



ALSTOM UBUNYE

MANUFACTURER ALSTOM Ubunye
Marievale Road, Vosterkroon, Nigel, 1490

CUSTOMER Gibela

CONTRACT

PROJECT PRASA

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE MOTOR BOGIE type MB1
DTR0009706804

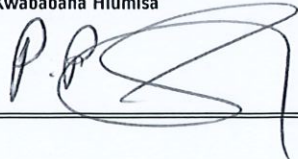
SERIAL NUMBER MB1 - 1335

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COMPLIANCE CERTIFICATE

We hereby declare, barring exceptions, reservations, or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completions of testing and verification, they completely satisfy all specified requirements and applicable standards and regulations.

CONSTRUCTOR APPROVAL	
DATE	22 February 2024
NAME	Kwababana Hlumisa
VISA	

I - Deviation / Derogation

II - Bogie configuration

B Bogie index

**ALSTOM UBUNYE****PRODUCTS TRACEABILITY**

Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Motor Bogie MB1	DTR0009706804	M1335		Alstom - Ubunye
Motor Bogie Frame	AR000000176080	M1641		Alstom - Ubunye
Wheelset (Front)	AR0000000177020	M3013		Alstom - Ubunye
Axle with fitted gearbox	AR000000177072	K2983		NGC
Wheel (Right)	AR000000174670	029	01-23	Bonatrans
Wheel (Left)	AR0000000174670	042	11-22	Bonatrans
Wheelset (Rear)	AR000000178600	M3014		Alstom - Ubunye
Axle with fitted gearbox	AR000000177072	K2979		NGC
Wheel (Right)	AR000000174670	034	02-23	Bonatrans
Wheel (Left)	AR000000174670	066	02-23	Bonatrans
Pneumatic suspension (Right)	AR000000176127	2401065		Hutchinson
Pneumatic suspension (Left)	AR000000176127	2312174		Hutchinson
Brake unit with PB (Right rear)	AR000000174544	1589	01-24	Wabtec
Brake unit without PB (Right front)	AR000000175185	4802	01-24	Wabtec
Brake unit without PB (Left Front)	AR000000175185	4803	01-24	Wabtec
Brake unit without PB (left rear)	AR000000175185	4792	01-24	Wabtec
Motor (front)	AR000000168516	21308		Alstom Ornans
Motor (Rear)	AR000000168516	21284		Alstom Ornans

DATE 2/21/2024		RESPONSABLE VALIDATION	
PRASA		INSTRUCTION SHEET:	
LOAD TEST : MOTOR BOGIE		PROJECT:	
DATE		FAMILY:	

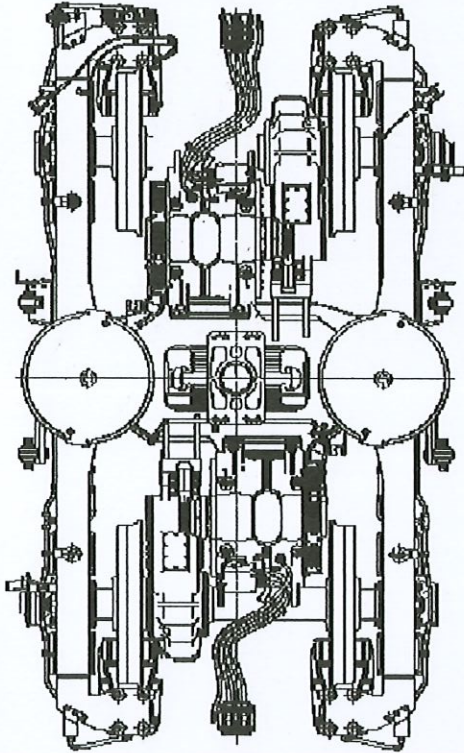
PRESSING REPORT

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	33.00	39.00	36.80 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5630

SECONDARY SUSPENSION ✓			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM[mm]	THEORETICAL [mm]
585.40	+	2.00 =	MIN 585.00 MAX 587.50

