: 15%; text-align: center;"> <b>1TP2</b> </td> <td style="width: 55%; text-align: center;"> </td> </tr> </table> <p style="font-size: small; margin-top: 5px;">                     PTC-THERMISTORS                      PTC-TEMPERATURFÜHLER                      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>		<b>1TP1</b>	<b>1TP2</b>	
	<b>1TP1</b>	<b>1TP2</b>			

<p><b>Dimension Print</b></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: Date:</p>	<p>ABB Oy, Motors and Generators 21.11.2019</p>	<p>Issued by: Approved by:</p>	<p>N.Palokangas S. Tikkanen</p>
<p>Customer Reference:</p>	<p>ABB Oy</p>		<p>Replaces: Replaced by:</p>
<p>Additional Information:</p>			