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 - 1502

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	16 July 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 1502		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M 1368		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M 3457		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3248		NGC
Wheel (Right)	AR00000174670	067	04.24	Bonatrans
Wheel (Left)	AR000000174670	066	04.24	Bonatrans
Wheelset (Rear)	AR00000178600	M 3458		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3256		NGC
Wheel (Right)	AR00000174670	109	03.24	Bonatrans
Wheel (Left)	AR00000174670	108	03.24	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2310029		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2311039		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	999	06.24	Wabtec
Brake unit without PB (Right front)	AR00000175185	2992	06.24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	2991	06.24	Wabtec
Brake unit without PB (left rear)	AR00000175185	2993	06.24	Wabtec
Motor (front)	AR00000168516	21731		Alstom Ornans
Motor (Rear)	AR00000168516	21808		Alstom Ornans

PRESSING REPORT

DATE VALIDATION	RESPONSABLE VALIDATION
7/11/2024	

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	37.00 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5580

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM[mm]	THEORETICAL [mm]	
586.84	+	0.00	= 586.84	MIN	585.00
				MAX	587.50

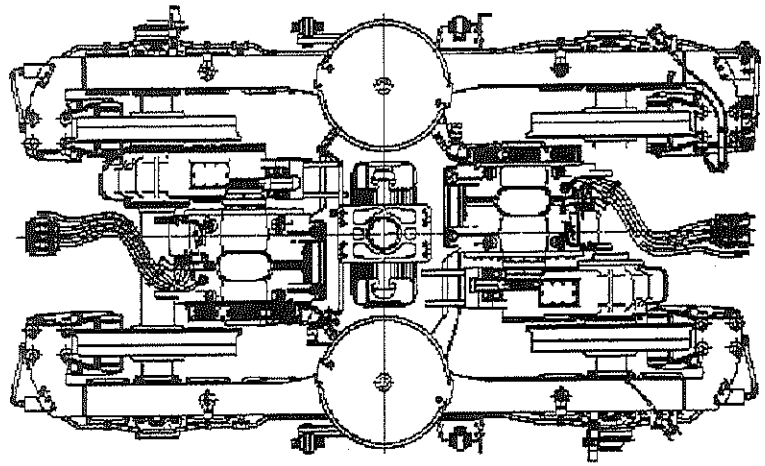
RIGHT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	37.50 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		5537

BOGIE SERIAL N°	MB1-1502
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22384
COMPLETE BOGIE WEIGHT [Kg]	7284

OPERATOR	DATE
BAFANA	7/11/2024

OPERATOR STAMP
DC-BFI-6



	THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN MAX	0.00 0.00	-0.03 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN MAX	0.00 0.00	1.36 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN MAX	0.00 0.00	-0.31 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN MAX	0.00 0.00	0.67 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN MAX	0.00 0.00	0.70 ✓

LEFT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	36.70 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5577

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM [mm]	THEORETICAL [mm]	
587.48	+	0.00	= 587.48	MIN	585.00
				MAX	587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm] ✓	THEORETICAL [mm]	
-0.64	MIN	-1.00
	MAX	1.00

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN MAX	33.00 39.00	36.30 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5690

21731

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: 14/05/24
Name: ROLAND

Assembly after test
Date: 26/06/24
Name: ROLAND & SURPRISE

ROTOR S/N	STATOR S/N	
MCB23-11-113	GIB-1782	

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 SN449-1369794

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:	Quality validation
Fitter 1(Name and signature)	Fitter 2(Name and signature) / Quality insp. Name and signature
	RDS / Bubble

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°: AUSTRIA 094W

S1 Radial play after assembly (0,021 / 0,067): 0,04mm

[X] OK [ ] NOK

Référence appareil: AMXG20

S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly

Min:159g Maxi:164g

Mesured quantity:	Quality verification
Fitter 1(Name and signature)	Fitter 2(Name and signature) / Quality insp. Name and signature
	RDS / Bubble

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) 11,6MΩ [X] OK [ ] NOK

OPERATOR		Device serial number	Quality verification
Out of round at the end of the shaft drive end, 0,05 max Value 0,01mm	[X] OK [ ] NOK	AMXG20	[ ] OK [ ] NOK
Out of round on toothed wheel 0,1 max: 0,04mm	[X] OK [ ] NOK	AMXG20	[ ] OK [ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2):	[ ] OK [ ] NOK		[ ] OK [ ] NOK
Sensor reference: DTR0000512252/0SD1830.19Q14HW	[ ] OK [ ] NOK		[ ] OK [ ] NOK

Missing Speed Sensor Deviation #: 7072

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) NCC0587	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) NCC0587	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) NCC0586	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) NCC0508	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) NCC0585	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) NCC0579	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 -06- 26
Name : Dima
Signature : DMS

21803

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: 31/05/24
Name: Godfrey

Assembly after test
Date: 06/06/24
Name: NOLANT

ROTOR S/N	STATOR S/N	
SU69682-009	GIB-1818	

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 SN2086 - 1369794

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: 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°: Austria 094 W