RIGHT JACK LOAD	Kg
7376	

BOGIE SERIAL N°	MB1-1335
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22399
COMPLETE BOGIE WEIGHT [Kg]	7299
OPERATOR	EDWARD
DATE	2/21/2024



OPERATOR STAMP
BFI-21

	THEORETICAL		MEASURED
	MIN	MAX	
LOAD DIFFERENCE ON FRONT AXLE [%]	0.00	0.00	-0.64 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	0.00	0.00	0.58 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	0.00	0.00	-0.10 ✓
LOAD DIFFERENCE ON RAILS [%]	0.00	0.00	-0.03 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	0.00	0.00	0.61 ✓

LEFT JACK LOAD	Kg
7376	

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	33.00	39.00	36.89 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5558

SECONDARY SUSPENSION ✓			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
587.32	+	0.00 =	MIN 585.00 MAX 587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]	0.08	✓
THEORETICAL [mm]	MIN -1.00 MAX 1.00	

	THEORETICAL		MEASURED
	MIN	MAX	
WHEEL DIAMETER [mm]			
GAP PRIMARY SUSPENSION [mm]	33.00	39.00	36.26 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5638

21308

ALSTOM

GIBELG

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Référence: TROS 916.216

Révision: 2

Documents de référence: AT00000325953 - AT00000325990

Assembly before test

Date: 18/11/23

Name: XOLANT

Assembly after test

Date: 09/01/24

Name: XOLANT

ROTOR S/N		STATOR S/N	
MCR02-11-062		CIB-1295	
Bearing lubrication - Security operation Incorrect lubrication can lead to engine failure with a safety risk in service SRIL TROS 965.289			
INSULATED CERAMIC BEARING DRIVE END - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: NU 214-E-XL-M1-P6-F1-H257A-J20AB-C4 or NU 214-E-M1-P6-F1-H257A-J20AA-C4 SKF: NU 214 ECM/C4 VA3091 (cross out the references that have not been fitted)			
N°: ROMANIA - 0097 11/22 SN691 - 5747155			
S2 Radial play after assembly (0,042 / 0,114): 0,06mm ☒ OK ☐ NOK		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min: 144g - Max: 49g Fitter 1 (Name and signature) [Signature] Fitter 2 (Name and signature) [Signature] Mesured quantity: [Signature] Quality validation: [Signature] Quality Insp. Name and signature: [Signature]	
INSULATED CERAMIC BEARING OPPOSITE DRIVE END side - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: 6214-M-P6-J20AB-H257A-C4 or 6214-M-P6-J20AA-H257-C4 SKF 6214-M/C4-VL 0241 (cross out the references that have not been fitted)			
Serial N°: GERMANY - 0200 1020 - 0854 01/23 SN0626			
S1 Radial play after assembly (0,021 / 0,067): 0,04mm ☒ OK ☐ NOK		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min: 159g - Max: 164g Fitter 1 (Name and signature) [Signature] Fitter 2 (Name and signature) [Signature] Mesured quantity: [Signature] Quality validation: [Signature] Quality Insp. Name and signature: [Signature]	
Référence appareil: AMXG14			
FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA		TROS 916.216 2 Page 1	

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FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Record the value of the insulation resistance of the bearings to TROS 915.069 (> 50 kΩ) 3,35		☒ OK ☐ NOK
OPERATOR		Quality verification
Out of round at the end of the shaft drive end 0,05 max: [Signature]	☒ OK ☐ NOK	AMXG14 [Signature]
Out of round on toothed wheel 0,1 max: 0,06mm	☒ OK ☐ NOK	AMXG14 [Signature]
sensor / toothed wheel play 0,7 (+/- 0,2): 0,85mm	☒ OK ☐ NOK	CIB-1295 [Signature]

