

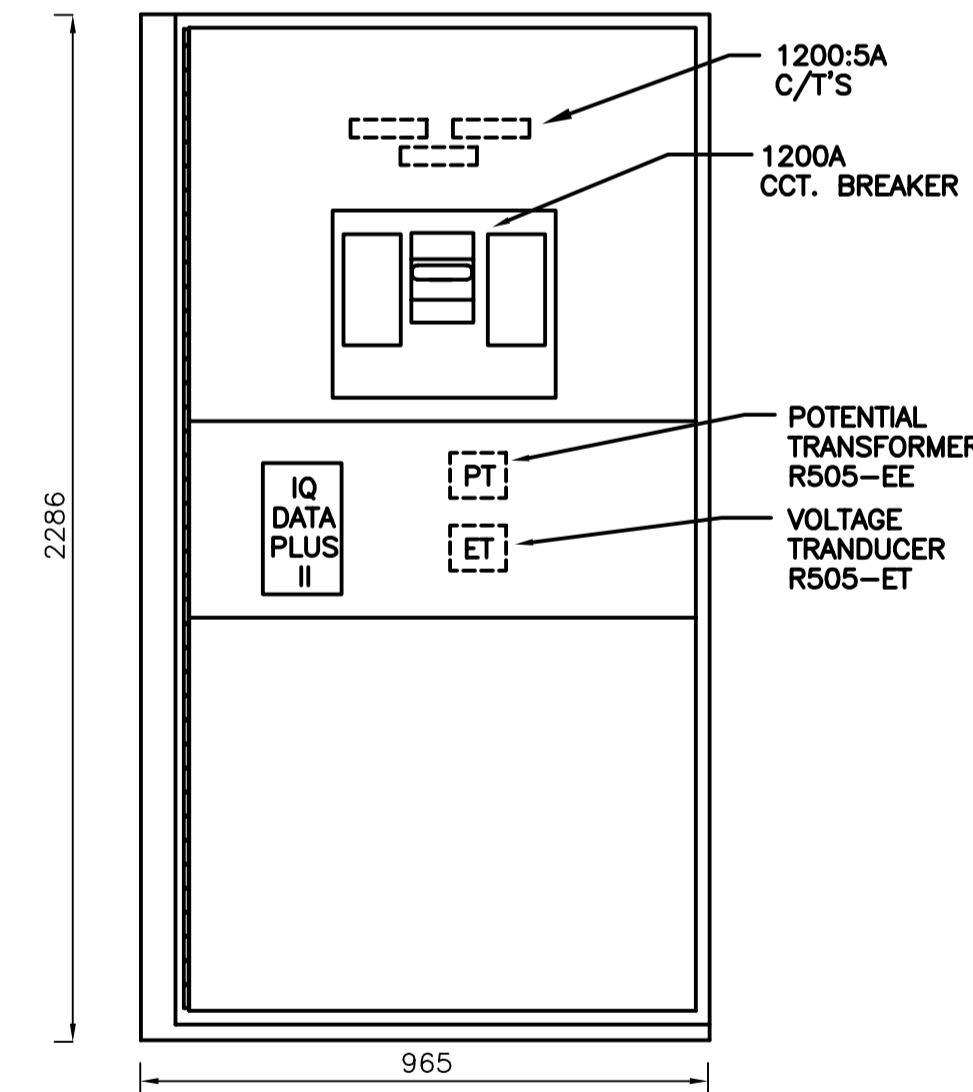
600 VOLT MOTOR CONTROL CENTER – MCC 1R

CONNECTED kW: 450
DEMAND kW: 400

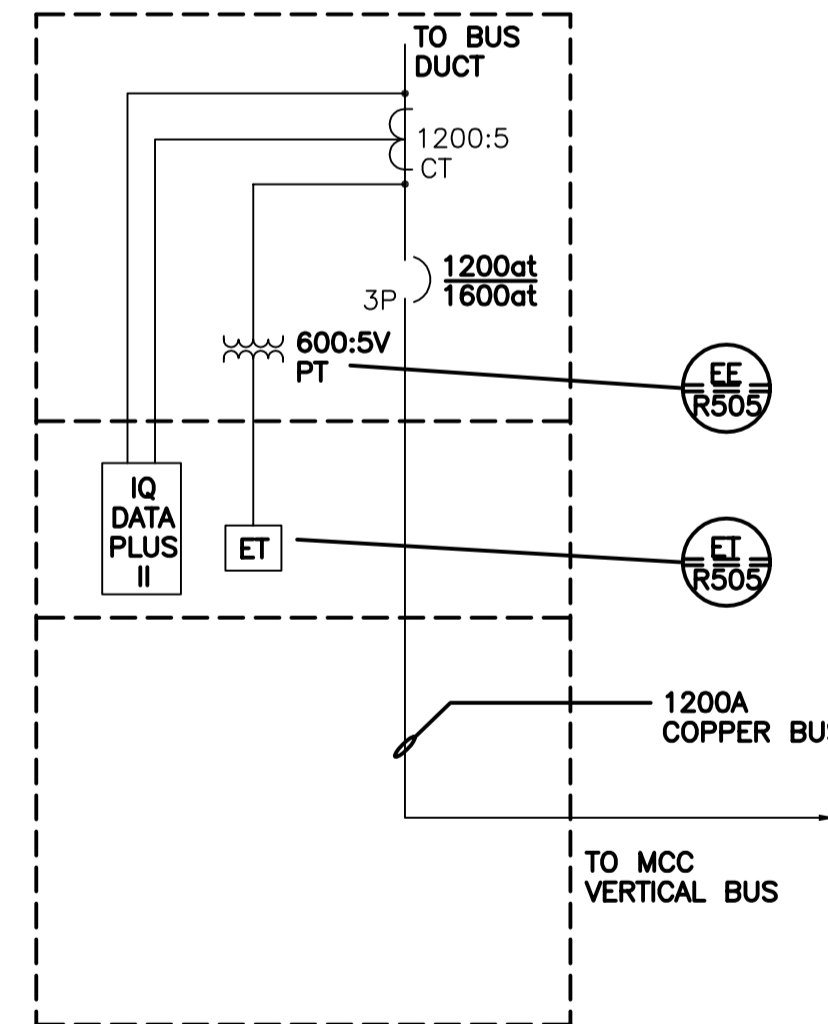
MCC NUMBER	EQUIP. NUMBER	MOTOR						STARTER		FEEDER			CIRCUIT PROTECTION		REMARKS
		DESCRIPTION	LOCATION	HP	KW	FULL LOAD AMPS	SERV. FACT.	EEMAC SIZE	TYPE	CAP (AMPS)	SIZE	TYPE	CONT. RATING (AMPS)	FRAME SIZE	
F1-1	R319-FN	COMPRESSOR VENT FAN	COMP R319	3	2.2	3.1	1.15	-	-	20	#12	RW90	15A-3P	HFD/CL	
F1-2		SPACE													
F1-3		SPACE													
F1-4		SPACE													
F1-5		SPACE													
F2-1	R233-MXR	MIXER FOR REACTOR 3, STAGE 1B	TANK 3-DECK	30	22.4	31	1.15	3	CMFVNR	45	#8	RW90	100A-3P	HMCP	
F2-2	R235-MXR	MIXER FOR REACTOR 3, STAGE 3	TANK 3-DECK	20	14.9	19.5	1.15	2	CMFVNR	30	#10	RW90	50A-3P	HMCP	
F2-3	R241-MXR	MIXER FOR REACTOR 4, STAGE 1A	TANK 4-DECK	30	22.4	31	1.15	3	CMFVNR	45	#8	RW90	100A-3P	HMCP	
F2-4	R243-MXR	MIXER FOR REACTOR 4, STAGE 2	TANK 4-DECK	25	18.7	26	1.15	2	CMFVNR	45	#8	RW90	50A-3P	HMCP	
F2-5	R231-PB	PURGE BLOWER FOR REACTOR 3	ROOM P127	5	3.7	5.5	1.15	1	CMFVNR	20	#12	RW90	15A-3P	HMCP	PURGE BLOWER IN PRI. CLAR. 3
F3-1	R213-MXR	MIXER FOR REACTOR 1, STAGE 1B	TANK 1-DECK	30	22.4	31	1.15	3	CMFVNR	45	#8	RW90	100A-3P	HMCP	
F3-2	R215-MXR	MIXER FOR REACTOR 1, STAGE 3	TANK 1-DECK	25	18.7	24	1.15	2	CMFVNR	45	#8	RW90	50A-3P	HMCP	
F3-3	R221-MXR	MIXER FOR REACTOR 2, STAGE 1A	TANK 2-DECK	30	22.4	31	1.15	3	CMFVNR	45	#8	RW90	100A-3P	HMCP	
