

70002 VAC BUS

2BP44-01

L1
L2
L3

150AF 60AT 3P

FU1A 0.25A CLASS CC
FU1B 0.25A CLASS CC

H1 H2 CPT 600:120V 150VA
X1 X2

SIZE 2
CLASS 20

T1 T2 T3

T1 T2 T3

JB

AØ BØ CØ

M

2BP44 MAIN BUILDING HEATING PUMP
25HP 23.6FLA 600V

FU2 1A CLASS CC

OVERLOAD
O/L RESET

OVERLOAD
O/L RESET

2BP44-LOS
XX 1 2BP44 XX 2
(NOTE 1)

TB01 2 TB01 3

BFDP-1 (NOTE 2)

XX 1 CR1

C O H

HAND

CONTROL

CR1

XX 4 XX 5 XX 6

CP-B8001

XX 1 MOTOR RUN CMD XX 2 OUTPUT

XX 3 MOTOR STOP CMD XX 4 OUTPUT

XX 2

XX 3

XX 6

XX 7

XX 8

(NOTE 3)

RUN STATUS

RUN STATUS

TB01 5 TB01 6

24VDC FROM CP-B8001

XX 4 TB02 200 TB02 201 XX 5

NOTE 4 (TYP.)

RUN STATUS INPUT

MCC-B7002
2BP44
STARTER COMPARTMENT

1x3C 10AWG TECK90 1kV
C-2BP44-1

EXISTING
-

JB

AØ
BØ
CØ

2BP44 MAIN BUILDING HEATING PUMP
M

2BP44 POWER CONNECTION

T1 RD
T2 BK
T3 BL

TB01

2BP44 LOCK-OUT SWITCH

1 2BP44-1
2 2BP44-2
3 2BP44-1
4 2BP44-2
5 2BP44-3
6 2BP44-4
X2 2BP44-4

EXISTING
-

(NOTE 5 TYP.)

2BP44-LOS (NOTE 6 TYP.)

XX

2BP44-1 1
2BP44-2 2

2BP44 LOCK-OUT SWITCH

EXISTING
-

BFDP-1

XX

2BP44-1 1
2BP44-2 2
3
4
5
6
2BP44-3 7
2BP44-4 8

HS-2BP44-01 CONTROL CIRCUIT

XX-1
XX-2
XX-3

RED RUN LIGHT

EXISTING
-

CP-B8001

XX

1 XX-1
2 XX-2
3 XX-3
2BP44-200 4
2BP44-201 5

RUN STATUS

TB02

200 2BP44-200
201 2BP44-201

CONTROL ROOM

1 (NOTE 8)
REF.2

1. LOCK-OUT SWITCH LOCATED AT MOTOR.
2. EXISTING HAND AND CONTROL CONTACTS AT LOCAL CONTROL PANEL.
3. CITY OF WINNIPEG 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.

10	—	—
9	—	—
8	—	—
7	—	—
6	—	—
5	—	—
4	—	—
3	—	—
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]

<div>KGS GROUP</div>				
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_E2-28

	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION	
	NORTH END SEWAGE TREATMENT PLANT (NEWPCC) BACKUP BOILER SYSTEM AREA B – BOILER ROOM ELECTRICAL SCHEMATIC WIRING DIAGRAM – 2BP44 MAIN BUILDING HEATING PUMP	
CITY DRAWING NUMBER	1-0101-EMCL-B028-001	SHEET 1 OF 1

PLOT DATE: 2025 04 30

BID OPPORTUNITY: 277-2025
CONTRACT NUMBER:

FILE PATH: R:\Projects\2023\23-0107-010\Dwg\Elec\2_PermBoiler\
FILE NAME: 1-0101-EMCL-B028-001.DWG