Sensor reference: DTR0000512252/DSD1830.19Q14HW

☒ OK ☐ NOK 60834008310
☐ OK ☐ NOK

Prep. & Final Assembly

OPERATOR			Quality verification		
☒ F1	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the motivated wrenching) <u>NEOS 527</u>	QC 1 X 61 Nm	☐ OK ☐ NOK
☒ F2	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the motivated wrenching) <u>NEOS 527</u>	QC 1 X 61 Nm	☐ OK ☐ NOK
☒ F3	Torque tightening to 4 x 44 Nm: Fold locking plate	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the motivated wrenching) <u>NEOS 527</u>	QC 1 X 37 Nm	☐ OK ☐ NOK
☒ F4	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the motivated wrenching) <u>NEOS 527</u>	QC 1 X 18 Nm	☐ OK ☐ NOK
☒ F5	Torque tightening to 6 x 22 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the motivated wrenching) <u>NEOS 527</u>	QC 1 X 18 Nm	☐ OK ☐ NOK

Finishing

☒ F1	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the motivated wrenching) <u>NEOS 527</u>	QC 1 X 22 Nm	☐ OK ☐ NOK
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Grease protection transport

☒ S3	18g (0/+4.5) CC	Mesured quantity: <u>18g</u>	☒ OK ☐ NOK
☒ S4	18g (0/+4.5) CC	Mesured quantity: <u>18g</u>	☒ OK ☐ NOK

Final inspection following the check-list DTR0000452909 and DTR0000452910 (in the case of 100% inspection of the production)

☒ OK ☐ NOK

Final Inspection

Quality Insp Name and Signature:

Dima AKS

Comments

OBSERVATIONS

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

TROS 916.216

2

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 GIBELA RAIL TRANSPORT CONSORTIUM RF (PTY) LTD
 Traction Motors Quality

2024-01-30

Name: DimaSignature: AKS

21284

ALSTOM

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FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Référence: TROS 916.216

Révision: 2

Documents de référence: AT00000325953 - AT00000325990

Assembly before test

Date: 13/11/23

Name: XOLANI

Assembly after test

Date: 03/02/24

Name: Godfrey Xolani & Thomas

ROTOR S/N MOB-11-161	STATOR S/N GIB-1097											
Bearing lubrication - Security operation Incorrect lubrication can lead to engine failure with a safety risk in service SRIL TROS 965.289												
INSULATED CERAMIC BEARING DRIVE END - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: NU 214-E-XL-M1-P6-F1-H257A-J20AB-C4 or NU 214-E-M1-P6-F1-H257A-J20AA-C4 SKE-NU 214-EGM/C4-VA3001 (cross out the references that have not been fitted)												
N°: AUSTRIA: 237 W												
S2 Radial play after assembly (0,042 / 0,114): 0,08 mm ☒ OK ☐ NOK	S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly <table border="1"> <tr> <td>Min: 144g - Max: 149g</td> <td>Mesured quantity:</td> <td>Quality validation</td> </tr> <tr> <td>Filter 1 (Name and signature)</td> <td>Filter 2 (Name and signature)</td> <td>Quality Insp. Name and signature</td> </tr> <tr> <td></td> <td></td> <td>Dina</td> </tr> </table>			Min: 144g - Max: 149g	Mesured quantity:	Quality validation	Filter 1 (Name and signature)	Filter 2 (Name and signature)	Quality Insp. Name and signature			Dina
Min: 144g - Max: 149g	Mesured quantity:	Quality validation										
Filter 1 (Name and signature)	Filter 2 (Name and signature)	Quality Insp. Name and signature										
		Dina										
S1 INSULATED CERAMIC BEARING OPPOSITE DRIVE END side - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: 6214-M-P6-J20AB-H257A-C4 or 6214-M-P6-J20AA-H257-C4 SKE 6214-M/C4-VL 0241 (cross out the references that have not been fitted)												
Serial N°: AUSTRIA: 094W												
S1 Radial play after assembly (0,021 / 0,067): 0,04 mm ☒ OK ☐ NOK	S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly <table border="1"> <tr> <td>Min: 159g - Max: 164g</td> <td>Mesured quantity:</td> <td>Quality verification</td> </tr> <tr> <td>Filter 1 (Name and signature)</td> <td>Filter 2 (Name and signature)</td> <td>Quality Insp. Name and signature</td> </tr> <tr> <td></td> <td></td> <td>Dina</td> </tr> </table>			Min: 159g - Max: 164g	Mesured quantity:	Quality verification	Filter 1 (Name and signature)	Filter 2 (Name and signature)	Quality Insp. Name and signature			Dina
Min: 159g - Max: 164g	Mesured quantity:	Quality verification										
Filter 1 (Name and signature)	Filter 2 (Name and signature)	Quality Insp. Name and signature										
		Dina										
Référence appareil: AMX6114												
FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA		TROS 916.216	2									
		Page 1										

