

BALDOR® • RELIANCE®

Customer information packet

ECR584506-PPN

M3BN 587MLB 6P 450HP

ABB Oy**PERFORMANCE DATA OF MOTOR**

Department/Author	Date of Issue	Lang.	Rev. date	Our ref.	Pages
MLA000/TISA	11.3.2018	EN		TMAA-ASUG9J-TISA21	1/3
Customer ref.			Saving Ident	Rev./Changed by	
			TMAA-ASUG9J-TISA21	A	

Driven Motor:

Catalog Number	ECR584506-PPN			
Motor type code	M3BN 587 MLB 6G			
Motor product code	3GBN983420-ADGBA02			
Motor type	Squirrel cage Motor			
Mounting designation	IM1001 (B3)			
Protected by enclosure	IP66			
Method of cooling	TEFC			
Insulation	Class F (Shock Resistant)			
Service factor	SF1.15 TEMP RISE CLASS F			
Standards	NEMA			
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	450 HP			
Voltage	460 V			
Frequency	60 Hz			
Speed	1193 r/min			
Current	530 Amps			
Locked rotor Amps	770 %	Code K		
Locked rotor torque	260 %			
Breakdown torque	280 %			
No load current	200 Amps			
Rated torque	1983 lb-ft			
Load characteristics				
	Load %	Current Amps	Efficiency %	Power Factor
	100	530	95.0	0.83
	75	421	94.9	0.79
	50	320	94.0	0.70

Typical calculated values to NEMA. -

Motors & Generators Visiting Address
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PERFORMANCE DATA OF MOTOR

