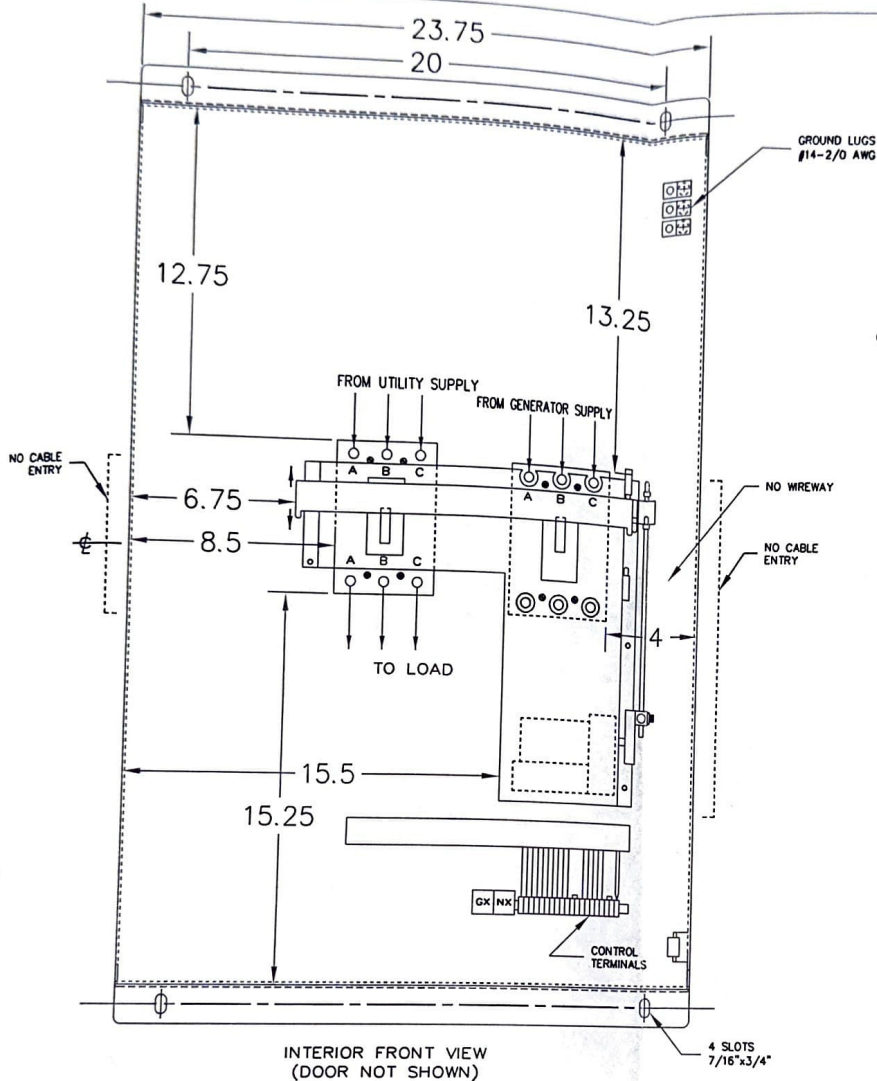
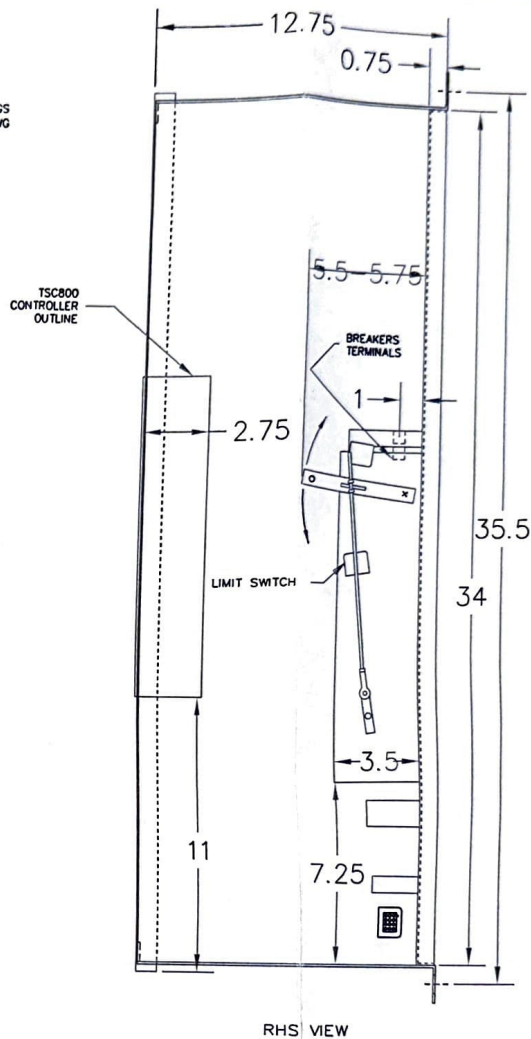


FRONT VIEW (TYPICAL)  
FINISH: ASA #61 GREY



INTERIOR FRONT VIEW  
(DOOR NOT SHOWN)



RHS VIEW

ENCLOSURE TYPE

- NEMA 1
- NEMA 2  
C/W DRIPHOOD
- NEMA 3R  
C/W GASKETING

SIZE (AMPS)

- 100A
- 150A

- 3 POLE

- 4 POLE

- SOLID NEUTRAL

SERIAL NUMBER:

AS BUILT BY/  
AS BUILT DATE

TESTED BY:

SPECIAL REQUIREMENTS:

DRAWINGS AND/OR OTHER TECHNICAL INFORMATION SUPPLIED BY THOMSON TECHNOLOGY INC AS A PART OF A SALE OF EQUIPMENT ARE FOR THE PURCHASER'S USE SOLELY IN CONJUNCTION WITH THAT EQUIPMENT, UNLESS SPECIFICALLY AGREED TO OTHERWISE AS A PART OF THE TERMS OF SALE.

CUSTOMER

DWN BY: VV AUTH BY: BD DATE: 99-05-05

DRAWING No. 475-6B008901 SHEET 1/1

**WARNING**  
MORE THAN ONE LIVE CIRCUIT  
SEE DIAGRAM

**AVERTISSEMENT**  
PLUS D'UN CIRCUIT SOUS  
TENSION VOIR SCHEMA

**WARNING**  
DISCONNECT ALL SOURCES OF  
SUPPLY BEFORE SERVICING

**AVERTISSEMENT**  
COUPER TOUTES LES SOURCES  
D'ALIMENTATION AVANT DE FAIRE  
L'ENTRETIEN ET LES REPARATIONS

GROUND LUGS: 3C #14-2/0 AWG Cu/Al

BREAKERS LUGS: 1C #4-4/0 AWG Cu/Al  
PER POLE

NEUTRAL LUGS: 1C #14-2/0 AWG Cu/Al  
(3 POLE VERSIONS)

NOTE: STANDARD CONFIGURATION SHOWN;  
3Ø/4W SYSTEM WITH SOLIDLY GROUNDED NEUTRAL

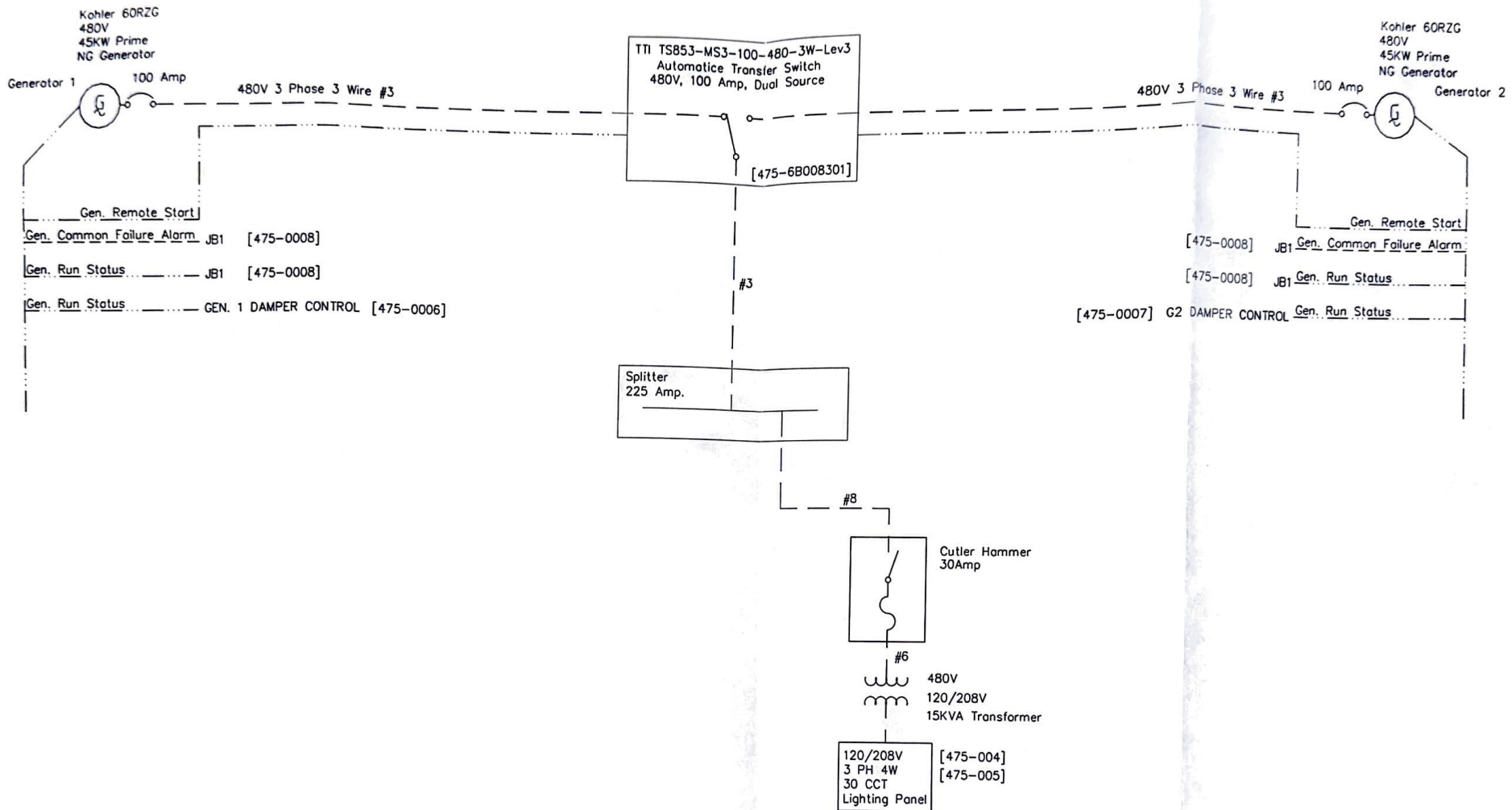
- APPROVED FOR CONSTRUCTION
- MASTER COPY  REFERENCE COPY OF \_\_\_\_\_
- MULTIPLE UNIT WORK ORDER
- RELEASED FOR INFORMATION


