



Draw the main power circuit on this page

1. What type of Motor starter is required for this application?

Ans: _____

Draw the control circuit on this page

EXAMINATION FOR THE ISSUE OF A LICENCE TO ACT AS WIREMAN - LIC 'B'

Practical Test

September 2014

Time Allowed: 1 Hr

NAME & SURNAME _____ INDEX NO. _____
(in Block letters)

A 400 V 50Hz 3-phase 5kW induction motor is used to drive a goods lift between two floors. The motor starter is installed in a panel located about 5m away from the motor. Each floor control panel has an emergency stop button together with two other buttons labelled UP and DOWN respectively. Each floor has a limit switch to stop the lift when this arrives at its destination. A schematic layout is shown.

1. What type of starter is required for this application? (4 marks)
2. Draw the main power circuit for this application. (18 marks)
3. Draw the control circuit for this application. (18 marks)

Note:

- 1) All diagrams must be neat, clear and fully labelled where necessary.
- 2) The control panel must have the necessary protection devices to protect the motor.
- 3) For safety reason the control circuit is to be supplied from a 400/24V AC step down transformer.
- 4) Indication lamps are required on each floor control panel to indicate in which direction the lift is travelling.