

| PROJECT | CUSTOMER | VEHICLE |
|-----------------|----------|----------------|
| Xtrapolis-PRASA | PRASA | 321 – M3 – VPT |

RTR Vehicle Pre-Testing TS321 M3 Report
 GIB0000009159



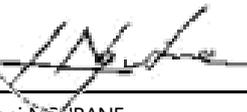
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|------------------|-----------------------|-----------------|-----------------|---|
| Name | Tshegofatso SETSHOGWE | Lindani NGUBANE | Kgomotso NKOANA | Confidentiality Category <i>Restricted</i> <i>Project</i> <i>Normal</i> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> |
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Table of modifications

| Rev | Date | Modifications Content | Writer |
|-----|------------|-----------------------|-----------------------|
| A0 | 04/02/2026 | Creation | Tshegofatso SETSHOGWE |

Internal validations

| | Name | Function | Date | Signature |
|-----------------|-----------------------|---------------------|------------|---|
| Creator | Tshegofatso SETSHOGWE | EPU Manager | 04/02/2026 | X  Tshegofatso SETSHOGWE EPU Manager |
| Verifier | Lindani NGUBANE | Serial Test Manager | 04/02/2026 | X  Lindani NGUBANE Serial Test Manager |
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Execution Plan

| | |
|-------------------|------------|
| Start Date | 28/01/2026 |
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Section 1 – Purpose / Objectives

1. Protective Bonding

The objective of this procedure is to verify the return path of the current to the ground.

2. Reflectometry

The objective of this procedure is to verify the integrity of the ethernet cables.

3. Config

The objective of this procedure is to set up car ID for specific systems such as fire and to verify wiring to the speed sensors and OTDR.

4. Traction motors

The objective of this procedure is to verify the wiring configuration of the motors. This is to ensure that all the motors are wired the same and shall rotate in the same direction in operation



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Section 2 – Protective Bonding and Return Current

2.1 Instructions list

2.1.1 Protective Bonding and Return Current

I - Information A - Action R - Result NE - Not Executed

| N° | Type | Instruction | File | Result status | Result value | Operator | Vehicle |
|-------|------|---|---|---------------|--------------|---|---------|
| 10001 | I | Return Circuit: Car Body to Ground | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10002 | I | The purpose of this test is to confirm that the car body of each car in the train is connected to ground via the earthing brush which will ensure that current from the overhead wire is returned to the substation without damage to equipment or risk of electric shock | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10003 | A | Use the Tool List to record the serial number of the Ohmmeter that will be used in this test | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10004 | A | Ensure that the current setpoint is 50A and voltage <50V (applicable for all impedance measurement) on the ohmmeter device to be used for the test. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10005 | I | For all impedance measurements of the car body to ground the positive terminal shall be connected to the car body and the negative terminal to the rail | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10006 | I | For all other impedance measurements, the positive terminal shall be connected to the tested subject and the negative terminal to the car body shell | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10007 | A | Visually identify and inspect that the earthing cables of the 1st and 2nd axle of the 1st and 2nd Bogie Frame are properly connected to the axle brushes |  | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10008 | A | Disconnect from the axle box the earthing cable of the 1st and 2nd axle of the 1st and 2nd Bogie Frame of the M3 car | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10009 | R | All the earthing cables of the M3 car are disconnected. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10010 | A | Connect the earthing cable of the 1st axle in the 1st Bogie Frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10011 | R | Only the earthing cable of the 1st axle of the 1st Bogie Frame is connected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10012 | A | Using an ohmmeter measure the impedance between the car body to rail | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10013 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.0021 | Mpumelelo Sithole 529980 28.01.2026 | M3 |

