

071306T4EIN

Electrical Installation Level 6

ENG/OS/PO/CR/01/6

Perform Electrical Installation

July/ August 2023



**TVET CURRICULUM DEVELOPMENT
COUNCIL**

**ASSESSMENT AND CERTIFICATION
C)**

PRACTICAL ASSESSMENT

TIME: 3 HOURS

INSTRUCTIONS TO THE ASSESSOR

1. You are required to mark the practical as the candidate performs the tasks.
2. You are required to take video clips at critical points.
3. Ensure the candidate has a name tag and registration code at the back and front.

This guide consists of five (5) printed pages.

Assessor should check the guide to ascertain that all the pages are printed as indicated and that no questions or answers are missing.

OBSERVATION CHECKLIST

Candidate's name & Registration No.			
Assessor's name & Reg. code			
Unit(s) of Competency			
Venue of Assessment			
Date of assessment			
<i>(Award marks appropriately as guided for in the items for evaluation indicated. Give a brief comment where necessary)</i>			
Items to be evaluated:	Marks allocated	Marks obtained	Comments
OBSERVATION CHECKLIST			
1. Wore Personal Protective Equipment - Dustcoat/Overall <i>(Award 1 or 0)</i> - Safety boots <i>(Award 1 or 0)</i>	1 1		
2. Applied good housekeeping practices - Ensured clean working area before beginning working. <i>(Award 1 or 0)</i> - Tidy working area arrangement <i>(Award 1 or 0)</i> - Proper waste disposal <i>(Award 1 or 0)</i>	1 1 1		
3. Identified and correct use of tools and equipment - Multi-meter <i>(Award 1 or 0)</i> - Phase tester <i>(Award 1 or 0)</i> - Pliers <i>(Award 1 or 0)</i> - Screw drivers <i>(Award 1 or 0)</i> 20 mm bending spring <i>(Award 1 or 0)</i> - Wire stripper <i>(Award 1 or 0)</i>	1 1 1 1 1 1		
4. Observed colour code <i>(Award 1 or 0)</i>	1		
Sub total	12		

PRODUCT CHECKLIST			
TASK 1			
4. Drew wiring diagram as per layout diagram			
• Intake point (Award 1 mark for each equipment; total 4 marks)	4		
• Main earth terminal (Award 1 or 0)	1		
• Lighting (Award 2 mark or 0 for each lamp)	2		
• DP switch (Award 1 mark or 0)	1		
• 240V 3 pin industrial socket (Award 1 mark or 0)	1		
Sub-Total	9		
TASK 2			
5. Terminated cables correctly (twisted, fo and not nicked)			
• Cut – out (Award 1 or 0)			
• Energy meter (Award 1 or 0)			
• Switch fuse (Award 1 or 0)	1		
• DP switch CB (Award 1 or 0)	2		
• Switches (Award 1 mark for each switch)	1		
• Lamp (Award 1 mark for each lamp)	2		
6. Wired the following correctly			
• Cut – out (Award 1 or 0)	1		
• Energy Meter (Award 2 or 0)	2		
• Switch fuse (Award 2 or 0)	2		
• C.C.U (Award 2 or 0)	2		
Sub- total	15		
TASK 3			
7. Utilized installation board properly			
• Layout (Award 1 or 0)	1		

8. Measurements $\pm 2\text{mm}$ (Award any 4 x $\frac{1}{2}$)	2		
9. Fixed components - Level (Award any 4 x $\frac{1}{2}$) - Firmness (Award any 4 x $\frac{1}{2}$) - Uniform spacing of open saddles vertical and horizontal (Award 2 or 0)	2 2 2		
10. Conduit bend and connection 90° Bend (Award 1 or 0 for each bend) 45° Bend (Award 1 for each bend) - Offset (Award 1 or 0 for each offset) - Connection with Male and female bushes (Award 2 or 0)	3 2 2 2		
11. Wired the components correctly at: - Industrial socket (Award 1 or 0) - Switches (Award 1 or 0 for each) - Lamp (Award 1 or 0 for each lamp)			
Sub - Total	23		
TASK 4			
12. Correct circuit operation; a) C.C.U (Award 3 or 0) b) Switches (Award 3 or 0) c) Fluorescent fitting (Award 3 or 0) d) Bulb (Award 3 or 0) e) Industrial socket (Award 3 or 0)	3 3 3 3 3		
Sub - Total	15		
GRAND TOTAL	74		
Percentage = $\frac{X}{74} \times 100$			