AUTH. BY: \_\_\_\_\_ DATE: \_\_\_\_\_

DRAWING No.	REFERENCE DRAWINGS	No.	REVISIONS	BY	AUTH	DATE
		7	ADD NEMA 3R	SH	SH	01-05-16
		6	UPDATED BORDER	SH	BD	99-11-22
		5	100-150A ONLY	VV	BD	99-09-09
		4	UPDATED TO LATEST STD	RG	NS	97-11-21

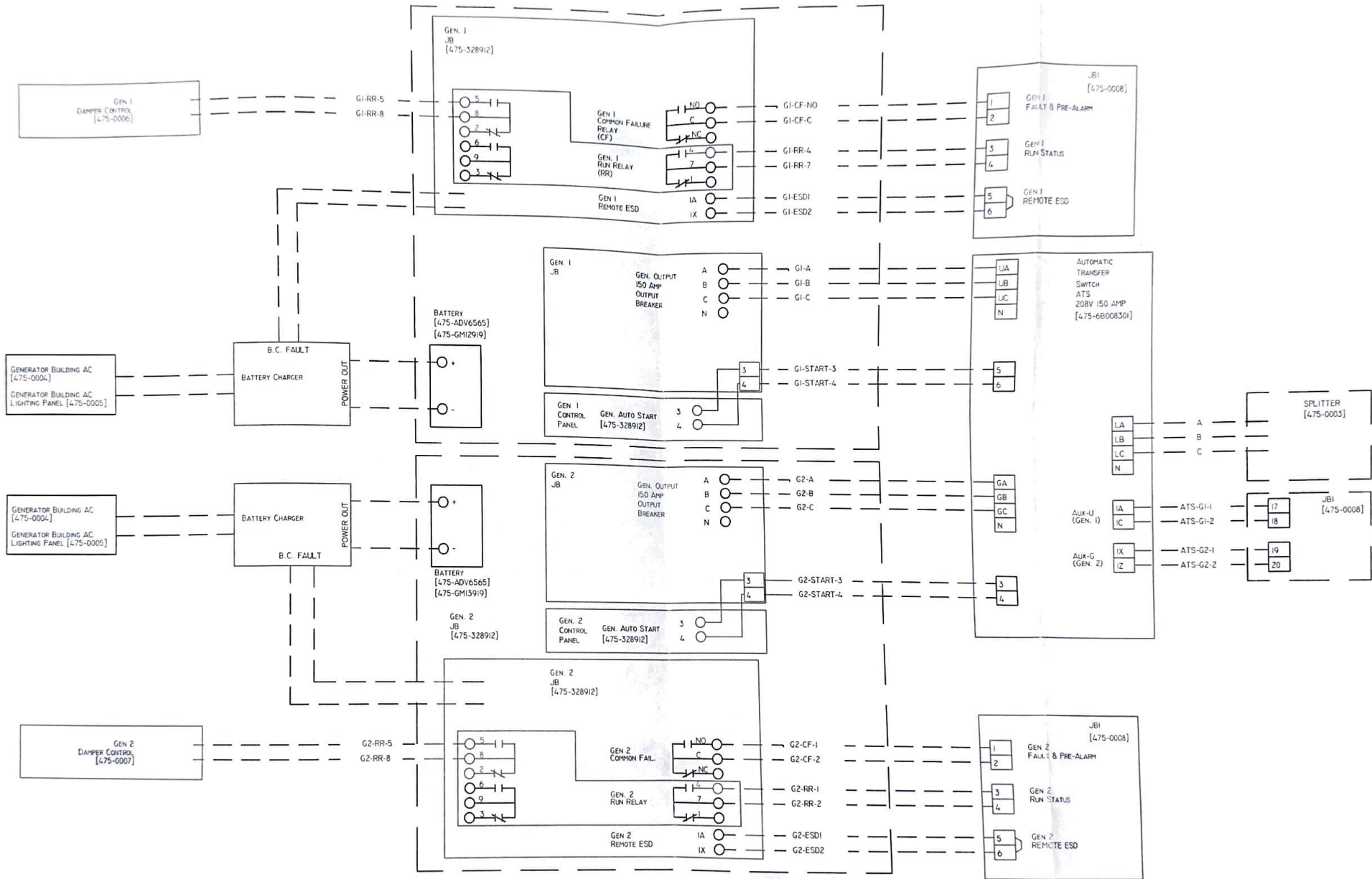


AUTOMATIC TRANSFER SWITCH  
MODEL TS 850M  
PHYSICAL LAYOUT AND INSTALLATION DETAILS  
100, 150A



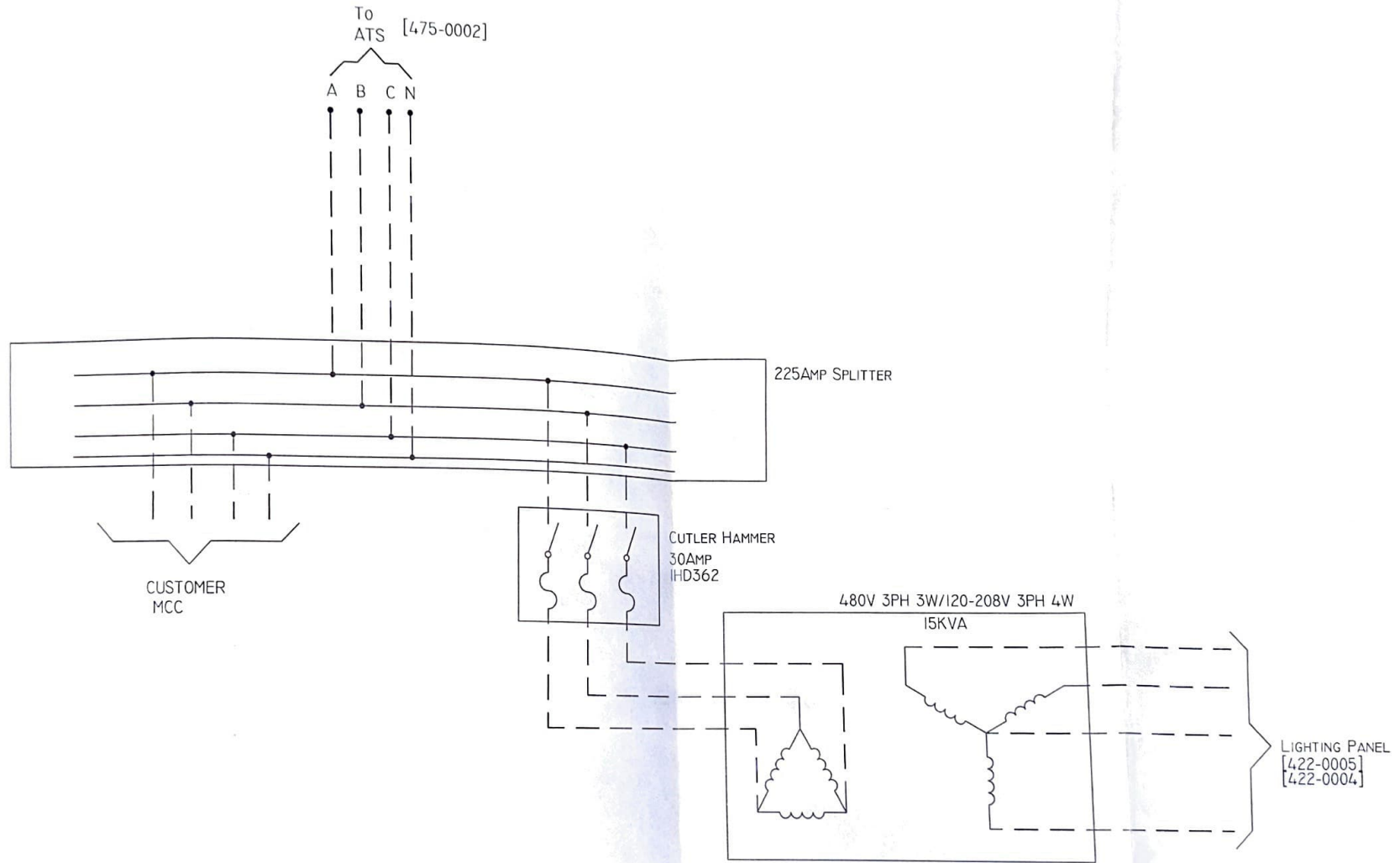
- NOTES: 
1. By Others
  2. Reference Drawing [????]
  3. AC Connection
  4. Alarm / Cntl / Status Connection

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. : 05/25/02	Location:	10-21-13-10 W4M
Design: JEA	Title:	Generator Single-Line
Drawn: DAE	DWG No.	475-0001 Rev. 0



NOTES:  
 I. [????] REFERENCE DRAWING

WATEROUS DDA INC.	CUSTOMER:	CNRL
DATE REV 0 : 11/25/03	PROJECT:	ALDERSON
DATE LAST REV. : 11/24/03	LOCATION:	10-21-13-10 W4M
DESIGN: JEA	TITLE:	GENERATOR & ATS INTERCONNECTION
DRAWN: DAE	DWG No.	475-0002 REV. 0

