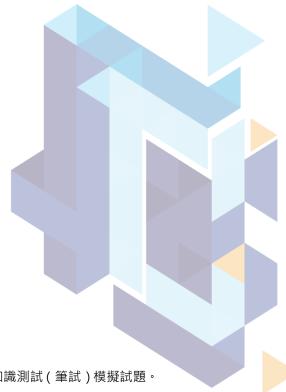


HONG KONG CONSTRUCTION INDUSTRY TRADE TESTING CENTRE 香港建造業工藝測試中心

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Electrical Control) Trade Test Written Test Mock Paper

(Version: EAE-WM-EN-01)



此文件關於空調製冷設備技工(電力控制)技能測試(大工)技術知識測試(筆試)模擬試題。如需索取此文件的中文版本,請致電 2100 9000 與香港建造業工藝測試中心聯絡。

Version: EAE-WM-EN-01

Disclaimer

No part of this material may be reproduced or transmitted in any form or by any means without the written permission from the Construction Industry Council (CIC). Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this material, the CIC nevertheless would encourage readers to seek appropriate independent advice from their professional advisers where possible and readers should not treat or rely on this material as a substitute for such professional advice for taking any relevant actions. The CIC will not assume any liability in relation to any loss or damage directly or indirectly resulted from unintended or/and unforeseeable use of this document.

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

The CIC reserves all rights of final interpretation for any content in this document.

Enquiries

Enquiries on this material may be made to Hong Kong Construction Industry Trade Testing Centre (HKCITTC) at:

Address: 95 Yue Kwong Road, Aberdeen, Hong Kong

Tel: (852) 2100 9000 Fax: (852) 2100 9090 Email: hkcittc@cic.hk Website: www.cic.hk

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Electrical Control) Trade Test Written Test Mock Paper

1.	According to	According to Electricity Supply Rules, if the	
	power outp	ut of a three-phase motor is 1.5	
	kW to 3.8 kV	kW to 3.8 kW, the maximum starting current	
	should be	times of the full load current.	

- a. 6
- b. 8
- c. 3
- d. 5
- 3. Fuse breaker can only be installed:
 - a. In live wire
 - b. In neutral wire
 - c. In protective wire
 - d. In circuit wire
- 5. What is the power consumption, in unit(s) electricity, of a 1kW electricity apparatus when working for an hour?
 - a. 1
 - b. 10
 - c. 100
 - d. 1,000
- 7. What is the function of "Star" $(Y \triangle)$ of the 8. starter control for motor?
 - a. To reduce starting current
 - b. To increase starting force-arm
 - c. To increase starting current
 - d. To increase starting power

- When the pipe in the refrigerant system of upright air conditioner is jammed, which of the following controllers will cut off the power of compressor?
 - a. Low voltage controller
 - b. High voltage controller
 - c. Thermostat
 - d. Overload relay
- 4. Single phase motor starter capacitor is:
 - a. In series with running wire coil
 - b. In parallel with running wire coil
 - c. In parallel with starting wire coil
 - d. In series with starting wire coil
- 6. What is the resistance setting of the multimeter (ohm, Ω) when connecting with the casing of the electrical appliance?
 - a. As high as possible
 - b. 50-100
 - c. 100-200
 - d. As little as possible
- 8. The circuit of oil heater for compressor is:

Version: EAE-WM-EN-01

- Closed when in emergency
- b. Closed at anytime
- c. Closed when start running
- d. Closed when stop running

Precautions

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Electrical Control) Trade Test Written Test Mock Paper (Con't)

- In Chiller Plant, anti-freezing switch should be installed at the:
- 10. The operating sequence of water cooled package unit should be:
 - (1) Condenser Pump
 - (2) Cooling Tower
 - (3) Fan
 - (4) Compressor
 - 4-2-3-1 a.
 - b. 3-4-2-1
 - 4-3-2-1 c.
 - d. 3-1-2-4
- Chilled water outlet of the Chiller Plant
- Chilled water entrance of the Chiller b. Plant
- c. Chilled water pump entrance
- Chilled water pump outlet
- 11. During activation of a three-phase motor, 12. Under what circumstances there is no rotation but humming sound. What is the cause?
 - Single-phase short circuit
 - Two-phases short circuit b.
 - c. Three-phases short circuit
 - d. No power
- 13. Water Flow Switch is to protect:
 - Compressor a.
 - b. Air cooler
 - Cooling water pump c.
 - d. Water tower

- does an overload relay protect the compressor?
 - Overvoltage a.
 - The high pressure is too high b.
 - c. The oil pressure is too high
 - d. Overcurrent
- 14. In case of short circuit of the motor coil of compressor, its:

Version: EAE-WM-EN-01

- Starting current decreases
- b. Resistance increases
- Running current decreases c.
- d. Running current increases

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Electrical Control) Trade Test Written Test Mock Paper (Con't)

- connection relationship of Loading and Volt Meter is:
 - Any connection
 - In series and parallel b.
 - c. In series
 - In parallel d.
- 15. To measure voltage by Volt Meter, the 16. In the protected circuit of the compressor of chiller, which of the following three protective components are connected?
 - Oil pressure differential controller, dual pressure controller, cold water return temperature switch
 - Overload protector, Dual controller, cold water return temperature switch
 - pressure controller, Dual Overload protector, cold water return temperature switch
 - d. Overload protector, oil pressure differential controller, dual pressure controller
- 17. What is the minimum amount of 18. A person should be serious at work and should "interest" as stated in Prevention of **Bribery Ordinance?**
 - \$100 a.
 - \$200 b.
 - \$500 c.
 - d. No limited amount

- uphold work ethics, including:
 - Appropriation of other's property
 - b. Craving for personal interest and neglecting the damages dealt to others
 - Accepting money and other advantages c.
 - Integrity, be honest and responsible, keep moral principles. Never corrupt and accept illegal advantage.
- following methods is correct?
 - Correct posture should be used. Workers should remain upright in their back.
 - b. Ask for a heavier load each time to hasten the process
 - Throw the object to higher places to strengthen the body
 - Hasten the speed of work suddenly

19. When lifting heavy objects, which of the 20. What may happen if working under hot and humid environments for a long period?

Version: EAE-WM-EN-01

- Heat stroke a.
- b. Temporary blindness
- c. Hunger
- d. Anaemia

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.