


BALDOR® • RELIANCE

Product Information Packet

ECR586004-PPN

M3BN 587MLA 4P 600HP

Specs			
Frame:	586/7		
Motor Standards:	NEMA		
Starting Method:	Full Voltage		

ABB Oy Motors & Generators		Classifying code or document type PERFORMANCE DATA OF MOTOR			
Department/Author MLA000/TISA	Date of issue 11.10.2018	Lang. EN	Rev. date 3GZF021035-1238	Our ref. 3GZF021035-1238	Pages 1/3
Customer ref.			Saving Ident TMAA-ASUG9J-TISA32	Rev./Changed by A	

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 %
	100
	75
	50
	Current Amps
	576
	453
	340
	Efficiency %
	96,2
	96,5
	96,0
	Power Factor
	0,84
	0,80
	0,71
NEMA nominal efficiency	96,2 %

Typical calculated values to NEMA. -

Motors & Generators Visiting Address
Strömbergin puistitie 5 A
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ABB Oy

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Classifying code or document type
PERFORMANCE DATA OF MOTOR

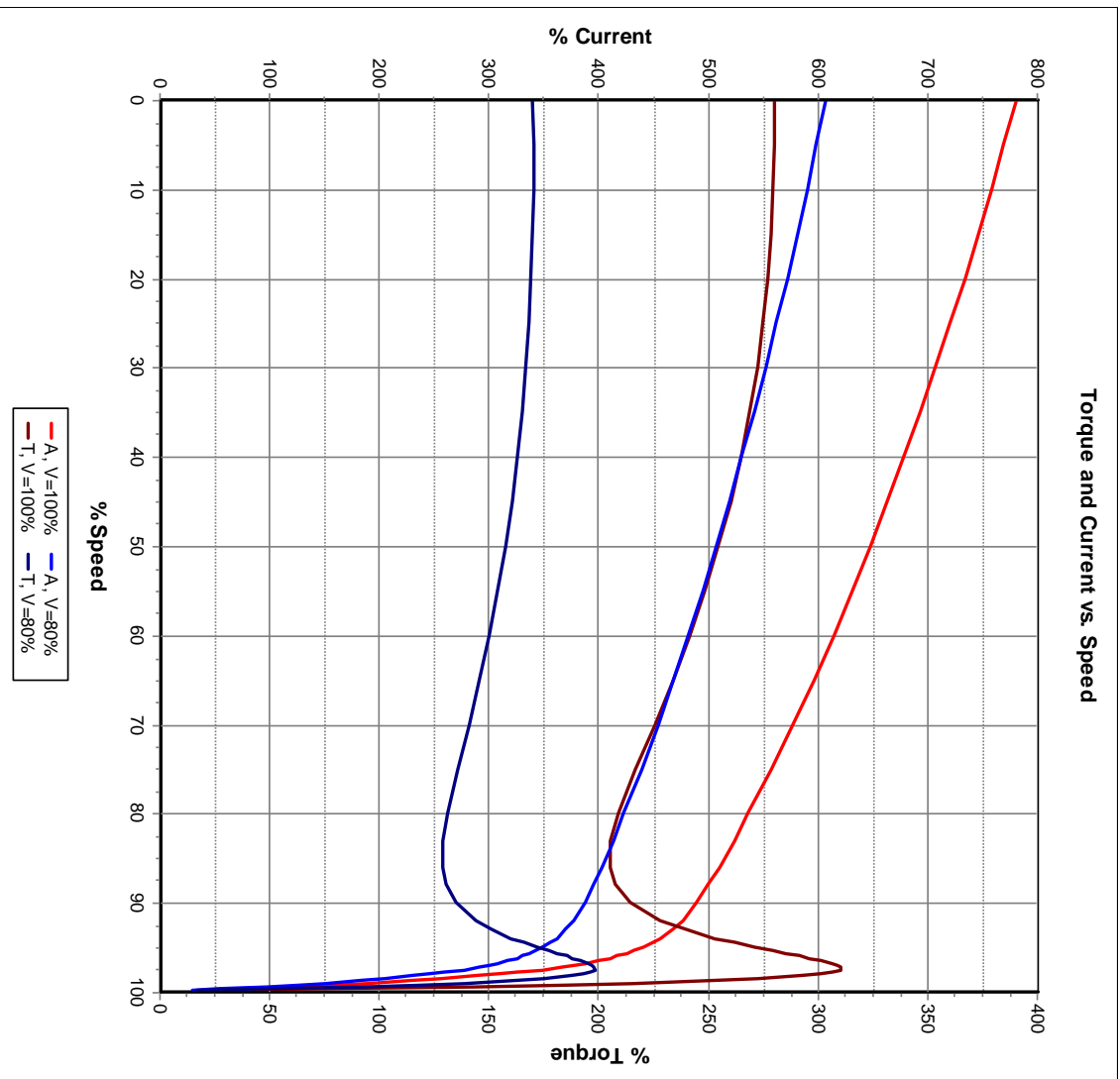


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Motor type code: M3BN 587 MLA 4K			
Rated output	500 HP	Power Factor	0,84
Voltage	460 V	Rated torque	1466 lb-ft
Frequency	60 Hz	Locked rotor Amps	780 %
Speed	1791 r/min	Locked rotor torque	280 %
Current	576 Amps	Breakdown torque	310 %

Torque and Current vs. Speed




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PWM
Switch. freq. 3KHz
FWP 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

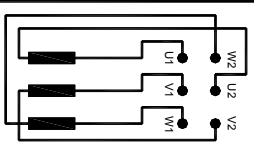
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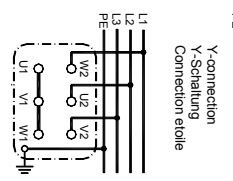
<h2>Connection Diagram</h2>		Document No: 3GZF321100-1 E
Description: 3-PHASE SQUIRREL-CAGE MOTOR		
Unit: Motors	Issued by: M Prusi No du moteur	
Date: 21.09.2005	Approved by: Jari Raittila	Replaces:
Customer Reference:		
ABB Oy		ABB

Diagram of connection
Anschluss-Schema
Schema de branchement

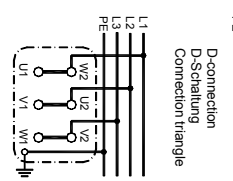


Connection of terminals
Anschluss des Motors
Branchement des bornes


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 mit umgekehrter Phasenfolge
Direction de rotation avec séquence de phase inversée




Motor No Machine Nr No du moteur	ABB Oy, Motors
	3GZF321100-1 E

Accessory Connection Diagram		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:	
Customer Reference: ABB Oy		ABB	

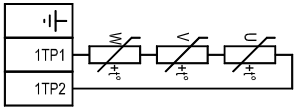
<p>Motor No Maschine Nr Motor No</p> <p>ABB Oy, Electrical Machines</p> <p>LV Motors</p>	<p>3GZF321200-35 B</p>
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BIMETAL DETECTORS, TYPE NCC
 1TB1...1TB2 BIMETALL-THERMOSCHALTER, TYP NCC
 SONDES BIMETALLIQUES, TYPE NCC

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:	

<p>Motor No Maschine Nr Moteur No ABB Oy, Motors</p>	<p>3GZF321200-1 D</p>
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PTC-THERMISTORS
PTC-TEMPERATURFÜHLER
SONDES THERMIQUE PTC



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

