

BALDOR® • RELIANCE®

Customer information packet
ECR584504-PPN

M3BN 587MLA 4P 450HP

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

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

Driven Motor:

Catalog Number	ECR584504-PPN				
Motor type code	M3BN 587 MLA 4K				
Motor product code	3GBN982410-ADKBA04				
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	450 HP				
Voltage	460 V				
Frequency	60 Hz				
Speed	1791 r/min				
Current	519 Amps				
Locked rotor Amps	800 %				
Locked rotor torque	290 %				
Breakdown torque	300 %				
No load current	183 Amps				
Rated torque	1321 lb-ft				
Load characteristics	Load %	Current Amps	Efficiency %	Power Factor	
	100	519	96.2	0.84	
	75	405	96.5	0.81	
	50	306	95.8	0.72	

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

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PERFORMANCE DATA OF MOTOR

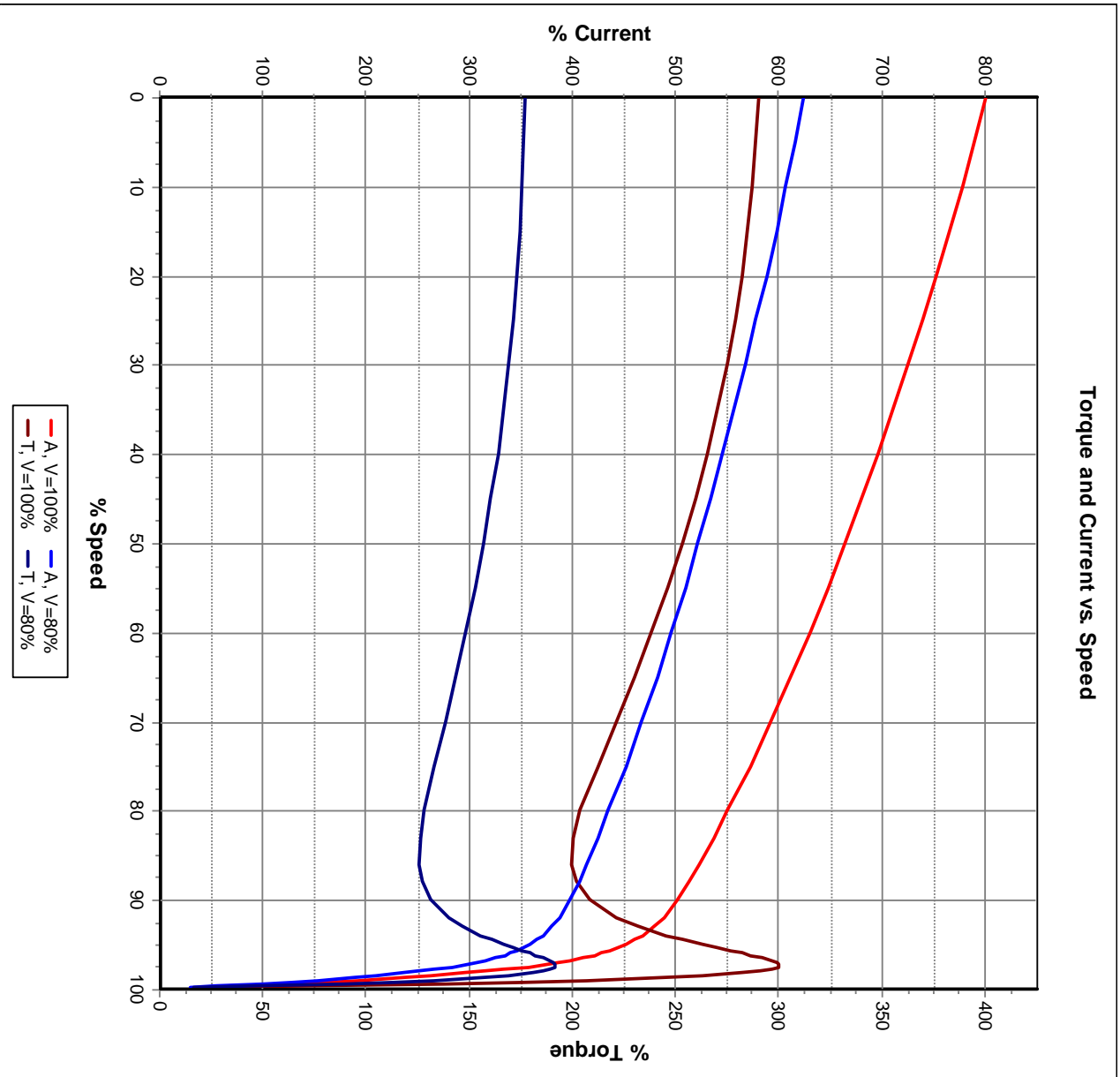


ABB Oy Motors & Generators		Date of Issue		Lang.	Rev. date	Our ref.	Pages
Department/Author MLA000/TISA		11.10.2018		En		3GZF021035-1236	2/3
Customer ref.		Saving Ident		Rev./Changed by			
		TMAA-ASUG9J-TISA31		A			

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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				Pages	3/3		

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: Replaced by:
Customer Reference: ABB Oy		

Diagram of connection
 Anschluss-Schema
 Schema de branchement

Connection of terminals
 Anschluss des Motors
 Branchement des bornes

Y-connection
 Y-Schaltung
 Connection étoile

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 im umgekehrten Phasenfolge
 Direction de rotation avec séquence de phase renversée

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;"> 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	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: center;"> </td> <td style="width: 20%; text-align: center;"> 1TP1 </td> <td style="width: 20%; text-align: center;"> 1TP2 </td> <td style="width: 40%; text-align: center;"> </td> </tr> </table>		1TP1	1TP2	
	1TP1	1TP2			
ABB Oy, Motors	3GZF321200-1 D				

PTC-THERMISTORS
 PTC-TEMPERATURFÜHLER
 SONDES THERMIQUE PTC

Note: Measuring voltage } max. 2,5 V/
 Achtung: Meßspannung } 1 thermistor
 Notez: Tension de meas. }