F3-4	R223-MXR	MIXER FOR REACTOR 2, STAGE 2	TANK 2-DECK	25	18.7	25.2	1.15	2	CMFVNR	45	#8	RW90	50A-3P	HMCP	
F3-5	R211-PB	PURGE BLOWER FOR REACTOR 1	ROOM P110	5	3.7	5.5	1.15	1	CMFVNR	20	#12	RW90	15A-3P	HMCP	PURGE BLOWER IN PRI. CLAR. 1&2
F4-1	R463-FN	COOLING TOWER FAN	RM R101-ROOF	5	3.7	5.4/2.1	1.15	1	CMFVNR	20	#12	RW90	15A-3P	HMCP	2 SPEED REVERSING FAN
F4-2	R101-HTR	DRIOX VAPORIZER HEATERS	DRIOX PLANT		48			3	CONTACTOR	65	#6	RW90	60A-3P	HFD/CL	
F4-3		SPACE													
F4-4		10 KVAR CAPACITOR													BREAKER IN F5-1L
F5-1L		10 KVAR CAPACITOR BREAKER								20	#12	RW90	15A-3P	HFD/CL	
F5-1R		10 KVAR CAPACITOR BREAKER								20	#12	RW90	15A-3P	HFD/CL	
F5-2L		WELDING RECEPTACLE BREAKER	REACTOR DECK		60 KW			-	-	65	#6	RW90	60A-3P	HFD/CL	
F5-2R		20 KVAR CAPACITOR BREAKER								30	#10	RW90	30A-3P	HFD/CL	
F5-3		SPACE													
F5-4		20 KVAR CAPACITOR													BREAKER IN F5-2R
F6-1		SPACE													
F6-2	R319-AC	PSA AIR COMPRESSOR	ROOM R101	350	261	300	1.15	-	-	420	2-3/0 PER ?	RW90	600A-3P	HMCP	WYE-DELTA STARTER, PFC AT MOTOR
F6-3	R465-CWP	COOLING TOWER CIRCULATION PUMP	ROOM R101	7.5	5.6	8.1	1.15	1	CMFVNR	20	#12	RW90	15A-3P	HMCP	
F6-4	R461-CWP	COOLING TOWER CIRCULATION PUMP	ROOM R101	7.5	5.6	8.1	1.15	1	CMFVNR	20	#12	RW90	15A-3P	HMCP	
F6-5		10 KVAR CAPACITOR	MCC 1R												BREAKER IN F5-1R