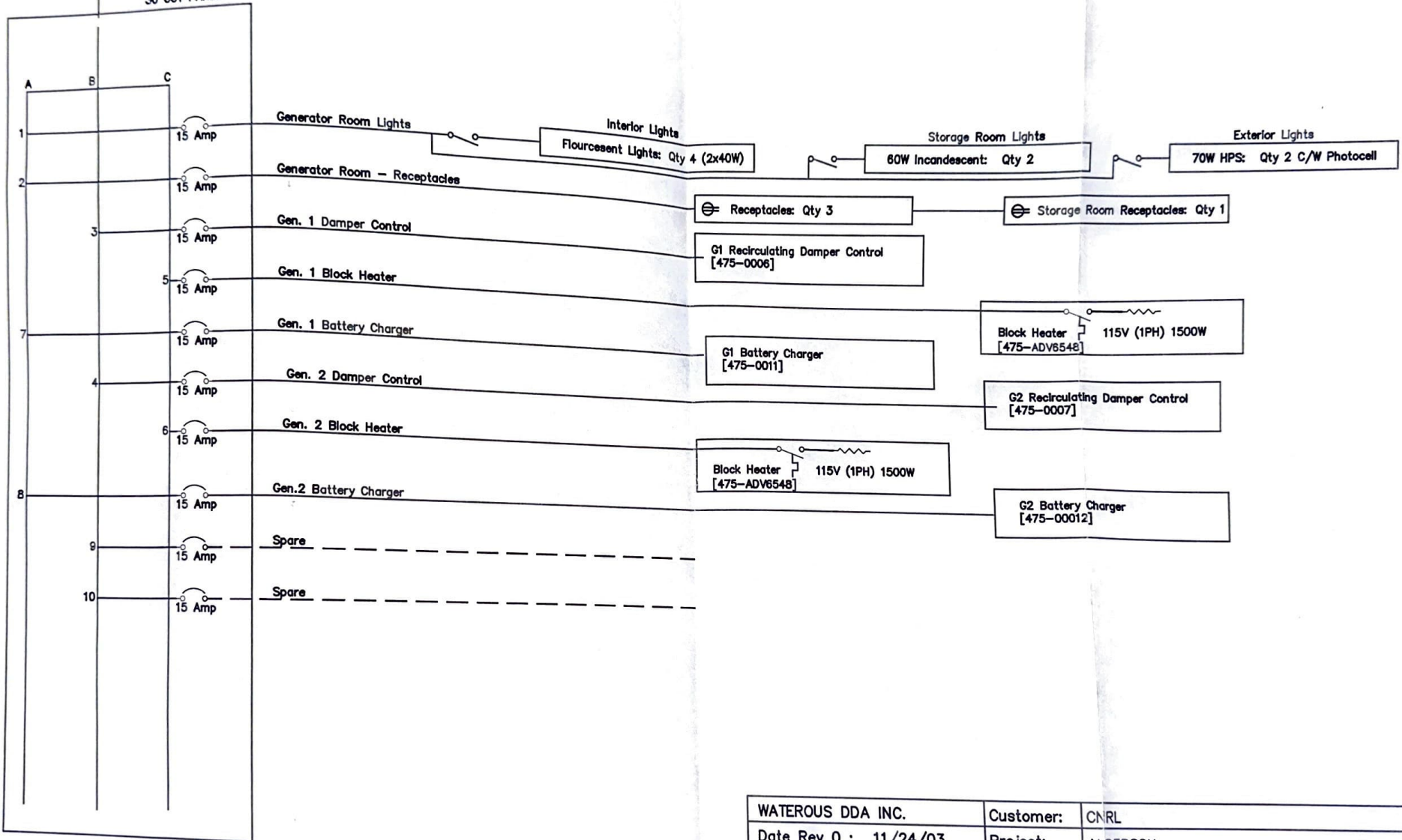


WATEROUS DDA INC.	CUSTOMER:	CNRL
DATE REV 0 : 11/24/03	PROJECT:	ALDERSON
DATE LAST REV. : 11/24/03	LOCATION:	10-21-13-10 W4M
DESIGN: JEA	TITLE:	INTERCONNECTION
DRAWN: DAE	DWG No.	475-0003 REV. 0



To Splitter  
[475-0003]

120/208V 3 Phase 4W  
30 CCT PANEL

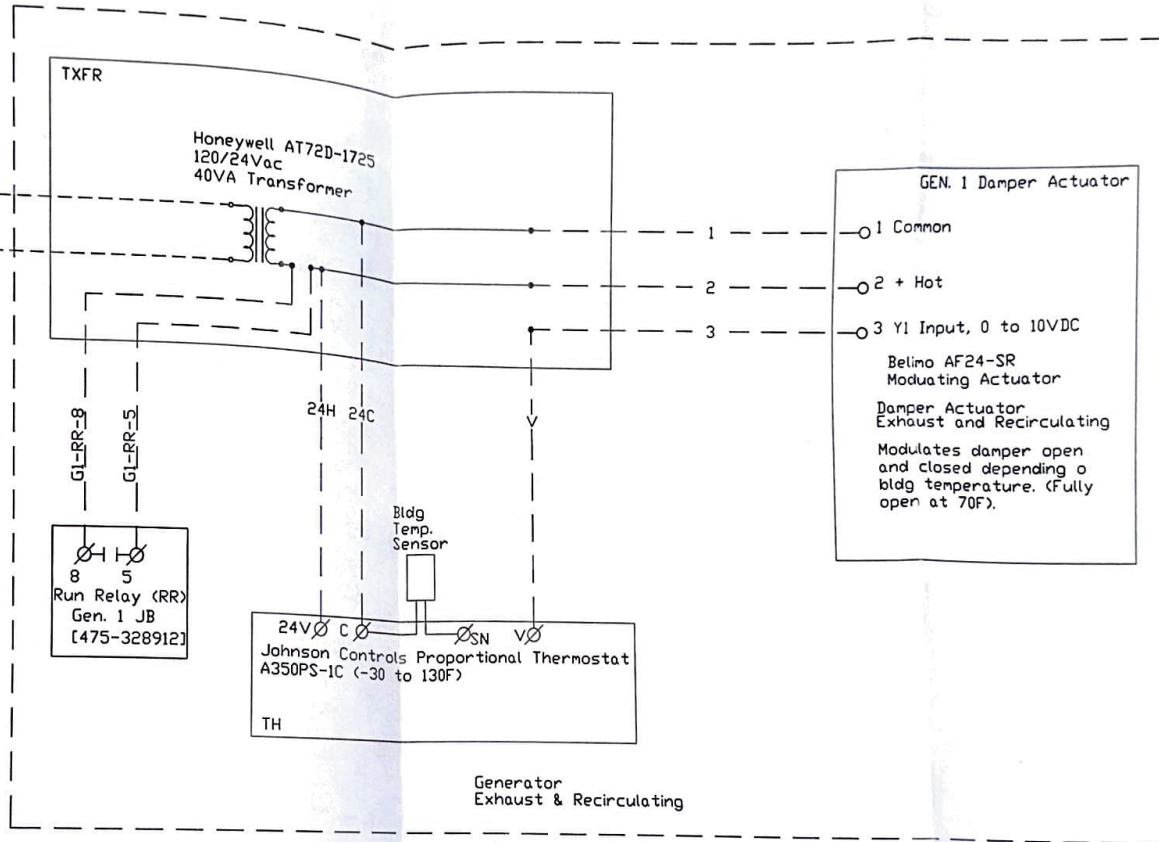
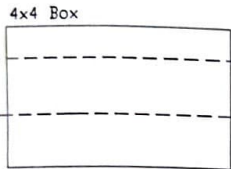
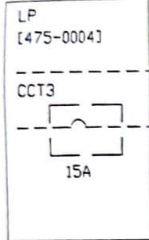


WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. : 11/24/03	Location:	10-21-13-10 W4M
Design: JEA	Title:	Generator Building AC
Drawn: DAE	DWG No.	475-0004 Rev 0

FEEDER <u>Customer</u>				LIGHTING PANEL <u>Generator</u>				PANEL LOCATION <u>Gen. Building</u>				
MAIN BREAKER <u>30A FDS (480V SIDE)</u>				VOLTS <u>120/208</u>				AREA SERVED <u>Generator</u>				
PHASE <u>3</u>				BUS <u>n/g</u>				WIRE <u>4</u>				
LOAD DESCRIPTION	LOAD (W)			TRIP AMPS	BRK. NO.	BUS			LOAD (W)			LOAD DESCRIPTION
	A	B	C			A	B	C	A	B	C	
Building Interior & Exterior Lighting	500W			15	1							
Gen. 1 Damper Control		50W		15	3							Receptacles
Gen. 1 Block Heater			1500W	15	5							Gen. 2 Damper Controls
Gen. 1 Battery Charger Outlet	500W			15	7						1500W	Gen. 2 Block Heater
SPARE				15	9							Gen. 2 Battery Charger Outlet
					11							Spare
					13							
					15							
					17							
					19							
					21							
					23							
					25							
					27							
					29							
					30							

SUB-TOTAL (LEFT)			
SUB-TOTAL (RIGHT)			
TOTAL PER PHASE			
TOTAL LOAD			

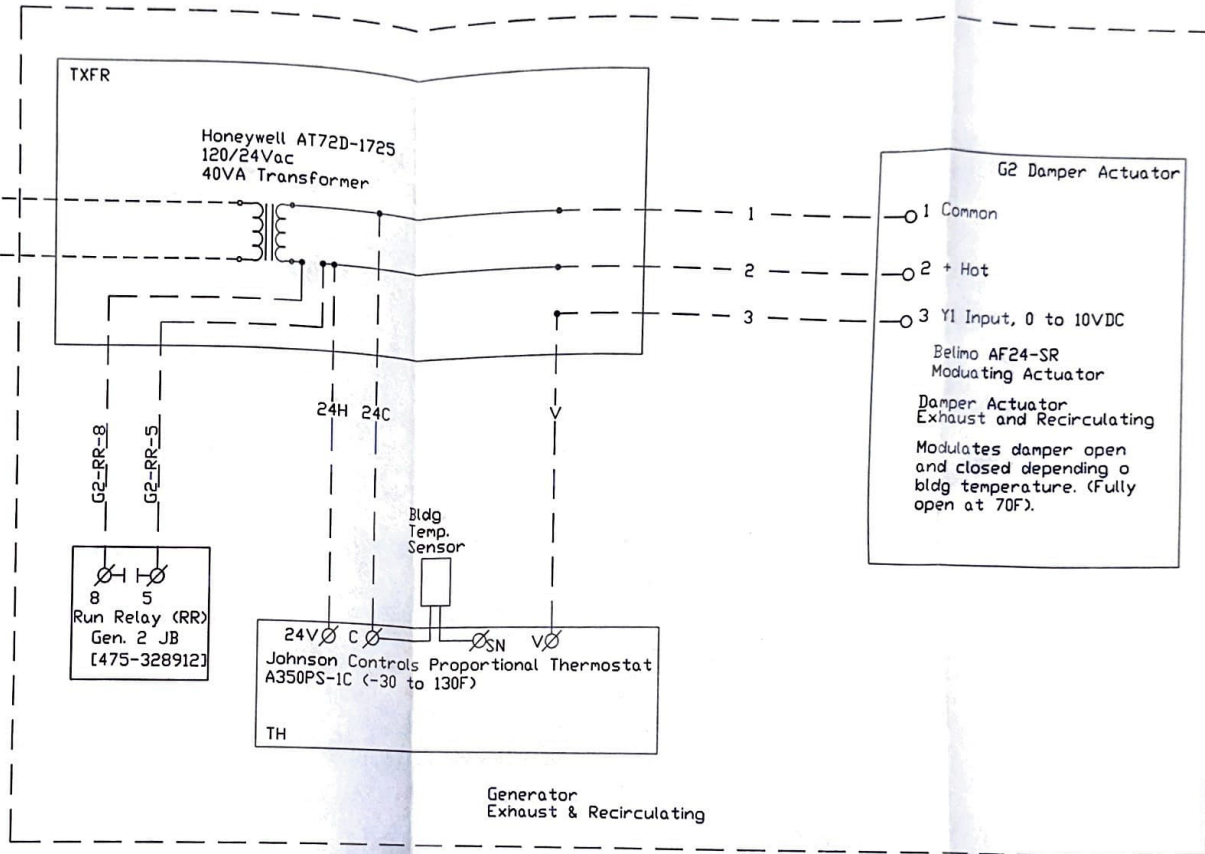
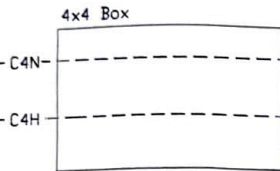
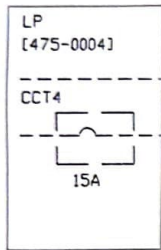
WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. : 11/24/03	Location:	10-21-13-10 W4M
Design: JEA	Title:	Generator Building AC Lighting Panel
Drawn: DAE	DWG No.	475-0005 Rev. 0



