

B1 MOTOR CONTROL CENTRE

TIER 1

TIER 2

TIER 3

TERMINALS

PB1



ST1 - STOP



STR1 - START



GP1

PB2



ST2 - STOP



STR2 - START



RP2

B1 Motor Control Centre

- Tier 1
 - C10A Main Switch
 - B6A for Control circuit
 - Motor overload protection
 - Safety contactor motor (isolate power to forward and reverse and deactivate control circuit)(SF 1)
 - Forward contactor (FO1)
 - Backward contactor (REV1)
- Tier 2
 - Logo Power Supply
 - Logo 8 Controller
 - Expansion module
 - Network Switch
- Emergency Stop pushbutton, Controls Safety contactor (ES)
- Equipment Placement from top to bottom in 3 hole enclosure
- Enclosure PB1
 - Stop pushbutton, Stop motor if running in any direction (ST1) white PB
 - Motor Forward as long as pressed and 5 seconds after release(STR1)green PB
 - Indication light Green(GP1)
- Enclosure PB2
 - Stop pushbutton, Stop motor if running in any direction (ST2) white PB
 - Motor Forward as long as pressed and 5 seconds after release Indication light Green (STR2) green PB
 - Indication light Red (RP2)
- The event.
 - The client has requested that a custom circuit must be designed where:
 - Both start buttons must be pressed within two seconds of each other. The buttons must be held in until the sequence of events have completed.
- The motor must run in forward direction for 5 seconds. Stop for 2 second. Run in Reverse for 5 Seconds.
- Fault indication:
 - Indication of Time out to Client (GP1or RP2 Flashing intermittently for 2 seconds each at 1 HZ)
 - Indication of Overload trip (RP2 Constantly ON)
- Indication of power to LOGO Display: WELCOME USER

LOGO 8								
INPUT	1	2	3	4	5	6	7	8
	ES		ST1		ST2			
OUTPUT	Q1	Q1	Q2	Q2	Q3	Q3	Q4	Q4
		SF1				FO1		

LOGO Expansion								
INPUT	1	2	3	4				
	STR1		STR2					
OUTPUT	Q1	Q1	Q2	Q2	Q3	Q3	Q4	Q4
		REV1		GP1		RP2		



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Skill: 18 Electrical Installations

SCM: Nick du Plessis

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SHEET SIZE:
A3