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FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Record the value of the insulation resistance of the bearings to TROS 915.069 (> 50 kΩ) 4,48 GΩ		☒ OK	☐ NOK
OPERATOR		Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,01 mm	☒ OK ☐ NOK	AMX6114	☐ OK ☐ NOK
Out of round on toothed wheel 0,1 max: 0,01 mm	☒ OK ☐ NOK	AMX6114	☐ OK ☐ NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,85 mm	☒ OK ☐ NOK	GIBELG	☐ OK ☐ NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW

☒ OK ☐ NOK Device serial number: 8883406339☐ OK ☐ NOK

Prep. & Final Assembly

OPERATOR		Quality verification			
☒ F1	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the indicated screwdriver) NCC5081	QC 1 X 61 Nm	☐ OK ☐ NOK
☒ F2	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the indicated screwdriver) NCC5081	QC 1 X 61 Nm	☐ OK ☐ NOK
☒ F3	Torque tightening to 4 x 44 Nm: Fold locking plate	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the indicated screwdriver) NCC5081	QC 1 X 37 Nm	☐ OK ☐ NOK
☒ F4	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the indicated screwdriver) NCC5081	QC 1 X 18 Nm	☐ OK ☐ NOK
☒ F5	Torque tightening to 6 x 22 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the indicated screwdriver) NCC5081	QC 1 X 18 Nm	☐ OK ☐ NOK

Finishing

☒ F1	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	wrench reference (in the event of failure / absence of the indicated screwdriver) NCC5081	QC 1 X 22 Nm	☐ OK ☐ NOK
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Grease protection transport

☒ S3	18g (0/+4.5) CC	Mesured quantity: 18g	☒ OK ☐ NOK
☒ S4	18g (0/+4.5) CC	Mesured quantity: 18g	☒ OK ☐ NOK

Final inspection following the check-list DTR0000452909 and DTR0000452910 (In the case of 100% inspection of the production)

☒ OK ☐ NOK

Final inspection

Quality Insp Name and Signature:

Dima Kados VAS

Comments

OBSERVATIONS

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

TROS 916.216

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Page

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GIBELA RAIL TRANSPORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -02- 03
Name : Dima
Signature : VAS



CERTIFICATION OF CONFORMITY

Inspection certificate according EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N° 21284

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76105450

Status: QC PASS

Derogations / Concession / Waiver N°: N/A

Customer modification: N/A

Missing parts: N/A

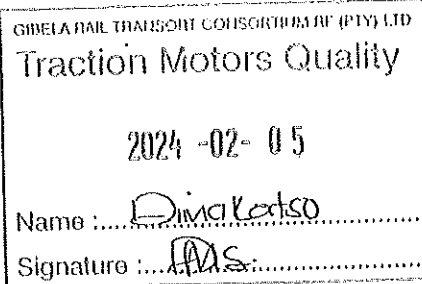
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Date: 2024/02/05

Function: Final Inspection

Performed and signed off by: Name _____ Dimakatso Mohoalali

Signature _____



Gibela Rail
02 Shosholara Avenue
M07 Traction Motor
1590

GIBELA RAIL

Compiled by M Kola

Date: 22/2/2022

Property of GIBELA RAIL, cannot be distributed or reproduced without authorization



CERTIFICATION OF CONFORMITY

Inspection certificate according to EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21308
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	76196175	
Status:	QC PASS	
Derogations / Concession / Waiver N °:	N/A	
Customer modification:	N/A	
Missing parts:	N/A	

We hereby declare, barring exceptions, reservations or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completion of testing and verification, they completely satisfy all specified requirements, and applicable standards and regulations.

