ABB BALDOR RELIANCE

Customer information packet

ECR583504-PPN

M3BN 587MLA 4P B3 350HP

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9/7/2026 10:29:25 AM

Department/Author	Date of issue	Lang.	Rev. date	Our ref.
MLA000/TISA	11.10.2018	En		3GZF021035-1239

Customer ref.	Saving Ident	Rev./Changed by	Pages
	TMAA-ASUG9J-TISA29	A	1/3

Driven Motor:

Catalog Number		**ECR583504-PPN**		
Motor type code		M3BN 587 MLA 4K		
Motor product code		3GBN982410-ADKBA02		
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		350 HP		
Voltage		460 V		
Frequency		60 Hz		
Speed		1792 r/min		
Current		396 Amps		
Locked rotor Amps		780 %	Code H	
Locked rotor torque		240 %		
Breakdown torque		300 %		
No load current		131 Amps		
Rated torque		1025 lb-ft		
Load characteristics	Load %	Current Amps	Efficiency %	Power Factor
	100	396	96,2	0,86
	75	311	96,4	0,82
	50	231	96,0	0,74

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

ABB Oy

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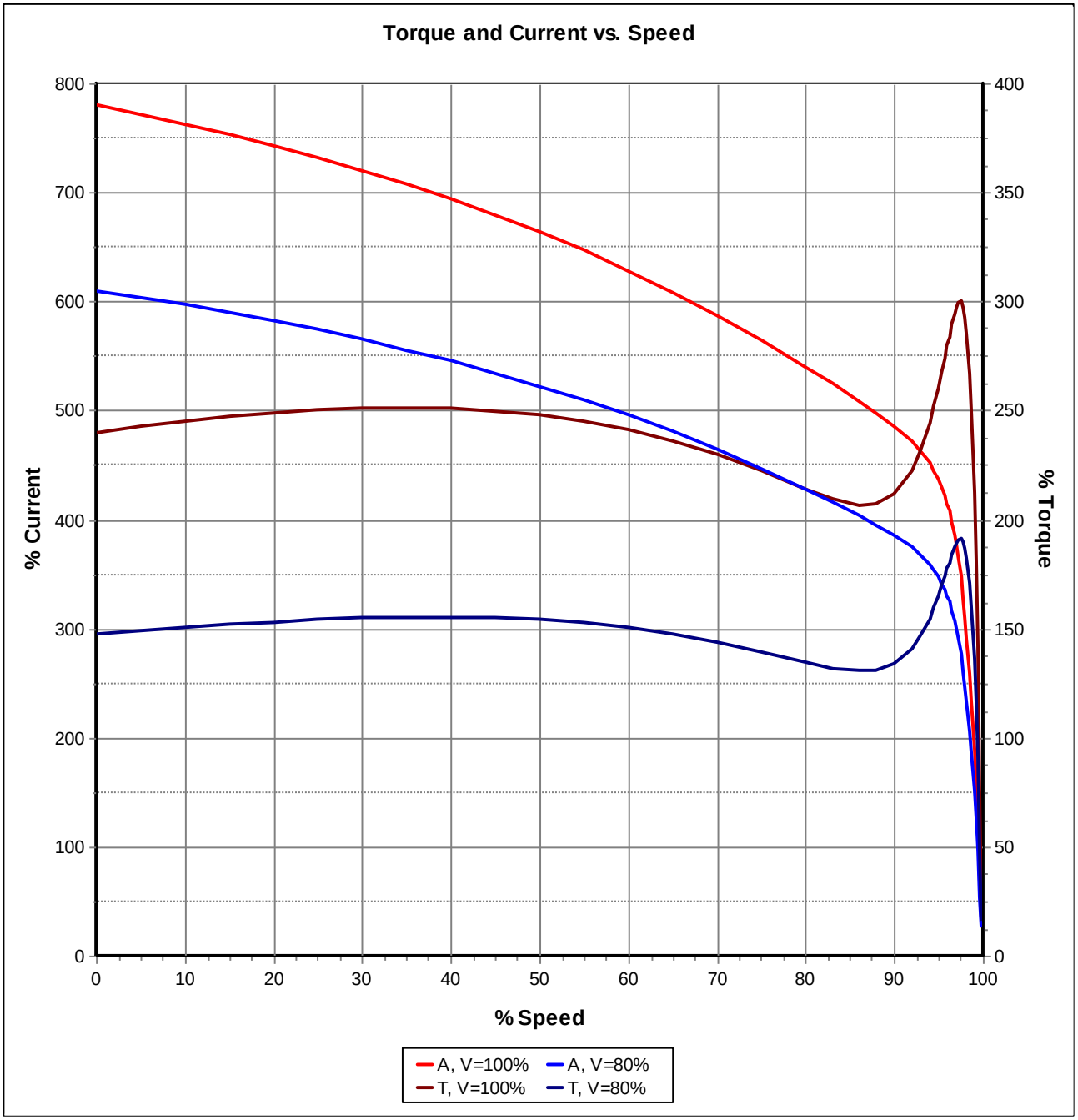
Motor type code: M3BN 587 MLA 4K

