

A1 SIZE - 594mm x 841mm

PANEL ID: MCC-M710			VOLTS: 600V		RATING: 600A		3P		WIRE: 3 W		MAIN BREAKER: 350AT/ 600AF		MAIN BREAKER TYPE: LSI		MAIN BREAKER SETTINGS: LTPI: 350A INST: 12 LTD: 16 GFPU: N/A STPU: 6 GFD: N/A STD: 0.2			
DESCRIPTION: NON-ESSENTIAL MCC			LOCATION: ELECTRICAL ROOM															
LOAD																		
UNIT LOC'N	ID	DESCRIPTION	MOTOR LOAD			NON-MOTOR LOAD		STARTER			CIRCUIT PROTECTION		NOTES					
			HP	KW	FLA	KW	NEMA SIZE	TYPE	OVERLOAD	RATING	TYPE							
1A	HCE-M609	PREHEAT DUCT HEATER				75					100A	TM, 3P						
2A	MCC-M710.MCB	MAIN BREAKER									350AT	LSI, 3P						
2J	MCC-M710.PM	POWER METER				12 VA					0.25A	FUSE, 3P	LOAD ASSUMED					
2N	MCC-M710.TVSS	SURGE PROTECTION DEVICE									30A	TM, 3P						
2P	ESL-M7101	VOLTAGE MONITORING RELAY									2A	FUSE, 3P						
2T	SPACE																	
3A	TIE BREAKER	MCC-M710 TO DP-M720 TIE BREAKER									400AT	ELECTRONIC, 3P	NORMALLY OPEN					
3I	CMP-M501	INSTRUMENT AIR COMPRESSOR	5	3.73	5.3			1	FVNR	MMC	30A	MCP, 3P						
3Q	SPACE																	
3R	MCC-M710.PS	POWER SUPPLY FOR ETHERNET SWITCH				250 VA					BY MFG	BY MFG	LOAD ASSUMED					
3U	MCC-M1.NSW	ETHERNET SWITCH																
4A	MCC-M730E	BACKUP FEEDER									200A	TM, 3P	NORMALLY OPEN					
4C	AHU-M605	ELECTRICAL ROOM AIR HANDLING UNIT	1	0.75	1.4			1	FVNR	MMC	30A	MCP, 3P						
4G	SPACE																	
4I	EF-M682	PUMP ROOM EXHAUST FAN	0.75	0.56	1.2			1	FVNR	MMC	30A	MCP, 3P	FLA ASSUMED					
4M	EF-M683	PUMP ROOM EXHAUST FAN	0.75	0.56	1.2			1	FVNR	MMC	30A	MCP, 3P	FLA ASSUMED					
4Q	AHU-M602	PUMP ROOM AIR HANDLING UNIT	10	7.46	10			1	FVNR	MMC	30A	MCP, 3P						
4U	XFMR-M711	PNL-M711 TRANSFORMER				0 KVA					60A	TM, 3P						
4W	WELD. RECEPT.	WELDING RECEPTACLE				20 KVA					70A	TM, 3P						
5A	HCE-M603	ELECTRIC HEATER FOR AHU-M603				60					80A	TM, 3P						
5C	CRN-C991	MONORAIL HOIST CL2 ROOM	2.8	2.09	3						20A	TM, 3P	LOAD ASSUMED					
5E	P-M631	CHILLED WATER PUMP 1	7.5	5.60	8						20A	TM, 3P						
5G	P-M632	CHILLED WATER PUMP 2	7.5	5.60	8						20A	TM, 3P						
5I	SPARE										20A	TM, 3P						
5K	SPARE										20A	TM, 3P						
5M	CRN-M992	PUMP ROOM CRANE	16.75	12.50	18.5							TM, 3P	LOAD ASSUMED					
5O	SPARE																	
5S	UH-C661	CL2 STORAGE ROOM UNIT HEATER				20					30A	TM, 3P						
5U	UH-C662	CL2 STORAGE ROOM UNIT HEATER				20					30A	TM, 3P						
5W	U-C534	TANKLESS WATER HTR - AMMONIA ROOM				102					125A	TM, 3P						
6A	PFC-M710	POWER FACTOR CORRECTION UNIT				0					250A	TM, 3P	NOT IN LOAD CALCULATIONS					
6C	AHU-M604	PUMP ROOM AIR HANDLING UNIT	10	7.46	10			1	FVNR	MMC	30A	MCP, 3P	FLA ASSUMED					
6G	CHLR-M630		181.4	135.3	154						300A	TM, 3P						
6Q	SPACE																	
6U	U-C535	TANKLESS WATER HTR - CHLORINATOR EQUIP. ROOM				102					125A	TM, 3P						
6W	U-C534	TANKLESS WATER HTR - AMMONIA ROOM				102					125A	TM, 3P						
TOTAL CONNECTED LOAD:			TOTAL DEMAND LOAD - SUMMER:			TOTAL DEMAND LOAD - WINTER:			LEGEND:									
KVA			KVA			KVA			FVNR		FULL VOLTAGE NON-REVERSING		MCP		MOTOR CIRCUIT PROTECTOR			
									TM		THERMAL MAGNETIC		3P		3 POLE			
									MMC		MOTOR MANAGEMENT CONTROLLER (TESYS T)		MCS		MOULDED CASE SWITCH			

