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 - 1384

CONTENTS

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	02 April 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	M 1384		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M 1698		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M 3157		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3183		NGC
Wheel (Right)	AR00000174670	013	10.23	Bonatrans
Wheel (Left)	AR000000174670	008	10-23	Bonatrans
Wheelset (Rear)	AR00000178600	M 3158		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3129		NGC
Wheel (Right)	AR00000174670	061	11-23	Bonatrans
Wheel (Left)	AR00000174670	009	11-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2311159		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2312160		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1688	03.24	Wabtec
Brake unit without PB (Right front)	AR00000175185	5091	03.24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	5090	03.24	Wabtec
Brake unit without PB (left rear)	AR00000175185	5092	03.24	Wabtec
Motor (front)	AR00000168516	21467		Alstom Ornans
Motor (Rear)	AR00000168516	21388		Alstom Ornans

PRESSING REPORT

DATE	
4/2/2024	
DATE VALIDATION	RESPONSABLE VALIDATION

PRASA

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

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN		
	MAX		
GAP PRIMARY SUSPENSION [mm]	MIN	33.00	37.77 ✓
	MAX	39.00	
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5602

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM[mm]	THEORETICAL [mm]	
585.26	+	1.00	= 586.26	MIN	585.00
				MAX	587.50

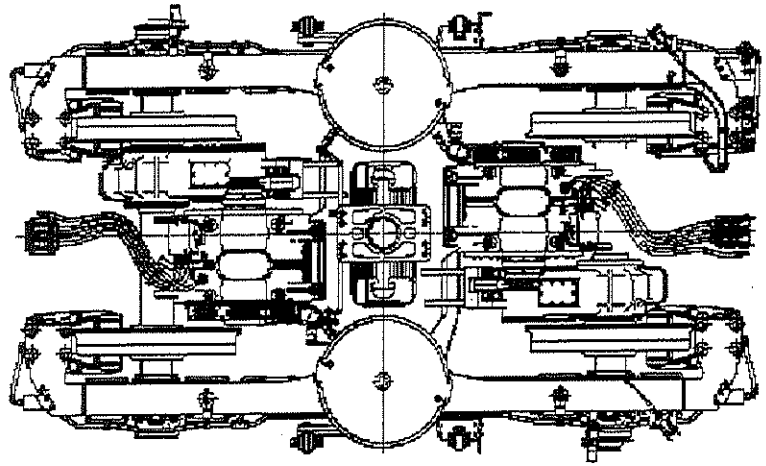
RIGHT JACK LOAD	
7374	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN		
	MAX		
GAP PRIMARY SUSPENSION [mm]	MIN	33.00	38.40 ✓
	MAX	39.00	
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		5562

BOGIE SERIAL N°	MB1-1384
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22372
COMPLETE BOGIE WEIGHT [Kg]	7288

OPERATOR	DATE
BAFANA	4/2/2024

OPERATOR STAMP
DC-BFI-6



	THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN	0.00	-0.36 ✓
	MAX	0.00	
LOAD DIFFERENCE ON REAR AXLE [%]	MIN	0.00	0.75 ✓
	MAX	0.00	
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN	0.00	-0.20 ✓
	MAX	0.00	
LOAD DIFFERENCE ON RAILS [%]	MIN	0.00	0.20 ✓
	MAX	0.00	
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN	0.00	0.55 ✓
	MAX	0.00	

LEFT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN		
	MAX		
GAP PRIMARY SUSPENSION [mm]	MIN	33.00	38.10 ✓
	MAX	39.00	
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5562

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM [mm]	THEORETICAL [mm]	
586.95	+	0.00	= 586.95	MIN	585.00
				MAX	587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm] ✓	THEORETICAL [mm]	
-0.69	MIN	-1.00
	MAX	1.00

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN		
	MAX		
GAP PRIMARY SUSPENSION [mm]	MIN	33.00	37.59 ✓
	MAX	39.00	
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5646

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21467
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	76634793	
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: 2024/03/13

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 13
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

CERTIFICATION OF CONFORMITY

GIBELA

Inpection certificate according EN 10204-3.1

Product:	Traction Motors 6 ECA 3022 B
Serial Number:	N ° 21388
Client / Customer:	ALSTOM UBUNYE (PTY) LTD
Project:	PRASA
P O Number:	76336933
Status:	QC PASS
Derogations / Concession / Waiver N °:	DR-GIB-049
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: 2024/03/12

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 12
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

21467

ALSTOM GIBELO

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: 31/01/2024
Name: Jacques

Assembly after test
Date: 02/03/24
Name: Godfrey Kolani & Thomas

ROTOR S/N	STATOR S/N	
MCB22-11-127	GTB-1472	

Bearing lubrification - 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 09/23 BN3DD - 1389794