| | | | | | | | |
|-------|---|---|--|----|---------|---|----|
| 10014 | A | Disconnect the earthing cable of the 1st axle of the 1st bogie frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10015 | R | Earthing cable disconnected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10016 | A | Connect the earthing cable of the 2nd axle in the 1st Bogie Frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10017 | R | Only the earthing cable of the 2nd axle of the 1st Bogie Frame is connected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10018 | A | Using an ohmmeter measure the impedance between the car body to rail | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10019 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00119 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10020 | R | Earthing cable disconnected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10021 | A | Disconnect the earthing cable of the 2nd axle of the 1st bogie frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10022 | I | Earthing of Equipment on the Underframe | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10023 | A | Connect the earthing cable of the 1st axle in the 2nd Bogie Frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10024 | R | Only the earthing cable of the 1st axle of the 2nd Bogie Frame is connected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10025 | A | Using an ohmmeter measure the impedance between the car body to rail | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10026 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00301 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10027 | A | Disconnect the earthing cable of the 1st axle of the 2nd bogie frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10028 | R | Earthing cable disconnected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10029 | A | Connect the earthing cable of the 2nd axle in the 2nd Bogie Frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10030 | R | Only the earthing cable of the 1st axle of the 2nd Bogie Frame is connected | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10031 | A | Using an ohmmeter measure the impedance between the car body to rail | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |

| | | | | | | | |
|-------|---|--|--|----|---------|---|----|
| 10032 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00207 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10033 | A | Reconnect all earthing cables of the 1st and 2nd axle of the 1st and 2nd Bogie Frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10034 | R | All earthing cables connected on the 1st and 2nd Bogie Frame | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10035 | A | Visually inspect that the earthing cable connecting the Traction Inverter Case to M3 car body is properly connected and related bolts are correctly torqued. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10036 | R | Traction Inverter Case visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10037 | A | Using an ohmmeter measure the impedance between the Traction Inverter Case and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10038 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00322 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10039 | A | Visually inspect that the earthing cable connecting the Line Inductor Case to M3 car body is properly connected and related bolts are correctly torqued. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10040 | R | Line Inductor Case visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10041 | A | Using an ohmmeter measure the impedance between the Line Inductor Case and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10042 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00211 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10043 | A | Visually inspect that the earthing cable connecting the Traction Motors of the 1st and 2nd axle of the 1st Bogie Frame to the car body is properly connected and related bolts are correctly torqued | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10044 | R | Traction Motors visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10045 | A | Using an ohmmeter measure the impedance between the Traction Motor of the 1st and 2nd axle of the 1st Bogie Frame and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10046 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00209 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10047 | A | Visually inspect that the earthing cable connecting the Traction Motors of the 1st and 2nd axle of the 2nd Bogie Frame to the car body is properly connected and related bolts are correctly torqued | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |

| | | | | | | | |
|-------|---|--|--|----|---------|---|----|
| 10048 | R | Traction Motors visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10049 | A | Using an ohmmeter measure the impedance between the Traction Motor of the 1st and 2nd axle of the 2nd Bogie Frame and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10050 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00235 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10051 | I | Earthing of Interior Equipment | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10052 | A | Visually inspect that the earthing cable connecting the LV3 cubicle, and the car body is properly connected and related bolts are correctly torqued | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10053 | R | LV3 cubicle visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10054 | A | Using an ohmmeter measure the impedance between the LV3 cubicle and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10055 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00311 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10056 | A | Visually inspect that the earthing cable connecting the LV6 cubicle, and the car body is properly connected and related bolts are correctly torqued | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10057 | R | LV6 cubicle visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10058 | A | Using an ohmmeter measure the impedance between the LV6 cubicle and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10059 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00233 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10060 | I | Earthing of Equipment on the Roof | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10061 | A | Visually inspect that the earthing cable connecting the 1st Braking Resistor Box to M3 car body is properly connected and related bolts are correctly torqued. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10062 | R | 1st Braking Resistor Box visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10063 | A | Using an ohmmeter measure the impedance between the 1st Braking Resistor Box and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10064 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00302 | Mpumelelo Sithole 529980 28.01.2026 | M3 |

