



Customer information packet

ECR585004-PPN

M3BN 587MLA 4P 500HP

ABB Oy
Motors & Generators

Classifying code or document type

PERFORMANCE DATA OF MOTOR

Department/Author	Date of Issue	Lang.	Rev. date	Our ref.	Pages
MLA000/TISA	11.10.2018	EN		3GZF021035-1238	
Customer ref.	Saving Ident		Rev./Changed by	TMAA-ASUG9J-TISA32 A	
					1/3

Driven Motor:

Catalog Number	ECR585004-PPN				
Motor type code	M3BN 587 MLA 4K				
Motor product code	3GBN982410-ADKBA05				
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	1791 r/min				
Current	576 Amps				
Locked rotor Amps	780 %				
Locked rotor torque	280 %				
Breakdown torque	310 %				
No load current	208 Amps				
Rated torque	1466 lb-ft				
Load characteristics	Load %	Current Amps	Efficiency %	Power Factor	
	100	576	96,2	0,84	
	75	453	96,5	0,80	
	50	340	96,0	0,71	
NEMA nominal efficiency	96,2 %				

Typical calculated values to NEMA. -

Motors & Generators Visiting Address
Strömbergin puistitie 5 A
VAASA
FINLAND

ABB Oy
Postal Address
P.O.Box 633
FI-65101 VAASA
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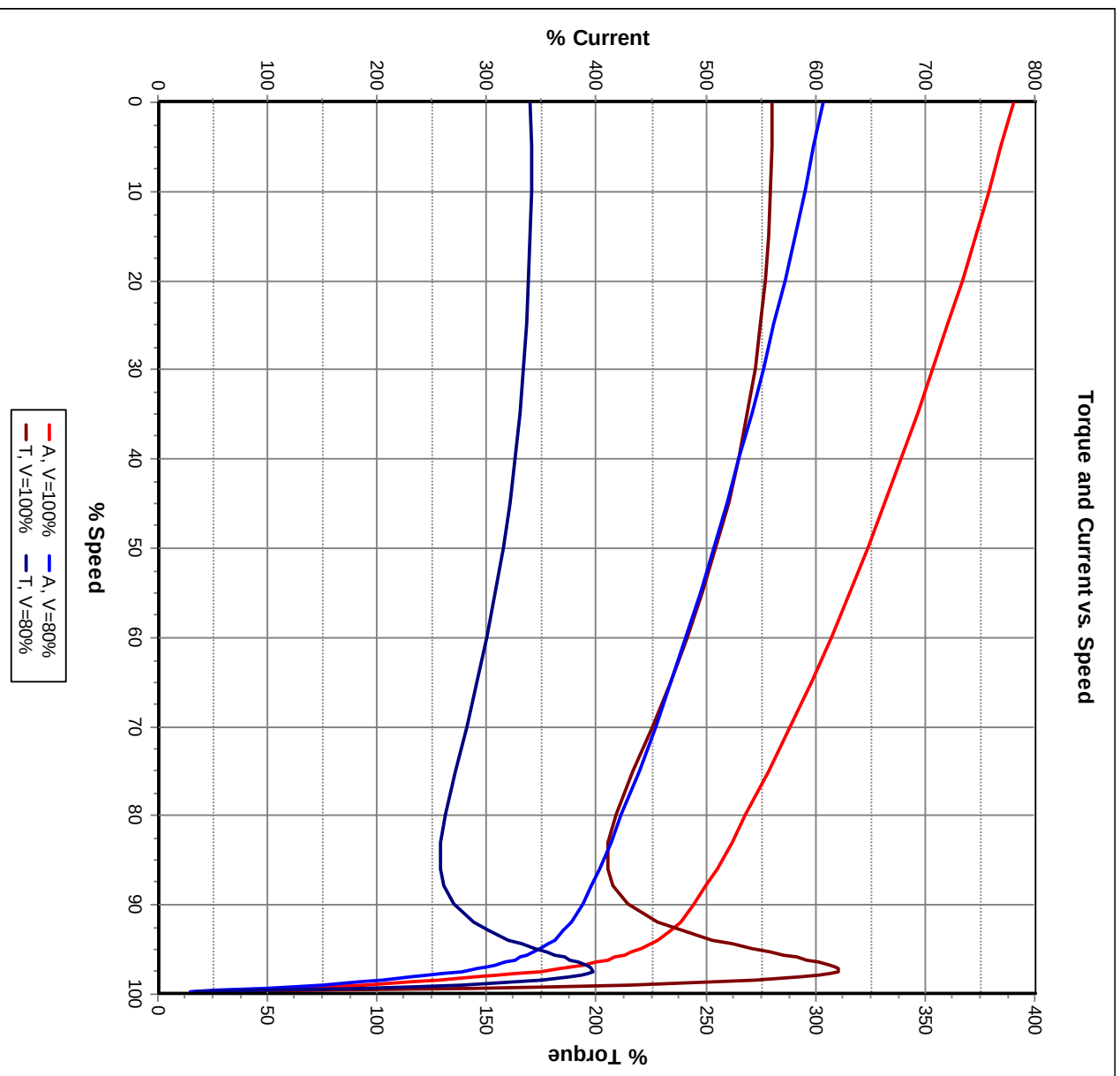
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Department/Author	Date of Issue	Lang.	Rev. date	Our ref.	Rev./Changed by	Pages
MLA000/TISA	11.10.2018	EN		3GZF021035-1238		
Customer ref.			Saving Ident	TMAA-ASUG9J-TISA32	A	2/3