Notes

1. [xxxx] Reference Dwg

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. : 11/24/03	Location:	10-21-13-10 W4M
Design: JEA	Title:	Generator 1 Damper Control
Drawn: DAE	DWG No.	475-0006 rev. 0

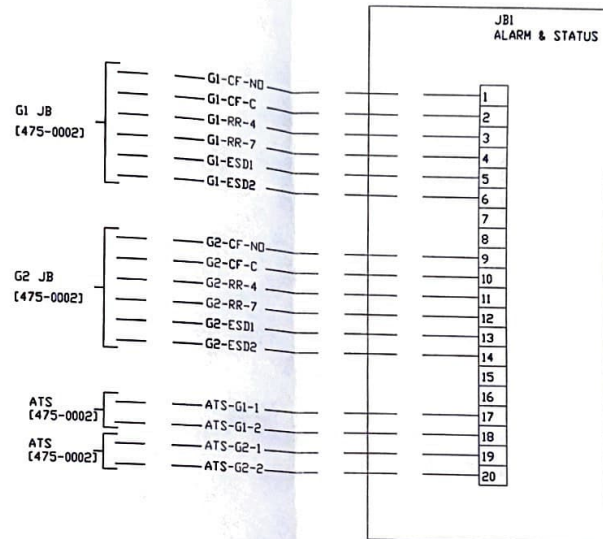


Notes

1. [xxxx] Reference Dwg

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. :11/24/03	Location:	10-21-13-10 W4M
Design: JEA	Title:	Generator 2 Damper Control
Drawn: DAE	DWG No.	475-0007 rev. 0

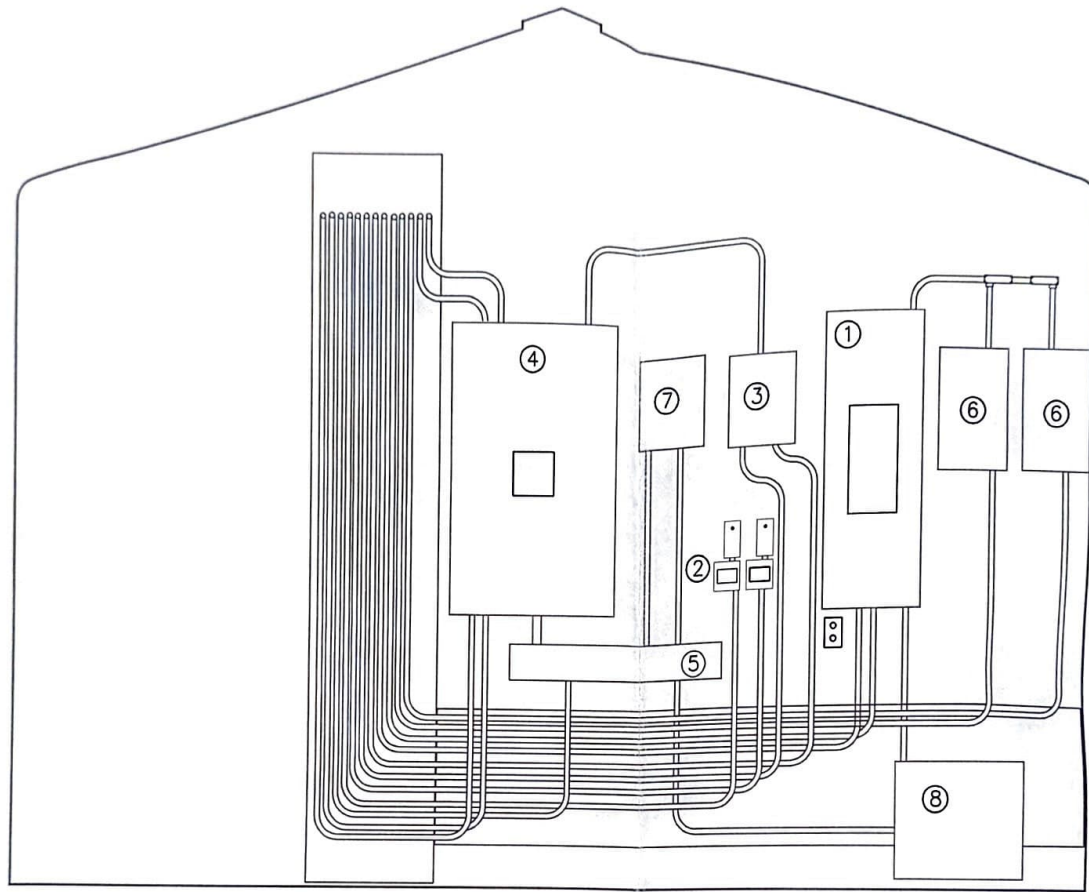




Notes:

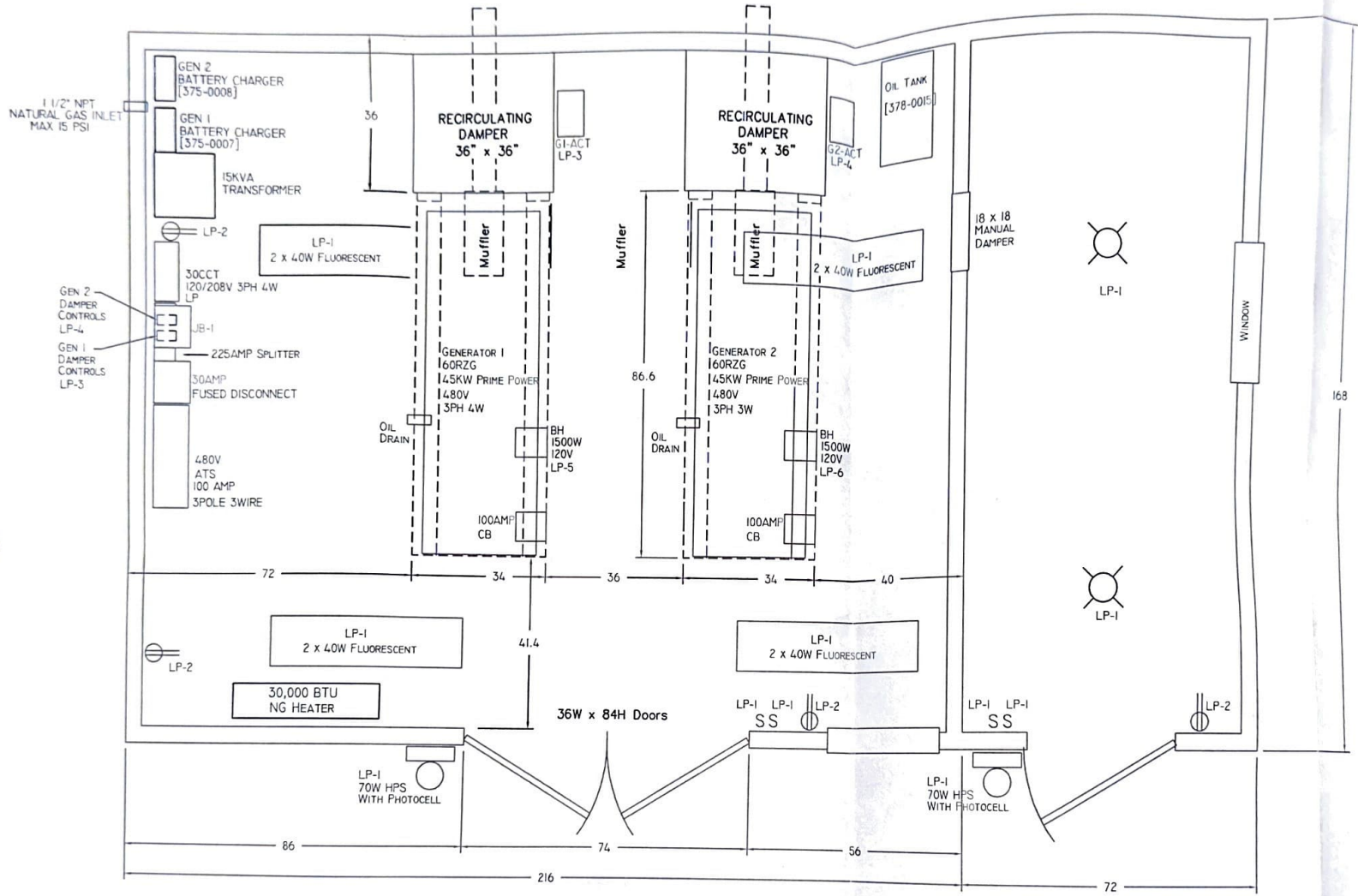
1. [????] Reference Drawing

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. : 11/24/03	Location:	10-21-13-10 W4M
Design: JEA	Title:	JBI ALARM & STATUS
Drawn: DAE	DWG No.	475-0008 rev. 0



1. 120/208V Lighting Panel, 30 Circuit
2. Damper Controllers
3. JB1 (Alarm, Status, Control)
4. Automatic Transfer Switch
5. Splitter
6. Battery Charger
7. 30Amp Transformer Fused Disconnect
8. 15KVA Transformer

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0: 03/11/24	Project:	ALDERSON
Date Last Rev. : 03/11/24	Location:	10-21-13-10 W4M
Design: JEA	Title:	ELECTRICAL LAYOUT
Drawn: DAE	DWG No.	475-0009 REV 0