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

Référence appareil: AJZP14

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

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) 10.86 GΩ [X] OK [ ] NOK

OPERATOR		Device serial number	Quality verification
Out of round at the end of the shaft drive end, 0,05 max Value 0,02mm	[X] OK [ ] NOK	AJZP14	[ ] OK [ ] NOK
Out of round on toothed wheel 0,1 max: 0,05mm	[X] OK [ ] NOK	AJZP14	[ ] OK [ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2):	[ ] OK [ ] NOK		[ ] OK [ ] NOK
Sensor reference: DTR0000512252/DSD1830.19Q14HW	[ ] OK [ ] NOK		[ ] OK [ ] NOK

Missing speed sensor Deviation #: 7072

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 installed screwdriver)	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 installed screwdriver)	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 installed screwdriver)	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 installed screwdriver)	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 installed screwdriver)	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 installed screwdriver)	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 AMS.	

OBSERVATIONS

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -06- 26
Name :...Dima.....
Signature :...AMS.....

CERTIFICATION OF CONFORMITY

GIBELA

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21803
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	77419369	
Status:	QC PASS	
Derogations / Concession / Waiver N °:	7072	
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: 2024/06/27

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -06- 27
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 ° 21731
Client / Customer:	ALSTOM UBUNYE (PTY) LTD
Project:	PRASA
P O Number:	77314078
Status:	QC PASS
Derogations / Concession / Waiver N °:	7072
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: 2024/06/27

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -06- 27
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

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 - 1503

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	16 July 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 1503		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M 1867		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M 3467		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3118		NGC
Wheel (Right)	AR00000174670	090	04.24	Bonatrans
Wheel (Left)	AR000000174670	102	04.24	Bonatrans
Wheelset (Rear)	AR00000178600	M 3470		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K 3255		NGC
Wheel (Right)	AR00000174670	107	04.24	Bonatrans
Wheel (Left)	AR00000174670	088	04.24	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2310162		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2310037		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1002	06.24	Wabtec
Brake unit without PB (Right front)	AR00000175185	2960	06.24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	2959	06.24	Wabtec
Brake unit without PB (left rear)	AR00000175185	2958	06.24	Wabtec
Motor (front)	AR00000168516	21793		Alstom Ornans
Motor (Rear)	AR00000168516	21773		Alstom Ornans

PRESSING REPORT

DATE	
7/15/2024	
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 MAX 39.00		36.00 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q2		5579

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM[mm]	THEORETICAL [mm]	
583.85	+	2.00	= 585.85	MIN	585.00
				MAX	587.50

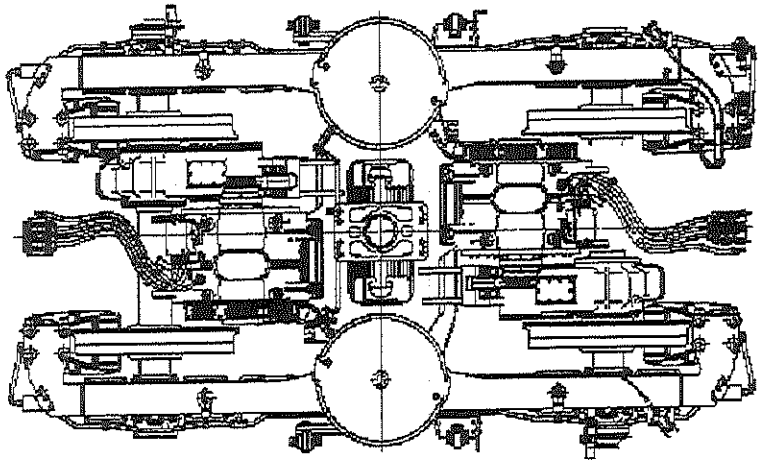
RIGHT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00		35.50 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q4		5603

BOGIE SERIAL N°	MB1-1503
BOGIE TYPE	M8
BOGIE WEIGHT UNDER LOAD [Kg]	22390
COMPLETE BOGIE WEIGHT [Kg]	7300

OPERATOR	DATE
BAFANA	7/15/2024

OPERATOR STAMP
DC-BFI-6



	THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN 0.00 MAX 0.00		0.10 ✓
LOAD DIFFERENCE ON REAR AXLE [%]	MIN 0.00 MAX 0.00		0.13 ✓
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN 0.00 MAX 0.00		-0.23 ✓
LOAD DIFFERENCE ON RAILS [%]	MIN 0.00 MAX 0.00		0.12 ✓
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN 0.00 MAX 0.00		0.02 ✓

LEFT JACK LOAD	
7376	Kg

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00		35.60 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q1		5590

SECONDARY SUSPENSION ✓					
MEASURED [mm]	SHIM THICK [mm]		DIM. WITH SHIM [mm]	THEORETICAL [mm]	
583.99	+	2.00	= 585.99	MIN	585.00
				MAX	587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm] ✓	THEORETICAL [mm]	
-0.14	MIN	-1.00
	MAX	1.00

	THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX		
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00		35.40 ✓
SHIM THICK [mm]			
WEIGHT ON WHEEL [Kg]	Q3		5618

GIBELA

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors	6 ECA 3022 B
Serial Number:	N °	21775
Client / Customer:	ALSTOM UBUNYE (PTY) LTD	
Project:	PRASA	
P O Number:	77402554	
Status:	QC PASS	
Derogations / Concession / Waiver N °:	7072	
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: 2024/06/25

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -06- 25
Name : Dimakatso
Signature :

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

CERTIFICATION OF CONFORMITY

Inpection certificate according EN 10204-3.1

Product:	Traction Motors 6 ECA 3022 B
Serial Number:	N ° 21793
Client / Customer:	ALSTOM UBUNYE (PTY) LTD
Project:	PRASA
P O Number:	77402608
Status:	QC PASS
Derogations / Concession / Waiver N °:	7072
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: 2024/06/27

Function: Final Inspection

Perfomed and signed off by: Name_____ Dimakatso Mohoalali

Signature_____

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -06- 27
Name : Dimakatso
Signature : FMS

Gibela Rail
02 Shosholoza Avenue
M07 Traction Motor
1590

21793

ALSTOM

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: 30/05/24
Name: Godfrey

Assembly after test
Date: 26/06/24
Name: NOLHNT & SURPRISE

ROTOR S/N	STATOR S/N	
SU69683-019	GIB - 1808	

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

N°: ROMANIA 0897 09/23 SNU36 - 1369794

(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: | 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°: AUSTRIA 095 W

(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: AJZP14

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) 7,98GΩ [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: 0,04mm	[X] OK [ ] NOK	Device serial number: AJZP14	[ ] OK [ ] NOK
sensor / toothed wheel play 0,7 (+/- 0,2):	[ ] OK [ ] NOK	Device serial number:	[ ] OK [ ] NOK
Sensor reference: DTR0000512252/DSD1830.19Q14HW	[ ] OK [ ] NOK	Device serial number:	[ ] OK [ ] NOK

Missing speed sensor Deviation #: 7072

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 recorded screwdriver) D2562 85	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 recorded screwdriver) D2562	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 recorded screwdriver) D2511099	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 recorded screwdriver) NCC1597	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 recorded screwdriver) NCC1597	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 recorded screwdriver) NCC1597	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) ☒ OK ☐ NOK

Final inspection	Comments
Quality Insp Name and Signature: Aima RMS	

OBSERVATIONS

GIBELA RAIL TRANSORT CONSORTIUM RF (PTY) LTD
Traction Motors Quality
2024 -06- 26
Name : Aima
Signature : RMS

21775

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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: 25/08/24
Name: Godfrey

Assembly after test
Date: 23/08/24
Name: VOLANT ST MORLAS

ROTOR S/N	STATOR S/N	
SN900282-053	GIB - 1800	

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 SN389 - 1369794

S2 Radial play after assembly (0,042 / 0,114): 0,07mm

[X] OK [ ] NOK

S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly

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

Filter 1(Name and signature)	Filter 2(Name and signature)	Quality validation / Quality Insp. Name and signature
		Oima RMS

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°: AUSTRIA 094 W

S1 Radial play after assembly (0,021 / 0,067): 0,04mm

[X] OK [ ] NOK

S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly

Mesured quantity: Mln:159g Max:164g

Filter 1(Name and signature)	Filter 2(Name and signature)	Quality verification / Quality Insp. Name and signature
		Oima RMS

Référence appareil: AJ2PIL

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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) 10.4 GΩ [X] OK [ ] NOK

OPERATOR	Quality verification

Out of round at the end of the shaft drive end, 0,05 max Value 0,00mm	X	OK	NOK	Device serial number AJZP14	OK	NOK
Out of round on toothed wheel 0,1 max: 0,01mm	X	OK	NOK	Device serial number AJZP14	OK	NOK
sensor / toothed wheel play 0,7 (+/- 0,2): t		OK	NOK	Device serial number	OK	NOK
Sensor reference: DTR0000512252/DSD1830.19Q14HW		OK	NOK	Device serial number	OK	NOK

Missing speed sensor deviation #: 7075

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	D2512.168	QC 1 X 61 Nm	OK	NOK
F2	Torque tightening to 8 x 76 Nm:	X	OK NOK	D2512.168	QC 1 X 61 Nm	OK	NOK
F3	Torque tightening to 4 x 44 Nm: Fold locking plate	X	OK NOK	D25110.09	QC 1 X 37 Nm	OK	NOK
F4	Torque tightening to 4 x 22 Nm:	X	OK NOK	D25110.09	QC 1 X 18 Nm	OK	NOK
F5	Torque tightening to 6 x 22 Nm:	X	OK NOK	D25110.09	QC 1 X 18 Nm	OK	NOK

Finishing

F1	Torque tightening to 4 x 22 Nm:	X	OK NOK	ACS527	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 -06- 24
Name : Dima
Signature :