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|-------|---|--|--|----|---------|---|----|
| 10065 | A | Visually inspect that the earthing cable connecting the Saloon HVAC to M3 car body is properly connected and related bolts are correctly torqued. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10066 | R | Saloon HVAC visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10067 | A | Using an ohmmeter measure the impedance between the Saloon HVAC and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10068 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00112 | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10069 | A | Visually inspect that the earthing cable connecting the 2nd Braking Resistor Box to M3 car body is properly connected and related bolts are correctly torqued. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10070 | R | 2nd Braking Resistor Box visually grounded and torque is correctly marked | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10071 | A | Using an ohmmeter measure the impedance between the 1st Braking Resistor Box and the car body | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10072 | R | ImpedanceResult Max : $x \leq 0.05$ (Ohm) | | OK | 0.00213 | Mpumelelo Sithole 529980 28.01.2026 | M3 |



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Section 3 – Reflectometry

3.1 Instructions list

3.1.1 Network Cabling Integrity

I - Information A - Action R - Result NE - Not Executed

| N° | Type | Instruction | File | Result status | Result value | Operator | Vehicle |
|-------|------|---|---|---------------|--------------|---|---------|
| 10001 | I | Network Cabling Integrity Test | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10002 | I | It is necessary to check the network cables to ensure that they have been installed correctly to improve the overall operation of the system. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10003 | I | The Cable Analyzer Module DSX-5000 will be used to validate cabling | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10004 | I | Register as a new Operator on the DSX-5000. Check on the manual below on how to register as a new Operator [11-4-5-308050_DSX 5000 User Manual.pdf] |  | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10005 | I | When saving the tests results for each line, it should be named by its trainset number (X) and the test code (Indicated in the test step). i.e. TS021_M3_P01 for PACIS and TS021_M3_T01 for TCMS. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10006 | I | TCMS cabling | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10007 | A | From: [25A10 CRS1 (Local: +LV3; Connector: 25XP10_X3)] to: [25A11 CRS2 (Local: +LV3; Connector: 25XP11_X4)] NOTE: Cable is crossed TSX_M3_T01 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10008 | A | From: [25A10 Ethernet Switch (Local: +LV3; Connector: 25XP10_X4)] to: [(Local: +END1; Connector: 90XP12.All)] NOTE: Cable is straight TSX_M3_T02 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10009 | A | From: [25A14 TBR (Local: +LV3; Connector: 25XP14_ETH0)] to: [Inter-car (Local: +END1; Connector: 90XP11.All)] NOTE: Cable is crossed TSX_M3_T03 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10010 | A | From: [25A14 TBR (Local: +LV3; Connector: 25XP14_ETH1)] to: [Inter-car (Local: +END2; Connector: 90XP22.al)] NOTE: Cable is straight TSX_M3_T04 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10011 | A | From: [25A11 Ethernet Switch (Local: +LV3; Connector: 25XP11_X3)] to: [Inter- | | OK | | Mpumelelo Sithole 529980 | M3 |