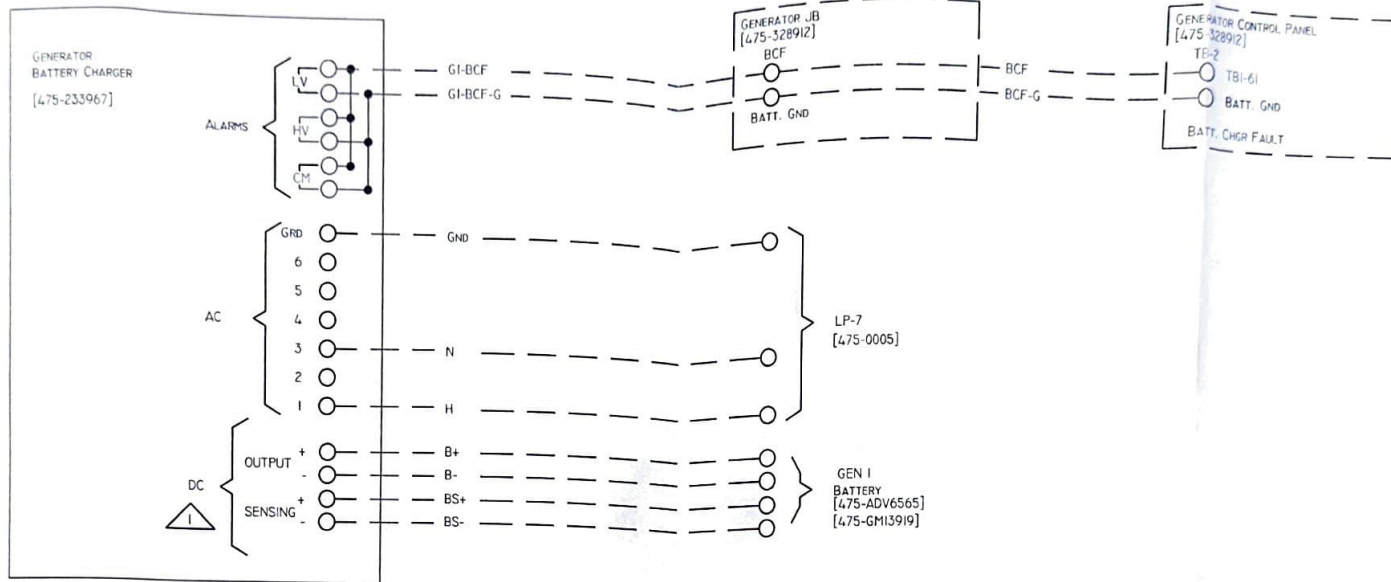


**WEIGHTS (POUNDS) APPROX.**

GEN.1 (60RZG)	1800
GEN.2 (60RZG)	1800
BUILDING	3580
SKID	6200
ELECTRICAL	1000
DAMPERS	400
MISC.	500
<b>TOTAL</b>	<b>15280</b>

NOTE:  
ALL DIMENSIONS ARE IN IMPERIAL

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0 : 11/24/03	Project:	ALDERSON
Date Last Rev. : 11/24/03	Location:	10-21-13-10 W4M
Design: JEA	Title:	Generator Building Layout Without IAC
Drawn: DAE	DWG No.	475-0010 Rev.0



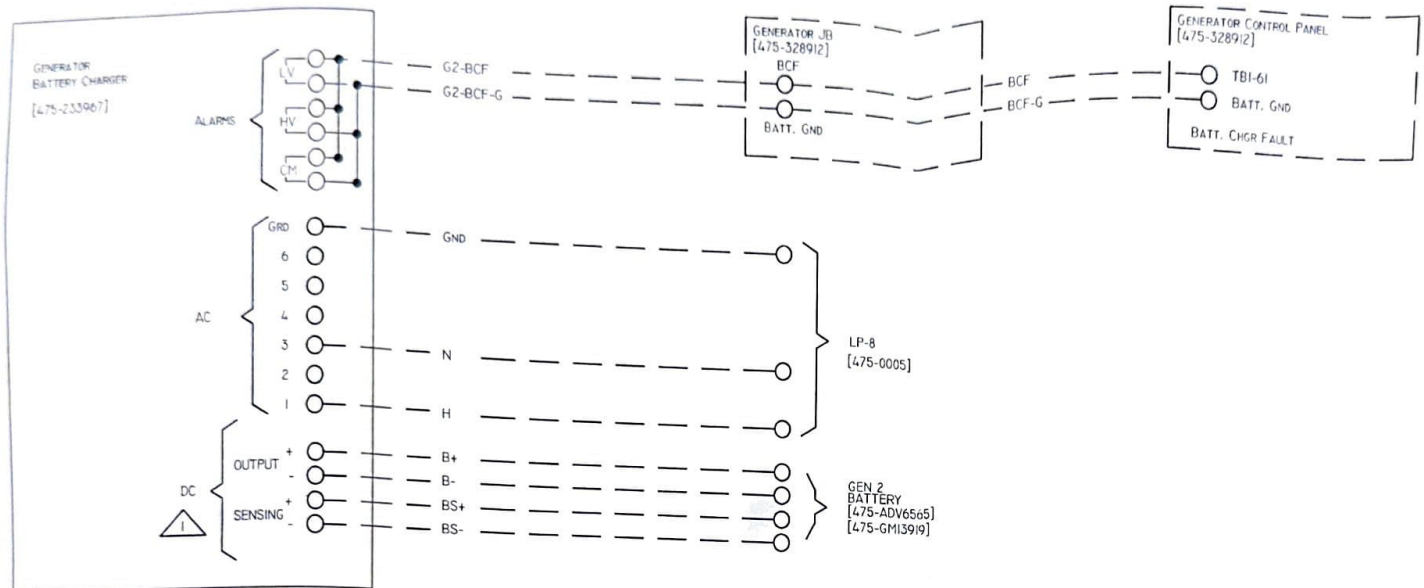
NOTES



1. SENSING LEADS REQUIRED IF BATTERY CHARGER OUTPUT CONDUCTOR RUN IS GREATER THAN 15 FEET.

WATEROUS DDA INC.	CUSTOMER:	CNRL
DATE REV 0 : 03/24/11	PROJECT:	ALDERSON
DATE LAST REV. : 03/24/11	LOCATION:	10-21-13-10 W4M
DESIGN: JEA	TITLE:	GENERATOR 1 BATTERY CHARGER INTERCONN.
DRAWN: DAE	DWG No.	475-0011 REV. 0





NOTES



1. SENSING LEADS REQUIRED IF BATTERY CHARGER OUTPUT CONDUCTOR RUN IS GREATER THAN 15 FEET.

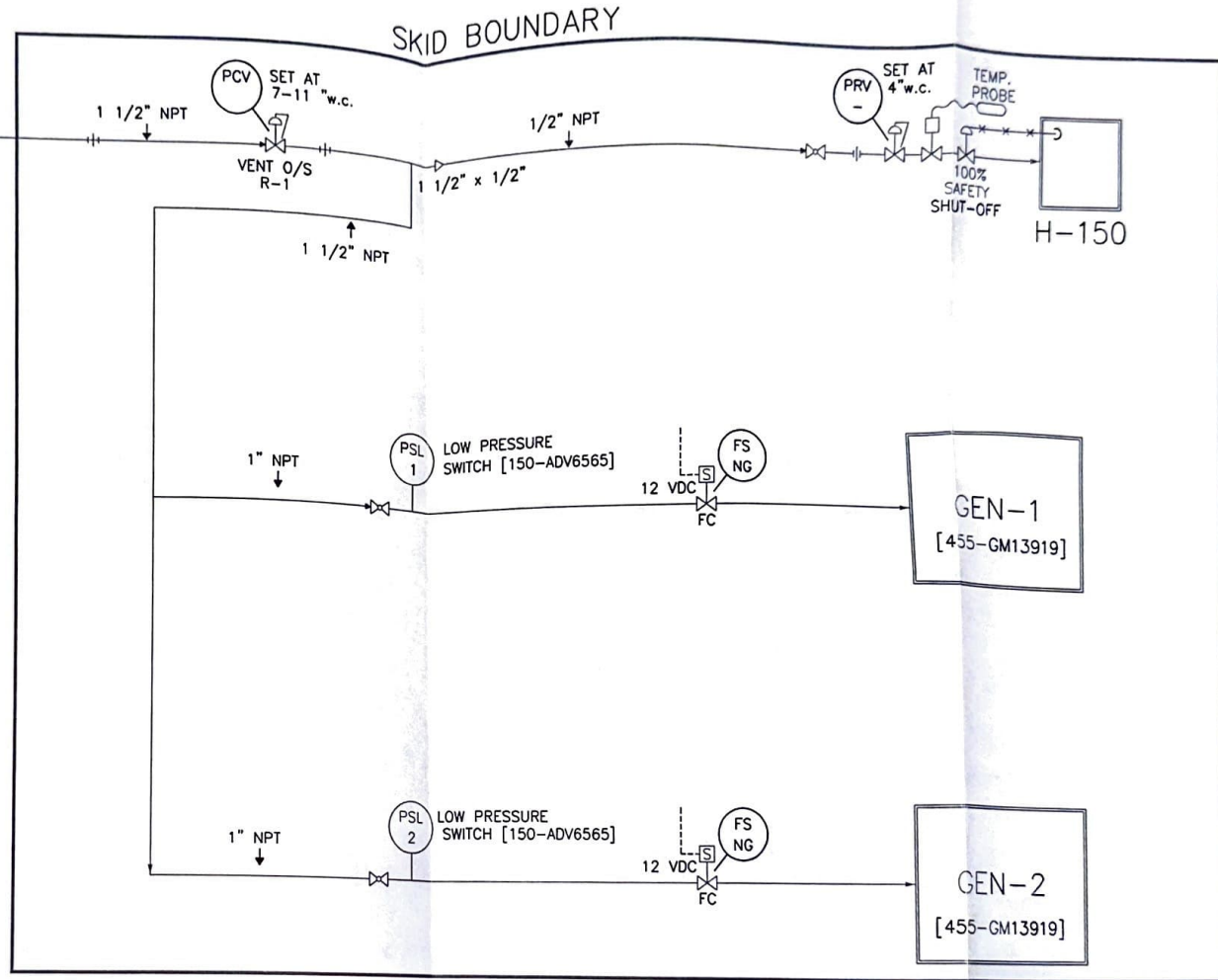
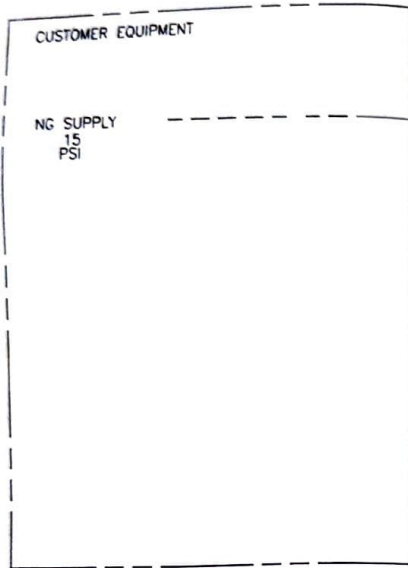
WATEROUS DDA INC.	CUSTOMER:	CNRL
DATE REV 0 : 03/24/11	PROJECT:	ALDERSON
DATE LAST REV. : 03/24/11	LOCATION:	10-21-13-10 W4M
DESIGN: JEA	TITLE:	GENERATOR 2 BATTERY CHARGER INTERCONN.
DRAWN: DAE	DWG No.	475-0012 REV. 0

R-1  
REGULATOR  
FISHER MODEL  
S402  
15PSI Max Inlet Pressure  
11" WC Outlet Pressure  
1/4" Orifice

H-150  
BUILDING HEATER  
WILLIAMS MODEL 3003612  
30,000 BTU INPUT  
21,849 BTU OUTPUT  
5" WC MIN. PRESSURE  
7" WC MAX. PRESSURE

GEN-1  
GENERATOR  
KOHLER 60RZG  
45KW  
NG. MAX FLOW: 748CFH  
Pressure: 7-11" w.c.

