**Unit: Manual Motor Controls Job: 24**

**Title: Forward/Reverse/Jog using Selector Switch for 3 Phase Mtr. CLO# 1,2**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Station \_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Objectives**

1. Student shall develop a further understanding of reversing a motor.
2. Student shall enhance motor jogging design skills.
3. Upon completion, a student shall have a more complete knowledge base for creating proficient motor control circuits.

**Assessment**

Students shall demonstrate a comprehension of the objectives listed above by scoring a minimum of 75% on this shop job. Grading shall be based on the Manual Motor Controls rubric.

**Instructions**

Design a forward/reverse/jog motor control circuit using three momentary pushbuttons and a two-position selector switch. One pushbutton shall be for “forward” rotation (CCW). Another pushbutton shall be for “reverse” action (CW). The remaining pushbutton shall be a “stop” button. The two-position selector switch shall determine whether the “forward” or “reverse” action is momentary, a “jog”, or sealing. If the motor is running in one direction, pressing the opposite direction’s pushbutton shall have no effect. The operator shall have to press the “stop” button first before making any direction changes. The green light shall indicate “forward”, the blue light shall indicate “reverse”, the red light shall indicate “stopped” and the yellow light shall indicate “overload”. Use the space on the opposite side of this page to design your circuit. Once complete, review your design with your instructor. After obtaining approval, you may wire your circuit. Ensure to label all wires with the appropriate wire numbers. Have your instructor review your wiring before energizing your circuit.



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