ALSTOM UBUNYE

MANUFACTURER	ALSTOM Ubunye Marievale Road, Vosterkroon, Nigel, 1490
CUSTOMER	Gibela
CONTRACT	
PROJECT	PRASA

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE	MOTOR BOGIE MB1
	DTR0009706804
SERIAL NUMBER	MB1 1398

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	17 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 1398		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M 1724		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M 03189		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3210		NGC
Wheel (Right)	AR00000174670	085	10-23	Bonatrans
Wheel (Left)	AR000000174670	098	10-23	Bonatrans
Wheelset (Rear)	AR00000178600	M 03190		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3222		NGC
Wheel (Right)	AR00000174670	078	10-23	Bonatrans
Wheel (Left)	AR00000174670	105	10-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2308111		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2308113		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1711	04-24	Wabtec
Brake unit without PB (Right front)	AR00000175185	5160	04-24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	5163	04-24	Wabtec
Brake unit without PB (left rear)	AR00000175185	5161		Wabtec
Motor (front)	AR00000168516	21562		Alstom Ornans
Motor (Rear)	AR00000168516	21546		Alstom Ornans

PRESSING REPORT

DATE	
4/16/2024	
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	37.02 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5601

SECONDARY SUSPENSION ✓			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM[mm]	THEORETICAL [mm]
587.46	+ 0.00	= 587.46	MIN 585.00 MAX 587.50

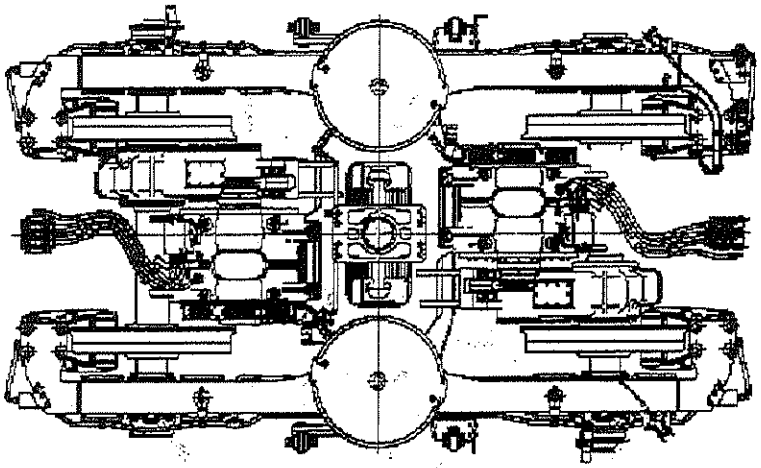
RIGHT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.20 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		5564

BOGIE SERIAL N°	MB1-1398
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22379
COMPLETE BOGIE WEIGHT [Kg]	7284

OPERATOR	DATE
BAFANA	4/16/2024

OPERATOR STAMP
DC-BFI-6



	THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN MAX	0.00 0.00	-0.24 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN MAX	0.00 0.00	0.69 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN MAX	0.00 0.00	-0.13 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN MAX	0.00 0.00	0.22 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN MAX	0.00 0.00	0.46 ✓

LEFT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.00 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5574

SECONDARY SUSPENSION ✓			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
587.42	+ 0.00	= 587.42	MIN 585.00 MAX 587.50

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

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	36.98 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5641

CERTIFICATION OF CONFORMITY

GIBELA

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21562
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	76892093	
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: 2024/04/11

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -04- 11
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

21567

ALSTOM GIBELA

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: 12/03/24
Name: XOLANI

Assembly after test
Date: 06/04/24
Name: XOLANI / THOMAS

ROTOR S/N	STATOR S/N
NCR03-10-057	GHB-1575

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 10/23 8H226-1988233

(S2) Radial play after assembly (0,042 / 0,114): 0,07mm
[X] 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
[signature]	[signature]	Dima [signature]