Date:	2024/02/05
Function:	Final Inspection
Performed and signed off by:	Name _____ Dimakatso Mohoalali
	Signature _____ 



Gibela Rail
02 Shosholozwa Avenue
M07 Traction Motor
1590

GIBELA RAIL

Compiled by M Kola

Date: 22/2/2022

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ALSTOM UBUNYE

MANUFACTURER **ALSTOM Ubunye**
Marievale Road, Vosterkroon, Nigel, 1490

CUSTOMER **Gibela**

CONTRACT

PROJECT **PRASA**

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE **MOTOR BOGIE type MB1**

DTR0009706804

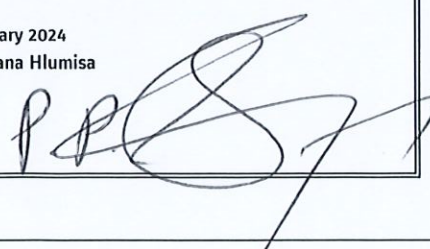
SERIAL NUMBER **MB1 - 1336**

CONTENTS

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- Motor certificate.....	8 pages	☒

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CONSTRUCTOR APPROVAL	
DATE	22 February 2024
NAME	Kwababana Hlumisa
VISA	

I - Deviation / Derogation

II - Bogie configuration

B Bogie index



ALSTOM UBUNYE PRODUCTS TRACEABILITY

Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Motor Bogie MB1	DTR0009706804	M1336		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M1648		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M3029		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K3184		NGC
Wheel (Right)	AR00000174670	062	07-23	Bonatrans
Wheel (Left)	AR000000174670	112	07-23	Bonatrans
Wheelset (Rear)	AR00000178600	M3030		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K3198		NGC
Wheel (Right)	AR00000174670	076	07-23	Bonatrans
Wheel (Left)	AR00000174670	114	07-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2312156		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2312100		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1594	01-24	Wabtec
Brake unit without PB (Right front)	AR00000175185	4811	01-24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	4810	01-24	Wabtec
Brake unit without PB (left rear)	AR00000175185	4789	01-24	Wabtec
Motor (front)	AR00000168516	21400		Alstom Ornans
Motor (Rear)	AR00000168516	21449		Alstom Ornans

QC: 018
Revision: 1.0

DATE	2/21/2024
DATE VALIDATION	

RESPONSABLE VALIDATION	
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PRESSING REPORT

PRASA	LOAD TEST :	MOTOR BOGIE
INSTRUCTION SHEET:		
FAMILY:		PROJECT:

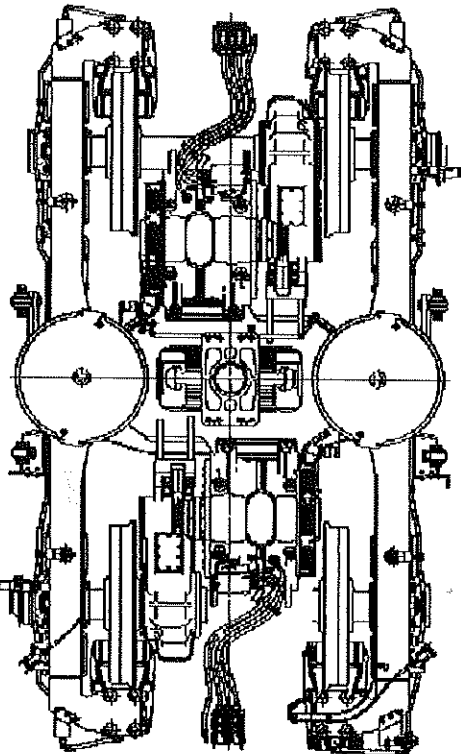
	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	38.40 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q2	5610

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
583.13	+	3.00	= 586.13
			MIN 585.00 MAX 587.50

RIGHT JACK LOAD
7376 Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	38.97 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q4	5529

BOGIE SERIAL N°	MB1-1336
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22376
COMPLETE BOGIE WEIGHT [Kg]	7293
OPERATOR	DATE
BAFANA	2/21/2024