Rated output	350 HP	Power Factor	0,86
Voltage	460 V	Rated torque	1025 lb-ft
Frequency	60 Hz	Locked rotor Amps	780 %
Speed	1792 r/min	Locked rotor torque	240 %
Current	396 Amps	Breakdown torque	300 %



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PWM
Switch. freq. 3kHz
FWP 460VD 60Hz

Drive1

Rated power	87 HP
Rated voltage	117 V
Nominal frequency	15,3 Hz
Type of connection	Delta
Rated torque	1017 lb-ft
Speed	450 rpm
Current	394 Amps

Drive2

Rated power	350 HP
Rated voltage	460 V
Nominal frequency	60,4 Hz
Type of connection	Delta
Rated torque	1020 lb-ft
Speed	1800 rpm
Current	434 Amps

Constant torque 450 – 1800rpm

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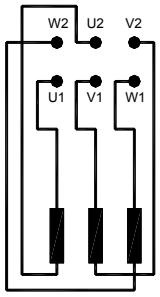
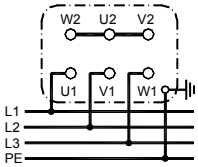
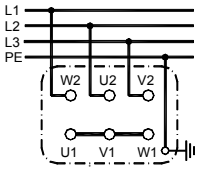
Diagram of connection
Anschluss-Schema
Schema de branchement

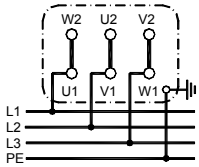


Connection of terminals
Anschluss des Motors
Branchement des bornes

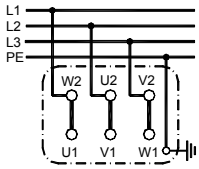


Y-connection
Y-Schaltung
Connection etoile





D-connection
D-Schaltung
Connection triangle

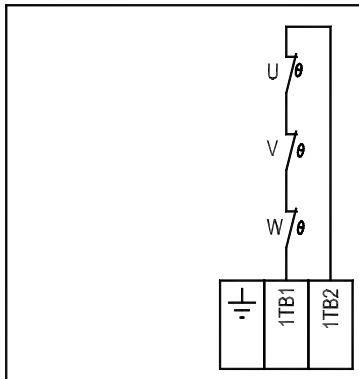


Direction of rotation with phase sequence shown in picture
Drehrichtung nach Schaltbild
Direction de rotation avec branchement ci-dessus

Direction of rotation with reversed phase sequence
Drehrichtung mit umgekehrter Phasenfolge
Direction de rotation avec sequence de phase reversée

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

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



BIMETAL DETECTORS, TYPE NCC
1TB1...1TB2 BIMETALL-THERMOSCHALTER, TYP NCC
SONDES BIMETALLIQUES, TYPE NCC

Motor No
Maschine Nr
Moteur No

ABB Oy, Electrical Machines
LV Motors

3GZF321200-35 B

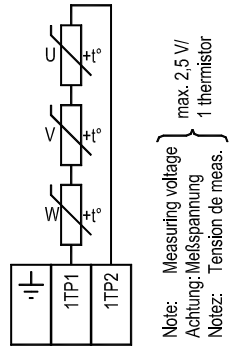
Accessory Connection Diagram

Document No: 3GZF321200-35 B

Description: BIMETAL DETECTORS

Unit:	Electrical Machines, LV Motors	Issued by:	K.Högkvist	Replaces:
Date:	16.01.2002	Approved by:	M.Prusi	Replaced by:

ABB Oy Customer Reference:



