071306T4EEN

ELECTRICAL ENGINEERING (POWER OPTION) LEVEL 6

ENG/OS/PO/CR/03/6

Install Electrical Machine

July/August 2025

TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION COUNCIL (TVET CDACC)

PRACTICAL ASSESSMENT

INSTRUCTIONS TO ASSESSOR

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

OBSERVATION CHECKLIST

Candidate's Name & Registration Code			
Assessor's Name & Registration Code			
Venue of Assessment			
Date of Assessment			
Items to be Evaluated: *Please award marks as appropriate. Give a brief comment on your observation.*	**Marks available**	**Marks obtained**	**Comments**
1. Wore safety clothing (a) Safety boots *(Award 1 or 0)* (b) Apron /dust coat *(Award 1 or 0)*	 1 1		
2. Applied good housekeeping (a) Ensured clean working area before beginning working *(Award 1 or 0)* (b) Tidy working area arrangement while working *(Award 1 or 0)* (c) Cleaned the working area at the end of the practical*(Award 1 or 0)*	1 1 1		
3. Correct use of tools and equipment (a) Pliers/hammer etc. *(Award 1 or 0)* (b) Phase tester*(Award 1 or 0)* (c) Multimeter *(Award 1 or 0)*	1 1 1		
Sub-Total	**08**		
TASK1			
4. Drew power and control wiring diagrams (a) Control wiring diagram *(Award 5 or 0)* (b) Power diagram *(Award 5 or 0)*	 5 5		
Sub- Total	**10**		

TASK2			
5. Fixed components (firm and level) *(award any ½×6)*	3		
6. Dimensions ± 2mm *(award any ½×4)*	2		
7. Cable fixing (firm and level) i. Horizontal *(Award 2 or 0)* ii. Vertical *(Award 2 or 0)*	2 2		
8. Cable clips spacing *(Award 1 or 0)*	1		
9. Safety signage or labels present*(Award 1 or 0)*	1		
10. Used correct wire sizes and protection devices *(Award 3 or 0)*	3		
11. Correct cable termination (twisted, folded firm and not nicked) and correct circuit connections at: *i.* D.B *(Award 2 or 0)* *ii.* Isolator *(Award 2 or 0)* *iii.* Start-stop buttons*(Award 2 or 0)* *iv.* Contactors *(Award 2 or 0)* *v.* Motor *(Award 2 or 0)* *vi.* vi timer(Award 2 or 0) *vii.* thermal overload (Award 2 or 2)	2 2 2 2 2 2 2		
12. Observed colour code *(Award 1 or 0)*	1		
13. Earthing *(Award 1 or 0)*	1		
Sub- Total	**30**		
TASK 3			
14. Carried out tests for: i. Polarity *(Award 5 or 0)* ii. Continuity *(Award 5 or 0)*	5 5		

Sub-Total	10		
TASK 4			
15. Powered the circuit i) Start/stop (Award 4 or 0) ii) Motor start in star and change to delta (Award 4 or 0) iii) Timer switching (Award 3or 0)	4 4 3		
Sub-Total	**11**		
GRAND TOTAL	**69**		

ASSESSMENT OUTCOME

Percentage $\frac{X}{69} X\ 100$

The candidate was found to be:

Competent ☐ Not yet Competent ☐

(Please tick as appropriate)

(The candidate is competent if the candidate obtains at least 50%)

Feedback from the Candidate:

Feedback to the Candidate:

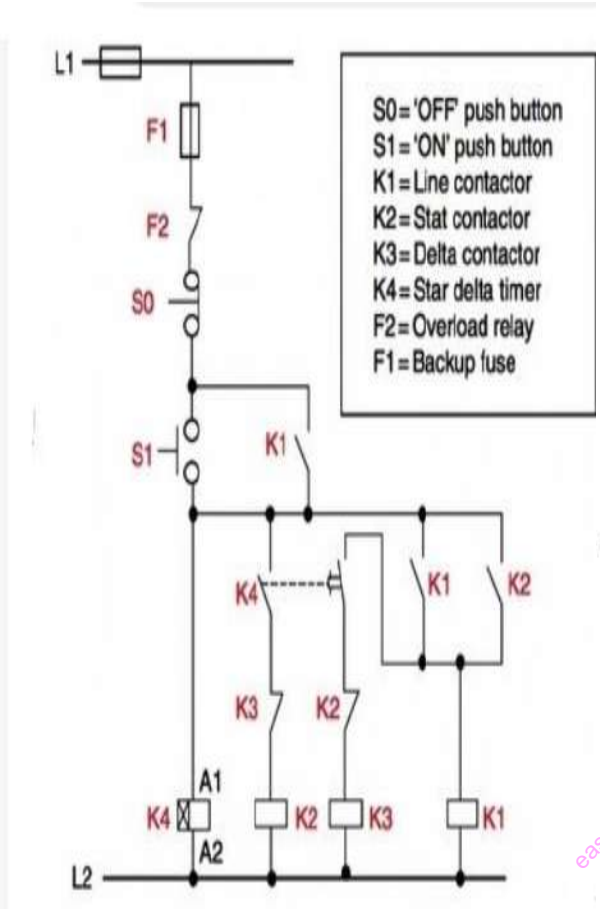
Candidate Signature **Date:**

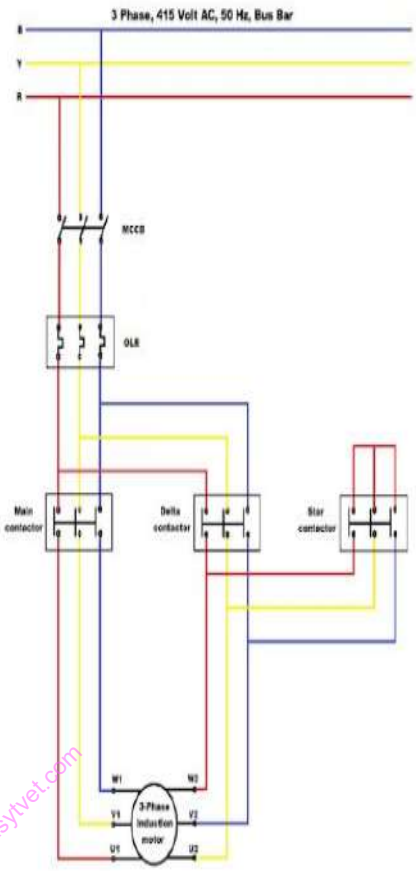
_____ _____

Assessor's Signature **Date**

_____ _____

Appendix: print for assessor only





Control circuit

power circuit