


**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES



A horizontal ruler scale with markings at 0.0, 0.05, 0.1, 0.2, and 0.3. The segment between 0.0 and 0.1 is divided into two equal parts by a vertical line. The segment between 0.1 and 0.2 is divided into four equal parts by three vertical lines. The segment between 0.2 and 0.3 is divided into four equal parts by three vertical lines. Below the ruler, the text "1:5" is centered.

ITEM	QTY	DESCRIPTION	MANUFACTURER	CATALOG NUMBER
1	1	TYPE 12 FLOOR-MOUNT ENCLOSURE – 1800x1600x600mm WITH LARGE DATA POCKET	HOFFMAN	PP18166
2	1	SUB-PANEL FOR ITEM 1	HOFFMAN	PPF1816
3	AS REQ'D	FUSED TERMINAL – UT 4 WITH FUSE PLUG-P-FU 5X20	PHOENIX CONTACT	3046142 3036806
4	AS-REQ'D	FEED-THROUGH TERMINAL – UT 4-MTD	PHOENIX CONTACT	3046184
5	AS REQ'D	KNIFE DISCONNECT TERMINAL – UT 4-MT	PHOENIX CONTACT	3046139
6	AS REQ'D	POTENTIAL-EARTH TERMINAL – UT 4-MTD-PE/S	PHOENIX CONTACT	3046207
7	AS REQ'D	TERMINAL END PLATE – D-UT 2,5/4 TWIN	PHOENIX CONTACT	3047141
8	AS REQ'D	TERMINAL END CLAMP – CLIPFIX 35	PHOENIX CONTACT	3022218
9	AS REQ'D	TERMINAL BLOCK MARKER – KLM-A	PHOENIX CONTACT	1004348
10	AS REQ'D	DOUBLE LEVEL FUSED TERMINAL – UTTB 4 WITH FUSE PLUG-P-FU 5X20	PHOENIX CONTACT	3044720 3036806
11	AS REQ'D	DOUBLE LEVEL TERMINAL END PLATE – D-UTTB 2,5/4	PHOENIX CONTACT	3047293
12	1	200mm PLINTH BASE FOR ITEM 1	HOFFMAN	PPB2166
13	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 2.25"x3.12"	PANDUIT	F2X3LG6
14	AS REQ'D	NARROW SLOT WIRING DUCT AND COVER, 3.25"x3.12"	PANDUIT	F3X3LG6
15	AS REQ'D	LAMACOIDS	–	–
16	AS REQ'D	35mm DIN RAIL	PHOENIX CONTACT	0801733
17	AS REQ'D	DIN RAIL INSULATED SUPPORT BRACKET	PHOENIX CONTACT	1201141
18	2	GROUND BAR, 14 TAPS	ILSCO	D167–14
19	2	GROUND BAR ISOLATION STAND OFF	PANDUIT	UGB–IN–SO
20	2	LED PANEL LIGHT AND DOOR SWITCH	HOFFMAN	LF120V15 ALF5WD
21	1	M580 PLC RACK – AS PER DETAIL A	SCHNEIDER	–
22	3	MIT 4-WIRE, 2-CHANNEL SIGNAL ISOLATOR/CONVERTER, DIN RAIL MOUNTED	MOORE INDUSTRIES	MIT/2XPRG/2X4–20mA/U [DIN]
23	1	24VDC POWER SUPPLY/UPS, TRIO-UPS–2G/1AC/24DC/10	PHOENIX CONTACT	2907161
24	1	ENERGY STORAGE, UPS–BAT/VRLA/24DC/3.4AH	PHOENIX CONTACT	2320306
25	AS REQ'D	NARROW SLOT WIRING DUCT, 1.75"x3.12"	PANDUIT	F1.5X3LG6
26	1	SURGE ARRESTOR MODULE C/W BASE, 120V, PLT–SEC–T3–120–FM–UT	PHOENIX CONTACT	2907918
27	1	FOLDING SHELF, GREY	HOFFMAN	ASHLF1818
28	1	MINIATURE CIRCUIT BREAKER, 10 AMP, DIN RAIL MOUNTED, FAZ TYPE, 120 VAC	EATON	FAZ–B10/1–NA–L
29	1	MINIATURE CIRCUIT BREAKER, 5 AMP, DIN RAIL MOUNTED, FAZ TYPE, 120 VAC	EATON	FAZ–B5/1–NA–L
30	1	RECEPTACLE, 125V, 15A, DIN RAIL MOUNTED, SD–US/SC/LA/GY	PHOENIX CONTACT	2963860
31	5	PLC RELAY MODULE, 24VDC	PHOENIX CONTACT	2966171
32	1	24VDC, 4CO RELAY MODULE	FINDER	55.14
33	1	5.7" HMI TOUCH SCREEN	SCHNIEDER ELECTRIC	HMI5TUB55
34	1	5 PORT UNMANAGED ETHERNET SWITCH	MOXA	EDS–205