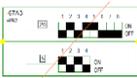
| | | | | | | | |
|-------|---|---|--|----|--|---|----|
| | | car (Local: +END2; Connector: 90XP22.all)] NOTE: Cable is crossed TSX_M3_T05 | | | | 28.01.2026 | |
| 10012 | A | From: [(Local: +END1; Connector: 90XR12.AI)] to: [Inter-car (Local: +END2; Connector: 90XP21.AI)] NOTE: Cable is straight TSX_M3_T06 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10013 | A | From: [(Local: +END1; Connector: 90XR11.AI)] to: [Inter-car (Local: +END2; Connector: 90XP21.all)] NOTE: Cable is straight TSX_M3_T07 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10014 | I | Pacis cabling | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10015 | A | From: [(Local: +END1; Connector: -90XR11.El)] to: [Inter-car (Local: +END2; Connector: -90XP21.el)] NOTE: Cable is straight TSX_M3_P01 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10016 | A | From: [54A10 CRS1 (Local: +LV6; Connector: 54XP10_X7)] to: [(Local: +END1; Connector: -90XR12.El)] NOTE: Cable is crossed TSX_M3_P02 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10017 | A | From: [54A11 CRS2 (Local: +LV6; Connector: 54XP11_X8)] to: [(Local: +END2; Connector: -90XP22.el)] NOTE: Cable is straight TSX_M3_P03 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10018 | A | From: [54A11 CRS2 (Local: +LV6; Connector: 54XP11_X7)] to: [54A10 CRS1 (Local: +LV6; Connector: 54XP10_X8)] NOTE: Cable is crossed TSX_M3_P04 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10019 | A | All cables have been validated on M3 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10020 | R | Download all the results from Fluke and save them on PC with folder name "M3_TSxx" | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |

Section 4 – Config

4.1 Instructions list

4.1.1 Vehicle Configuration

I - Information A - Action R - Result NE - Not Executed

| N° | Type | Instruction | File | Result status | Result value | Operator | Vehicle |
|-------|------|--|---|---------------|--------------|--------------------------------------|---------|
| 10001 | I | Configuration Checks | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10002 | A | Check continuity on all pins of End 1 connector 90XP15 & 90XP14 to ground | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10003 | R | There is no continuity | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10004 | A | Check continuity on all pins of End 2 connector 90XP15 & 90XP14 to ground | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10005 | R | There is no continuity | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10006 | I | Smoke Detector Address Configuration | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10007 | A | Remove and configure the Smoke Detector 67A2 (+PA1) according to the figure attached |  | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10008 | A | Reconnect Smoke Detector 67A2 | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10009 | A | Remove and configure the Smoke Detector 67A3 (+PA3) according to the figure attached |  | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10010 | I | Line Heat Detection | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10011 | R | Measure the resistance between point 1 and point 4 of the connector 67XP3_11Result Min/Max : 550<= x<= 700 () | | OK | 620.1 | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10012 | A | Reconnect Smoke Detector 67A3 | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |

| | | | | | | | |
|-------|---|--|--|----|--|--------------------------------------|----|
| 10013 | I | OTDR LOOP | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10014 | I | Check the continuity between the following points: | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10015 | A | From: [+IV1 (local +END2 Connector - 93XP23.b (pin1))] to: [local +END1 Connector - 90XR13.B(pin1)] | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |
| 10016 | A | From: [-IV1 (local +END2 Connector - 93XP23.b (pin2))] to: [local +END1 Connector - 90XR13.B(pin2)] | | OK | | Amanda Ntuli 526239 28.01.2026 | M3 |



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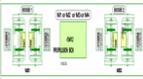
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Section 5 – Traction Motors

5.1 Instructions list

5.1.1 Traction Motors

I - Information A - Action R - Result NE - Not Executed

| N° | Type | Instruction | File | Result status | Result value | Operator | Vehicle |
|-------|------|---|---|---------------|--------------|---|---------|
| 10001 | I | Traction Motors (SPP = 11) | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10002 | I | Ensure all the CONNECTORS are fully ASSEMBLED before running a continuity test. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10003 | I | The following test is used to confirm the wiring of the traction motors. |  | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10004 | I | SAFETY NOTICE: It is important to ensure that there is no 400Vac power supply on the vehicle. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10005 | A | Switch OFF the 400Vac power supply at the source and disconnect the supply cables from the vehicle | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10006 | R | There is no 400Vac available on the vehicle | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10007 | I | Bogie 1 (MB1) | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10008 | I | Visual Inspection | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10009 | A | For motor 1 and motor 2 connect 11XR1 and 11XR2 and visually inspect that the following cables are connected from - 11XR1 connector to -11M1 motor and - 11XR2 connector to -11M2 motor respectively. NOTE: the cable configuration should be straight, none should cross the other | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10010 | I | Motor 2 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10011 | R | [-11XR2 connector (local: UND - 11XP2_2.X1 pin 1)] connected to: [- 11XT2 motor terminals (U) -11M2]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10012 | R | [-11XR2 connector (local: UND - 11XP2_2.X2 pin 1)] connected to: [- 11XT2 motor terminals (V) -11M2]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10013 | R | [-11XR2 connector (local: UND - 11XP2_2.X3 pin 1)] connected to: [- 11XT2 motor terminals (W) -11M2]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10014 | R | -11M2 Motor terminals PE connected to - 11GND2. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |

