

The diagram illustrates a motor management system for a 3-phase motor. It includes the following components and connections:

- Power Source:** 0A, 0B, 0C lines from a 15A circuit breaker (CB-P7033-10) feed into the system.
- Protection:** Fuses FU1A (0.75A, CLASS CC, TIME DELAY) and FU1B (0.75A, CLASS CC, TIME DELAY) are connected to the power lines.
- Control Transformer:** A transformer with primary H1, H2 and secondary X1, X2 (600:120V, 150VA) provides control voltage.
- Motor Management Controller (MMC) TESYS:** The central control unit, connected to the power lines and the control transformer.
- PLC:** A Programmable Logic Controller connected to the MMC via MODBUS TCP.
- Motor:** A 3-phase motor (M) with 3.75 kW (5 HP) and 600 V rating, connected to the power lines via a switch (DS-P6610-1).
- Terminal Blocks:** TB01 and TB02 are used for wiring connections.
- Wiring Details:**
 - Power lines (1, 2, 3) connect to TB01 and TB02.
 - Control lines (13, 14, 15, 16) connect to the MMC and TB01.
 - Motor control lines (95, 96) connect to the MMC and TB02.
 - Motor status lines (3, 4) connect to TB01 and TB02.

Legend:

- △ TERMINAL IN MCC
- PANEL WIRING
- - - FIELD WIRING
- o—o— ETHERNET: CAT6

MCC-P7033

Power Distribution:

- Source:** T1, T2, T3 (RD, BK, BL)
- Circuit Breaker:** C-P6610-1 (3C+GND, 12 AWG, TECK90)
- Busbar:** RD
- Motor:** M (P-P6610, 3.75 kW (5 HP), 575 V)
- Circuit Breaker:** C-P6610-2 (3C+GND, 12 AWG, TECK90)
- PLC:** DS-P6610-1 (RD, BK, BL)

Control System:

- PLC:** DS-P6610-1
- Network:** Ethernet (ETHERNET)

2	SCUM DEWATERING BUILDING - MCC ELEVATION MCC-P7033 & MCC-P7034	1-0101-ECBD-P701
1	SCUM DEWATERING BUILDING - SINGLE LINE DIAGRAM MCC-P7033	1-0101-ESLD-P708
NO.	DRAWING TITLE	DRAWING NUMBER

REFERENCE DRAWING

**ENGINEERS
GEOSCIENTISTS
MANITOBA**

Certificate of Authorization

AECOM Canada ULC

No. 4671

						
					DESIGNED BY:	CHECKED BY:
					JEP	SB
					DRAWN BY:	APPROVED BY:
					JEP	NW
					SCALE:	RELEASED FOR CONSTRUCTION BY:
					NONE	
					DATE:	DATE:
					2020-12-09	
01	ISSUED FOR ADDENDUM 11	2025-04-04	TW	SB	CONSULTANT NO.: P3-E609	
00	ISSUED FOR TENDER	2025-01-31	JEP	SB		
NO.	REVISIONS	DATE	DESIGN	CHECK		

ENGINEER'S SEAL	 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT			
	NORTH END SEWAGE TREATMENT PLANT PRIMARY CLARIFICATION PROJECT ELECTRICAL MOTOR STARTER SCHEMATICS HOT WATER PUMP P-P6610			
	CITY DRAWING NUMBER	SHEET	REV.	SIZE
	1-0101-EMCL-P601	001	01	A1