1. ALL POWER AND 120 VAC WIRING IS TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 12 AWG OR LARGER WHERE CURRENT REQUIREMENTS DICTATE AS PER CEC REQUIREMENTS.
2. ALL 24 VDC CONTROL WIRING IS TEW/MTW 300V, 105°C INSULATION, STRANDED COPPER, 16 AWG.
3. ALL ANALOG WIRING IS 18 AWG SHIELDED TWISTED PAIR, WITH INSULATION RATED AT 300V.
4. COMPONENTS ARE LABELLED AS SHOWN IN THE DRAWINGS.
5. TESTED ALL WIRING AND COMPONENTS FOR FUNCTIONAL OPERATION, CORRECT CONNECTION, CONTINUITY AND INSULATION INTEGRITY.
6. DOCUMENTED ALL TEST RESULTS.
7. ALL MAJOR COMPONENTS INSIDE THE PANEL WERE LABELLED WITH LAMACOIDS IN ACCORDANCE WITH MAJOR DESCRIPTIONS ON THE DRAWINGS.
8. PROVIDED WIRE BARREL FERRULES FOR WIRING WHERE POSSIBLE.
9. ALL TERMINAL BLOCKS WERE NUMBERED AS SHOWN IN THE DRAWINGS, COMPLETE WITH GROUP LABELING.
10. ALL WIRES WERE MARKED AS INDICATED ON THE DRAWINGS.
11. ROUTED ALL 24VDC WIRING SEPARATE FROM 120VAC WIRING.
12. JUMPER BARS WERE USED INSTEAD OF WIRE JUMPERS WHERE POSSIBLE.

- 1 CONNECTED ISOLATED DIN RAIL TO ISOLATED GROUND BAR.
- 2 PROVIDE NEW MODICON X80, MULTIMODE FIBRE CONVERTER MODULE.

PLC-M806  
RACK: BME XBP 1200

P5	0	1	2	3	4	5	6	7	8	9	10	11
BMW CPS 3020			BMW NRP 0200	BMW DDI 3202K	BMW DDI 3202K	BMW DDI 3202K	BMW DDO 1602	BMW AMI 0810	BMW AMI 0810	BMW AMO 0410	BMW AMO 0410	SPACE (BMW XEM 010)

DETAIL - PLC-M806 RACK CONFIGURATION

					 148 Nature Park Way, Winnipeg, Manitoba Canada R3P 0X7 204-786-8080		ENGINEER'S SEAL		 <b>THE CITY OF WINNIPEG</b> WATER AND WASTE DEPARTMENT				
					DESIGNED BY: S. BOGHOSIAN		CHECKED BY: B. CLEVEN		MCPHILLIPS PUMPING STATION  PANEL LAYOUT HVAC CONTROL PANEL CP-M826				
					DRAWN BY: C. DUBON		APPROVED BY: D. BECKER						
					SCALE: AS SHOWN		ISSUED FOR CONSTRUCTION BY: A. WEISS						
					DATE: 2019/06/03		DATE: 2019/10/18						
					CONSULTANT NO.:								
02 ISSUED FOR TENDER AND CONSTRUCTION					2025/04/30	VE	VE						
01 AS-BUILT - 1070-2019 TENDER					2023/10/23	-	VE						
00 ISSUED FOR TENDER AND CONSTRUCTION					2019/10/18	VE	BC						
NO. REVISIONS					DATE	DESIGN	CHECK						

CITY DRAWING NUMBER				SHEET	REV.	SIZE
1-0640M-A0050				002	02	A1