

**MCC-B7002 600VAC BUS**

The schematic illustrates the electrical system for the MCC-B7002 600VAC BUS, including power distribution, motor control, and status monitoring.

**Power Distribution:**

- The main power source is the MCC-B7002 600VAC BUS, connected to the 2BP36.01 bus.
- Three phase lines (L1, L2, L3) are shown, each with a 150AF 15AT 3P fuse (FU1A, FU1B, FU1C).
- The lines pass through a 600:120V 150VA transformer (CPT) and a 1A 1A 1A fuse (FU2).

**Motor Control:**

- The motor (M) is connected to the 2BP36.01 bus via a 2BP36.01 switch.
- The motor is controlled by a 2BP36.01 switch (T1, T2, T3) and a 2BP36.01 switch (T1, T2, T3).
- The motor is protected by an OVERLOAD relay (A) and an O/L RESET switch.

**Status Monitoring:**

- The motor status is monitored by a RUN STATUS indicator (G) and a RUN STATUS indicator (G).
- The motor status is monitored by a RUN STATUS indicator (G) and a RUN STATUS indicator (G).

**Notes:**

- NOTE 1: 2BP36-LOS (2BP36 switch).
- NOTE 2: BFDP-1 (BFDP switch).
- NOTE 3: RUN STATUS (RUN STATUS indicator).
- NOTE 4 (TYP.): 24VDC FROM CP-B8001 (24VDC source).

[illegible]

1. LOCK-OUT SWITCH LOCATED AT MOTOR.
2. EXISTING HAND AND CONTROL CONTACTS AT LOCAL CONTROL PANEL.
3. CITY OF WINNEPEG COLOUR CONVENTION REQUIRES GREEN RUN INDICATOR. EXISTING LIGHT PREDATES THE CURRENT CONVENTION.
4. TO PLC DISCRETE INPUT. TERMINAL BLOCK NUMBERS TO COORDINATE WITH DCS MIGRATION PROJECT.
5. PRIOR TO DEMOLITION FIELD CABLE TAGS TO BE VERIFIED BY CONTRACTOR DURING INSTALLATION.
6. PRIOR TO DEMOLITION LOCAL CONTROL PANEL TERMINALS TO BE VERIFIED BY CONTRACTOR DURING INSTALLATION.
7. GREY LINETYPE DENOTES EXISTING. ENGINEER'S SEAL APPLIES TO NEW WORKS ONLY.
8. WHERE FIELD CONDITIONS NECESSITATE AN EXTENSION TO EXISTING CABLES IN ORDER TO REACH NEW MCC, SEE REFERENCE DRAWING 2.

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2	1-0101-EMCL-B034-001	ELECTRICAL – SCHEMATIC WIRING DIAGRAM DETAILS – TYPICAL EXISTING WIRING
1	1-0101-ESLD-B002-001	ELECTRICAL – MCC-B7002 SINGLE LINE DIAGRAM
NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
REFERENCE DRAWINGS		


**ES ENGINEERS  
GEOSCIENTISTS  
MANITOBA**

**Certificate of Authorization**

**KGS Group**

**No. 245**


[illegible]

		DESIGNED BY	AMS	CHECKED BY	CLR
		DRAWN BY	FA	APPROVED BY	CLR
		SCALE:	N.T.S.	RELEASED FOR CONSTRUCTION	
		DATE:	2025 03 26	DATE:	

ENGINEER'S SEAL

CONSULTANT DRAWING NUMBER

23-0107-010\_PB\_E2-25

	<h1>THE CITY OF WINNIPEG</h1>	
	<h2>WATER AND WASTE DEPARTMENT</h2> <h3>ENGINEERING DIVISION</h3>	
<h3>NORTH END SEWAGE TREATMENT PLANT (NEWPCC)</h3> <h4>BACKUP BOILER SYSTEM</h4> <h4>AREA B – BOILER ROOM</h4> <h4>ELECTRICAL</h4> <h4>SCHEMATIC WIRING DIAGRAM – 2BP36 W. DIG. GALLERIES HTG. PUMP</h4>		
CITY DRAWING NUMBER	1-0101-EMCL-BQ25-001	SHEET 1 OF 1