Motor type code: M3BN 587 MLA 4K

Rated output	500 HP	Power Factor	0,84
Voltage	460 V	Rated torque	1466 lb-ft
Frequency	60 Hz	Locked rotor Amps	780 %
Speed	1791 r/min	Locked rotor torque	280 %
Current	576 Amps	Breakdown torque	310 %

Torque and Current vs. Speed



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Customer ref.	Saving Ident			TMAA-ASUG9J-TISA32	A	3/3

PWM

Switch. freq. 3KHz

FMP 460VD 60Hz

VSD-duty: Temp. rise class F

Drive1

Rated power	125 HP
Rated voltage	117 V
Nominal frequency	15,3 Hz
Type of connection	Delta
Rated torque	1455 lb-ft
Speed	450 rpm
Current	574 Amps

Drive2

Rated power	500 HP
Rated voltage	460 V
Nominal frequency	60,4 Hz
Type of connection	Delta
Rated torque	1459 lb-ft
Speed	1800 rpm
Current	627 Amps

Constant torque 450 – 1800rpm

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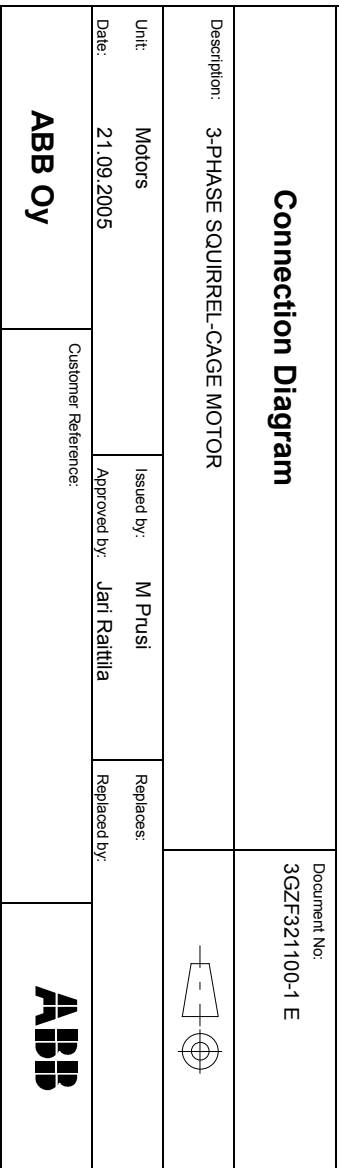
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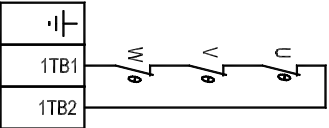
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Motor No Machine Nr Moteur No ABB Oy, Electrical Machines LV Motors BIMETAL DETECTORS, TYPE NCC 1TB1...1TB2 BIMETALL-THERMOSCHALTER, TYP NCC SONDES BIMETALLIQUES, TYPE NCC 			Document No: 3GZF321200-35 B 
Description: BIMETAL DETECTORS			
Unit: Date:	Electrical Machines, LV Motors 16.01.2002	Issued by: Approved by:	K. Höglkvist M. Prusi
Replaces: Replaced by:			
ABB Oy		Customer Reference:	
			

