

JAY ELECTRIC LIMITED

- Reviewed
- Reviewed as noted
- Resubmit

DATE: Mar. 10, 2015
 REVIEWED BY: Gary R Beer

NOVATREND ENGINEERING GROUP LTD.

THIS REVIEW IS MADE ONLY TO VERIFY CONFORMITY WITH THE GENERAL DESIGN CONCEPT AND DOES NOT IMPLY APPROVAL OF THE DETAIL DESIGN INHERENT IN THE SHOP DRAWINGS, RESPONSIBILITY FOR WHICH REMAINS WITH THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ERRORS & OMISSIONS ON THE SHOP DRAWINGS, FOR INFORMATION RELATING SOLELY TO FABRICATION PROCESSES & CONSTRUCTION TECHNIQUES AND FOR MEETING ALL CONTRACTUAL REQUIREMENTS INCLUDING CO-ORDINATION OF FIELD DIMENSIONS & CO-ORDINATION OF THE WORK OF ALL HIS SUB-TRADES.

- REVIEWED
- REVIEWED AS NOTED
- REVISE & RESUBMIT
- REJECTED

Kevin Chen
 REVIEWED BY

2015-03-26
 DATE

S&C ELECTRIC CANADA LTD.

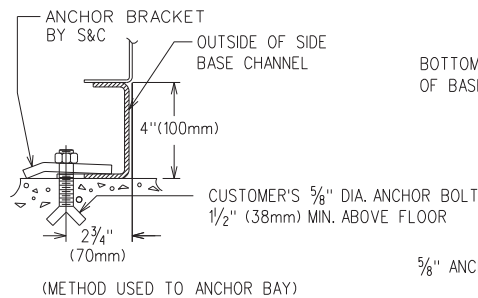
SWITCHGEAR UNIT
 APPAREILLAGE DE COMMUTATION
 CSA C22.2 NO. 3 Series
 Série CSA C22.2 NO. 3I

KV. NDM	13.8	BUS AMPS	600
KV. MAX	15	POLES	3
KV. BIL	95	CYCLES	60
SHORT-CIRCUIT WITHSTAND AMPS RMS SYM.	25000	ENCLOSURE TYPE	2
DWG. No.	MEG-1593623	DATE	

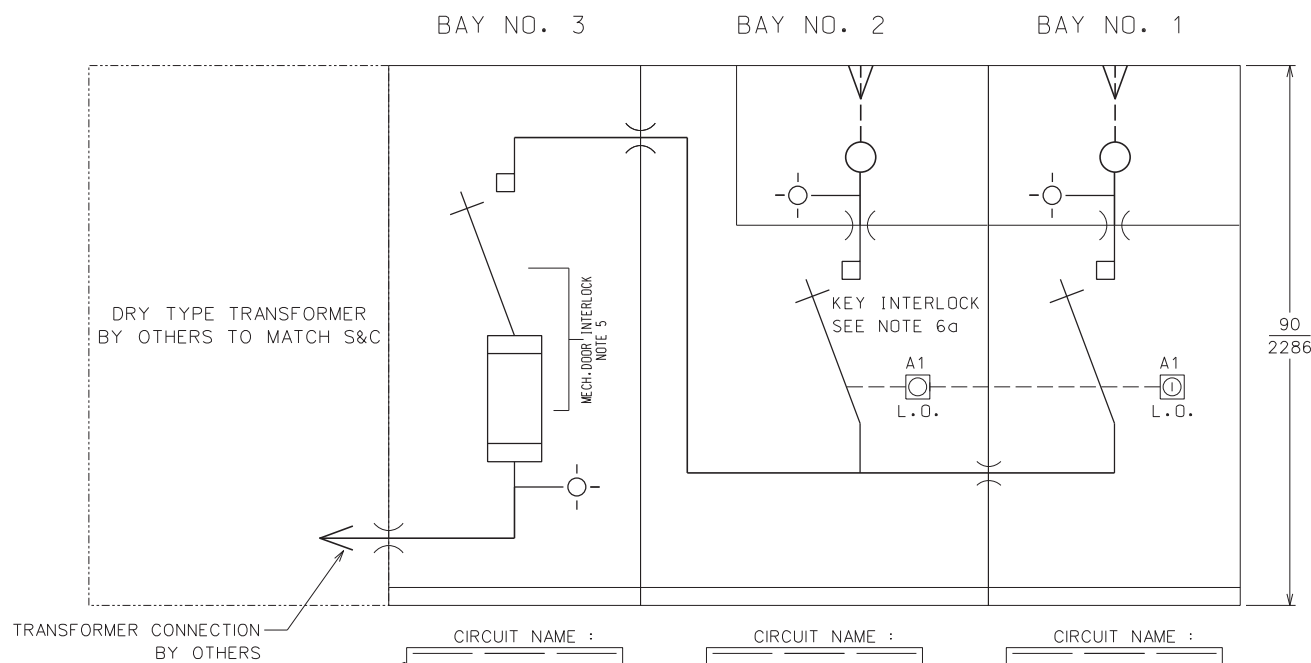
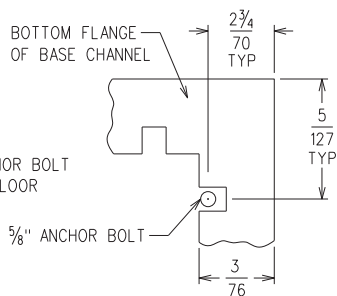
S&C SWITCHGEAR UNIT
 APPAREILLAGE DE COMMUTATION
 LL-12794