GEN-2  
GENERATOR  
KOHLER 60RZG  
45KW  
NG. MAX FLOW: 748CFH  
Pressure: 7-11" w.c.



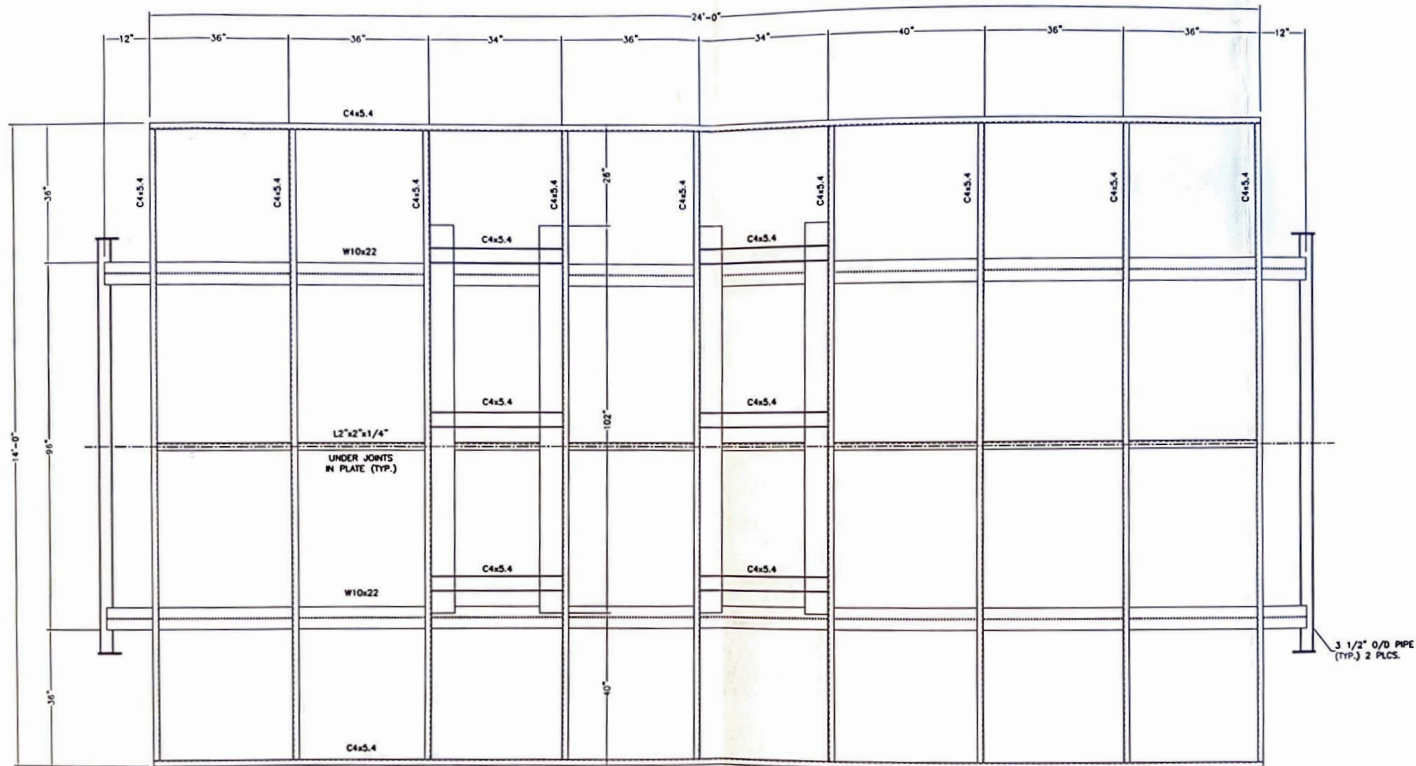
PSL1 AND PSL2 OPEN AT 5" W.C.

NOTES:

1. ALL PIPE SCHEDULE 80 THREADED
2. ALL NIPPLES SCHEDULE 160, MIN 1 1/2" OF NON-THREAD PIPE

WATEROUS DDA INC.	Customer:	CNRL
Date Rev 0: 03/24/11	Project:	ALDERSON
Date Last Rev. : 03/24/11	Location:	10-21-13-10 W4M
Design: JEA	Title:	NATURAL GAS P&ID
Drawn: DAE	DWG No.	455-0014 REV. 0

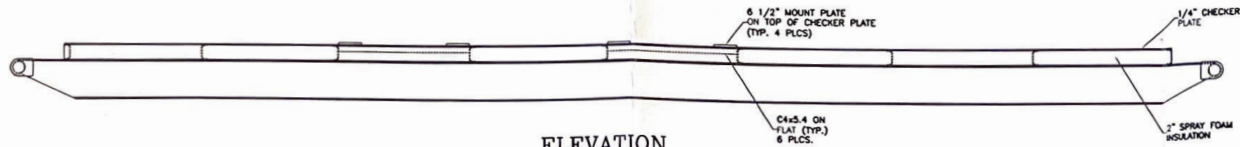




**PLAN VIEW**

SCALE: 3/4" = 1'-0"

WEIGHT: 8000LBS



**ELEVATION**

SCALE: 3/4" = 1'-0"

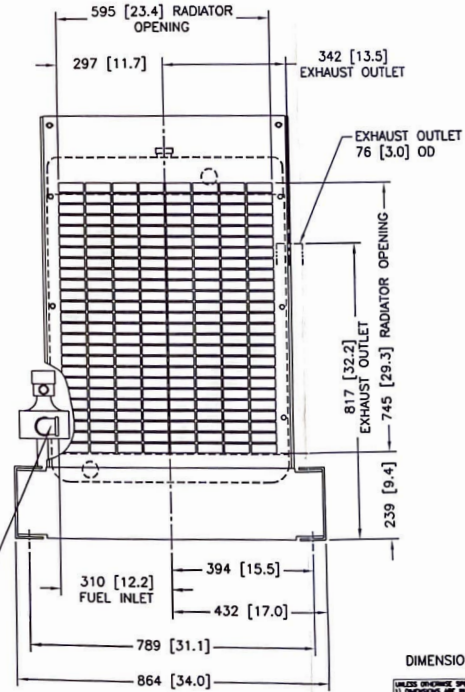
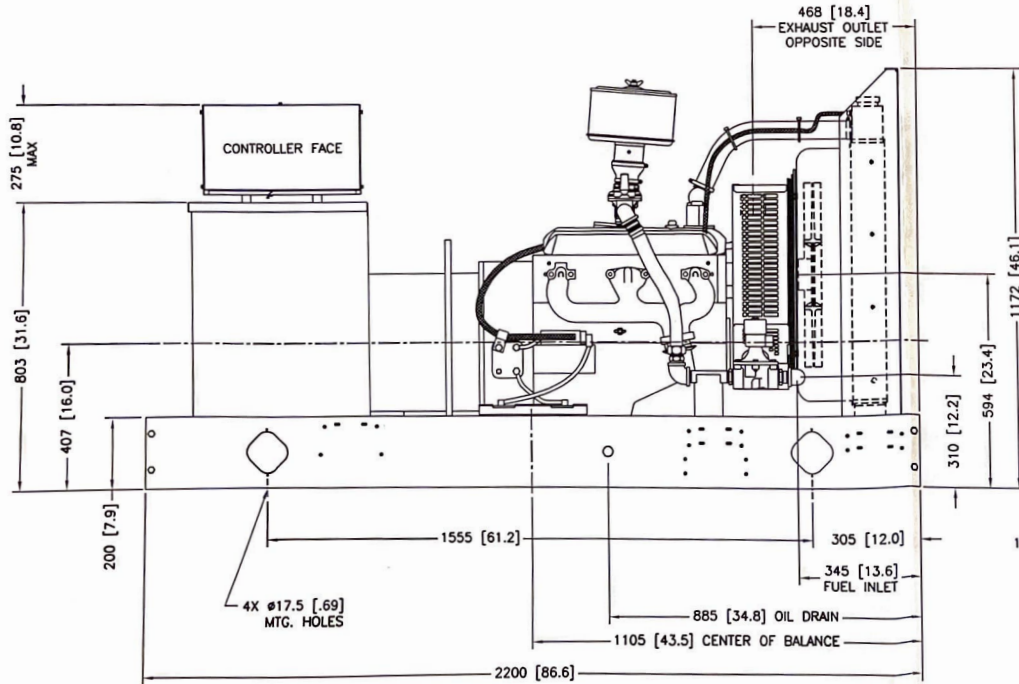
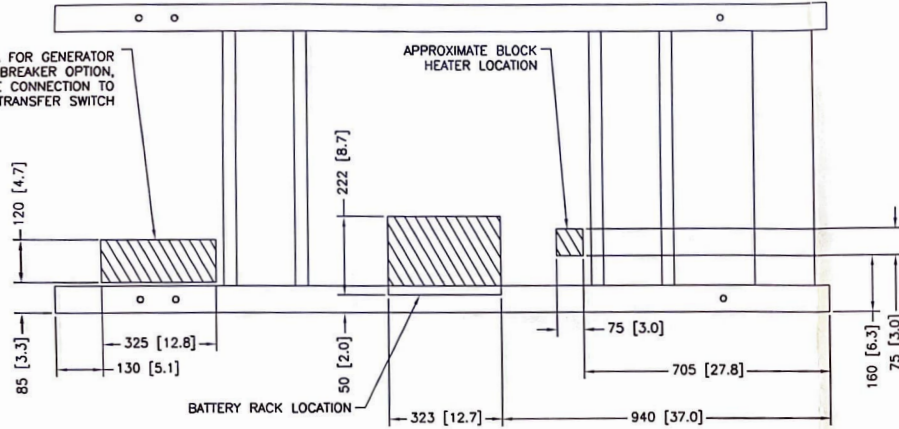
NOTES: 1) SEE TO BE PROVIDED AND  
 2) CHECK COST OF INSULATION,  
 3) CHECK WEIGHTS, DIMENSIONS,  
 4) CHECK ALL DIMENSIONS & 1/4" CHECKER PL.  
 5) APPROVAL, WEIGHT IS 8000 LB.

customer		MEGAFAB INDUSTRIES	
customer ref. no. 3			
job	ONE	of	ONE
description	WATEROUS DIESEL	proj. no.	475-0318501
date		rev.	0
drawn		checked	
designed		approved	
checked		scale	
date		job	
description		by	
		date	