| | | | | | | | |
|-------|---|---|--|----|--|---|----|
| 10015 | I | Motor 1 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10016 | R | [-11XR1 connector (local: UND - 11XP1_2.X1 pin 1)] connected to: [- 11XT1 motor terminals (U) -11M1]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10017 | R | [-11XR1 connector (local: UND - 11XP1_2.X2 pin 1)] connected to: [- 11XT1 motor terminals (V) -11M1]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10018 | R | [-11XR1 connector (local: UND - 11XP1_2.X3 pin 1)] connected to: [- 11XT1 motor terminals (W) -11M1]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10019 | R | -11M1 Motor terminals PE connected to - 11GND. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10020 | I | Bogie 2 (MB2) | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10021 | I | Visual Inspection | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10022 | A | For motor 3 and motor 4 visually inspect that the following cables are connected from -11XR3 connector to -11M3 motor and -11XR4 connector to -11M4 motor respectively. NOTE: the cable configuration should be straight, none should cross the other | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10023 | I | Motor 3 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10024 | R | [-11XR3 connector (local: UND - 11XP3_2.X1 pin 1)] connected to: [- 11XT3 motor terminals (U) -11M3]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10025 | R | [-11XR3 connector (local: UND - 11XP3_2.X2 pin 1)] connected to: [- 11XT3 motor terminals (V) -11M3]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10026 | R | [-11XR3 connector (local: UND - 11XP3_2.X3 pin 1)] connected to: [- 11XT3 motor terminals (W) -11M3]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10027 | R | -11M3 Motor terminals PE connected to - 11GND3. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10028 | I | Motor 4 | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10029 | R | [-11XR4 connector (local: UND - 11XP4_2.X1 pin 1)] connected to: [- 11XT4 motor terminals (U) -11M4]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10030 | R | [-11XR4 connector (local: UND - 11XP4_2.X2 pin 1)] connected to: [- 11XT4 motor terminals (V) -11M4]. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |
| 10031 | R | [-11XR4 connector (local: UND - 11XP4_2.X3 pin 1)] connected to: [- | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |



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|-------|---|---|--|----|--|---|----|
| | | 11XT4 motor terminals (W) -11M4]. | | | | | |
| 10032 | R | -11M4 Motor terminals PE connected to -11GND. | | OK | | Mpumelelo Sithole 529980 28.01.2026 | M3 |



Serial Tests Report
TS321 – M3 – VPT
RTR Vehicle Pre-Testing Report

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Section 6 – Report summaries

6.1 Results status

| Test Instruction Sheet | Compliant | Incomplete | Non-compliant |
|---------------------------------------|-----------|------------|---------------|
| Protective Bonding and Return Current | X | | |
| Reflectometry | X | | |
| Config | X | | |
| Traction Motors | X | | |

6.2 Tools used

| Function | Tool name | Tool number | Next Calibration date |
|-----------------|------------------------|-----------------------|-----------------------|
| 012_PB | Megger | Megger 2 | 12/11/2026 |
| 025_NET_054_PIS | Cable Analyser DSX5000 | Cable Analyser Ubunye | 12/11/2026 |
| CONFIG | Multimeter | Multimeter 3 | 12/11/2026 |