

BALDOR® • RELIANCE™

Customer information packet

ECR584504-PPN

M3BN 587MLA 4P 450HP

ABB Oy**PERFORMANCE DATA OF MOTOR**

Department/Author MLA000/TISA	Date of Issue 11.10.2018	Lang. En	Rev. date	Our ref. 3GZFE021035-1236	Rev./Changed by A	Pages 1/3
Customer ref.	Saving Ident TMAA-ASUG9J-TISA31					

Driven Motor:

Catalog Number Motor type code Motor product code Motor type Mounting designation Protected by enclosure Method of cooling Insulation Service factor Standards International efficiency classification (IEC 60034-30) Ambient temperature, max. Altitude, max.	ECR584504-PPN M3BN 587 MLA 4K 3GBN982410-ADKBA04 Squirrel cage motor IM 1001 (B3) IP66 TEFC Class F (Shock Resistant) SF1.15 TEMP RISE CLASS B NEMA IE3 40 °C 3280 ft.a.s.l.
Duty type Temp. rise Connection of stator winding Rated output Voltage Frequency Speed Current	Continuous Class B Delta 450 HP 460 V 60 Hz 1791 r/min 519 Amps
Locked rotor Amps Locked rotor torque Breakdown torque No load current Rated torque	800 % 290 % 300 % 183 Amps 1321 lb-ft Code K
Load characteristics	Load % 100 75 50
	Current Amps 519 405 306
	Efficiency % 96.2 96.5 95.8
	Power Factor 0.84 0.81 0.72

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

Motors & Generators Visiting Address
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PERFORMANCE DATA OF MOTOR

