



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 - 1339**

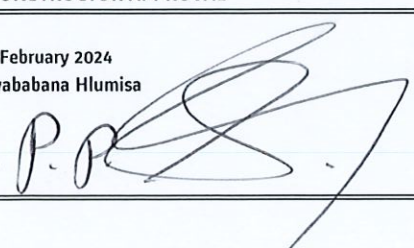
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COMPLIANCE CERTIFICATE

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

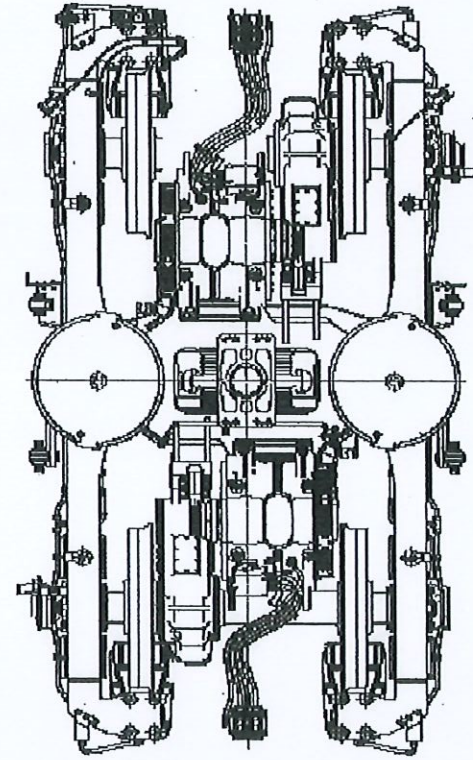
Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Motor Bogie MB1	DTR0009706804	M1339		Alstom - Ubunye
Motor Bogie Frame	AR00000176080	M1644		Alstom - Ubunye
Wheelset (Front)	AR000000177020	M3015		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K2974		NGC
Wheel (Right)	AR00000174670	077	02-23	Bonatrans
Wheel (Left)	AR000000174670	114	02-23	Bonatrans
Wheelset (Rear)	AR00000178600	M3016		Alstom - Ubunye
Axle with fitted gearbox	AR00000177072	K2985		NGC
Wheel (Right)	AR00000174670	094	02-23	Bonatrans
Wheel (Left)	AR00000174670	080	02-23	Bonatrans
Pneumatic suspension (Right)	AR00000176127	2310203		Hutchinson
Pneumatic suspension (Left)	AR00000176127	2310105		Hutchinson
Brake unit with PB (Right rear)	AR00000174544	1595	01-24	Wabtec
Brake unit without PB (Right front)	AR00000175185	4814	01-24	Wabtec
Brake unit without PB (Left Front)	AR00000175185	4813	01-24	Wabtec
Brake unit without PB (left rear)	AR00000175185	4815	01-24	Wabtec
Motor (front)	AR00000168516	21465		Alstom Ornans
Motor (Rear)	AR00000168516	21435		Alstom Ornans

PRESSING REPORT

DATE 2/22/2024		PRASA ALZOM UG JUNE	
DATE VALIDATION		RESPONSABLE VALIDATION	
INSTRUCTION SHEET:		LOAD TEST : MOTOR BOGIE	
FAMILY:		PROJECT:	

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM[mm]	THEORETICAL [mm]
587.41	+	0.00	MIN
			587.41
			MAX
			587.50

RIGHT JACK LOAD
7376 Kg



BOGIE SERIAL N°	MB1-1339
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22360
COMPLETE BOGIE WEIGHT [Kg]	7281
OPERATOR	DATE
BAFANA	2/22/2024
OPERATOR STAMP	
DC-BFI-6	

THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN	38.10
	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN	33.00
	MAX	
SHIM THICK [mm]	MIN	39.00
	MAX	
WEIGHT ON WHEEL [Kg]		5569
Q2		

THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN	0.07
	MAX	
LOAD DIFFERENCE ON REAR AXLE [%]	MIN	-0.35
	MAX	
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN	-0.31
	MAX	
LOAD DIFFERENCE ON RAILS [%]	MIN	-0.14
	MAX	
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN	-0.21
	MAX	