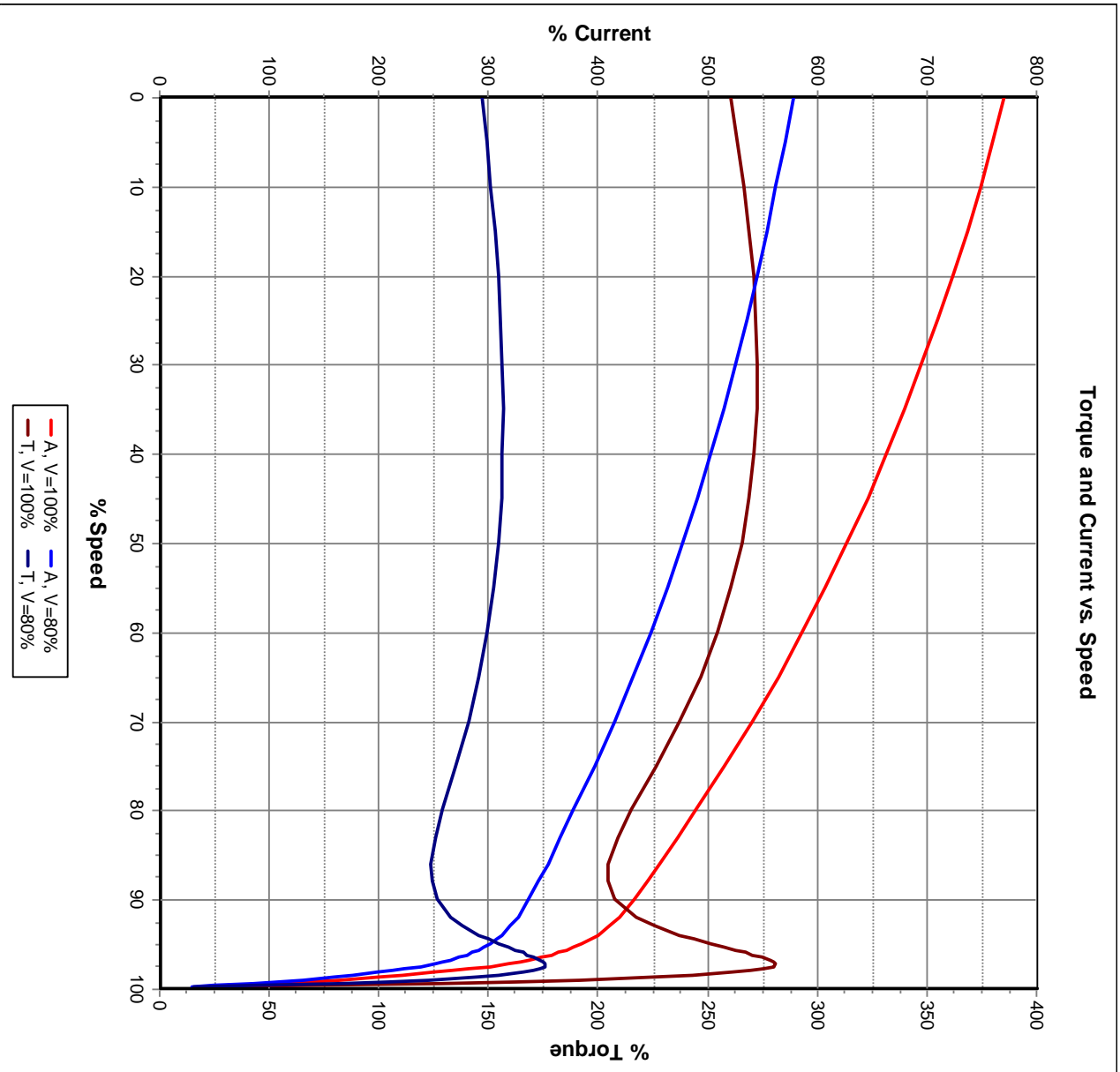


ABB Oy Motors & Generators		Date of Issue		Lang.	Rev. date	Our ref.	Pages
Department/Author MLA000/TISA		11.3.2018		En		TMAA-ASUG9J-TISA21	2/3
Customer ref.		Saving Ident		Rev./Changed by			
		TMAA-ASUG9J-TISA21		A			

Motor type code: M3BN 587 MLB 6G

Rated output	450 HP	Power Factor	0.83
Voltage	460 V	Rated torque	1983 lb-ft
Frequency	60 Hz	Locked rotor Amps	770 %
Speed	1193 r/min	Locked rotor torque	260 %
Current	530 Amps	Breakdown torque	280 %

Torque and Current vs. Speed




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Department/Author	MLA000/TISA	Date of Issue	11.3.2018	Lang.	En	Rev. date	TMAA-ASUG9J-TISA21
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PWM
 Switch . freq. 3KHz
 FWP 460VD 60Hz
 VSD-duty: Temp. rise class F

Drive1	
Rated power	112,5 HP
Rated voltage	118 V
Nominal frequency	15,4 Hz
Type of connection	Delta
Rated torque	1971 lb-ft
Speed	300 rpm
Current	533 Amps

Drive2	
Rated power	450 HP
Rated voltage	460 V
Nominal frequency	60,5 Hz
Type of connection	Delta
Rated torque	1971 lb-ft
Speed	1200 rpm
Current	585 Amps


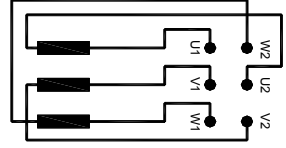
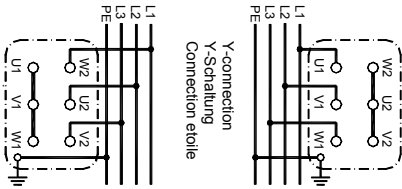
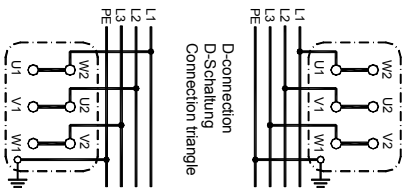


Constant torque 300 – 1200rpm

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<h2>Connection Diagram</h2>		Document No: 3GZF321100-1 E
Description: 3-PHASE SQUIRREL-CAGE MOTOR		
Unit: Motors Date: 21.09.2005	Issued by: M Prusi Approved by: Jari Raitila	Replaces: Replaced by:
Customer Reference: ABB Oy		
<div style="border: 1px solid black; padding: 10px;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Diagram of connection Anschluss-Schema Schema de branchement</p>  </div> <div style="width: 35%; border-top: 1px dashed black; border-bottom: 1px dashed black; padding: 5px 0;"> <p>Connection of terminals Anschluss des Motors Branchement des bornes</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>Y-connection Y-Schaltung Connection étoile</p>  </div> <div style="width: 45%;"> <p>D-connection D-Schaltung Connection triangle</p>  </div> </div> </div> <div style="width: 30%;"> <p>Direction of rotation with phase sequence shown in picture Drehrichtung nach Schaltbild Direction de rotation avec branchement ci-dessus</p>  </div> <div style="width: 30%;"> <p>Direction of rotation with reversed phase sequence Drehrichtung umgekehrter Phasenfolge Direction de rotation avec séquence de phase renversé</p>  </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <p>Motor No Maschine Nr No du moteur</p> <p>ABB Oy, Motors</p> </div> <div style="width: 45%;"> <p>3GZF321100-1 E</p> </div> </div> </div>		

<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	3GZF321200-35 B

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

Motor No Maschine Nr Moteur No	ABB Oy, Motors		
3GZF321200-1 D	<div style="text-align: center;"> </div> <p style="font-size: small; margin-top: 5px;"> PTC-THERMISTORS PTC-TEMPERATURFÜHLER SONDES THERMIQUE PTC </p> <table style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 60%; border-right: 1px solid black; padding: 2px;"> Note: Measuring voltage Achtung: Meßspannung Notez: Tension de meas. </td> <td style="padding: 2px;"> } max. 2,5 V/ 1 thermistor </td> </tr> </table>	Note: Measuring voltage Achtung: Meßspannung Notez: Tension de meas.	} max. 2,5 V/ 1 thermistor
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<p>Additional Information:</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>Dimension Print</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>Issued by: N.Palokangas</p>	<p>Replaces:</p>		<p>Replaced by:</p>	
<p>Date: 21.11.2019</p>	<p>Approved by: S.Tikkanen</p>	<p>Customer Reference:</p>		<p>ABB Oy</p>	

