

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS

ELECTRICAL ENGINEERING DEPARTMENT

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EE-360

Key Solution

Quiz # 8 Serial #

Name:

I.D.#

1) The figures below show one phase of a 2-pole ployphase induction motor where the winding in Fig. 1-a is a (.....) winding and has been connected, as shown in Fig. 1-b, as a (...) winding in order to (.....) the speed of the rotor.

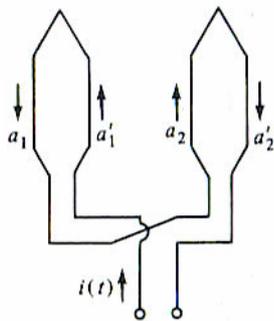


Fig 1.a

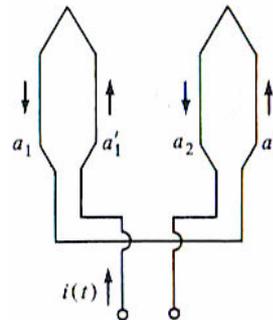


Fig. 1.b

- a) two-pole ; four-pole ; increase
- b) two-pole ; four-pole ; reduce**
- c) four-pole ; two-pole ; increase
- d) four-pole ; two-pole ; reduce

2) A 4-pole, 60-Hz, 3-phase, induction motor has a full-load speed of 1740 rpm. At half-load, its speed would be :

- a) 1800 rmp
- b) 1770 rmp**
- c) 900 rmp
- d) 770 rmp