LEFT JACK LOAD
7376 Kg

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
585.20	+	2.00	MIN
			587.20
			MAX
			587.50

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

THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN	38.29
	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN	33.00
	MAX	
SHIM THICK [mm]	MIN	39.00
	MAX	
WEIGHT ON WHEEL [Kg]		5577
Q1		

THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN	38.70
	MAX	
GAP PRIMARY SUSPENSION [mm]	MIN	33.00
	MAX	
SHIM THICK [mm]	MIN	39.00
	MAX	
WEIGHT ON WHEEL [Kg]		5588
Q3		

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: 31/01/24

Name: XOLANT

Assembly after test

Date: 09/02/24

Name: XOLANT & THOMAS

ROTOR S/N	STATOR S/N		
MEER-11-114	CTEB-1478		
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/C4-VA3091 (cross out the references that have not been fitted)			
N°: ROMANIA: 0097 09/23 SN 277 - 1369794			
S2 Radial play after assembly (0,042 / 0,114): 0,05mm ☒ OK ☐ NOK		S4 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min: 144g - Max: 149g Measured quantity: ☐ OK ☐ NOK Filter 1 (Name and signature) <i>[Signature]</i> Filter 2 (Name and signature) <i>[Signature]</i> Quality validation: <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-VE0241 (cross out the references that have not been fitted)			
Serial N°: GERMANY: 0200 X716-1013 04/23 SN 0294			
S1 Radial play after assembly (0,021 / 0,067): 0,05mm ☒ OK ☐ NOK		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min: 159g Max: 164g Measured quantity: ☐ OK ☐ NOK Filter 1 (Name and signature) <i>[Signature]</i> Filter 2 (Name and signature) <i>[Signature]</i> Quality validation: <i>[Signature]</i>	
Référence appareil: AJZP14			
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ALSTOM

GIBEL

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)		10,2 MΩ	☒ OK ☐ NOK
OPERATOR		Quality verification	
Out of round at the end of the shaft drive end 0,05 max:	☒ OK ☐ NOK	<i>AJZP14</i>	☐ OK ☐ NOK
Out of round on toothed wheel 0,1 max:	☒ OK ☐ NOK	<i>AJZP14</i>	☐ OK ☐ NOK
sensor / toothed wheel play 0,7 (+/- 0,2):	☒ OK ☐ NOK	<i>GIBEL 1</i>	☐ OK ☐ NOK

Sensor reference: DTR0000512252/DSD1830.19Q14HW

Device serial number: 623122043

OK NOK

Prep. & Final Assembly

OPERATOR			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	
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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:

Bukle

Comments

OBSERVATIONS

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

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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: 24/01/2024

Name: S1C9100

Assembly after test

Date: 05/02/24

Name: XOUNT

ROTOR S/N		STATOR S/N	
MCB22-11-056		CIB-1452	
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-NIL 214 ECM/C4 VA3091 (cross out the references that have not been fitted)			
N°: ROMANIA: 0097 09/23 S1425-1369794			
S2 Radial play after assembly (0,042 / 0,114): 0,07mm ☒ OK ☐ NOK		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min:144g - Max:149g Measured quantity: Filter 1 (Name and signature) Filter 2 (Name and signature) Quality validation 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 X 272-1309 09/23 S10095			
S1 Radial play after assembly (0,021 / 0,067): 0,05mm ☒ OK ☐ NOK		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min:159g Max:164g Measured quantity: Filter 1 (Name and signature) Filter 2 (Name and signature) Quality verification Quality Insp. Name and signature	
Reference/appareil		Reference/appareil	
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GIBEL

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)				917 MΩ ☒ OK ☐ NOK	
OPERATOR				Quality verification	
Out of round at the end of the shaft drive end 0,05 max: 0,01mm ☒ OK ☐ NOK				A52414 ☐ OK ☐ NOK	
Out of round on toothed wheel 0,1 max: 0,07mm ☒ OK ☐ NOK				A52414 ☐ OK ☐ NOK	
sensor / toothed wheel play 0,7 (+/- 0,2): 0,85mm ☒ OK ☐ NOK				C1251002 ☐ OK ☐ NOK	