CONDUIT ENTRY AREA FOR GENERATOR  
LOAD LEADS CIRCUIT BREAKER OPTION,  
REMOTE CONNECTION TO  
TRANSFER SWITCH

APPROXIMATE BLOCK  
HEATER LOCATION



MODEL	WEIGHT (WET)
60	755 KG [1665 LBS]

METRIC CAD FILE

DIMENSIONS IN [ ] ARE INCH EQUIVALENT

UNLESS OTHERWISE SPECIFIED -  
 1) DIMENSIONS ARE IN MILLIMETERS  
 2) TOLERANCES ARE:  
 FRACTIONS DECIMALS  
 1/16 & 1/32 SURFACE FINISH  
 1/16 ± 0.010 1/32 ± 0.005  
 1/8 ± 0.015 1/16 ± 0.008  
 1/4 ± 0.020 1/8 ± 0.012  
 3/8 ± 0.025 1/4 ± 0.015  
 1/2 ± 0.030 3/8 ± 0.020  
 3/4 ± 0.040 1/2 ± 0.030  
 1 ± 0.050 3/4 ± 0.040  
 1 1/2 ± 0.075 1 ± 0.060  
 2 ± 0.100 1 1/2 ± 0.090  
 3 ± 0.150 2 ± 0.130  
 4 ± 0.200 3 ± 0.180  
 6 ± 0.300 4 ± 0.270  
 8 ± 0.400 6 ± 0.360  
 10 ± 0.500 8 ± 0.450

**KOHLER CO.**  
 GENERATOR DIVISION, 20000 W. 10TH AVE., SUITE 100, DENVER, CO 80233 U.S.A.  
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 NO PART MAY BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF KOHLER CO.  
 ALL RIGHTS OF INVENTION ARE RESERVED.

**DIMENSION PRINT**  
**60RZG**

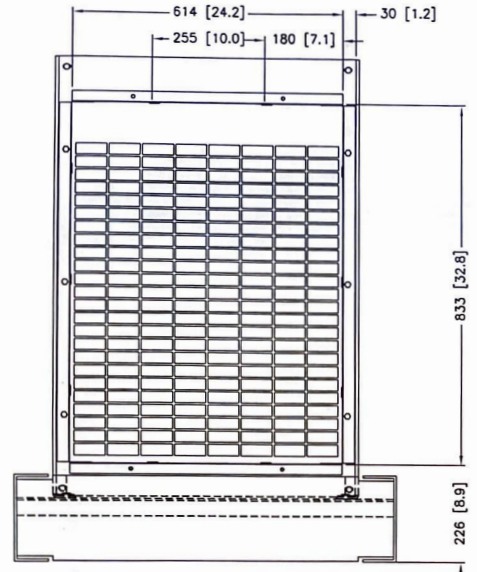
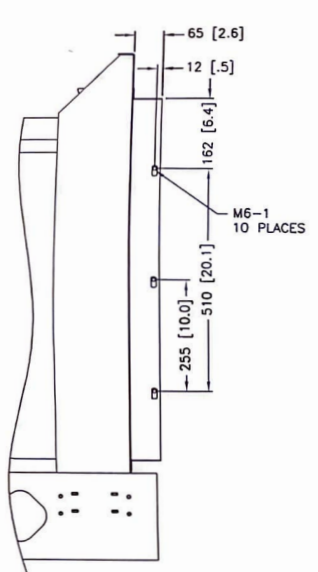
APPROVED: [Signature] DATE: 2-23-00  
 DRAWN: [Signature] SCALE: 0.18X  
 CHECKED: [Signature] DATE: 2-28-00  
 SPECIFIED: [Signature] DATE: 2-28-00

FORM NO. 475-ADV6549DWG 1-4  
 475-ADV6549

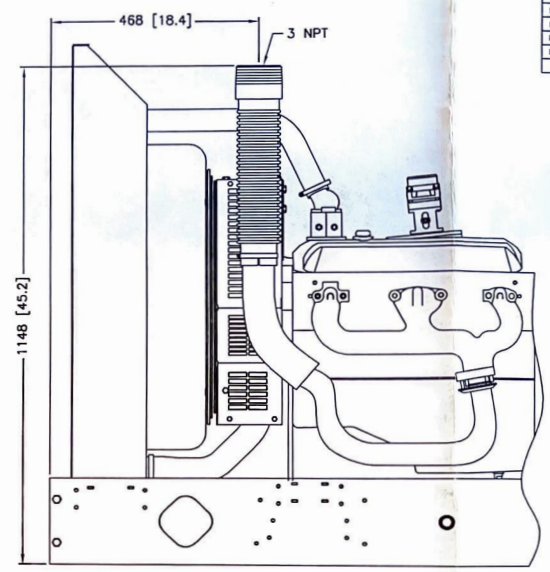
5.0 & 5.7 LITER GM

FORM NO. 475-ADV6549

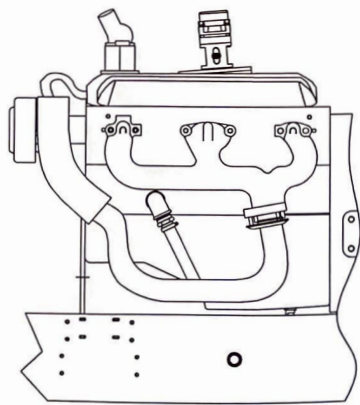
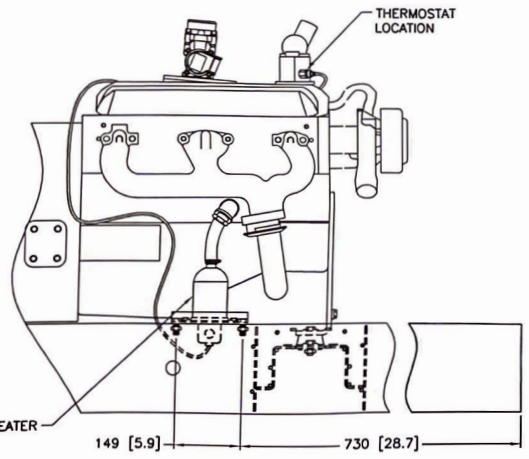
REV	DATE	REVISION	BY
K	2-8-01	SEE SHEET 8 OF 8 (64098)	DFP
L	8-4-01	(A-1) SHEET 4-4 WAS 4-5; SHEET 5 REMOVED (64100)	LJC
M	8-10-01	(A-3) 5.0 & 5.7 LITER GM WAS 5.7 LITER GM (65354)	DFP
N	1-2-02	SEE SHEET 1 OF 4 (66206)	
P	12-17-02	(A-3) BATTERY CHARGER ADDED. (66636)	RAC
R	4-23-03	SEE SHEET 1 OF 4. (69413)	RAC



RADIATOR DUCT FLANGE



FLEX EXHAUST



BLOCK HEATER  
120V, 1500W

METRIC CAD FILE

DIMENSIONS IN [ ] ARE INCH EQUIVALENT

UNLESS OTHERWISE SPECIFIED -	
1) DIMENSIONS ARE IN MILLIMETERS	
2) TOLERANCES ARE:	
3.0 ± 0.25	SURFACE FINISH
1.2 ± 1.0	✓ MAX.
0.7 ± 0.15	
ANGLES ± 0.5°	
WELD SIZES	
APPROVALS	DATE
DESIGN	6-14-00
CHECK	6-15-00
APPROVED	6-15-00

**KOHLER CO.**  
GENERATOR DIVISION, EDINBURGH, VA 22041 U.S.A.  
THIS DRAWING IS UNLESS OTHERWISE SPECIFIED TO BE MADE TO ORDER AND MUST NOT BE USED WITHOUT THE WRITTEN CONSENT OF KOHLER CO. TRADE MARKS ARE INDICATED BY THE SYMBOLS.

