Customer information packet

ECR582508-PP

M3BN 587MLB 8P B3 250HP

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Driven Motor:

Motor type code		M3BN 587 MLB 8G		
Motor product code		3GBN984420-ADG (+209)		
Motor type		Squirrel cage Motor		
Mounting designation		IM 1001		
Protected by enclosure		TEFC		
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		250 HP		
Voltage		460 V		
Frequency		60 Hz		
Speed		894 r/min		
Current		312 Amps		
Locked rotor Amps		780 %	Code J	
Locked rotor torque		160 %		
Breakdown torque		280 %		
No load current		138 Amps		
Rated torque		1473 lb-ft		
Load characteristics	Load %	Current Amps	Efficiency %	Power Factor
	100	312	95,0	0,79
	75	249	95,4	0,74
	50	196	94,8	0,63

Typical calculated values to NEMA. –
NEMA Nominal Eff. 95,0%

ABB Oy

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Motor type code: M3BN 587 MLB 8G

Rated output	251 HP	Power Factor	0,79
Voltage	460 V	Rated torque	1473 lb-ft
Frequency	60 Hz	Locked rotor Amps	780 %
Speed	894 r/min	Locked rotor torque	160 %
Current	312 Amps	Breakdown torque	280 %

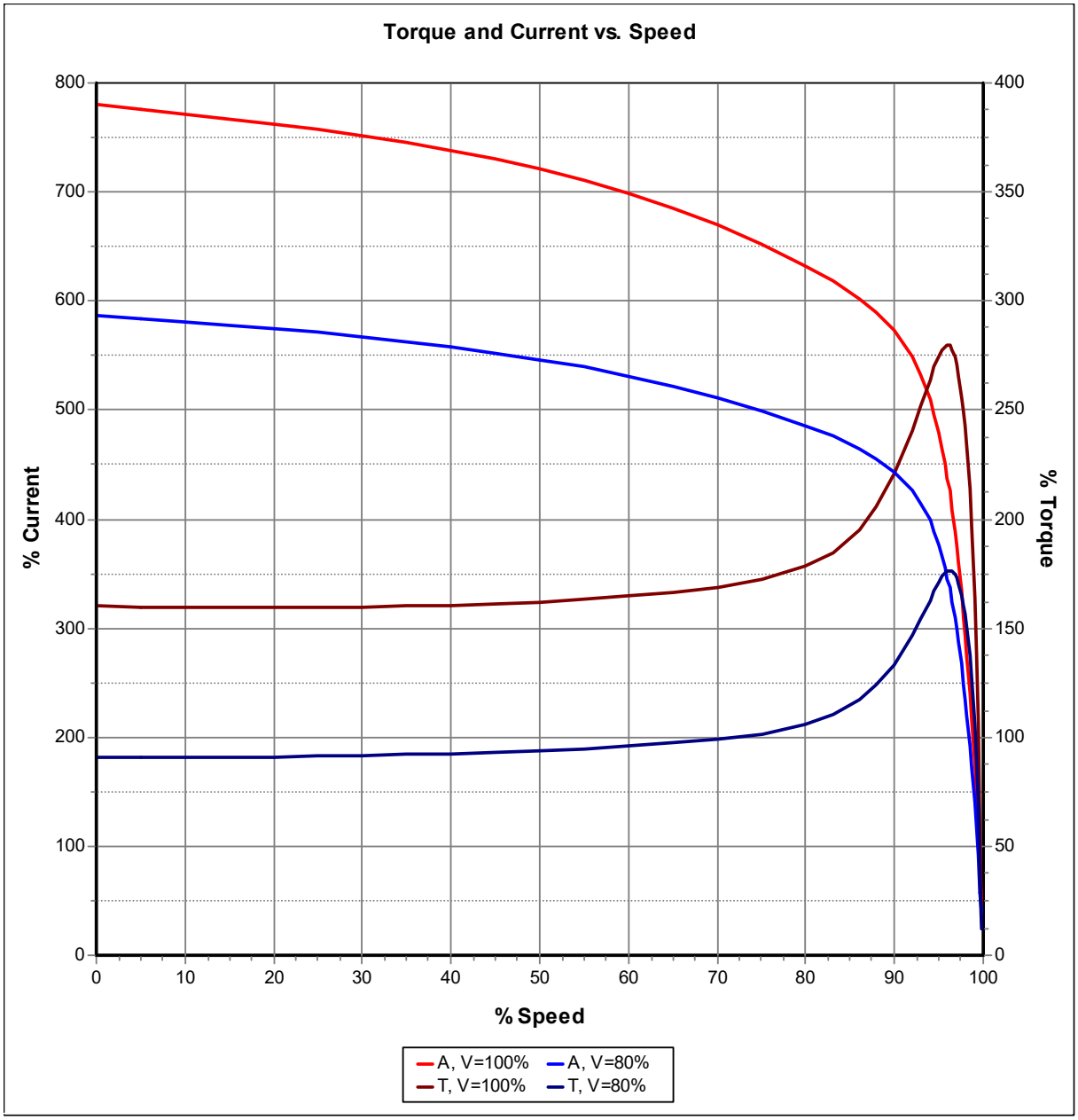


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PWM