004

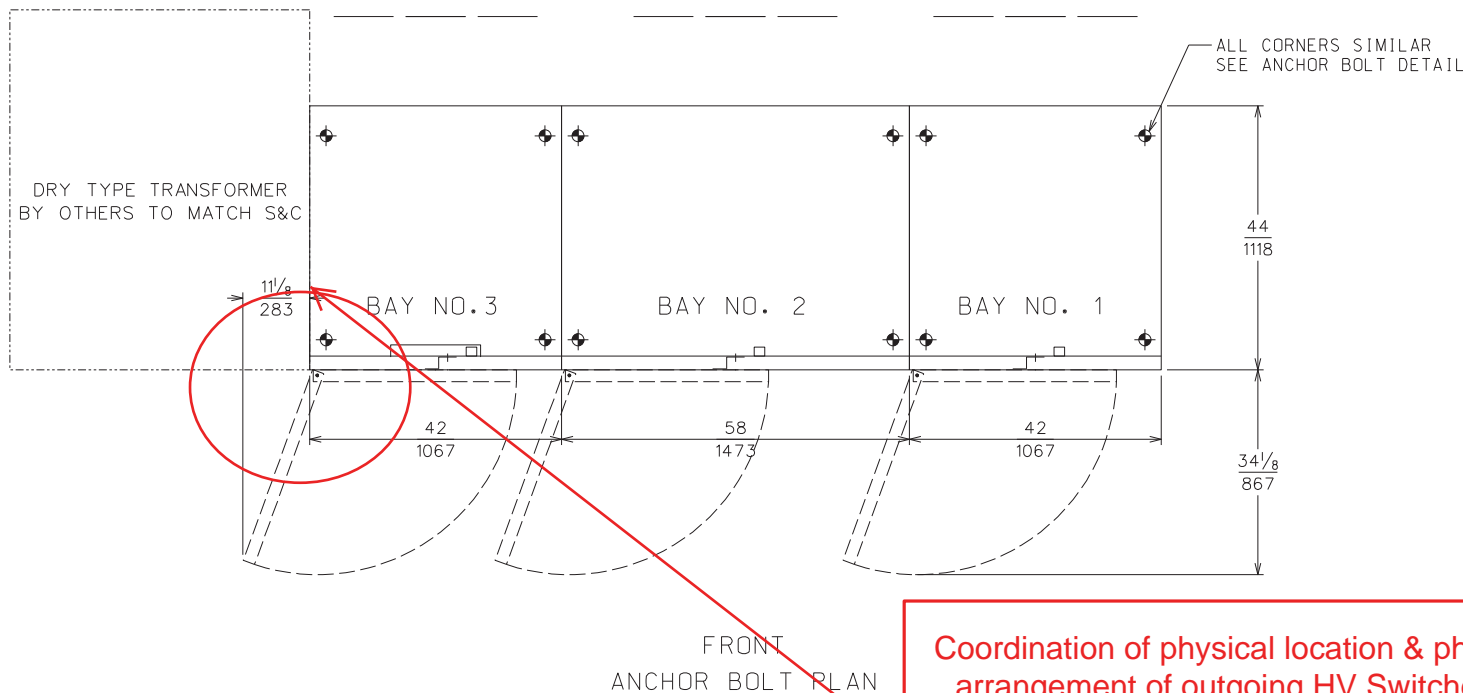
ANCHOR BOLT DETAIL



ANCHOR BOLT LOCATION DETAIL



CIRCUIT NAME :	CIRCUIT NAME :	CIRCUIT NAME :
REMOTE ISOLATION AT:	REMOTE ISOLATION AT:	REMOTE ISOLATION AT:
_____	_____	_____
_____	_____	_____
_____	_____	_____



Coordination of physical location & phasing arrangement of outgoing HV Switchgear bussing & HV transformer Primary bussing & supply of links must be confirmed by both HV Manuf. and Transformer Manuf. prior to fabrication of equipment.

REF	QTY	ITEM NUMBER	DESCRIPTION
101	1	MEG-10542	ENTRANCE -BAY SWITCH
102	1	MEG-10548	ENTRANCE -BAY SWITCH
103	1	MEG-10605	FEEDER-BAY SWITCH AND FUSE
301	1	MELK-1593620	KEY INTERLOCK KIT
302	12KG	9990199-129	ANSI 61 GREY HYBRID POWDER MODIFIED FOR EDGE PROTECTION 1/D
303	12KG	9990199-260	WHITE POLYESTER-EPOXY HYBRID POWDER MODIFIED FOR EDGE PROTECTION 1/D
701	1	IM-1027	INSTRUCTION SHEETS A/R - M/R-SM-40
702	1	NP-CSA-LP	NAMEPLATE KIT - SWITCHGEAR
