

DISTRIBUTION COMMISSIONING FORM (DCF) 3.5 – SWER isolation transformer (Pole mounted)



Purpose: This form covers the testing and commissioning requirements for new or replacement pole mounted SWER isolation transformers (up to 200kVA) before energisation. For more information refer to the *Distribution Commissioning Forms Manual* ([EDM 34137510](#))

Notes: The following tests and checks must be carried out after installation and before the transformer is put into service.

Address/Pole No.		Work Package No.	
Manuf. Serial No.		SPIDAWeb Pick ID:	

1. Transformer Checks

- Ensure that the earth resistance has been tested and is acceptable (DCF 4.1).
- Ensure all electrical connections have been disconnected, including earth return (ER) links.
- Record the insulation resistance after 1 minute of testing.

Stock number	XT0189/0225, XT0201, XT0190/0227, XT0228 (200kVA)	XT 0192 (50kVA)	XT 0193 (63kVA)
Transformer type			
Transformer diagram			
Insulation resistance test using 2.5 kV (greater than 1 GΩ acceptable)	A10 to SW _____ Ω	SW1 to SW2 _____ Ω	A8 to SW _____ Ω
	A10 to Tank _____ Ω	SW1 to Tank _____ Ω	A8 to Tank _____ Ω
Winding continuity test using 1 kV (0 Ω acceptable)	A10 to A1 _____ Ω	SW1 to ER1 _____ Ω	A8 to A1 _____ Ω
	SW to ER _____ Ω	SW2 to ER2 _____ Ω	SW to ER _____ Ω

2. Installation and Construction Checks

Earthing	Ensure that the earth resistance test (DCF 4.1) has been completed with acceptable results (<30 Ω) prior to commissioning.	
Inspect the following: <ul style="list-style-type: none"> • rating plate • tank and bushings • tap setting • wiring • neutral connection • MEN links /N-E connections 	Transformer matches system voltage.	
	Transformer installed as per construction standards and applicable design drawings.	
	HV bushings correctly connected.	
	Neutral connected and earthed and ER links reconnected.	
	Transformer tap is at the position as per design/network planning or previously installed transformer.	
	Transformer bushings and tank in good condition (no oil leaks).	
	All SPIDAWeb labels fitted and numbered correctly as per SPIDAWeb sheet.	

3. Energisation

Energise the transformer	Check that the HV fuses are the correct rating.	
	Energise the transformer according to the switching program. Switching program No.:	
	Ensure the transformer is operating normally.	
Without a load	Record the voltage at the control of the 1-ph recloser, if available.	V
With a load	Check the voltage at an existing LV point (240V), to prove supply.	V

4. Handover of Responsibility

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

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