Switch. freq. 3kHz
FWP 460VD 60Hz
VSD-Duty Temp. rise class F

Drive1

Rated power	62,5 HP
Rated voltage	118 V
Nominal frequency	15,4 Hz
Type of connection	Delta
Rated torque	1463 lb-ft
Speed	225 rpm
Current	310 Amps

Drive2

Rated power	250 HP
Rated voltage	460 V
Nominal frequency	60,5 Hz
Type of connection	Delta
Rated torque	1463 lb-ft
Speed	900 rpm
Current	334 Amps

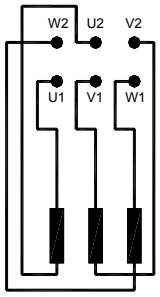
Constant torque 225 – 900rpm

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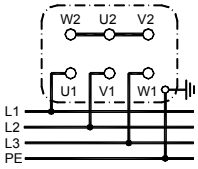
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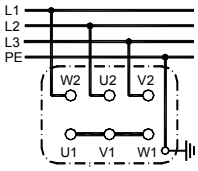
Diagram of connection
Anschluss-Schema
Schema de branchement

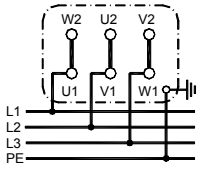


Connection of terminals
Anschluss des Motors
Branchement des bornes

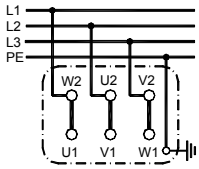


Y-connection
Y-Schaltung
Connection etoile





D-connection
D-Schaltung
Connection triangle





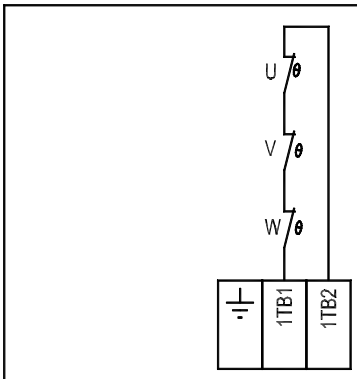
Direction of rotation with phase sequence shown in picture
Drehrichtung nach Schaltbild
Direction de rotation avec branchement ci-dessus