703	1	MESK-1593620	SHIPPING KIT
705	5LBS	9990352-055	DUCT SEAL
711	1	SL-1000	PERMANENT SINGLE LINE DWG.
712	0	DRW-MEG-1593623	13.8KV 600 AMP METAL-ENCLOSED MODULAR SWITCHGEAR INDOOR STYLE MANUAL TYPE 3 BAYS SHORT CIRCUIT RATING 600MVA @ 13.8 KV

ORG:TOR ITEM:MEG-1593623
 REV:003

CUSTOMER INFORMATION RATINGS	
13.8 kV NOMINAL	SHORT CIRCUIT 600 MVA 3-PHASE SYM.
15 kV MAXIMUM DESIGN	25000 AMPS RMS SYM.
95 kV B.I.L.	FAULT CLOSING 40000 AMP RMS ASYM.
FREQUENCY, HZ. 60	SHORT-TIME 25000 AMP RMS SYM.
MOMENTARY 40000 AMP RMS ASYM.	SHORT-TIME DURATION 2(1) SECONDS (SEE NOTE15)
BUS: MAIN	600 A. CU. - TIN PLATED COPPER
TAP-OFF	600 A. CU. - TIN PLATED COPPER
GROUND	600 A. CU. - TIN PLATED COPPER

PAINT FINISH:	CONSTRUCTION:
EXTERIOR: LIGHT GREY ANSI 61 EEMAC 2Y-1, 1958	INDOOR DRIPPROOF
INTERIOR: WHITE	THIS SWITCHGEAR MEETS THE REQUIREMENTS OF CSA C94 SPECIAL ENCLOSURE TYPE 'WEATHERPROOF'. THIS SWITCHGEAR IS NOT SUITABLE FOR USE OUTDOORS