OPERATOR STAMP
DC-3FI-6

LEFT JACK LOAD
7375 Kg

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	38.59 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q1	5557

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
586.83	+	0.00	= 586.83
			MIN 585.00 MAX 587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]	✓	THEORETICAL [mm]
-0.70		MIN -1.00 MAX 1.00

	THEORETICAL	MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN 0.00 MAX 0.00	-0.47 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN 0.00 MAX 0.00	1.36 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN 0.00 MAX 0.00	-0.19 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN 0.00 MAX 0.00	0.44 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN 0.00 MAX 0.00	0.92 ✓

	THEORETICAL	MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	38.50 ✓
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q3	5681

ALSTOM

GIBEL

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Référence: TROS 916.216

Révision: 2

Documents de référence: AT00000325953 - AT00000325990

Assembly before test

Date: 27/01/24

Name: XOUANI

Assembly after test

Date: 09/02/24

Name: XOUANI & THOMAS

ROTOR S/N		STATOR S/N	
MOROS-11-137		GIB-1450	
Bearing lubrication - Security operation Incorrect lubrication can lead to engine failure with a safety risk in service SRIL TROS 965.289			
INSULATED CERAMIC BEARING DRIVE END - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: NU 214-E-XL-M1-P6-F1-H257A-J20AB-C4 or NU 214-E-M1-P6-F1-H257A-J20AA-C4 SKE-NU 214-ECM/C1-VA3092 (cross out the references that have not been fitted)			
N°: Romania: 0097 09/23 SN/40 - 1369794			
Radial play after assembly (0,042 / 0,114): 0,08mm ☒ OK ☐ NOK		LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min: 144g - Max: 149g Mesured quantity: Filter 1 (Name and signature): Filter 2 (Name and signature): Quality Insp. Name and signature:	
INSULATED CERAMIC BEARING OPPOSITE DRIVE END side - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: 6214-M-P6-J20AB-H257A-C4 or 6214-M-P6-J20AA-H257-C4 SKE 6214-M/C4-VL 0241 (cross out the references that have not been fitted)			
Serial N°: Germany: 0200 X116-0946		04/23 SNO236	
Radial play after assembly (0,021 / 0,067): 0,05mm ☒ OK ☐ NOK		LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min: 159g - Max: 164g Mesured quantity: Filter 1 (Name and signature): Filter 2 (Name and signature): Quality Insp. Name and signature:	
Référence appareil: AJEP14			
FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA		TROS 916.216 2 Page 1	

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FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Record the value of the Insulation resistance of the bearings to TROS 915.069 (> 50 kΩ)		8,54 MΩ		☒ OK	☐ NOK
OPERATOR				Quality verification	
Out of round at the end of the shaft drive end 0,09 max:	☒ OK ☐ NOK	AJEP14		☐ OK	☐ NOK
Out of round on toothed wheel 0,1 max: 0,06mm	☒ OK ☐ NOK	AJEP14		☐ OK	☐ NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,8mm	☒ OK ☐ NOK	GIB-1450		☐ OK	☐ NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW		☒ OK ☐ NOK		Device serial number: <u>B0310001911</u>		☐ OK ☐ NOK	
Prep. & Final Assembly							
OPERATOR				Quality verification			
	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	insert reference (in the event of failure / absence of the material) <u>NC05587</u>	QC 1 X 61 Nm	☐ OK ☐ NOK		
	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	insert reference (in the event of failure / absence of the material) <u>NC05587</u>	QC 1 X 61 Nm	☐ OK ☐ NOK		
	Torque tightening to 4 x 44 Nm:	☒ OK ☐ NOK	insert reference (in the event of failure / absence of the material) <u>NC05587</u>	QC 1 X 37 Nm	☐ OK ☐ NOK		
	Fold locking plate						
	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	insert reference (in the event of failure / absence of the material) <u>NC05587</u>	QC 1 X 18 Nm	☐ OK ☐ NOK		
	Torque tightening to 6 x 22 Nm:	☒ OK ☐ NOK	insert reference (in the event of failure / absence of the material) <u>NC05587</u>	QC 1 X 18 Nm	☐ OK ☐ NOK		
Finishing							
	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	insert reference (in the event of failure / absence of the material) <u>NC05587</u>	QC 1 X 22 Nm	☐ OK ☐ NOK		
Grease protection transport							
	18g (0/+4.5) CC	Measured quantity:	<u>18g</u>		☒ OK ☐ NOK		
	18g (0/+4.5) CC	Measured quantity:	<u>18g</u>		☒ OK ☐ NOK		
Final inspection following the check-list DTR0000452909 and DTR0000452910 (in the case of 100% inspection of the production)						☒ OK ☐ NOK	
				Final Inspection Quality Insp Name and Signature: <u>Buhli</u>	Comments		
OBSERVATIONS							

