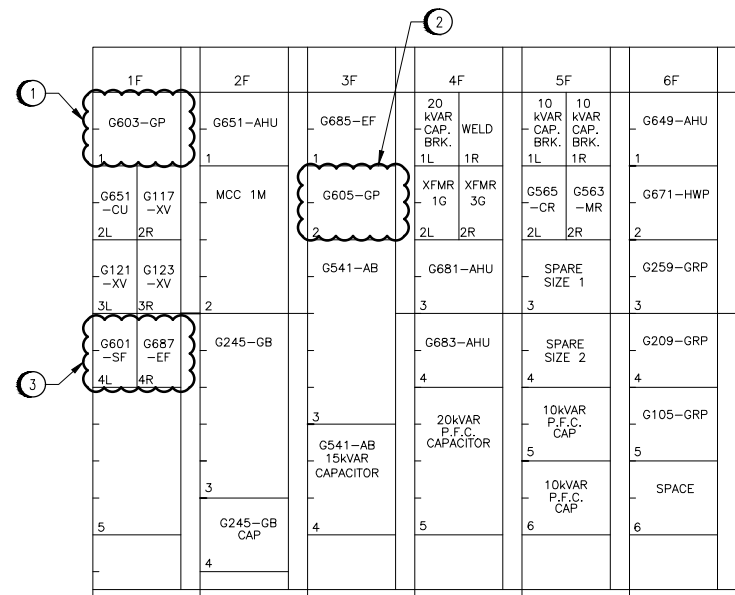


600 VOLT MOTOR CONTROL CENTRE – MCC-1G

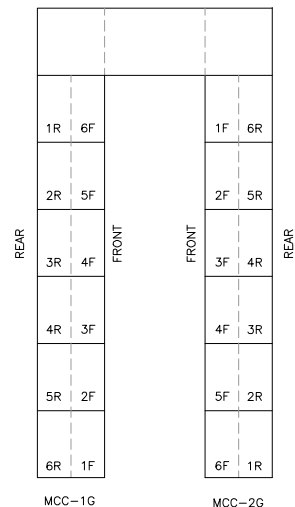
CONNECTED KW: 502
DEMAND KW: 370

MCC DETAILS:
MANUFACTURER: WESTINGHOUSE
MODEL: FIVE STAR
ORDER NO.: 3787136
MAIN BUS AMPACITY: 800A
VOLTAGE: 600V, 3Ø, 3W
MINIMUM INTERRUPTING RATING: 25kA