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

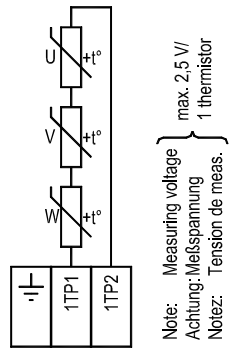
Accessory Connection Diagram

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

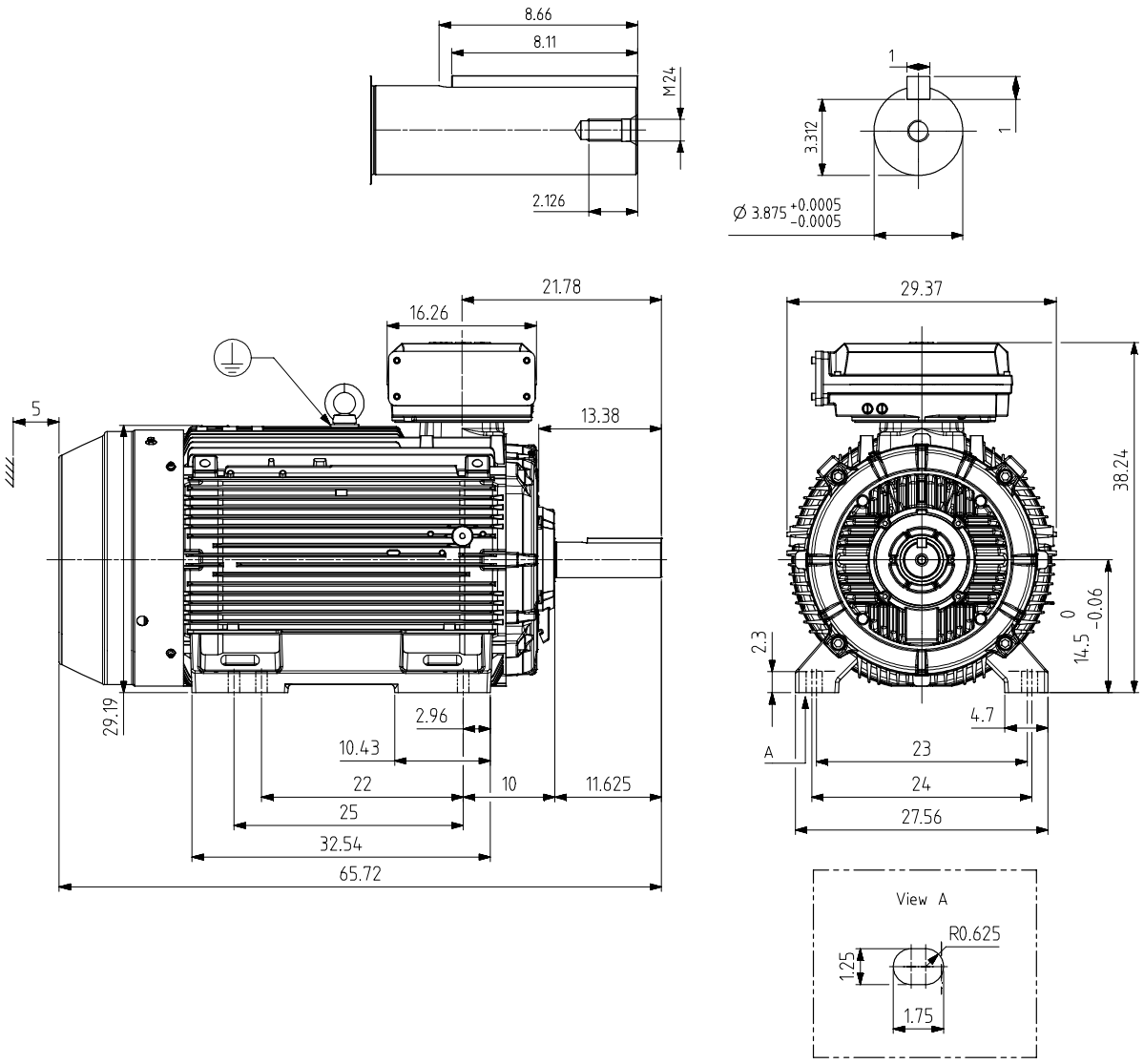
Accessory Connection Diagram

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: 3GZF500098-175 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:	R.Ketoja	Replaces:
Date:	31.Mar.2020	Approved by:	A.Vith	Replaced by:

ABB Oy	Customer Reference:	