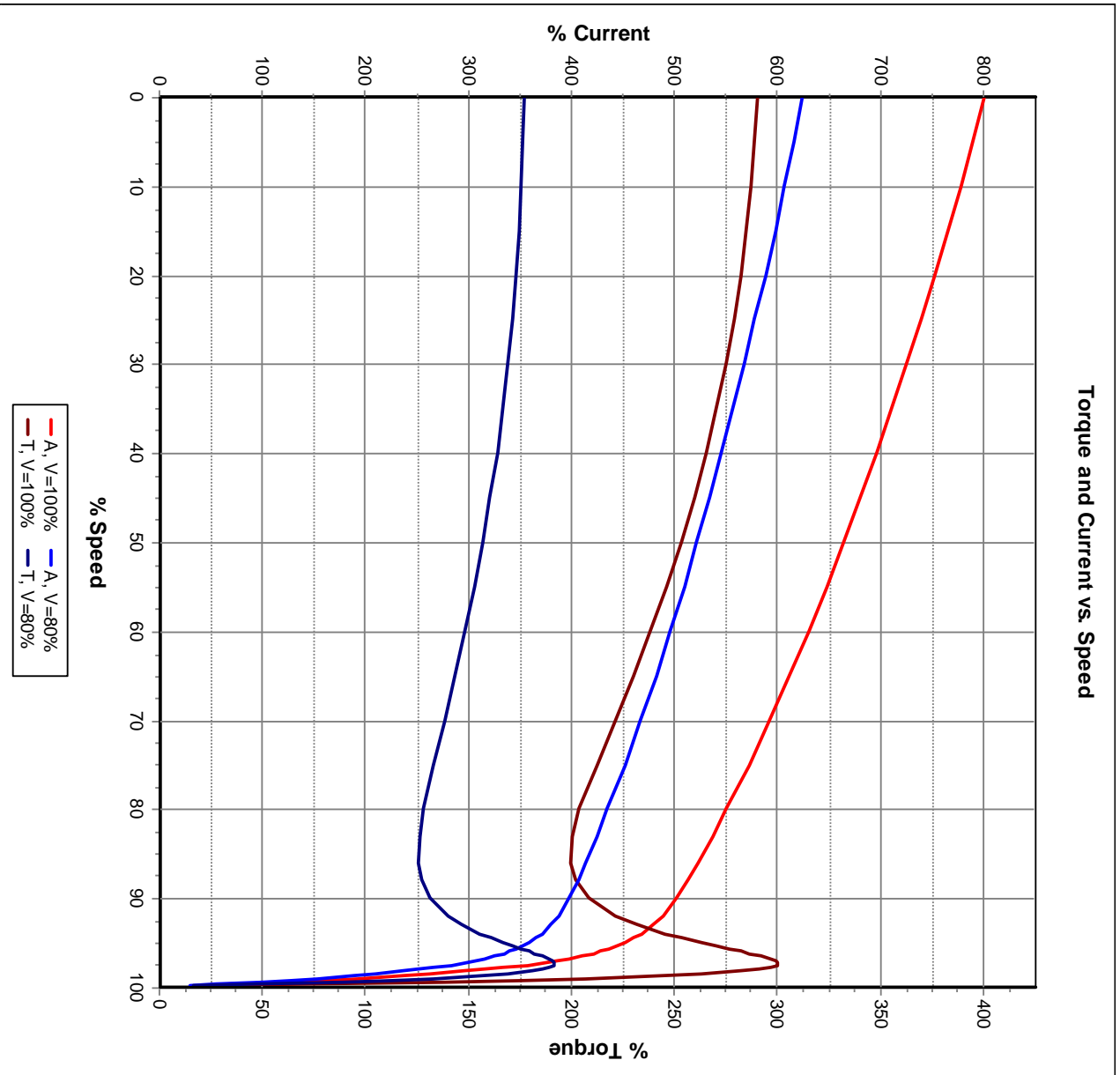


ABB Oy Motors & Generators		Date of Issue		Lang.	Rev. date	Our ref.	Pages
Department/Author MLA000/TISA		11.10.2018		En		3GZF021035-1236	2/3
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		TMAA-ASUG9J-TISA31		A			

Motor type code: M3BN 587 MLA 4K

Rated output	450 HP	Power Factor	0.84
Voltage	460 V	Rated torque	1321 lb-ft
Frequency	60 Hz	Locked rotor Amps	800 %
Speed	1791 r/min	Locked rotor torque	290 %
Current	519 Amps	Breakdown torque	300 %

Torque and Current vs. Speed




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

Drive1	
Rated power	113 HP
Rated voltage	117 V
Nominal frequency	15,3 Hz
Type of connection	Delta
Rated torque	1314 lb-ft
Speed	450 rpm
Current	519 Amps

Drive2	
Rated power	450 HP
Rated voltage	460 V
Nominal frequency	60,4 Hz
Type of connection	Delta
Rated torque	1314 lb-ft
Speed	1800 rpm
Current	565 Amps

Constant torque 450 – 1800rpm

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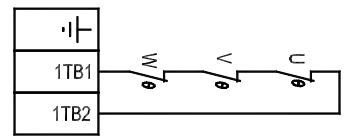
<h2 style="margin: 0;">Connection Diagram</h2>		Document No: 3GZF321100-1 E
Description: 3-PHASE SQUIRREL-CAGE MOTOR		
Unit: Motors Date: 21.09.2005	Issued by: M Prusi Approved by: Jari Raitila	Replaces:
Customer Reference: ABB Oy		

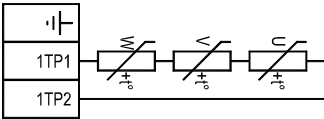
<p>Diagram of connection Anschluss-Schema Schema de branchement</p>	<p>Connection of terminals Anschluss des Motors Branchement des bornes</p> <p>Y-connection Y-Schaltung Connection étoile</p> <p>D-connection D-Schaltung Connection triangle</p>	<p>Direction of rotation with phase sequence shown in picture Drehrichtung nach Schaltbild Direction de rotation avec branchement ci-dessus</p> <p>Direction of rotation with reversed phase sequence Drehrichtung im umgekehrten Phasenfolge Direction de rotation avec séquence de phase renversé</p>
Motor No Maschine Nr No du moteur ABB Oy, Motors		3GZF321100-1 E

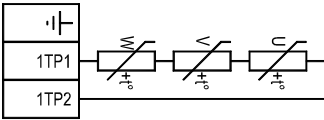
<h2 style="margin: 0;">Accessory Connection Diagram</h2>				Document No: 3GZF321200-35 B
Description: BIMETAL DETECTORS				
Unit: Electrical Machines, LV Motors	Issued by: K. Höglkvist	Replaces:		
Date: 16.01.2002	Approved by: M. Prusi	Replaced by:		
ABB Oy		Customer Reference:		

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



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 3GZF321200-1 D	 <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>Additional Information:</p>		
<p>Dimension Print</p>		<p>Motor Type: M3BN 587ML_4.. B3, B6, B7, B8, V5, V6</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>Date: 21.11.2019</p>	<p>Approved by: S.Tikkanen</p>	<p>Replaced by:</p>
<p>Customer Reference:</p>		<p>Document No: 3GZF500098-174 A 14 BN 587 A</p>
<p>ABB Oy</p>		<p>ABB</p>