Sensor reference: DTR0000512252/DSD1830.19Q14HW

Device serial number
32852005433☒ OK ☐ NOK

Prep. & Final Assembly

OPERATOR			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	
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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

Comments

OBSERVATIONS

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

TROS 916.216

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GIBELA RAIL TRANSPORT CONSORTIUM RF (PTY) LTD

Traction Motors Quality

2024-02-06

Name: Dima

Signature: Dima



CERTIFICATION OF CONFORMITY

Inspection certificate according EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N ° 21465

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76634790

Status: QC PASS

Derogations / Concession / Waiver N °: N/A

Customer modification: N/A

Missing parts: N/A

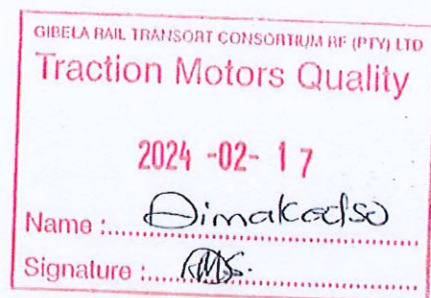
We hereby declare, barring exceptions, reservations or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completion of testing and verification, they completely satisfy all specified requirements, and applicable standards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

Date: 2024/02/17

Function: Final Inspection

Performed and signed off by: Name _____ Dimakatso Mohoalali

Signature _____



Gibela Rail
02 Shosholoza 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 EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N ° 21434

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76568546

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

Perfomed 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

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

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

CUSTOMER **Gibela**

CONTRACT

PROJECT **PRASA**

MANUFACTURER'S DELIVERY DOCUMENT

PRODUCT TYPE **MOTOR BOGIE MB2**

DTR0009706805

SERIAL NUMBER **MB2 575**

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- Motor certificate.....	8 pages	☒

COMPLIANCE CERTIFICATE

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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

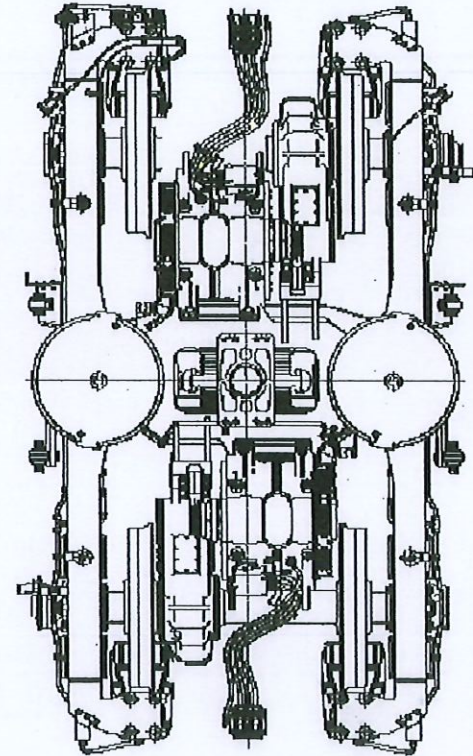
Products Designation	Product Reference	Serial Number	Batch or Date Manufactured	Supplier
Motor Bogie MB2	DTR0009706805	575		Alstom - Ubunye
Motor Bogie Frame	AR000000176080	M1652		Alstom - Ubunye
Wheelset (Front)	AR0000000177020	M03027		Alstom - Ubunye
Axle with fitted gearbox	AR000000177072	K2921		NGC
Wheel (Right)	AR000000174670	119	11-22	Bonatrans
Wheel (Left)	AR0000000174670	057	02-23	Bonatrans
Wheelset (Rear)	AR000000178600	M03028		Alstom - Ubunye
Axle with fitted gearbox	AR000000177072	K2926		NGC
Wheel (Right)	AR000000174670	060	02-23	Bonatrans
Wheel (Left)	AR000000174670	126	11-22	Bonatrans
Pneumatic suspension (Right)	AR000000176127	2310104		Hutchinson
Pneumatic suspension (Left)	AR000000176127	2311034		Hutchinson
Brake unit with PB (Right rear)	AR000000174544	1588	01-24	WEBTEC
Brake unit without PB (Right front)	AR000000175185	4795	01-24	WEBTEC
Brake unit without PB (Left Front)	AR000000175185	4798	01-24	WEBTEC
Brake unit without PB (left rear)	AR000000175185	4793	01-24	WEBTEC
Motor (front)	AR000000168516	21307		GIBELA
Motor (Rear)	AR000000168516	21330		GIBELA