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

TROS 916.216

2

Page

2

GIBELA RAIL TRANSPORT CONSORTIUM RE (PT) LTD

Traction Motors Quality

2024-02-16

Name: Buhli

Signature: [Signature]

ALSTOM

21400

GIBELCO

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Référence: TROS 916.216

Révision: 2

Documents de référence: AT00000325953 - AT00000325990

Assembly before test

Date:

Name:

12/12/2023
Sagres

Assembly after test

Date:

Name:

03/02/24
XOIANI, GODFREY & HONING

ROTOR S/N MCR23-10-083		STATOR S/N CLB-1411	
Bearing/lubrication - Security operation Incorrect lubrication can lead to engine failure with a safety risk in service SRIL TROS 965.289			
INSULATED CERAMIC BEARING DRIVE END - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: NU 214-E-XL-M1-P6-F1-H257A-J20AB-C4 or NU 214-E-M1-P6-F1-H257A-J20AA-C4 SKE-NU 214-EGM/C4-VA3091 (cross out the references that have not been fitted)			
N°: ROMANIA: 0097 09/23 SN 301-1369774			
S2 Radial play after assembly (0,042 / 0,114): 0,07mm ☒ OK ☐ NOK		S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min:144g - Max:149g Measured quantity: Filter 1 (Name and signature) <i>[Signature]</i> Filter 2 (Name and signature) <i>[Signature]</i> Quality validation: Dima <i>[Signature]</i>	
INSULATED CERAMIC BEARING OPPOSITE DRIVE END side - Security operation Incorrect assembly can lead to engine failure with a safety risk in service SRIL TROS 965.289 FAG: 6214-M-P6-J20AB-H257A-C4 or 6214-M-P6-J20AA-H257-C4 SKE 6214-M/C4-VL-0241 (cross out the references that have not been fitted)			
Serial N°: GERMANY: 0200 X116-0721 04/23 SN 0079			
S1 Radial play after assembly (0,021 / 0,067): 0,04mm ☒ OK ☐ NOK Reference applied: <i>[Signature]</i>		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min:159g Max:166g Measured quantity: Filter 1 (Name and signature) <i>[Signature]</i> Filter 2 (Name and signature) <i>[Signature]</i> Quality validation: Dima <i>[Signature]</i>	
FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA		TROS 916.216 2 Page 1	

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FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PRASA

Record the value of the insulation resistance of the bearings to TROS 915.069 (> 50 kΩ)				2,319.2 ☒ OK ☐ NOK	
OPERATOR:				Quality verification	
Out of round at the end of the shaft drive end 0,05 max:	☒ OK ☐ NOK	<i>[Signature]</i>		☐ OK ☐ NOK	
Out of round on toothed wheel 0,1 max:	☒ OK ☐ NOK	<i>[Signature]</i>		☐ OK ☐ NOK	
sensor / toothed wheel play 0,7 (+/- 0,2):	☒ OK ☐ NOK	<i>[Signature]</i>		☐ OK ☐ NOK	