- GENERAL NOTES**
- MATERIAL: 11 GAUGE (0.119) REINFORCED SHEET STEEL
 - SCREENS PAINTED FLAT BLACK
 - TO AVOID PLACING STRAIN ON ANY SWITCH OR FUSE TERMINAL, DO NOT USE THE MOUNTING BOLTS OF THE CONNECTOR TO PULL THE CABLES INTO ALIGNMENT.
 - ALL HANDLES HAVE PROVISION FOR PADLOCKING
 - DOOR CANNOT BE OPENED UNLESS INTERRUPTER SWITCH IS IN OPEN POSITION. DOOR MUST BE CLOSED BEFORE INTERRUPTER SWITCH CAN BE CLOSED.
 - KEY INTERLOCK SEQUENCE: BAYS 1 & 2 ONE INTERRUPTER SWITCH ONLY CAN BE CLOSED AT ONE TIME. (SPARE KEY A1 MARKED "FOR T.H.E.S. USE ONLY")
 - 2-PLEX NAMEPLATES: 1/2" HIGH WHITE LETTERS ON BLACK, GLUED AND FASTENED WITH RIVETS. CUSTOMER TO SUPPLY THIS INFORMATION AT APPROVAL STAGE. NAMEPLATES WILL BE ENGRAVED EXACTLY AS WRITTEN.
 - ALL BAYS SHIPPED SEPARATELY
 - MIMIC BUS. WHITE LINES ON RED, GLUED AND FASTENED WITH RIVETS.
 - COLOR CODED BUS : A PHASE - RED, B PHASE - WHITE, C PHASE - BLUE, GRD. - GREEN
 - DOORS & PANELS OPEN 135 DEGREES
 - BARRIER MATERIAL: 3/16" WHITE FIBERGLASS GRADE GPO3
 - ALL PANELS SECURED WITH 1" CAPTIVE KNURLD HEAD BOLTS
 - APPROXIMATE WEIGHT OF BAY NO.1 1500 LBS., BAY NO.2 1700 LBS., BAY NO.3 1600 LBS.
 - SHORT-TIME DURATION IS 2 SECONDS FOR SWITCHES IN BAY 1 & 2, 1 SECOND FOR SWITCH IN BAY 3

JOB NAME: ALEXANDRA PARK
 CUSTOMER: VAUGHAN ELECTRICAL SUPPLY CO. LTD.
 CUSTOMER P.O.: 82641
 S&C.S.O.: 476132
 APPROVAL

REVISIONS	NO.	DATE	DESCRIPTION
ST508019	11-16-12	004	
ST506763	11-25-11	003	
ST504664	05-17-10	002	
ST500419	07-23-07	001	
T108123	04-10-07	000	

UNLESS OTHERWISE SPECIFIED : DECIMAL DIMS. TO BE : FRACTIONAL DIMS. TO BE : ANGLES TO BE : WHEN CHECKED, BREAK ALL CORNERS ☐ WHEN CHECKED, REMOVE ALL BURRS ☐

MATERIAL: S&C SPEC NO. DESCRIPTION: FINISH: S&C SPEC NO. DESCRIPTION: SCALE: NTS DR. BY: KSN CH. BY: APP. BY: M.W. DATE: 04-11-07

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 Excellence Through Innovation