S2 Radial play after assembly (0,042 / 0,114):
0,08mm ☒ OK ☐ NOK

S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min:144g - Max:149g

Mesured quantity:	Quality validation
Fitter 1(Name and signature)	Fitter 2(Name and signature) / Quality Insp. Name and signature
	Dima RMS

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 0000 X272-1000 09/23 BN0008

S1 Radial play after assembly (0,021 / 0,067):
0,06mm ☒ OK ☐ NOK
Référence appareil

S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min:159g Max:164g

Mesured quantity:	Quality verification
Fitter 1(Name and signature)	Fitter 2(Name and signature) / Quality Insp. Name and signature
	Dima RMS

ALSTOM GIBELO

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) 1,039Ω ☒ OK ☐ NOK

OPERATOR			Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,01mm	☒ OK ☐ NOK	Device serial number	☐ OK	☐ NOK
Out of round on toothed wheel 0,1 max: 0,06mm	☒ OK ☐ NOK	Device serial number	☐ OK	☐ NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,75mm	☒ OK ☐ NOK	Device serial number	☐ OK	☐ NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW	☒ OK ☐ NOK	Device serial number: S0314C0671624	☐ 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 motorized screwdriver)	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 motorized screwdriver)	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 motorized screwdriver)	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 motorized screwdriver)	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 motorized screwdriver)	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 motorized screwdriver) N0052477	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	Comments
Quality Insp Name and Signature: Dima	

OBSERVATIONS

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 13
Name : Dima
Signature :

21388

ALSTOM GE GIBELI

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: 10/12/2023
Name: Sarqlos

Assembly after test
Date: 22/01/2024
Name: Sarqlos & Xolgni

ROTOR S/N	STATOR S/N	
MC222-10-026	GIB-1395	

Bearing lubrification - 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 09/23 SN316 - 1369794

S2 Radial play after assembly (0,042 / 0,114): 0,08mm ☒ OK ☐ NOK

S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min:144g - Max:~~149~~ Mesured quantity:

Fitter 1(Name and signature)	Fitter 2(Name and signature)	Quality validation / Quality Insp. Name and signature
		Dima

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 X116-0751 04/23 SN0130

S1 Radial play after assembly (0,021 / 0,067): 0,05mm ☒ OK ☐ NOK

Référence appareil: ASCP14

S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min:159g Max:~~164g~~ Mesured quantity:

Fitter 1(Name and signature)	Fitter 2(Name and signature)	Quality verification / Quality Insp. Name and signature
		Dima

ALSTOM GE GIBELI

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) 3,71 GΩ ☒ OK ☐ NOK

OPERATOR				Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,01mm	☒ OK	☐ NOK	Device serial number: ASCP14	☐ OK	☐ NOK
Out of round on toothed wheel 0,1 max: 0,03mm	☒ OK	☐ NOK	Device serial number: ASCP14	☐ OK	☐ NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,7mm	☒ OK	☐ NOK	Device serial number: GIBFL002	☐ OK	☐ NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW	☒ OK ☐ NOK	Device serial number: SD3160134991	☐ OK	☐ NOK

Prep. & Final Assembly

OPERATOR			Wrench reference (in the event of failure / absence of the motorised screwdriver)	Quality verification		
F1	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK		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		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	Comments
Quality Insp Name and Signature: Dima EMS	

OBSERVATIONS

GIBELA RAIL TRANSORT CONSORTIUM NF (PTY) LTD
Traction Motors Quality
2024 -02- 28
Name : Dima
Signature : EMS

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 - 1386**

CONTENTS

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	03 April 2024
NAME	Kwababana Hlumisa
VISA	P.P.

I - Deviation / Derogation

II - Bogie configuration

B Bogie index

PRESSING REPORT

DATE	
4/3/2024	
DATE VALIDATION	RESPONSABLE VALIDATION

PRASA

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

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.88 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5599

SECONDARY SUSPENSION ✓				
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM[mm]	THEORETICAL [mm]
587.26	+ 0.00	=	587.26	MIN 585.00 MAX 587.50

