



Customer information packet

ECR584504-PPN

M3BN 587MLA 4P 450HP

ABB Oy**PERFORMANCE DATA OF MOTOR**

Classifying code or document type

Motors & Generators

Department/Author	Date of Issue	Lang.	Rev. date	Our ref.	Pages
MLA000/TISA	11.10.2018	EN		3GZF021035-1236	
Customer ref.	Saving Ident		Rev./Changed by	TMAA-ASUG9J-TISA31 A	
					1/3

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%

Motors & Generators Visiting Address
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P.O.Box 633
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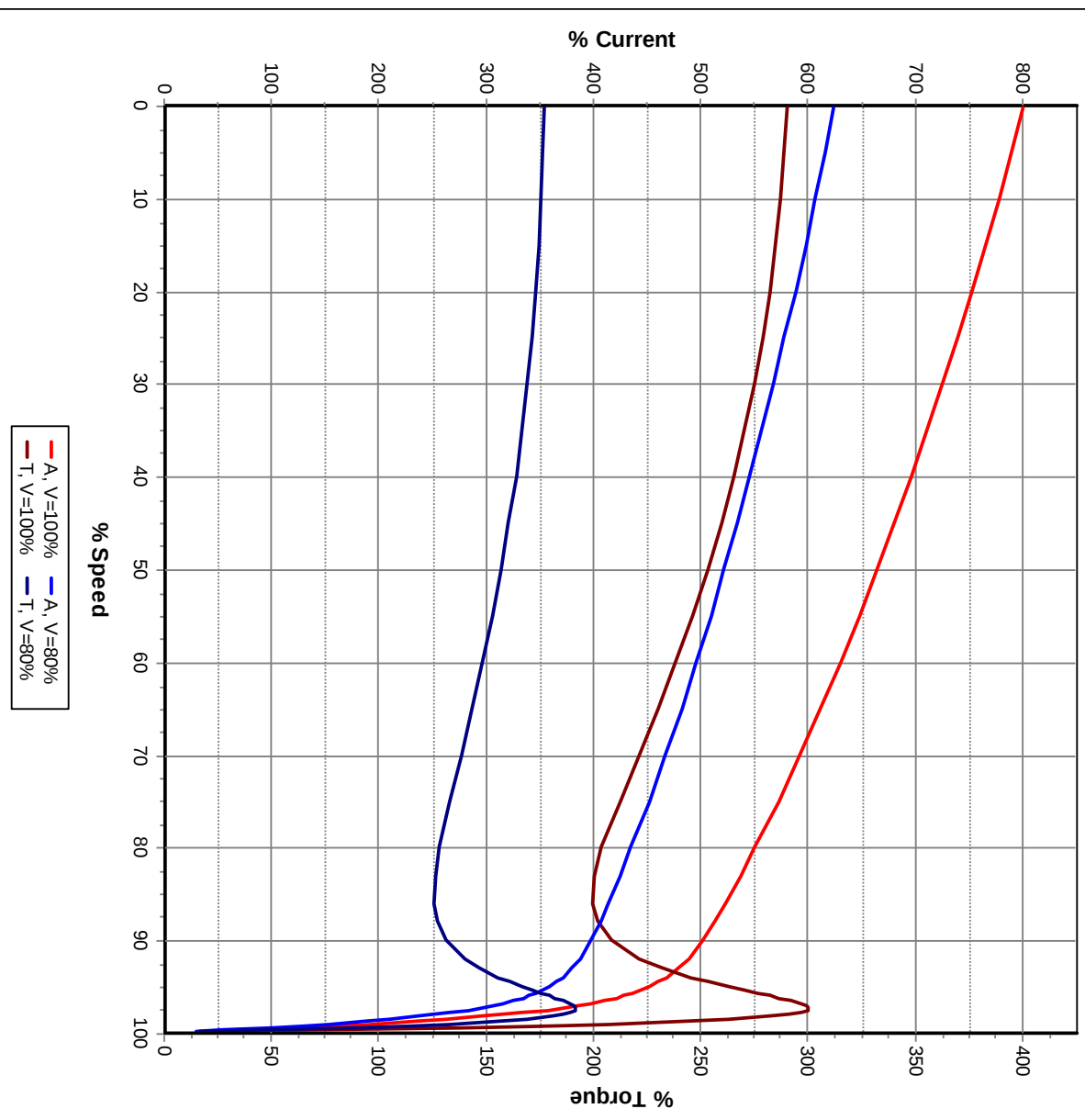
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MLA000/TISA	11.10.2018	EN		3GZF021035-1236		
Customer ref.			Saving Ident	TMAA-ASUG9J-TISA31	A	2/3

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
FMP 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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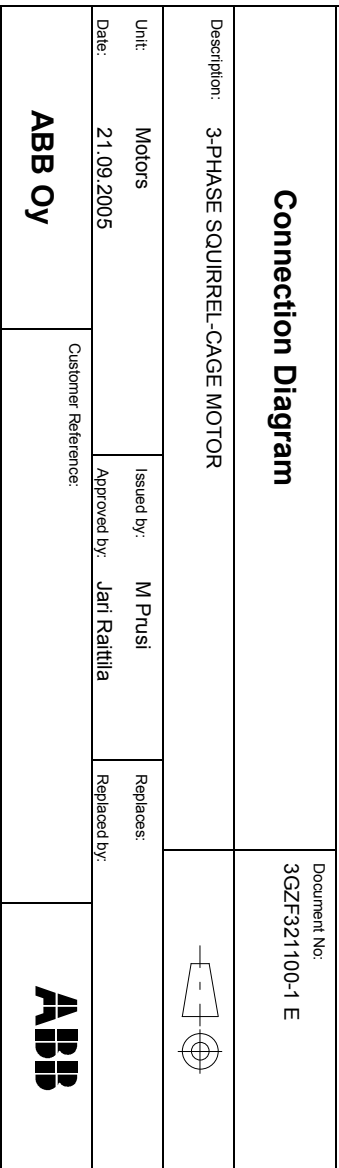
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Motor No Maschine Nr Moteur No ABB Oy, Motors3GZF321200-1 D			
PTC-THERMISTORS PTC-TEMPERATURFÜHLER SONDES THERMIQUE PTC 1TP1 1TP2 W $\frac{1}{T}$ V $\frac{1}{T}$ U $\frac{1}{T}$ Note: Measuring voltage Achtung: Meßspannung Notez: Tension de meas. max. 2,5 V/ 1 thermistor			
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:	
Customer Reference: ABB Oy		ABB	