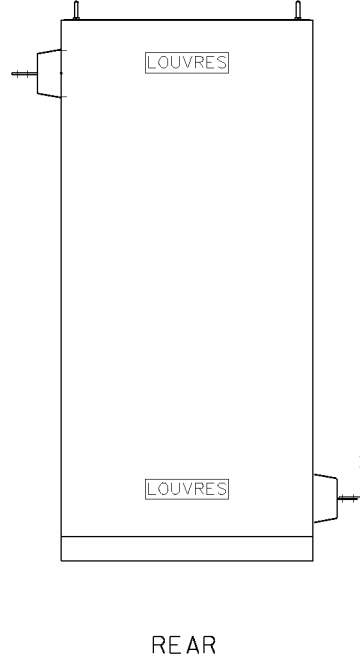
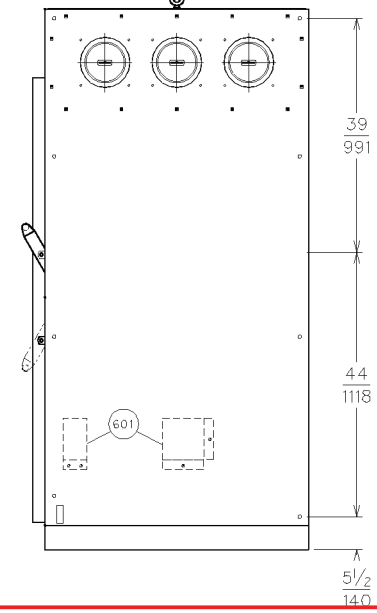
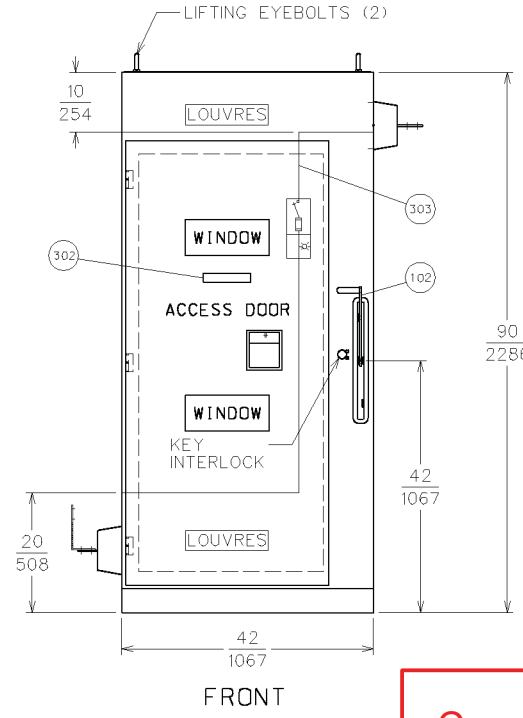
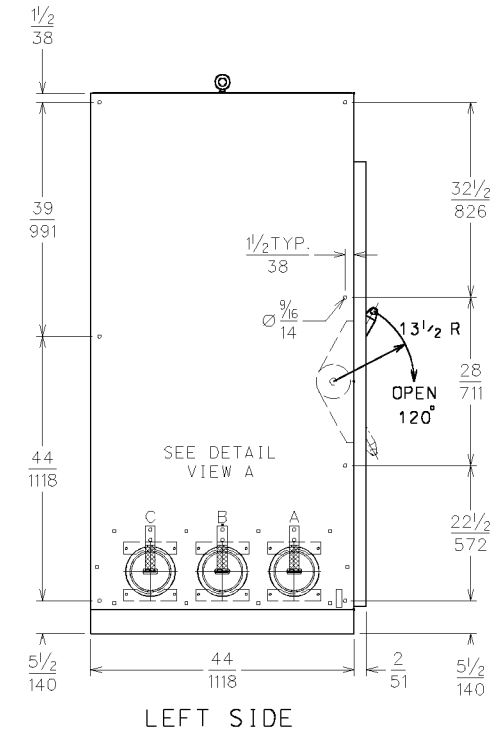
DESCRIPTION: 13.8 kV 95 kV B.I.L. INDOOR STYLE METAL-ENCLOSED SWITCHGEAR

SOURCE FILE NO.: 15213.DGN

DRAWING NO.: MEG-1593623

DRAWING NO.: MICROSTATION MEG-1593623

REF	QTY	ITEM NUMBER	DESCRIPTION
101	1	255702R2-T203	MINI-RUPTER SWITCH SM-40 FUSE 15KV, 600A, 95KV BIL, 400E MAX C/W WHITE BARRIER ASSY
102	1	ED-494R1-T200	M/R OPERATING MECH 15KV SM-40 (T.H.E.S.)
103	3	3090	SM-40 FUSE END FITTINGS
104	6	CA-1675-1-T201	THROUGH BUSHING - 600A
105	5	PA-7163	CYPOXY INSULATOR 15KV
107	1	5392T	1- BOLT CONNECTOR #6-250 MCM CU OR AL CABLES - CU TERM PADS
201	3	MP-015-001-262	VOLTAGE INDICATOR YZ-2 TEDCO RATINGS 2-46KV
301	1	PFB-10605	BUS PREFAB
302	1	G-1000	2- PLEX NAMEPLATE
303	1	SKM-10605	MIMIC BUS
304	3	9993022-071	600A FLEXIBLE BRAID 12" LONG
401	1	C-752	GROUNDING ROD (STRAIGHT)
403	1	MEA-007-003-001	HORIZONTAL BARRIER ASSEMBLY
501	1	CMA-10605	42X44X90 MODULAR ENCLOSURE ASSEMBLY FOR T.H.E.S
502	1	CMA-10560	CHAIN GUARD ASSEMBLY FOR M/R 90" HIGH ENCLOSURE
601	1	CMA-10235	SM-20/40 CONTAINER ASSY
602	1	SA-40569-2	MECH INTERLOCK MINI-RUPTER RH
603	4	CA-1320	OUTDOOR VENT ASSY
701	1	NP-10605	NAMEPLATE KIT
702	1	DRW-MEG-10605	FEEDER-BAY SWITCH AND FUSE
		ORG: TOR	ITEM: MEG-10605
		REV: 000	