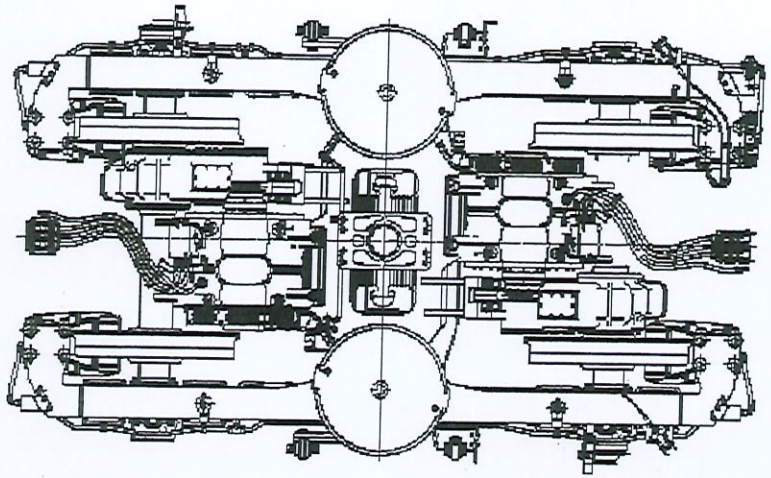
RIGHT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	38.69 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		5521

BOGIE SERIAL N°	MB1-1386
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22375
COMPLETE BOGIE WEIGHT [Kg]	7285

OPERATOR	DATE
BAFANA	4/3/2024

OPERATOR STAMP
DC-BFI-6



	THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN MAX	0.00 0.00	-0.26 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN MAX	0.00 0.00	1.45 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN MAX	0.00 0.00	-0.16 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN MAX	0.00 0.00	0.60 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN MAX	0.00 0.00	0.86 ✓

LEFT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.79 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5570

SECONDARY SUSPENSION ✓				
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM [mm]	THEORETICAL [mm]
587.05	+ 0.00	=	587.05	MIN 585.00 MAX 587.50

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

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.40 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5684

ALSTOM UBUNYE

PRODUCTS TRACEABILITY

Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Motor Bogie MB1	DTR0009706804	M 1386		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M 1697		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M 3147		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3086		NGC
Wheel (Right)	AR00000174670	109	11.23	Bonatrans
Wheel (Left)	AR000000174670	197	12.23	Bonatrans
Wheelset (Rear)	AR00000178600	M 3148		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3092		NGC
Wheel (Right)	AR00000174670	071	11.23	Bonatrans
Wheel (Left)	AR00000174670	115	11.23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2308145		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2308147		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1678	03.24	Wabtec
Brake unit without PB (Right front)	AR00000175185	5064	03.24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	5052	03.24	Wabtec
Brake unit without PB (left rear)	AR00000175185	5054		Wabtec
Motor (front)	AR00000168516	21518		Alstom Ornans
Motor (Rear)	AR00000168516	21426		Alstom Ornans

GIBELA

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21518
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	76765686	
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: 2024/03/13

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 13
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

GIBELA

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21426
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	76595348	
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: 2024/03/13

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 13
Name :.... Dimakatso
Signature :.....

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

2518

ALSTOM

GIBELO

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: 23/02/24
Name: Godfreyd Xolani

Assembly after test
Date: 28/03/24
Name: XOLANI, GODFREY & THOMAS

ROTOR S/N	STATOR S/N	
MCR23-10-049	GIB-1533	

Bearing lubrification - 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

S2

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 09/23 SH179-13697-04

S2 Radial play after assembly (0,042 / 0,114): 0,06mm

☒ OK ☐ NOK

S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly

Min:144g - Max:149g Mesured quantity:

Fitter 1(Name and signature)	Fitter 2(Name and signature)	Quality validation Quality Insp. Name and signature
		Dima

INSULATED CERAMIC BEARING OPPOSITE DRIVE END side – Security operation

S1

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 X 116-1011 04/23 SH0292

S1 Radial play after assembly (0,021 / 0,067): 0,06mm

☒ OK ☐ NOK

S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly

Min:159g Max: 164g Mesured quantity:

Fitter 1(Name and signature)	Fitter 2(Name and signature)	Quality verification Quality Insp. Name and signature
		Dima

Référence appareil: AMXGIL4

ALSTOM

GIBELO

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) 1.329 52 ☒ OK ☐ NOK

OPERATOR	Quality verification

Out of round at the end of the shaft drive end, 0,05 max Value 0,02mm	X	OK	NOK	Device serial number AMXG114	OK	NOK
Out of round on toothed wheel 0,1 max: 0,07mm	X	OK	NOK	Device serial number AMXG112	OK	NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,8mm	X	OK	NOK	Device serial number GIBELA01	OK	NOK
Sensor reference: DTR0000512252/DSD1830.19Q14HW	X	OK	NOK	Device serial number 5231420670?	OK	NOK