MCC NUMBER	EQUIP. NUMBER	LOAD		MOTOR			STARTER			FEEDER			CIRCUIT PROTECTION		REMARKS
		DESCRIPTION	LOCATION	HP	KW	FULL LOAD AMPS	EEMAC SIZE	TYPE	OVERLOAD	CAP IN AMPS	SIZE	TYPE	CONT. RATING (AMPS)	FRAME TYPE	
6F-5	G105-GRP	GRIT REMOVAL PUMP	ROOM G114	20	15	22	2	CMFVNR	FH46	30	#10	RW90	50	HMCP	
6F-4	G209-GRP	GRIT PUMP	ROOM G135	15	11.2	15.2	2	CMFVNR	FH49	30	#10	RW90	50	HMCP	
2F-3	G245-GB	GRIT BLOWER	ROOM G115	50	37.3	47.5	3	CMFVNR	FH81	85	#4	RW90	100	HMCP	
6F-3	G259-GRP	GRIT CLASSIFIER	ROOM G127	0.5	0.37	1.0	1	CMFVNR	-	20	#12	RW90	3	HMCP	
3F-3	G541-AB	CHANNEL AERATION BLOWER	ROOM G115	75	56	68	4	CMFVNR	FH85	120	#2	RW90	150	HMCP	
5F-2R	G563-MR	MONORAIL	ROOM G125	8	6	10	-	-	-	20	#12	RW90	15A-3P	HFD	OUT OF SERVICE
5F-2L	G565-CR	CRANE	ROOM G127	6.5	4.8	8	-	-	-	20	#12	RW90	15A-3P	HFD	LOCAL PACKAGED CONTROLS
6F-2	G671-HWP	HOT WATER PUMP	ROOM G130	3	2.2	3.3	1	CMFVNR	FH29	20	#12	RW90	7	HMCP	
4F-3	G681-AHU	COOLING AIR HANDLING UNIT – MOTOR ROOM	ROOM G130	5	3.7	5.6	1	CMFVNR	FH35	20	#12	RW90	15	HMCP	
4F-4	G683-AHU	RECIRCULATION UNIT – MOTOR/PUMP ROOM	ROOM G130	7.5	5.6	7.6	1	CMFVNR	FH38	20	#12	RW90	15	HMCP	
3F-1	G685-EF	EXHAUST FAN – MOTOR/PUMP ROOM	ROOM G130	1.5	1	1.8	1	CMFVNR	FH23	20	#12	RW90	7	HMCP	
3F-2	G605-GP	GLYCOL PUMP	ROOM G129	1	0.75	1.4	1	CMFVNR	-	15	12 AWG	TECK90	7	HMCP	CABLE DE-RATED 50%, CEC 2012
2F-1	G651-AHU	RECIRCULATION UNIT – CONTROL ROOM	ROOM G130	1	2.2	1.1	1	CMFVNR	FH30	20	#12	RW90	7	HMCP	
6F-1	G649-AHU	PRESSURIZATION UNIT – CONTROL ROOM	ROOM G130	2	1.5	2.2	1	CMFVNR	FH26	20	#12	RW90	7	HMCP	
1F-2L	G651-AHU	CONDENSING UNIT – CONTROL ROOM	PENTHOUSE	8	6	10.4	-	-	-	20	#12	RW90	20A-3P	HFD	
4F-2L		45 KVA 600-600/347 V TRANSFORMER "1G"	ROOM G116	-	45KVA	-	-	-	-	120	#2	RW90	60A-3P	HFD	
4F-2R		45 KVA 600-208/120 V TRANSFORMER "3G"	ROOM G116	-	45KVA	-	-	-	-	65	#6	RW90	60A-3P	HFD	
4F-1R		WELDING RECEPTACLES	RM G108/115/116	-	60	-	-	-	-	65	#6	RW90	60A-3P	HFD	
2F-2		FEED TO MCC 1M (ADMINISTRATION BUILDING)		-	200	-	-	-	-	325	350 MCM	RW90	300A-3P	KD	
5F-5		POWER FACTOR CORRECTION CAPACITOR		-	10KVAR	-	-	-	-	20	#12	RW90	-	-	CAPACITOR BREAKER IN SECTION 4F-1A
5F-1L		CAPACITOR BREAKER		-	-	-	-	-	-	20	#12	RW90	15A-3P	HFD	
5F-6		POWER FACTOR CORRECTION CAPACITOR		-	10KVAR	-	-	-	-	20	#12	RW90	-	-	CAPACITOR BREAKER IN SECTION 4F-1B
5F-1R		CAPACITOR BREAKER		-	-	-	-	-	-	20	#12	RW90	15A-3P	HFD	
4F-5		POWER FACTOR CORRECTION CAPACITOR		-	20KVAR	-	-	-	-	30	#10	RW90	-	-	CAPACITOR BREAKER IN SECTION 3F-1A
4F-1L		CAPACITOR BREAKER		-	-	-	-	-	-	30	#10	RW90	30A-3P	HFD	
2F-4		CAPACITOR FOR MOTOR G245-GB		-	10KVAR	-	-	-	-	20	#12	RW90	15A-3P	HFD	
3F-4		CAPACITOR FOR MOTOR G541-AB		-	15KVAR	-	-	-	-	20	#12	RW90	20A-3P	HFD	
5F-4		SPARE STARTER		-	-	-	2	CMFVNR	-	-	-	-	50	HMCP	
5F-3		SPARE STARTER		-	-	-	1	CMFVNR	-	-	-	-	30	HMCP	
1F-2R	G117-XV	WEST WET WELL INLET CHAMBER ACTUATOR	INLET CHAMBER	-	-	8.9	-	-	-	18	10 AWG	TECK90	15A-3P	HFD	CABLE DE-RATED 50%
1F-3L	G121-XV	RAW SEWAGE PUMP SUCTION VALVE ACTUATOR	ROOM G101	-	-	3.8	-	-	-	10	12 AWG	TECK90	15A-3P	HFD	CABLE DE-RATED 50%
1F-3R	G123-XV	RAW SEWAGE PUMP SUCTION VALVE ACTUATOR	ROOM G101	-	-	3.8	-	-	-	10	12 AWG	TECK90	15A-3P	HFD	CABLE DE-RATED 50%
1F-1	G603-GP	GLYCOL PUMP	ROOM G129	1	0.75	1.4	1	CMFVNR	-	15	12 AWG	TECK90	7	HMCP	CABLE DE-RATED 50%, CEC 2012
1F-4L	G601-SF	WET WELL UPPER LEVEL SUPPLY VFD	ROOM G129	3	2.24	-	-	-	-	15	12 AWG	TECK90	15A-3P	HFD	CABLE DE-RATED 50%, CEC 2012
1F-4R	G687-EF	WET WELL EXHAUST FAN 1 VFD	ROOM G129	10	7.5	-	-	-	-	20	10 AWG	TECK90	15A-3P	HFD	CABLE DE-RATED 50%, CEC 2012