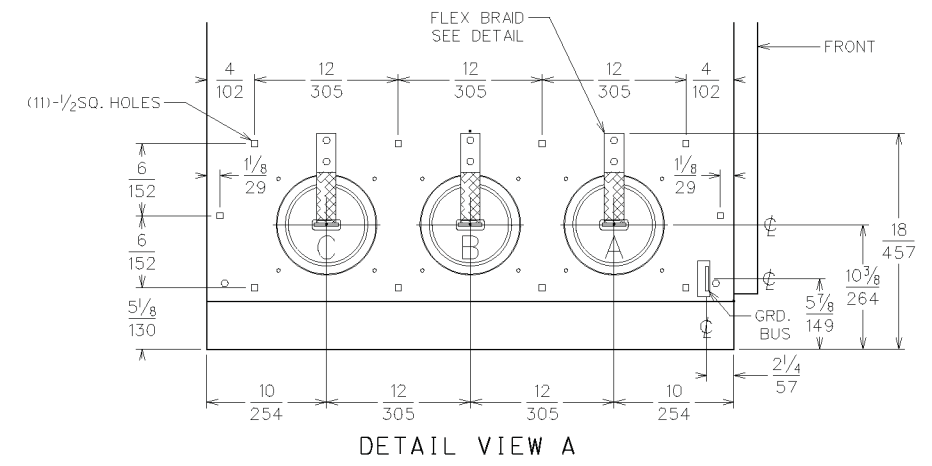
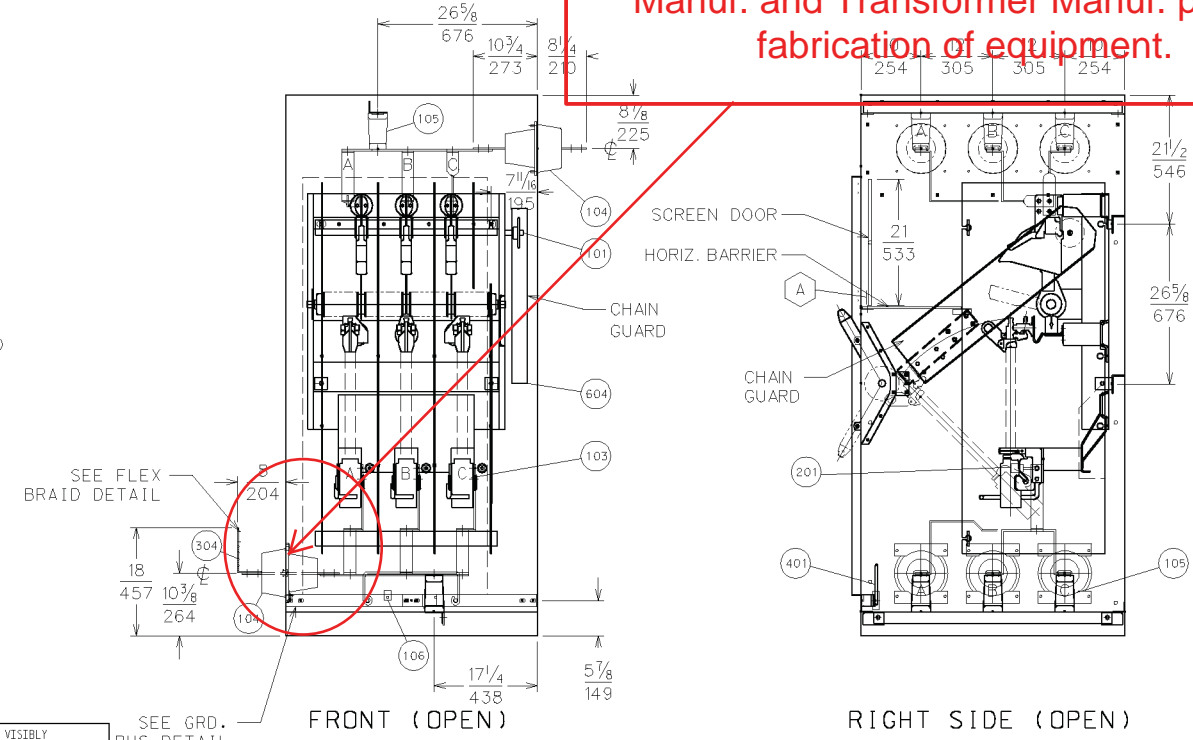
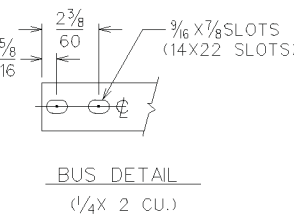
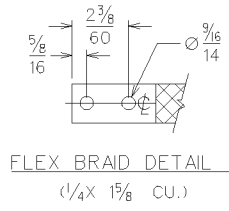
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Mar. 10, 2015	Gary R Beer

