


Service Connection Test Form

All tests must be carried out in accordance with the [Service connection testing guideline \(EDM 53525817\)](#)

Failure to follow the steps in this form could cause hazardous voltages in the installation resulting in a Fatality Risk.

Installation Address					DATE:	
Job Description:						
Existing meter number		New meter number		W/O#		
Direct	MMM	Distributed		CT	UMS (no meter)	Pre-76 Earth Wire
Single Phase - ANNA		Three Phase - AA AA AA NN			Split Phase - AA XX AA NN	
Service connection test point:		Meter terminals (Direct)			SPD for installation (MMM)	
Test Instrument type		PAT ID or Serial No			Calibration date	
Disconnection						
Only enter values in the relevant sections and N/A all others not required.						
1.	Prove test instrument function. Conduct a touch voltage test from independent earth (>2.0m from the installation/meter box/earthed equipment) to the customer earth test point. Expected result <6V AC. If meter box is non-metallic, record test location below:					V
	Customer's neutral link or Neutral bar (consumers side)	Customer's earth stake (check it is connected to the earth wire)	Metallic (water) pipe (check it is connected to the earth wire)	Other: Please write location here		
2.	Direct only: Z-Line loop impedance (Z line) – Line Active to Customer Earth Test Point. Expected result <1Ω. If result is >1Ω, capture in comments section.					Ω
3.	Direct only: Record position of customer's main switch(es) (ON/OFF) if accessible. Switch customer's main switch(es) (including EG main switches) OFF. Note additional switches in 'Comments' below.				ON	OFF Remote
4.	Confirm voltage(s) are within supply limits and record 3-phase rotation (e.g., 1;2;3)				Phase rotation:	
5.	Direct: Isolate SPD. Confirm no voltage. Apply "Do not access or alter" tag. MMM, DMM, CT, UMS: Isolate SPD. Confirm no voltage on load side of SPD. Apply "Do not access or alter" tag to the SPD.					OR
6.	Direct: Remove LOAD active(s) first and then LOAD neutral/Pre 1976 earth wire from the meter terminals, and L1. MMM, DMM, CT, UMS: Remove and secure the LINE neutral from the MEN/Neutral link bar.					OR
I, _____ <u>Name & Surname</u> _____ certify that I have performed all the above tests in sequence and confirm that the service is correctly disconnected from the network.						
BNA:		Date & Time:		Signature:		
Comments:						

Service Connection Test Form

RECONNECTION										
				PAT ID or Serial No			Calibration date			
Direct: Confirm all Main Switches, including EG, are in the OFF position as instructed in SCT form step 3, including additional switch positions in comments. Confirm that only the LINE neutral and the LINE active/s are connected to the meter. MMM, DMM, CT, UMS: confirm SPD switched off										
Prove test instrument function. Direct: Install SPD. Confirm voltage(s). Remove "Do not access or alter" label. MMM, DMM, CT, UMS: Confirm voltage to line side of SPD. Leave SPD switched OFF.									OR	
Confirm phase rotation is the same as found in STEP 4 (e.g., 1;2;3)						Phase rotation:				
Line impedance, polarity, and voltage test (at meter position or SPD). Record results in the table below:										
Test		Acceptable Range		Red (Or single-phase)		White		Blue		
a) V - 3-Phase Voltages (if applicable)		390V - 440V		U1-2 V		U1-3 V		U2-3 V		
b) Z - Line loop impedance (Z Line)		<1.0Ω		Ω		Ω		Ω		
c) Z- R - Earth (RE)		<10kΩ		kΩ		kΩ		kΩ		
d) V - Line Active – Line Neutral		226V - 254V		V		V		V		
e) V- Line Active – Independent Earth		226V - 254V		V		V		V		
f) V- Line Neutral – Independent Earth		<6V		V						
g) V - Split Phase to Phase Volts (if applicable)		451V to 509V		V						
h) V - Line Active to Metal Meter Enclosure		Within 5V of test d)		V						
i) V - Line Active – Load Neutral/ Pre-1976 earth wire/Neutral bar		Within 5V of test d)		V						
11. Direct: Isolate SPD. Confirm no voltage. MMM, DMM, CT, UMS: Confirm voltage between LINE neutral and Neutral bar is <6V.									OR	
12. Direct: Reconnect LOAD neutral/pre-76 earth wire first, and then LOAD active(s) and L1. MMM, DMM, CT, UMS: Reconnect the LINE neutral to the Neutral bar.									OR	
PULL TEST ALL CONNECTIONS WITH PLIERS										
14. Direct only: Install SPD. Using a load tester prove the meter function.										
15. Direct only: (repeat step 2): Z - Line loop impedance (Z line) – Line Active to Customer Earth Test Point. Expected result same as step 2.										
16. Direct: Confirm customer's Main Switch as found in STEP 3 (including EG main switches)								ON	OFF	Remote
MMM, DMM, CT, UMS: Remove "Do not access or alter" label. Switch SPD ON, confirm voltage.										
17. Repeat Step 1: Touch voltage test from independent earth to the customer's earth test point, or pre '76 neutral link. Expected result <6V AC.										
18. Photograph the meter panel showing the meter number and confirming all tails connected correctly. For MMM , also photograph the Line Neutral connected to the customer's neutral bar.										
I, _____ <u>Name & Surname</u> _____ certify that I have performed all the above tests in sequence and confirm that the service connection is safe and correctly connected to the network.										
BNA		Date & Time:		Signature:						
Comments:										