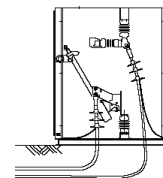


## DISTRIBUTION COMMISSIONING FORM (DCF) 4.6 – High Voltage Single Phase Underground Rural Supply Fuse Switch



**Purpose:** This instruction covers the testing and commissioning of all replacements or new installations of single phase underground rural supply fuse switches before energisation.

For more information refer to the *Distribution Commissioning Forms Guideline (EDM 34137510)*

**Notes:** The following test must be carried out after installation and before the switch is put into service.

<b>Address/Pole No.</b>			
<b>Work Package No.</b>		<b>SPIDAWeb Pick ID:</b>	

### 1. Pre-Installation Checks

Earth resistance test and nameplate	Ensure that the earth resistance test (DCF 4.1) has been completed with acceptable results (<30 Ω) prior to commissioning.	
Cable testing	Ensure that the cable Distribution Commissioning Form 2.1 (EDM 21540116 HV XLPE cables) has been completed with acceptable results	

### 2. Installation Check

Install a switch with blades and contacts de-energised and operate for a functional test.	Operate the switch and ensure that it operates ON and OFF smoothly and that contacts are fully seated in the ON position and check fuse size. (Adjust if necessary.)	
Construction checks	Check that the construction complies with the distribution construction, labelling standards and applicable design drawings.	
	Check the cables are properly connected and terminated.	
	Ensure that the switch body is properly earthed and secured.	

### 3. Insulation Resistance Test

With the unit in the OFF position, use a 5 kV insulation resistance tester for 1 minute. Values greater than 5000 MΩ are acceptable.	Test Connection	Expected Values	Test Results
	Phase – Earth (Incoming side)	> 5,000 MΩ	MΩ
	Phase – Frame (Incoming side)	> 5,000 MΩ	MΩ
	Phase – Earth (Exiting side)	> 5,000 MΩ	MΩ
	Phase – Frame (Exiting side)	> 5,000 MΩ	MΩ

### 4. Energisation

Energisation	Ensure the switch is in the correct position (ON or OFF) as per the switching program and network configuration.	
	Fit a Perspex cover and lock the unit door with a Distribution Switching (WPC) padlock.	
	Energise the switch from the remote end of the incoming cable.	
	Check for any signs of abnormality.	

### 5. Handover of Responsibility

I hereby certify that items 1 to 4 have been completed with satisfactory results and transfer control to the network operating authority.			
Commissioned by		NAC	
Signature		Date & Time	

1. Ensure the work area is left tidy with no hazards to the public.
2. Hand over responsibility to the operating authority.
3. The completed form must be returned to the project file/work pack.