PANEL ID: MCC-M730E			VOLTS: 600V	RATING: 600A	PHASE: 3P	WIRE: 3 W	MAIN BREAKER: 250AF	MAIN BREAKER TYPE: MCS	MAIN BREAKER SETTINGS: LTPI: N/A INST: N/A LTD: N/A GFPU: N/A STPU: N/A GFD: N/A STD: N/A				
DESCRIPTION: ESSENTIAL MCC			LOCATION: ELECTRICAL ROOM										
LOAD													
UNIT LOC'N	ID	DESCRIPTION	MOTOR LOAD			NON-MOTOR LOAD	STARTER			CIRCUIT PROTECTION		NOTES	
			HP	KW	FLA	KW	NEMA SIZE	TYPE	OVERLOAD	RATING	TYPE		
1A	MCC-M730E.MCS-A	MAIN INCOMING SWITCH FROM ATS-M730E								250AF	MCS, 3P		
1I	MCC-M730E.TVSS	SURGE PROTECTION DEVICE								30A	TM, 3P		
1K	ESL-M7301	VOLTAGE MONITORING RELAY								2A	FUSE, 3P		
1O	MCC-M730E.MCS-B	BACKUP INCOMING SWITCH FROM MCC-M710								250AF	MCP, 3P		
1U	P-M541	SUMP PUMP	5	3.73	5.8		1	FVNR	MMC	30A	MCP, 3P		
2A	P-M542	SUMP PUMP	5	3.73	5.8		1	FVNR	MMC	30A	MCP, 3P		
2E	MCC-M730E.PM	POWER METER FOR MAIN INCOMING				30 KVA				2A/1A	FUSE, 3P		
2I	CMP-M502	INSTRUMENT AIR COMPRESSOR	5	3.73	5.1		1	FVNR	MMC	30A	MCP, 3P		
2O	CMP-M503	VALVE AIR COMPRESSOR	10	7.46	10.4		1	FVNR	MMC	30A	MCP, 3P		
2S	XFMR-M733E	PNL-M733 TRANSFORMER				25 KVA				30A	TM, 3P		
2U	UH-C657	CL2 EQUIP. ROOM UNIT HEATER				12				30A	TM, 3P		
2W	HCE-C620	CHLORINATOR EQUIPMENT ROOM VENT HEATER				20kW				30A	TM, 3P		
3A	EF-M681	PUMP ROOM EXHAUST FAN	0.75	0.56	1.2		1	FVNR	MMC	30A	MCP, 3P	FLA ASSUMED	
3E	EF-M684	PUMP ROOM EXHAUST FAN	0.75	0.56	1.2		1	FVNR	MMC	30A	MCP, 3P	FLA ASSUMED	
3I	SPACE						1	FVNR	MMC	30A	MCP, 3P		
3M	SPACE						1	FVNR	MMC	30A	MCP, 3P		
3Q	SPACE						1	FVNR	MMC	30A	MCP, 3P		
3R	MCC-M730E.PS	POWER SUPPLY FOR ETHERNET SWITCH				250 VA				BY MFG	BY MFG	LOAD ASSUMED	
3U	MCC-M730E.NSW	NETWORK SWITCH					1	FVNR	MMC	30A	MCP, 3P		
4A	SPACE						1	FVNR	MMC	30A	MCP, 3P		
4E	SPACE						1	FVNR	MMC	30A	MCP, 3P		
4I	XV-M1410	SUCTION HEADER BUTTERFLY VALVE	2	1.49	2.9					15A	TM, 3P		
4K	XV-M1430	SUCTION HEADER BUTTERFLY VALVE	2	1.49	2.9					15A	TM, 3P		
4M	XV-M1510	DISCHARGE HEADER BUTTERFLY VALVE	1	0.75	2.3					15A	TM, 3P		
4O	XV-M1540	DISCHARGE HEADER BUTTERFLY VALVE	1	0.75	2.3					15A	TM, 3P		
4Q	AHU-M601	PUMP ROOM AIR HANDLING UNIT	10	7.46	10		1	FVNR	MMC	30A	MCP, 3P		
4U	AHU-M603	PUMP ROOM AIR HANDLING UNIT	10	7.46	10		1	FVNR	MMC	30A	MCP, 3P		
5A	UPS-M731	UPS-M731 VIA XFMR-M731E				15 VA				30A	TM, 3P		
5C	SPACE												
5E	EF-C640	TONNER STORAGE ROOM EXHAUST FAN	1.5		2.4		1	FVNR	MMC	15A	MCP, 3P		
5I	SPACE												
5M	SPACE												
5Q	SPACE												
5U	SPACE												
TOTAL CONNECTED LOAD:		TOTAL DEMAND LOAD - SUMMER:		TOTAL DEMAND LOAD - WINTER:		LEGEND:							
132 KVA		64 KVA		84 KVA		FVNR		FULL VOLTAGE NON-REVERSING		MCP		MOTOR CIRCUIT PROTECTOR	
						TM		THERMAL MAGNETIC		3P		3 POLE	
						MMC		MOTOR MANAGEMENT CONTROLLER (TESYS T)		MCS		MOULDED CASE SWITCH	