ASSESSMENT OUTCOMES		
The candidate was found to be: (Please tick (✓) as appropriate)		
Competent ☐	Not yet competent ☐	
<i>(The candidate is competent if s/he gets 50% of the marks)</i>		
Feedback from candidate:		
Feedback to candidate:		
Candidate's signature:	Date:	
Assessor's signature:	Date:	

WIRING DIAGRAM

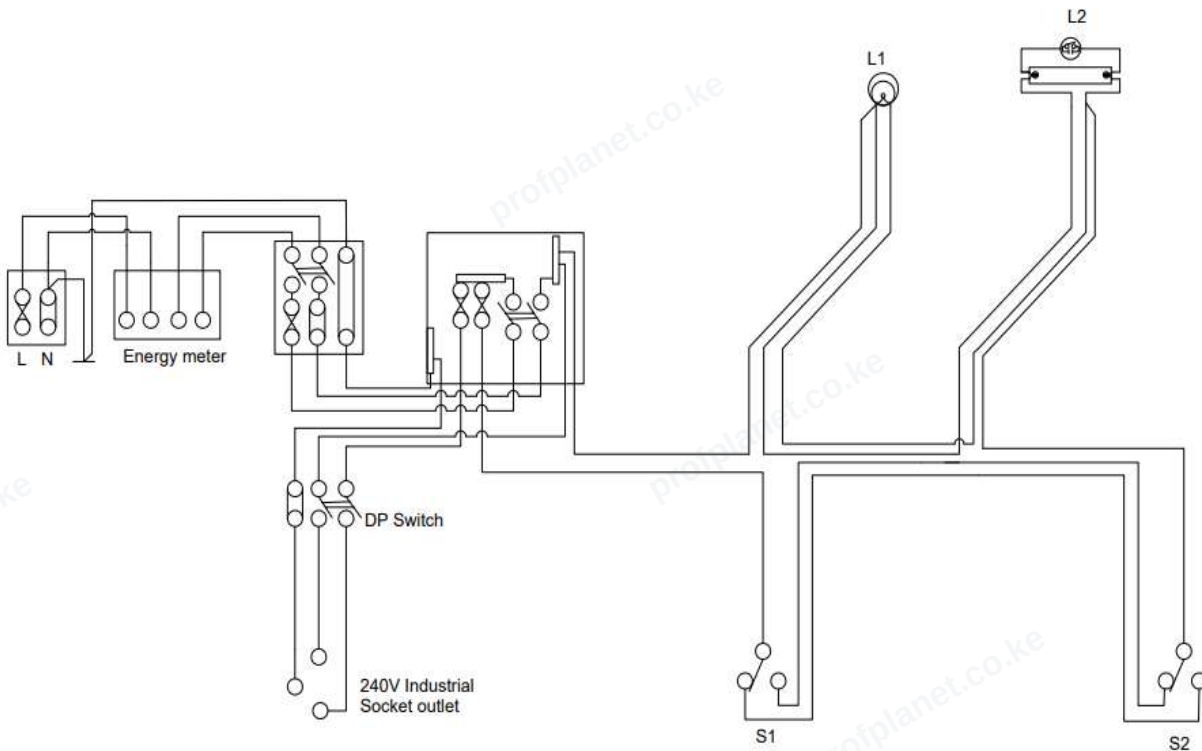


Figure 1: Wiring diagram

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