MCC-1G – FRONT ELEVATION
N.T.S.



MCC-1G & MCC-2G LAYOUT-PLAN VIEW
N.T.S.

CONSTRUCTION NOTES

- USE SPARE MCC BUCKET FOR G603-GP AND MODIFY AS SHOWN ON SCHEMATIC DRAWING.
- RE-USE EXISTING G687-EF MCC BUCKET FOR G605-GP AND MODIFY AS SHOWN ON SCHEMATIC DRAWING.
- INSTALL BREAKERS FOR VFD'S FOR G601-SF AND G687-EF.



SNC-Lavalin Inc. 148 Nelson Park Way Winnipeg, Manitoba Canada R3P 0X7				
DESIGNED BY: T. CHURCH	APPROVED BY: C. REIMER			
CHECKED BY: C. REIMER	DATE: 2012/10/09			
PROJECT No.: 112577	SUBJ.: 0112	SERIAL: 47 DD	REV.: 0001	4

B.M. ELEV.			
4	ADDED HVAC EQUIPMENT	2012/09/10	TMC
3	ADDED BREAKERS FOR ACTUATORS	2010/10/10	TMC
2	ADDED UNDERVOLTAGE PROTECTION TO MCC-1G	12/09	NB
1	AS CONSTRUCTED	08/93	B.T.
0	ISSUED FOR TENDER	12/91	B.T.
-	ISSUED FOR CITY REVIEW	05/91	B.T.
NO REVISIONS		DATE	BY

MaLAREN ENGINEERS INC. WARDROP ENGINEERING INC.	
ENGINEERING CONSULTANTS	
DESIGNED BY: B.T.	CHECKED BY:
DRAWN BY: N.B.	APPROVED BY:
HOR. SCALE: VERTICAL: N.T.S.	
RELEASED FOR CONSTRUCTION:	
DATE: OCTOBER 1990	DATE:

THE CITY OF WINNIPEG
WORKS AND OPERATIONS DIVISION
WATERWORKS, WASTE & DISPOSAL DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
PUMP & SCREEN BUILDING – ELECTRICAL
MOTOR CONTROL CENTRE 1G

CITY DRAWING NUMBER
SHEET OF
SEP-829

CONSULTANT DRAWING NO.
870012-01-20-G-E108