PRESSING REPORT

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

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
584.51	+	2.00	586.51
			MIN 585.00
			MAX 587.50

RIGHT JACK LOAD	
7376	Kg



BOGIE SERIAL N°	MB2-575
BOGIE TYPE	MB
BOGIE WEIGHT UNDER LOAD [Kg]	22370
COMPLETE BOGIE WEIGHT [Kg]	7281
OPERATOR	BAFANA
DATE	2/21/2024

OPERATOR STAMP
DC-3FI-6

THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.60
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q2	5579

THEORETICAL		MEASURED
LOAD DIFFERENCE ON FRONT AXLE [%]	MIN 0.00 MAX 0.00	0.04
LOAD DIFFERENCE ON REAR AXLE [%]	MIN 0.00 MAX 0.00	0.58
LOAD DIFFERENCE FRONT AXLE AND REAR AXLE [%]	MIN 0.00 MAX 0.00	-0.20
LOAD DIFFERENCE ON RAILS [%]	MIN 0.00 MAX 0.00	0.31
LOAD DIFFERENCE ON DIAGONAL WHEELS [%]	MIN 0.00 MAX 0.00	0.27

LEFT JACK LOAD	
7376	Kg

SECONDARY SUSPENSION			
MEASURED [mm]	SHIM THICK [mm]	DIM. WITH SHIM [mm]	THEORETICAL [mm]
587.44	+	0.00	587.44
			MIN 585.00
			MAX 587.50

DIFFERENCE IN RIGHT AND LEFT SUSPENSION HEIGHTS [mm]		
-0.93		
	MIN -1.00	
	MAX 1.00	

THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	38.79
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q1	5584

THEORETICAL		MEASURED
WHEEL DIAMETER [mm]	MIN MAX	
GAP PRIMARY SUSPENSION [mm]	MIN 33.00 MAX 39.00	37.31
SHIM THICK [mm]		
WEIGHT ON WHEEL [Kg]	Q3	5636



CERTIFICATION OF CONFORMITY

Inspection certificate according EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N ° 21330

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76228322

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 _____ *EMS*



Gibela Rail
02 Shosholozu 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

21330

ALSTOM

GIBELCA

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: 23/11/23

Name: XOLANT

Assembly after test

Date: 30/01/2024

Name: Jacques & Thomas

ROTOR S/N MC202-10-014	STATOR S/N CLTB-1330		
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 09/23 SN339 - 1369794			
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: 149g Filter 1 (Name and signature): [Signature] Filter 2 (Name and signature): [Signature] Quality Insp. Name and signature: DIMCI	
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 SKF 6214-M/C4-VL 0241 (cross out the references that have not been fitted)			
Serial N°: GERMANY : 0200 X019-0855 01/23 SN0142			
S1 Radial play after assembly (0,021 / 0,067): 0,05mm ☒ OK ☐ NOK		S3 LUBRIFICATION WITH MOBILITH SHC 100 before cover assembly Min:159g - Max:164g Mesured quantity: 164g Filter 1 (Name and signature): [Signature] Filter 2 (Name and signature): [Signature] Quality Insp. Name and signature: DING	
Référence appareil: AMXG14			
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ALSTOM