PTC-THERMISTORS
PTC-TEMPERATURFÜHLER
SONDES THERMIQUE PTC

Motor No
Maschine Nr
Moteur No

ABB Oy, Motors | 3GZF321200-1 D

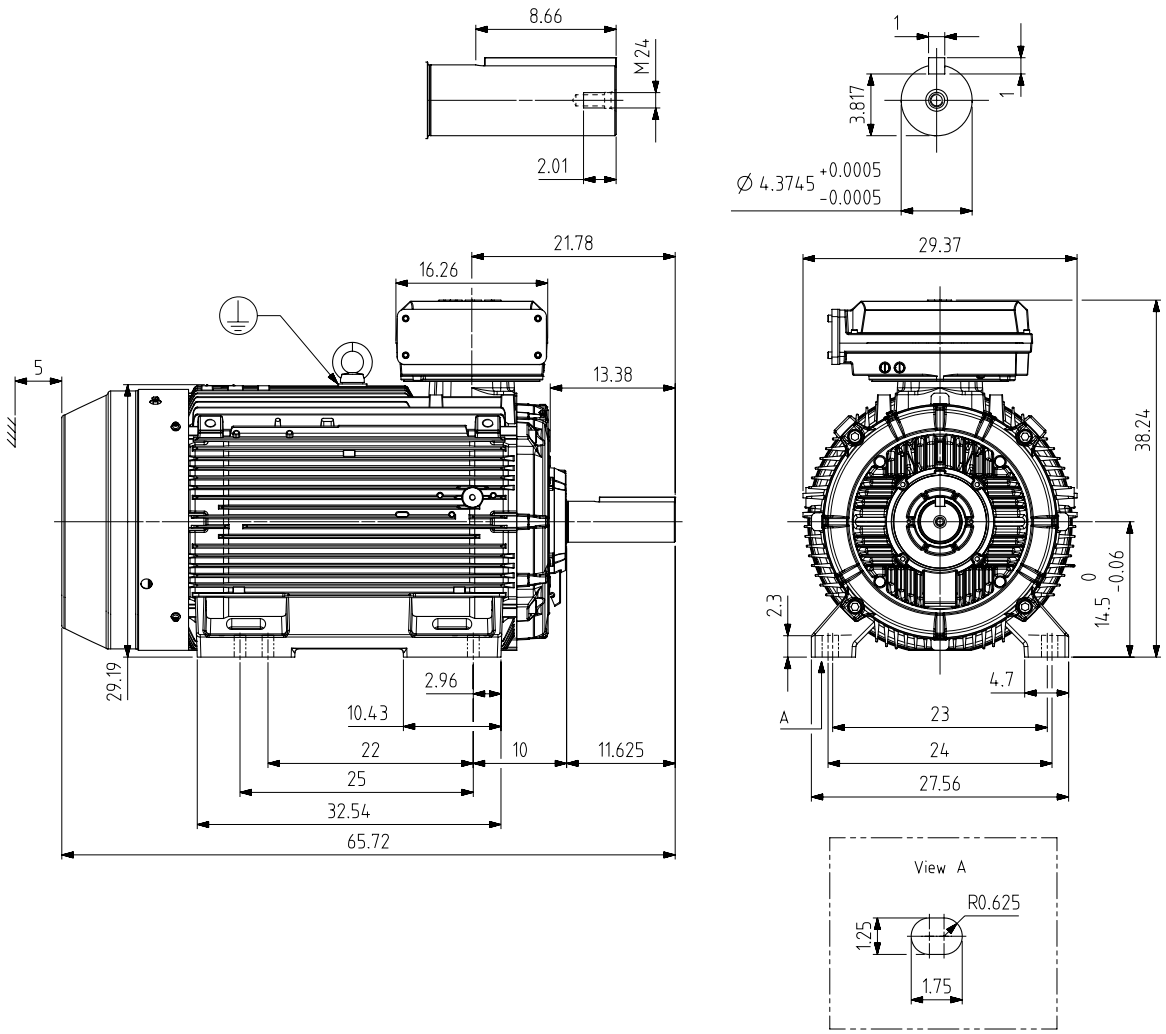
Accessory Connection Diagram

Document No: 3GZF321200-1 D

Description: PTC-THERMISTORS

Unit:	Motors	Issued by:	K.Högkvist	Replaces:
Date:	30.11.2005	Approved by:	M.Prusi	Replaced by:

ABB Oy | Customer Reference:



Additional information:

Dimension Print	Motor Type: M3BN 587ML_4.. B3, B6, B7, B8, V5, V6	Document No: 3GZF500098-174 A 14 BN 587 A
Description: SQUIRREL CAGE MOTOR, CABLE ENTRY LHS, SPECIAL SHAFT, SLOTTED FEET HOLES. DIMENSIONS IN INCHES, MOTOR SIZES 586/587.		

Unit:	ABB Oy, Motors and Generators	Issued by:	N.Palokangas	Replaces:
Date:	21.11.2019	Approved by:	S.Tikkanen	Replaced by:

ABB Oy	Customer Reference:	ABB