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 -0901 04/23 8H0173

(S1) Radial play after assembly (0,021 / 0,067): 0,04mm
[X] 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
[signature]	[signature]	Dima [signature]

Référence appareil: AJZP14

ALSTOM GIBELA

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)	40,8 MΩ	[X] OK	[ ] NOK

OPERATOR				Quality verification	
Out of round at the end of the shaft drive end, 0,05 max Value 0,01mm	[X] OK	[ ] NOK	Device serial number AJZP14	[ ] OK	[ ] NOK
Out of round on toothed wheel 0,1 max: 0,07mm	[X] OK	[ ] NOK	Device serial number AJZP14	[ ] OK	[ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,85mm	[X] OK	[ ] NOK	Device serial number GIBELC01	[ ] OK	[ ] NOK
Sensor reference: DTR0000512252/DSD1830.19Q14HW	[X] OK	[ ] NOK	Device serial number 5023160133351	[ ] 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): NCC5951	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): NCC5987	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): NCC5081	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): NCC5933	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): NCC5938	QC 1 X 18 Nm	☐ OK ☐ NOK

Finishing

F1	Torque tightening to 4 x 22 Nm:	X OK ☐ NOK	wrench reference (in the event of failure / absence of the motorized screwdriver): NCC5977	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 MS	

OBSERVATIONS

GIBELA RAIL TRANSPORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -04- 08
Name : Dima
Signature : MS

GIBELA

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors 6 ECA 3022 B
Serial Number:	N ° 21546
Client / Customer:	ALSTOM UBUNYE (PTY) LTD
Project:	PRASA
P O Number:	76851220
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: 2024/04/11

Function: Final Inspection

Perfomed and signed off by: Name_____. Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -04- 11
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

21546

ALSTOM

GIBELA

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: 05/03/24
Name: Godfrey & Xolani

Assembly after test
Date: 19/03/24
Name: XOLANI & GODFREY

ROTOR S/N	STATOR S/N	
MCR23-10-020	GIB-1565	

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~~
~~or SKF NU 214 ECM/C4 VA3091~~
(cross out the references that have not been fitted)

N°: Romania 0097 10/23 SN16-1988233

S2 Radial play after assembly (0,042 / 0,114): 0,07mm
[X] OK [ ] NOK

S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly
Min 144g - Max 148g Mesured quantity:

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

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~~
~~or SKF 6214-M/C4 VL 0241~~
(cross out the references that have not been fitted)

Serial N°: Germany 0200 X116-1002 04/23 SN0272

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

Référence appareil: KMXG14

ALSTOM

GIBELA

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) 2.60 G Ω [X] OK [ ] NOK

OPERATOR			Device serial number	Quality verification	
Out of round at the end of the shaft drive end: 0,05mm	[X] OK	[ ] NOK	KMXG14	[ ] OK	[ ] NOK
Out of round on toothed wheel 0,1 max: 0,06mm	[X] OK	[ ] NOK	KMXG14	[ ] OK	[ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,07mm	[X] OK	[ ] NOK	GIBEL007	[ ] OK	[ ] NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW	[X] OK [ ] NOK	Device serial number: S23110000597	[ ] 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): D2861188	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): D2862188	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): D2511039	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): W0058088	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): N0062088	QC 1 X 18 Nm	[ ] OK [ ] NOK

Finishing

F1	Torque tightening to 4 x 22 Nm:	[X] OK [ ] NOK — wrench reference (in the event of failure/absence of the motorized screwdriver): NCCSD-77	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 TRANSPORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -03- 20
Name : Dima
Signature :

ALSTOM UBUNYE

MANUFACTURER	ALSTOM Ubunye Marievale Road, Vosterkroon, Nigel, 1490
CUSTOMER	Gibela
CONTRACT	
PROJECT	PRASA

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE	MOTOR BOGIE type MB2
	DTR0009706805
SERIAL NUMBER	MB2 - 595