F1	F2	F3	F4	F5	F6
R319-FN	R233-MXR	R213-MXR	R463-FN	10KVAR CAP	SPACE
1	1	1		1L	R319-AC
SPACE	R235-MXR	R215-MXR	R101-HTR	WELD BRKER	
2	2	2		2R	
SPACE	R241-MXR	R221-MXR		SPACE	R465-CWP
3	3	3	2		3
SPACE	R243-MXR	R223-MXR	SPACE	20KVAR CAP	R461-CWP
4	4	4	3		4
SPACE	R231-PB	R211-PB	10KVAR CAP		10KVAR CAP
5	5	5	4		5

MCC 1R FRONT ELEVATION



FRONT VIEW SWITCHGEAR



SWITCHGEAR SCHEMATIC

AS CONSTRUCTED
DATE JUNE/93 BY R.H.
APPROVED BY B.T.

B.M. ELEV.	MACLAREN ENGINEERS INC. WARDROP ENGINEERING INC. ENGINEERING CONSULTANTS	ENGINEER'S SEAL
DESIGNED BY B.T.	CHECKED BY	
DRAWN BY S.R.	APPROVED BY	
1 AS CONSTRUCTED 06/93 B.T.	HOR. SCALE: N.T.S.	RELEASED FOR CONSTRUCTION: DATE
0 ISSUED FOR TENDER 07/90 B.T.	VERTICAL: N.T.S.	
- ISSUED FOR APPROVAL 04/90 B.T.	DATE NOVEMBER 1989	
NO. REVISIONS	DATE	DATE



SOUTH END WATER POLLUTION CONTROL CENTRE
OXYGEN REACTOR EXPANSION – ELECTRICAL
MOTOR CONTROL CENTER 1R

CONSULTANT DRAWING NO.
870012-01-19-R-E101

CITY DRAWING NUMBER
SHEET OF
SEP-351

SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, Manitoba Canada R3P 0X7				
FOR REFERENCE ONLY				
PROJECT No.	SUBDIV.	SUBJECT	SERIAL	REV.
112577	0105	47 DD	0403	1