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 CUSTOMER P.O.: 82641
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 APPROVAL



DANGER
 HIGH VOLTAGE

DO NOT ENTER THIS COMPARTMENT UNLESS VISIBLY ISOLATED BY DISCONNECT DEVICE
 NE PAS ENTRER DANS CETTE CELLULE AVANT DE S'ASSURER QU'UN SECTIONNEUR PRECEDENT EST VISIBLEMENT OUVERT

NOTE: CUSTOMER TO SUPPLY THIS INFORMATION AT APPROVAL STAGE. CARE SHOULD BE TAKEN TO ENSURE THAT ALL SUPPLY SOURCES ARE CONSIDERED. IF DRAWINGS ARE RETURNED WITH BLANK OR AMBIGUOUS INFORMATION, THESE PLATES WILL BE SHIPPED BLANK FOR SITE ENGRAVING BY CUSTOMER.

REMARQUE: IL INCOMBE AU CLIENT DE FOURNIR CETTE INFORMATION PENDANT LE STADE D'APPROBATION. ON DOIT TENIR COMPTE DE TOUTES LES SOURCES D'ALIMENTATION. S'IL MANQUE DES INFORMATIONS PERTINENTES, OU SI L'INFORMATION EST AMBIGUE, DES PLAQUES D'AVERTISSEMENT SANS INSCRIPTION SERONT FOURNIES. LE CLIENT DEURA ALORS LUI-MEME FAIRE GRAVER L'INFORMATION NECESSAIRE SUR LES PLAQUES.

UNLESS OTHERWISE SPECIFIED: DECIMAL DIMS. TO BE: FRACTIONAL DIMS. TO BE: ANGLES TO BE:		MATERIAL: S&C SPEC NO. DESCRIPTION	FINISH: S&C SPEC NO. DESCRIPTION	SCALE
WHEN CHECKED, BREAK ALL CORNERS □		PROPRIETARY STATEMENT		DR. BY KSN
WHEN CHECKED, REMOVE ALL BURRS □		THIS DOCUMENT AND ALL PREVIOUS ISSUES ARE THE SOLE AND CONFIDENTIAL PROPERTY OF S&C ELECTRIC CANADA LTD. IT IS TO BE KEPT IN STRICTLY CONFIDENTIAL AND NOT BE LOANED, REPRODUCED, COPIED, REPRODUCED, OR OTHERWISE DISCLOSED TO ANY OTHER PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF S&C. THIS DOCUMENT IS PROVIDED UNDER THE EXPRESS ACCEPTANCE THAT IT WILL BE COVERED BY THE PROPRIETARY INFORMATION POLICY OF S&C ELECTRIC CANADA LTD. AND THAT IT WILL NOT BE USED IN ANY WAY DETRIMENTAL TO S&C.		CH. BY
REVISIONS	NOTICE NO. DATE NO.	T1108123 04-10-07 000		APP. BY M.W.
				DATE 04-11-07

BAY NO.3

S&C ELECTRIC CANADA LTD.
 GENERAL OFFICES • TORONTO

Specialists in High-Voltage Switching and Protection

DESCRIPTION	13.8 KV 95 KV B.I.L.L.	SOURCE FILE NO.	15216.DGN
	INDOOR STYLE		
	METAL-ENCLOSED SWITCHGEAR	DRAWING NO.	MEG-10605