

**BALDOR® • RELIANCE®**

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# Customer information packet

## ECR585006-PPN

M3BN 587MLB 6P 500HP

**ABB Oy****PERFORMANCE DATA OF MOTOR**

Department/Author MLA000/TISA	Date of Issue 11.3.2018	Lang. En	Rev. date	Our ref. TMAA-ASUG9J-TISA22	Rev./Changed by A	Pages 1/3
Customer ref.		Saving Ident TMAA-ASUG9J-TISA22				

**Driven Motor:**

Catalog Number	<b>ECR585006-PPN</b>		
Motor type code	M3BN 587 MLB 6K		
Motor product code	3GBN983420-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 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	500 HP		
Voltage	460 V		
Frequency	60 Hz		
Speed	1194 r/min		
Current	603 Amps		
Locked rotor Amps	720 %	Code H	
Locked rotor torque	220 %		
Breakdown torque	250 %		
No load current	229 Amps		
Rated torque	2200 lb-ft		
Load characteristics	Load %	Current Amps	Efficiency %
	100	603	95,8
	75	474	96,2
	50	359	95,9
			Power Factor
			0,81
			0,77
			0,68

Typical calculated values to NEMA. –

Motors & Generators Visiting Address  
Stroinbergin puistotie 5 A  
VAASA  
FINLAND