1-0630M-E0027
1-0630M-E0026
1-0630M-E0025
1-0630M-E0023

MCC-ELEVATION - MCC-M730E
MCC-ELEVATION - MCC-M710
SINGLE LINE DIAGRAM - MCC-M730E
SINGLE LINE DIAGRAM - MCC-M710

DRAWING NUMBER REFERENCE DRAWINGS

**ENGINEERS
GEOSCIENTISTS
MANITOBA**
Certificate of Authorization
AtkinsRéalis Canada Inc.
No. 4489

					 AtkinsRéalis 148 Nature Park Way, Winnipeg, Manitoba Canada R3P 0X7 204-786-8080		ENGINEER'S SEAL		 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT				
							DESIGNED BY: B. CLEVEN	CHECKED BY: C. REIMER	MACLEAN WATER PUMPING STATION				
							DRAWN BY: M.J. PERSSON	APPROVED BY: C. REIMER					
04	ISSUED FOR TENDER AND CONSTRUCTION	2025/04/30	VE	VE			SCALE: NTS	ISSUED FOR CONSTRUCTION BY: R. CARROLL	MCC SCHEDULES MCC-M710 AND MCC-M730E				
03	REVISED PER 2014 CHILLER REPLACEMENT	2020/02/04	—	JDB									
02	AS-BUILT	2013/07/24	—	BUC									
01	ISSUED FOR CONSTRUCTION	2012/11/29	BJC	CJR			DATE: 2012/01/12	DATE: 2012/11/29	CITY DRAWING NUMBER 1-0630M-E0028				
00	ISSUED FOR TENDER, BID OPP. 490-2012	2012/07/23	BJC	CJR									
NO. REVISIONS		DATE	DESIGN CHECK		CONSULTANT NO.: 508955-0000-47DD-0028				SHEET REV. SIZE 001 04 A1				