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	12 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 MB2	DTR0009706805	595		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M 1715		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M 3185		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3225		NGC
Wheel (Right)	AR00000174670	137	10.23	Bonatrans
Wheel (Left)	AR000000174670	146	10.23	Bonatrans
Wheelset (Rear)	AR00000178600	M 3186		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3247		NGC
Wheel (Right)	AR00000174670	039	10.23	Bonatrans
Wheel (Left)	AR00000174670	041	10.23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2308149		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2310211		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1707	04.24	Wabtec
Brake unit without PB (Right front)	AR00000175185	5150	04.24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	5148	04.24	Wabtec
Brake unit without PB (left rear)	AR00000175185	5149	04.24	Wabtec
Motor (front)	AR00000168516	21477		Alstom - Gibela
Motor (Rear)	AR00000168516	21543		Alstom - Gibela

PRESSING REPORT

DATE VALIDATION	RESPONSABLE VALIDATION
4/11/2024	

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	37.38 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5629

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM[mm]	THEORETICAL [mm]	
586.11	+	1.00	= 587.11	MIN	585.00
				MAX	587.50

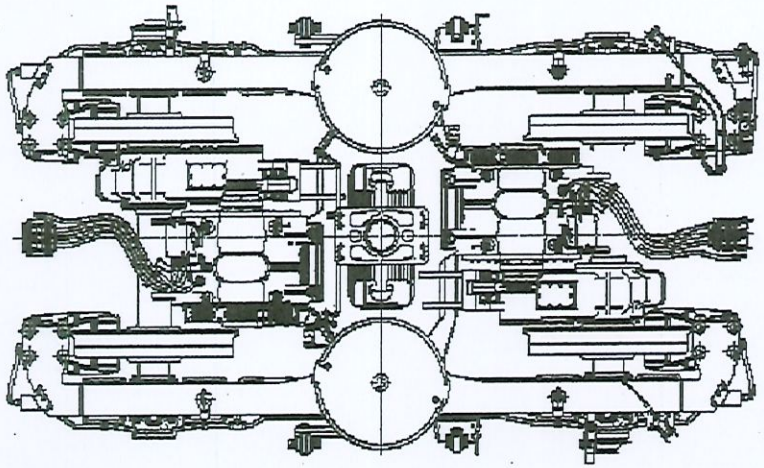
RIGHT JACK LOAD	
7375	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.62 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		5557

BOGIE SERIAL N°	MB2-595
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22397
COMPLETE BOGIE WEIGHT [Kg]	7293

OPERATOR	DATE
EDWARD	4/11/2024

OPERATOR STAMP
BFI-21



	THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN MAX	0.00 0.00	-0.74 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN MAX	0.00 0.00	0.95 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN MAX	0.00 0.00	-0.21 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN MAX	0.00 0.00	0.11 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN MAX	0.00 0.00	0.85 ✓

LEFT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.67 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5546

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM [mm]	THEORETICAL [mm]	
587.43	+	0.00	= 587.43	MIN	585.00
				MAX	587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm] ✓	THEORETICAL [mm]	
-0.32	MIN	-1.00
	MAX	1.00

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.20 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5664

GIBELA

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors 6 ECA 3022 B
Serial Number:	N ° 21477
Client / Customer:	ALSTOM UBUNYE (PTY) LTD
Project:	PRASA
P O Number:	76679924
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: 2024/04/11

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -04- 11
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

2147

ALSTOM

GIBELA

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: 06/08/24
Name: VINCENT

Assembly after test
Date: 13/03/2024
Name: Jacques + Kolani + Tommas

ROTOR S/N	STATOR S/N	
MCR002-10-0904	GIB3-1485	

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~~
SKE: ~~NU 214 ECM/C4 VA3091~~
(cross out the references that have not been fitted)

N°: Romanin : 0097 09/23 SN70 - 1369794

S2 Radial play after assembly (0,042 / 0,114): 0,06mm
[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
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 X116-1040 04/23 SN0289