GIBELCA

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) **6,82 GΩ**☒ OK ☐ NOK

OPERATOR				Quality verification			
Out of round at the end of the shaft drive end 0,05 max:	☒	OK ☐	NOK ☐	Device serial number: AMXG714	☐	OK ☐	NOK ☐
Out of round on toothed wheel 0,1 max:	☒	OK ☐	NOK ☐	Device serial number: AMXG714	☐	OK ☐	NOK ☐
sensor / toothed wheel play 0,7 (+/- 0,2):	☒	OK ☐	NOK ☐	Device serial number: CH3F1001	☐	OK ☐	NOK ☐
Sensor reference: DTR0000512252/DSD1830.19Q14HW	☒	OK ☐	NOK ☐	Device serial number: 82310004059	☐	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:	☒	OK ☐	NOK ☐	wrench reference (in the event of failure / absence of the motorized screwdriver) QC 1 X 37 Nm	☐	OK ☐	NOK ☐
Fold locking plate							
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) 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 MS

Comments

OBSERVATIONS

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

TROS 916.216

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

2024 -02- 03

Name : Dima

Signature : MS



CERTIFICATION OF CONFORMITY

Inspection certificate according to EN 10204-3.1

Product: Traction Motors 6 ECA 3022 B

Serial Number: N ° 21307

Client / Customer: ALSTOM UBUNYE (PTY) LTD

Project: PRASA

P O Number: 76183354

Status: QC PASS

Derogations / Concession / Waiver N °: N/A

Customer modification: N/A

Missing parts: N/A

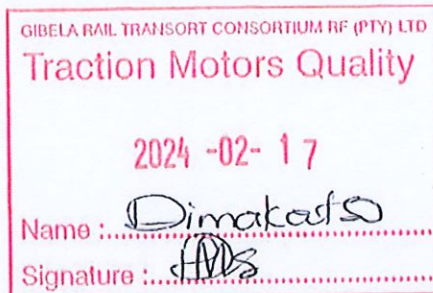
We hereby declare, barring exceptions, reservations or exemptions listed in this statement of conformity, that the listed supplies comply with the contract requirements and that, after completion of testing and verification, they completely satisfy all specified requirements, and applicable standards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

Date: 2024/02/17

Function: Final Inspection

Performed and signed off by: Name _____ Dimakatso Mohoalali

Signature _____



Gibela Rail
02 Shosholozwa Avenue
M07 Traction Motor
1590

GIBELA RAIL

Compiled by M Kola

Date: 22/2/2022

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21307

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: 13/11/23

Name: XOLANI

Assembly after test

Date: 08/02/24

Name: Guelrey Xolani & Thomas

ROTOR S/N		STATOR S/N	
MCP02-11-084		GIB-1309	
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°: AUSTRIA :- 237W			
S2 Radial play after assembly (0,042 / 0,114): 0,07mm ☒ OK ☐ NOK		S3 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 validation Quality Insp. Name and signature	
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 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): 0,06mm ☒ OK ☐ NOK		S3 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 verification Quality Insp. Name and signature	
Reference appareil AMXG14			
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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)		1,71 GΩ		☒ OK ☐ NOK
OPERATOR				Quality verification
Out of round at the end of the shaft drive end 0,05 max:	☒ OK ☐ NOK	Device serial number	☐ OK ☐ NOK	
Out of round on toothed wheel 0,1 max:	☒ OK ☐ NOK	Device serial number	☐ 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

80023601398

☐ OK☐ NOK

Prep. & Final Assembly

OPERATOR		Quality verification	
F1	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	QC 1 X 61 Nm
F2	Torque tightening to 8 x 76 Nm:	☒ OK ☐ NOK	QC 1 X 61 Nm
F3	Torque tightening to 4 x 44 Nm: Fold locking plate	☒ OK ☐ NOK	QC 1 X 37 Nm
F4	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	QC 1 X 18 Nm
F5	Torque tightening to 6 x 22 Nm:	☒ OK ☐ NOK	QC 1 X 18 Nm

Finishing

F1	Torque tightening to 4 x 22 Nm:	☒ OK ☐ NOK	QC 1 X 22 Nm
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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

Comments

OBSERVATIONS

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

TROS 916.216

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

2024 -02- 05

Name : Dima

Signature : [Signature]