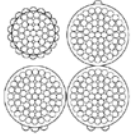




DISTRIBUTION COMMISSIONING TEST SHEET – LOW VOLTAGE AERIAL BUNDLED CONDUCTOR
HPC-4DL-07-0014-2014



This commissioning test sheet covers the checking and commissioning of all replacement or new installations of low voltage aerial bundled conductor.

SAFETY: At all times maintain suitable clearance to all other electrical equipment.

DATE:		Project No.		Name of Officer	
Location:					
Conductor Span	From:		To:		

1. INSTALLATION AND CONSTRUCTION CHECKS

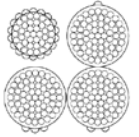
Inspect the constructed line and carry out the following checks.	1	Check that the installation complies with the distribution construction standards and applicable design drawings.	<input type="checkbox"/>
	2	Check the supply to the aerial bundled conductor line, that it is switched off and isolated as per switching sheet and permit.	<input type="checkbox"/>
	3	Confirm with approved testing device that the line is de-energised.	<input type="checkbox"/>
	4	Check the conductor arrangement and ensure correct clearances from the ground, buildings and trees.	<input type="checkbox"/>
	5	Wherever possible, check that there is no physical damage to the conductor or equipment and that all is secured.	<input type="checkbox"/>
	6	Check that the structures are clearly numbered and labelled correctly.	<input type="checkbox"/>
	7	Check that all terminations and connections are completed correctly and secured.	<input type="checkbox"/>
	8	Check that Public Safety has been considered (e.g. trip hazards removed, anti-climbing devices applied where applicable).	<input type="checkbox"/>

2. CONDUCTOR TENSION CHECK

Check the tension of the conductors as per the conductor tension table and record the details.	1	Date tensioned	DD/MM/YYYY	Tension correct <input type="checkbox"/>
	2	Conductor size	150 mm ² <input type="checkbox"/> 95 mm ² <input type="checkbox"/>	
	3	Ambient temperature	°C	
	4	Average bay length	m	
	5	Tension (dynamometer)	kg	



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3. CONTINUITY TEST

	Test Connection	Resistor Values	Test Results
Using the three (3) phase resistor box in conjunction with a 500 V insulation resistance tester to identify the correct cable end and phasing.	Red phase to neutral	MΩ	MΩ
	White phase to neutral	MΩ	MΩ
	Blue phase to neutral	MΩ	MΩ

4. INSULATION RESISTANCE TEST

	Test Connection	Minimum Values	Test Results
Use a 500 V insulation resistance tester for 1 minute between each phase conductor and between phase and neutral conductor. Values greater than 100 MΩ for new cables and 10 MΩ for existing cables are acceptable. Tests may not be practicable for existing cables because of connected services. (Note: 1,000 MΩ = 1 GΩ)	Red phase to white phase	>100 MΩ (new) or >10 MΩ (existing)	Ω
	White phase to blue phase		Ω
	Blue phase to red phase		Ω
	Red phase to neutral		Ω
	White phase to neutral		Ω
	Blue phase to neutral		Ω

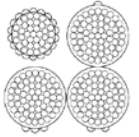
Confirm cables have been discharged after each test.

5. LINE HARDWARE

Check the clearance of the conductors, poles and stays (if applicable)	1	Check that the installation (poles, line hardware and other equipment) complies with the distribution construction standards, applicable design drawings and there is no sign of damage.	<input type="checkbox"/>
	2	Check that the voltage rating of the line hardware matches the system voltage (if applicable).	<input type="checkbox"/>
	3	Check that all connections are correctly placed and are secure.	<input type="checkbox"/>
	4	Check that no loose or unconnected items exists on the line.	<input type="checkbox"/>



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6. ENERGISATION

Energisation of the low voltage overhead line	1	Ensure that all short-circuiting equipment has been removed (if applicable).		<input type="checkbox"/>
	2	Check that the low voltage fuses are correct (if applicable). Refer to Table 6-1 in DDM Vol 2 (HPC-5DC-07-0002-2012) or 'LV Mains Protection' in the System Rules (HPC-9DJ-01-0002-2015)		<input type="checkbox"/>
	3	Energise the circuit as per the low voltage switching program	Number	<input type="checkbox"/>
	4	Conduct a service connection test on all installations where the service connections have been disturbed.		<input type="checkbox"/>
	5	If the LV network is to be interconnected with another LV network, phase out at the normally open point; otherwise phase out as required.		<input type="checkbox"/>

7. OPERATIONAL HANDOVER

The commissioning officer must ensure that all checks are completed and the test results comply with the minimum standards.

I hereby certify that all sections have been completed with satisfactory results and transfer responsibility to the network operating authority. This equipment is ready to be **SAFELY** energised.

Commissioning Officer: _____

Pay Number: _____

Signature: _____

Date: DD/MM/YY Time: HH:MM

1. Ensure the work area is left tidy with no hazards to the public.
2. Hand over responsibility to the operating authority
3. Return this sheet to the project/working file as a record of commissioning and as a document required for the Handover Certificate.