Postal Address  
P.O.Box 633  
FI-65101 VAASA  
FINLAND

**ABB Oy**

Telephone  
+358 10 222 000

Telefax  
+358 10 224 7372

**PERFORMANCE DATA OF MOTOR**

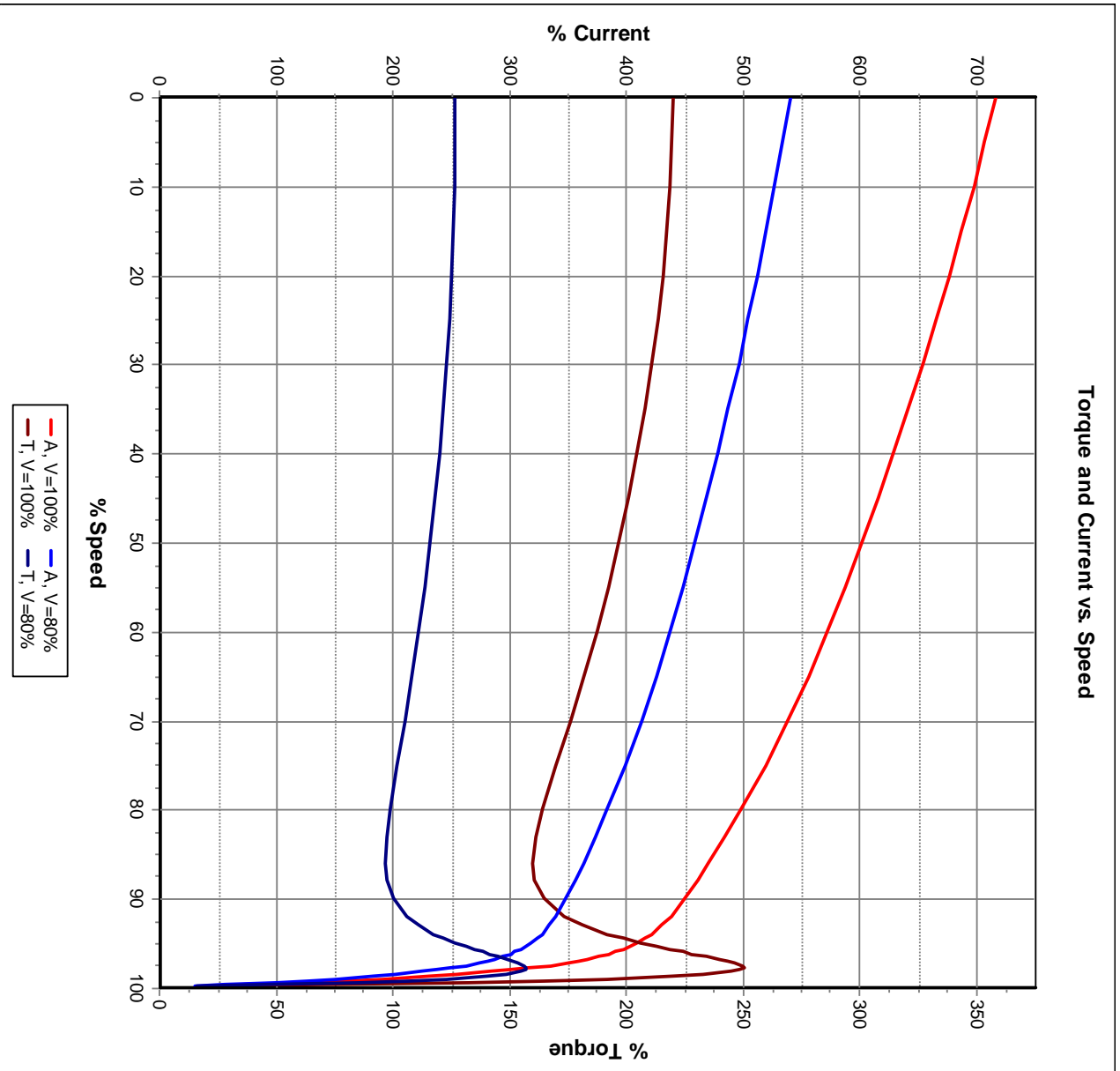


<b>ABB Oy</b> <b>Motors &amp; Generators</b>		Date of Issue		Lang.	Rev. date	Our ref.	Pages
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		TMAA-ASUG9J-TISA22		A			

Motor type code: M3BN 587 MLB 6K

Rated output	500 HP	Power Factor	0,81
Voltage	460 V	Rated torque	2200 lb-ft
Frequency	60 Hz	Locked rotor Amps	720 %
Speed	1194 r/min	Locked rotor torque	220 %
Current	603 Amps	Breakdown torque	250 %

**Torque and Current vs. Speed**




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VAASA  
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FINLAND

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

<b>Drive1</b>	
Rated power	125 HP
Rated voltage	117 V
Nominal frequency	15,3 Hz
Type of connection	Delta
Rated torque	2182 lb-ft
Speed	300 rpm
Current	603 Amps

<b>Drive2</b>	
Rated power	500 HP
Rated voltage	460 V
Nominal frequency	60,4 Hz
Type of connection	Delta
Rated torque	2188 lb-ft
Speed	1200 rpm
Current	652 Amps

Constant torque 300 – 1200rpm


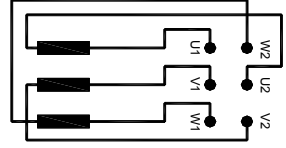
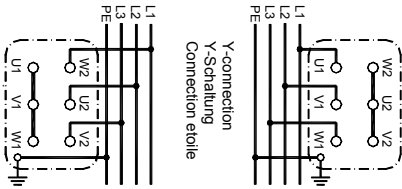
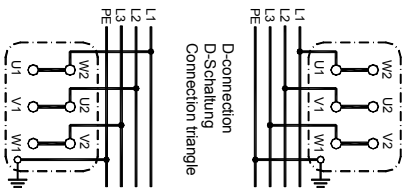

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 Stroinbergin puistotie 5 A  
 VAASA  
 FINLAND

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 FI-65101 VAASA  
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<p>Diagram of connection Anschluss-Schema Schema de branchement</p> 		<p>Direction of rotation with phase sequence shown in picture Drehrichtung nach Schaltbild Direction de rotation avec branchement ci-dessus</p> 	
<p>Diagram of connection Anschluss-Schema Schema de branchement</p> 		<p>Direction of rotation with reversed phase sequence Drehrichtung umgekehrt Phasefolge Direction de rotation avec sequence de phase renversee</p> 	
<p>Diagram of terminals Anschluss des Motors Branchement des bornes</p> 		<p>Motor No Machine Nr No du moteur</p> <p><b>ABB Oy, Motors</b></p>	
<p>Document No: <b>3GZF321100-1 E</b></p>		<p>3GZF321100-1 E</p>	
<p><b>Connection Diagram</b></p>			
<p>Description: <b>3-PHASE SQUIRREL-CAGE MOTOR</b></p>			
<p>Unit: <b>Motors</b></p>		<p>Issued by: <b>M Prusi</b></p>	
<p>Date: <b>21.09.2005</b></p>		<p>Approved by: <b>Jari Raitila</b></p>	
<p>Customer Reference:</p>		<p>Replaces:</p>	
<p><b>ABB Oy</b></p>		<p><b>ABB</b></p>	

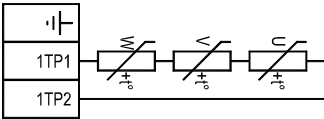
<h2 style="margin: 0;">Accessory Connection Diagram</h2>				Document No: <b>3GZF321200-35 B</b>
Description: <b>BIMETAL DETECTORS</b>				
Unit:	Electrical Machines, LV Motors	Issued by:	K. Höglkvist	Replaces:
Date:	16.01.2002	Approved by:	M. Prusi	Replaced by:
<b>ABB Oy</b>		Customer Reference:		

<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>

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

Motor No Maschine Nr Moteur No  <b>ABB Oy, Motors</b> <b>3GZF321200-1 D</b>	 <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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