S1 Radial play after assembly (0,021 / 0,067): 0,06mm
[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: AJ2714

ALSTOM

GIBELA

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) 7,81GΩ [X] OK [ ] NOK

OPERATOR			Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,01mm	[X] OK [ ] NOK	Device serial number: AJ2714	[ ] OK	[ ] NOK
Out of round on toothed wheel 0,1 max: 0,04mm	[X] OK [ ] NOK	Device serial number: AJ2714	[ ] OK	[ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,65mm	[X] OK [ ] NOK	Device serial number: GIB4000	[ ] OK	[ ] NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW	[X] OK [ ] NOK	Device serial number: [illegible]	[ ] 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	NCC1587	QC 1 X 61 Nm	[ ] OK	[ ] NOK
F2	Torque tightening to 8 x 76 Nm:	[X] OK [ ] NOK	NCC1587	QC 1 X 61 Nm	[ ] OK	[ ] NOK
F3	Torque tightening to 4 x 44 Nm: Fold locking plate	[X] OK [ ] NOK	NCC1588	QC 1 X 37 Nm	[ ] OK	[ ] NOK
F4	Torque tightening to 4 x 22 Nm:	[X] OK [ ] NOK	NCC1588	QC 1 X 18 Nm	[ ] OK	[ ] NOK
F5	Torque tightening to 6 x 22 Nm:	[X] OK [ ] NOK	NCC1588	QC 1 X 18 Nm	[ ] OK	[ ] NOK

Finishing

F1	Torque tightening to 4 x 22 Nm:	[X] OK [ ] NOK	[illegible]	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- 20
Name : Dima
Signature :

CERTIFICATION OF CONFORMITY

GIBELA

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21543
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	76851196	
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: 2024/04/11

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -04- 11
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

21543

ALSTOM

GIBELA

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: 04/02/24
Name: XOLANI

Assembly after test
Date: 19/08/24
Name: Godfrey & Xolani

ROTOR S/N	STATOR S/N	
NCR23-10-017	CHI3-1556	

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 10/23 SN273 - 1988233

S2 Radial play after assembly (0,042 / 0,114): 0,06mm
[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 X116-09357 04/23 SN217

S1 Radial play after assembly (0,021 / 0,067): 0,05mm
[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: AJEP14

ALSTOM

GIBELA

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) 9,78MΩ [X] OK [ ] NOK

OPERATOR			Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,01mm	[X] OK [ ] NOK	Device serial number: AJEP14	[ ] OK	[ ] NOK
Out of round on toothed wheel 0,1 max: 0,03mm	[X] OK [ ] NOK	Device serial number: AJEP14	[ ] OK	[ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,7mm	[X] OK [ ] NOK	Device serial number: CHI3-1556	[ ] OK	[ ] NOK

21543

ALSTOM

GIBELA

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: 04/02/24
Name: XOLANI

Assembly after test
Date: 19/08/24
Name: Godfrey & Xolani

ROTOR S/N	STATOR S/N	
NLCR23-10-017	CHT3-1556	

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 10/23 SN273 - 1988233

S2 Radial play after assembly (0,042 / 0,114): 0,06mm
[X] 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
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°:
Germania 0200 X116-09357 04/23 SN0217

S1 Radial play after assembly (0,021 / 0,067): 0,05mm
[X] 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: AJEP14

ALSTOM

GIBELA

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) 9,78MΩ [X] OK [ ] NOK

OPERATOR			Quality verification
Out of round at the end of the shaft drive end 0,05 max: 0,01mm	[X] OK [ ] NOK	Device serial number AJEP14	[ ] OK [ ] NOK
Out of round on toothed wheel 0,1 max: 0,03mm	[X] OK [ ] NOK	Device serial number AJEP14	[ ] OK [ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2): 0,7mm	[X] OK [ ] NOK	Device serial number CHT3-0001	[ ] OK [ ] NOK