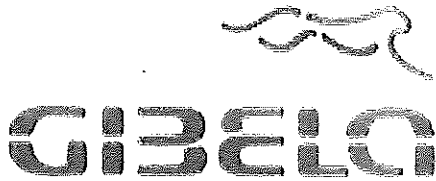
Sensor reference: DTR0000512252/DSD1830.19Q14HW			☒ OK ☐ NOK		Device serial number 50316013532	☐ OK ☐ NOK	
Prep. & Final Assembly							
OPERATOR					Quality verification		
☒ F1	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	<i>Wrench reference (in the event of false absence of the motorised screwdriver)</i> DS1051		QC 1 X 61 Nm	☐ OK ☐ NOK	
☒ F2	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK			QC 1 X 61 Nm	☐ OK ☐ NOK	
☒ F3	Torque tightening to 4 x 44 Nm: Fold locking plate	☒ OK ☐ NOK			QC 1 X 37 Nm	☐ OK ☐ NOK	
☒ F4	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK			QC 1 X 18 Nm	☐ OK ☐ NOK	
☒ F5	Torque tightening to 6 x 22 Nm:	☒ OK ☐ NOK			QC 1 X 18 Nm	☐ OK ☐ NOK	
Finishing							
☒ F1	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	<i>Wrench reference (in the event of false absence of the motorised screwdriver)</i> DS1051		QC 1 X 22 Nm	☐ OK ☐ NOK	
Grease protection transport							
☒ S3	18g (0/4.5) CC	Mesured quantity: 18g			☒ OK ☐ NOK		
☒ S4	18g (0/4.5) CC	Mesured quantity: 18g			☒ OK ☐ NOK		
Final inspection following the check-list DTR0000452909 and DTR0000452910 (In the case of 100% inspection of the production)							☒ OK ☐ NOK
Final inspection Quality Insp Name and Signature:					Comments		
Dina							
OBSERVATIONS							

FINAL ASSEMBLY REPORT FOR THE MOTOR 6 ECA 3022 B - PIASA	TROS 916.216	2	Page
			2

GIBELA RAIL TRANSPORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality

 2024-02-05

 Name: Dina
 Signature: [Signature]



CERTIFICATION OF CONFORMITY

Inspection certificate according EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N° 21449

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76596483

Status: QC PASS

Derogations / Concession / Waiver N°: N/A

Customer modification: N/A

Missing parts: N/A

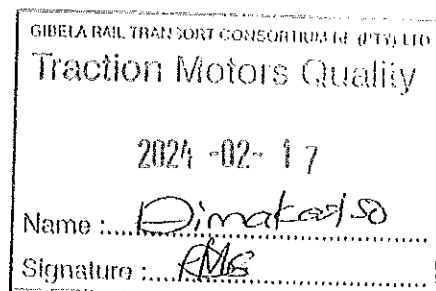
We hereby declare, barring exceptions, reservations or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completion of testing and verification, they completely satisfy all specified requirements, and applicable standards and regulations.

Date: 2024/02/17

Function: Final Inspection

Performed and signed off by: Name _____ Dimakatso Mohoalali

Signature _____



Gibela Rail
02 Shosholozo Avenue
M07 Traction Motor
1590

GIBELA RAIL

Compiled by M Kola

Date: 22/2/2022

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CERTIFICATION OF CONFORMITY

Inspection certificate according EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N° 21400

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76348010

Status: QC PASS

Derogations / Concession / Waiver N°: N/A

Customer modification: N/A

Missing parts: N/A

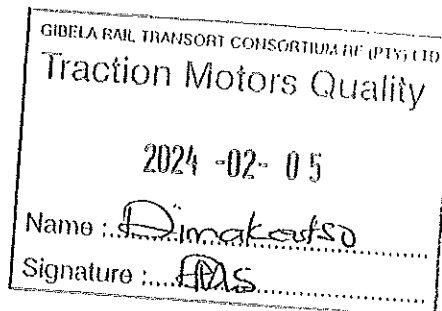
We hereby declare, barring exceptions, reservations or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completion of testing and verification, they completely satisfy all specified requirements, and applicable standards and regulations.

Date: 2024/02/05

Function: Final Inspection

Performed and signed off by: Name _____ Dimakatso Mohoalali

Signature _____



Gibela Rail
02 Shosholota Avenue
M07 Traction Motor
1590

GIBELA RAIL

Compiled by M Kola

Date: 22/2/2022

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