Prep. & Final Assembly

OPERATOR				Quality verification		
F1 Torque tightening to 8 x 76 Nm:	X	OK	NOK	wrench reference (in the event of failure / absence of the motorized screwdriver) N0053671	QC 1 X 61 Nm	OK NOK
F2 Torque tightening to 8 x 76 Nm:	X	OK	NOK	wrench reference (in the event of failure / absence of the motorized screwdriver) N0053671	QC 1 X 61 Nm	OK NOK
F3 Torque tightening to 4 x 44 Nm: Fold locking plate	X	OK	NOK	wrench reference (in the event of failure / absence of the motorized screwdriver) N0057081	QC 1 X 37 Nm	OK NOK
F4 Torque tightening to 4 x 22 Nm:	X	OK	NOK	wrench reference (in the event of failure / absence of the motorized screwdriver) N0053688	QC 1 X 18 Nm	OK NOK
F5 Torque tightening to 6 x 22 Nm:	X	OK	NOK	wrench reference (in the event of failure / absence of the motorized screwdriver) N0053723	QC 1 X 18 Nm	OK NOK

Finishing

F17 Torque tightening to 4 x 22 Nm:	X	OK	NOK	wrench reference (in the event of failure / absence of the motorized screwdriver) N0053577	QC 1 X 22 Nm	OK NOK

Grease protection transport

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

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

Final Inspection	Comments
Quality Insp Name and Signature: Dima KMS	

OBSERVATIONS

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 13
Name : Dima
Signature : KMS

21426

ALSTOM GIBELO

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: 23/01/24
Name: XOLANE

Assembly after test
Date: 02/03/24
Name: XOLANE, THOMAS & GODFREY

ROTOR S/N	STATOR S/N	
MCR23-10-056	GTIB-1434	

Bearing lubrification - 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
S2
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 09/23 8N0295 – 1369794

S2 Radial play after assembly (0,042 / 0,114): 0,06 mm
[X] OK [ ] NOK

S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min:144g - Max:149g | Mesured quantity: | Quality validation
Fitter 1(Name and signature) | Fitter 2(Name and signature) | Quality Insp. Name and signature: Dima

INSULATED CERAMIC BEARING OPPOSITE DRIVE END side – Security operation
S1
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 X116-1013 04/23 8N0295

S1 Radial play after assembly (0,021 / 0,067): 0,05 mm
[X] OK [ ] NOK

S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min:159g Max:164g | Mesured quantity: | Quality verification
Fitter 1(Name and signature) | Fitter 2(Name and signature) | Quality Insp. Name and signature: Dima

Référence appareil: AJ2P14

ALSTOM GIBELO

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) 2,34 GΩ [X] OK [ ] NOK

OPERATOR			Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,03 mm	[X] OK [ ] NOK	Device serial number: AJ2P14	[ ] OK	[ ] NOK
Out of round on toothed wheel 0,1 max: 0,03 mm	[X] OK [ ] NOK	Device serial number: AJ2P14	[ ] OK	[ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,7 mm	[X] OK [ ] NOK	Device serial number: GTIB-0001	[ ] OK	[ ] NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW	[X] OK [ ] NOK	Device serial number: S004301360	[ ] OK	[ ] NOK

Prep. & Final Assembly

	OPERATOR			wrench reference (in the event of failure / absence of the motorized screwdriver)	Quality verification		
F1	Torque tightening to 8 x 76 Nm:	[X] OK	[ ] NOK	NC0C5857	QC 1 X 61 Nm	[ ] OK	[ ] NOK
F2	Torque tightening to 8 x 76 Nm:	[X] OK	[ ] NOK	NC0C5857	QC 1 X 61 Nm	[ ] OK	[ ] NOK
F3	Torque tightening to 4 x 44 Nm: Fold locking plate	[X] OK	[ ] NOK	NC0C5881	QC 1 X 37 Nm	[ ] OK	[ ] NOK
F4	Torque tightening to 4 x 22 Nm:	[X] OK	[ ] NOK	NC0C5857	QC 1 X 18 Nm	[ ] OK	[ ] NOK
F5	Torque tightening to 6 x 22 Nm:	[X] OK	[ ] NOK	NC0C5857	QC 1 X 18 Nm	[ ] OK	[ ] NOK

Finishing

F1	Torque tightening to 4 x 22 Nm:	[X] OK	[ ] NOK	NC0C5877	QC 1 X 22 Nm	[ ] OK	[ ] NOK

Grease protection transport

S3	18g (0/+4.5) CC	Mesured quantity: 18g		[X] OK	[ ] NOK	
S4	18g (0/+4.5) CC	Mesured quantity: 18g		[X] OK	[ ] NOK	

Final inspection following the check-list DTR0000452909 and DTR0000452910 (In the case of 100% inspection of the production) [X] OK [ ] NOK

Final Inspection	Comments
Quality Insp Name and Signature: Dima	

OBSERVATIONS

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 13
Name : Dima
Signature :