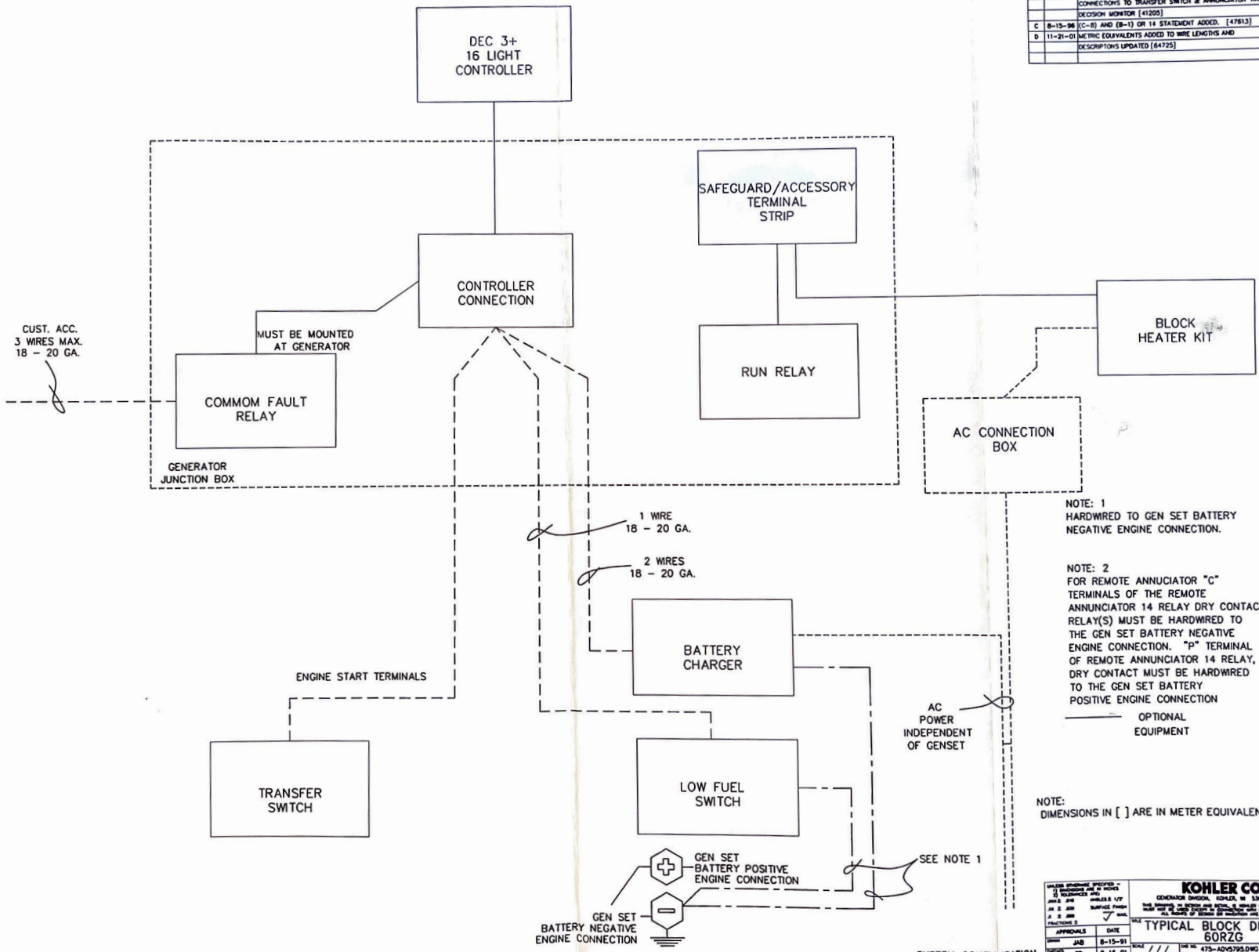
**DIMENSION PRINT**  
60RZG

50 MODEL, 4P8  
60 MODEL, 4P10  
RECONNECTABLE & 600V ALTERNATOR  
5.0 & 5.7 LITER GM

SCALE 0.2X  
DWG NO. 475-ADV6490.DWG  
REV 4-4  
475-ADV6549

8 7 6 5 4 3 2

REV	DATE	REVISION	BY
B	3-9-95	(B-3) ENGINE TERMINALS ADDED FROM CUSTOMER CONNECTIONS TO TRANSFER SWITCH & ANNUNCIATOR WAS DECISION MONITOR (41205)	PHH
C	8-15-96	(C-8) AND (B-1) OR 14 STATEMENT ADDED. (47813)	BTM
D	11-21-01	METRIC EQUIVALENTS ADDED TO WIRE LENGTHS AND DESCRIPTIONS UPDATED (44725)	BTM



NOTE: 1  
HARDWIRED TO GEN SET BATTERY  
NEGATIVE ENGINE CONNECTION.

NOTE: 2  
FOR REMOTE ANNUNCIATOR "C"  
TERMINALS OF THE REMOTE  
ANNUNCIATOR 14 RELAY DRY CONTACT  
RELAY(S) MUST BE HARDWIRED TO  
THE GEN SET BATTERY NEGATIVE  
ENGINE CONNECTION. "P" TERMINAL  
OF REMOTE ANNUNCIATOR 14 RELAY,  
DRY CONTACT MUST BE HARDWIRED  
TO THE GEN SET BATTERY  
POSITIVE ENGINE CONNECTION

OPTIONAL  
EQUIPMENT

NOTE:  
DIMENSIONS IN [ ] ARE IN METER EQUIVALENTS.

<small>KOHLER ENGINE DIVISION 2300 KOHLER DRIVE VALLEY VIEW, MO 63054 U.S.A.</small>		<b>KOHLER CO.</b> <small>GENERATOR DIVISION, KOHLER, WI 53044 U.S.A.</small> <small>THE COMPANY IS NOT RESPONSIBLE FOR ANY DAMAGE TO PROPERTY AND          PERSONS OR TO THE QUALITY OF THE WORKMANSHIP OF THE INSTALLATION.</small>	
<small>APPROVALS</small> JAB CB JAB	<small>DATE</small> 8-15-91 9-16-91 9-16-91	<small>SCALE</small> ///	<small>FIG NO.</small> 475-ADV5795.DWG <small>SHEET</small> 1-1 <b>TYPICAL BLOCK DIAGRAM 60RZG</b> 475-ADV5795

SYSTEM CONFIGURATION  
FOR ACCESSORY CONNECTIONS

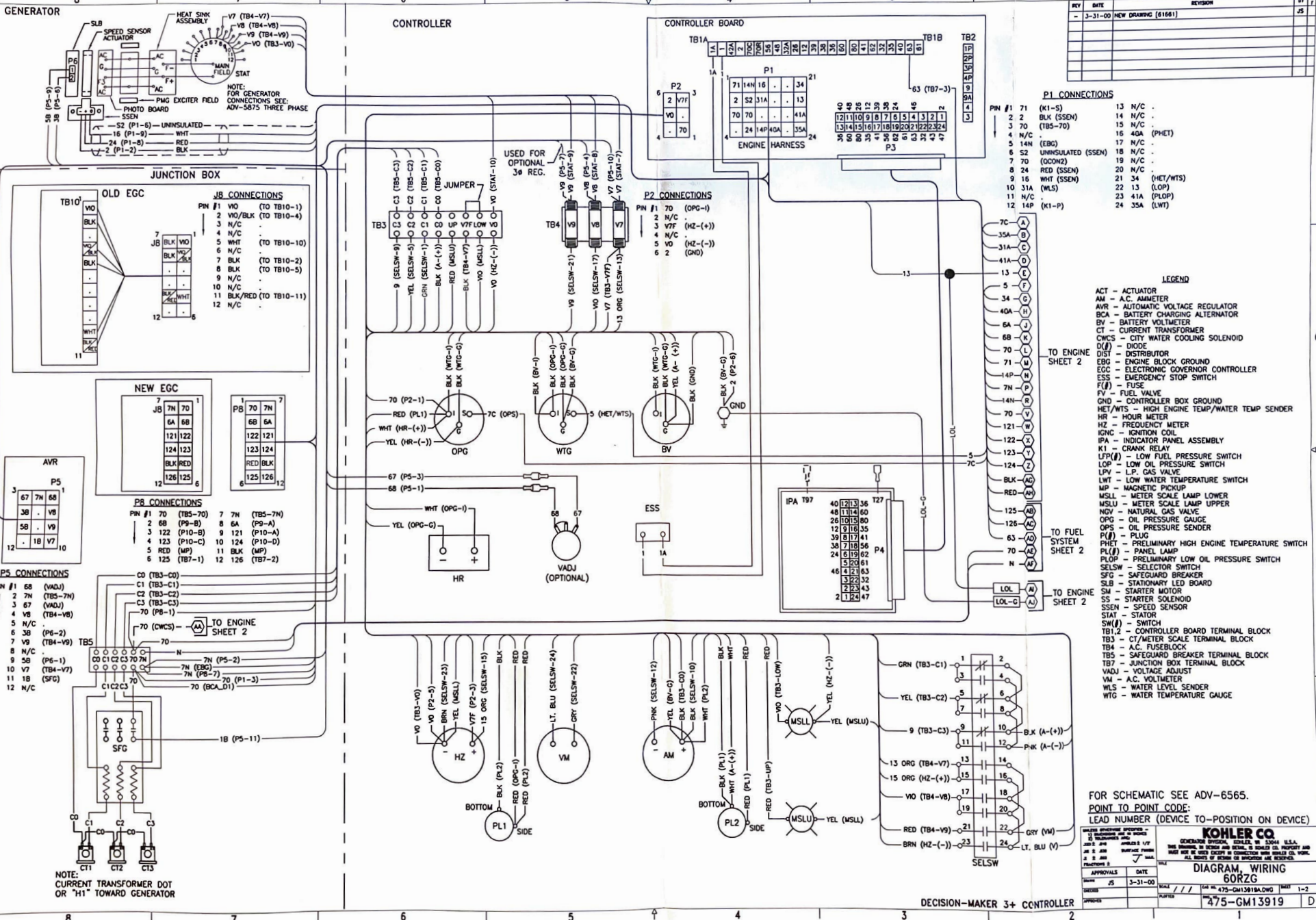












REV	DATE	REVISION	BY	7
-	3-31-00	NEW DRAWING (61681)		JS

**P1 CONNECTIONS**

PN #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	(K1-S)	13	N/C																						
2	BLK (SSEN)	14	N/C																						
3	(TBS-70)	15	N/C																						
4	N/C	16	40A (PHET)																						
5	14M (EBG)	17	N/C																						
6	S2 UNINSULATED (SSEN)	18	N/C																						
7	70 (COONZ)	19	N/C																						
8	24 RED (SSEN)	20	N/C																						
9	16 WHT (SSEN)	21	34 (HET/WTS)																						
10	31A (WLS)	22	13 (LOP)																						
11	N/C	23	41A (PLOP)																						
12	14P (K1-P)	24	35A (LWT)																						

**LEGEND**

- ACT - ACTUATOR
- AM - A.C. AMMETER
- AVR - AUTOMATIC VOLTAGE REGULATOR
- BCK - BATTERY CHARGING ALTERNATOR
- BV - BATTERY VOLT METER
- CT - CURRENT TRANSFORMER
- CWCS - CITY WATER COOLING SOLENOID
- D(V) - DIODE
- DIST - DISTRIBUTOR
- EBG - ENGINE BLOCK GROUND
- EGC - ELECTRONIC GOVERNOR CONTROLLER
- ESS - EMERGENCY STOP SWITCH
- F(β) - FUSE
- FV - FUEL VALVE
- GND - CONTROLLER BOARD TERMINAL BLOCK
- HET/WTS - HIGH ENGINE TEMP/WATER TEMP SENDER
- HR - HOUR METER
- HZ - FREQUENCY METER
- IGNC - IGNITION COIL
- IPA - INDICATOR PANEL ASSEMBLY
- K1 - CRANK RELAY
- LFP(β) - LOW FUEL PRESSURE SWITCH
- LOP - LOW OIL PRESSURE SWITCH
- LPV - L.P. GAS VALVE
- LWT - LOW WATER TEMPERATURE SWITCH
- MP - MAGNETIC PICKUP
- MSLL - METER SCALE LAMP LOWER
- MSLU - METER SCALE LAMP UPPER
- NGV - NATURAL GAS VALVE
- OPG - OIL PRESSURE GAUGE
- OPS - OIL PRESSURE SENDER
- PL(β) - PLUG
- PHET - PRELIMINARY HIGH ENGINE TEMPERATURE SWITCH
- PLP(β) - PANEL LAMP
- PLOP - PRELIMINARY LOW OIL PRESSURE SWITCH
- SELV - SELECTOR SWITCH
- SFC - SAFEGUARD BREAKER
- SLSB - SAFEGUARD LED BOARD
- SM - STARTER MOTOR
- SS - STARTER SOLENOID
- SSEN - SPEED SENSOR
- STAT - STATOR
- SW(β) - SWITCH
- TB1.2 - CONTROLLER BOARD TERMINAL BLOCK
- TB3 - CY/METER SCALE TERMINAL BLOCK
- TB4 - A.C. FUSEBLOCK
- TB5 - SAFEGUARD BREAKER TERMINAL BLOCK
- TB7 - JUNCTION BOX TERMINAL BLOCK
- VADJ - VOLTAGE ADJUST
- VM - A.C. VOLTMETER
- WLS - WATER LEVEL SENDER
- WTG - WATER TEMPERATURE GAUGE

FOR SCHEMATIC SEE ADV-6565.  
**POINT TO POINT CODE:**  
 LEAD NUMBER (DEVICE TO-POSITION ON DEVICE)

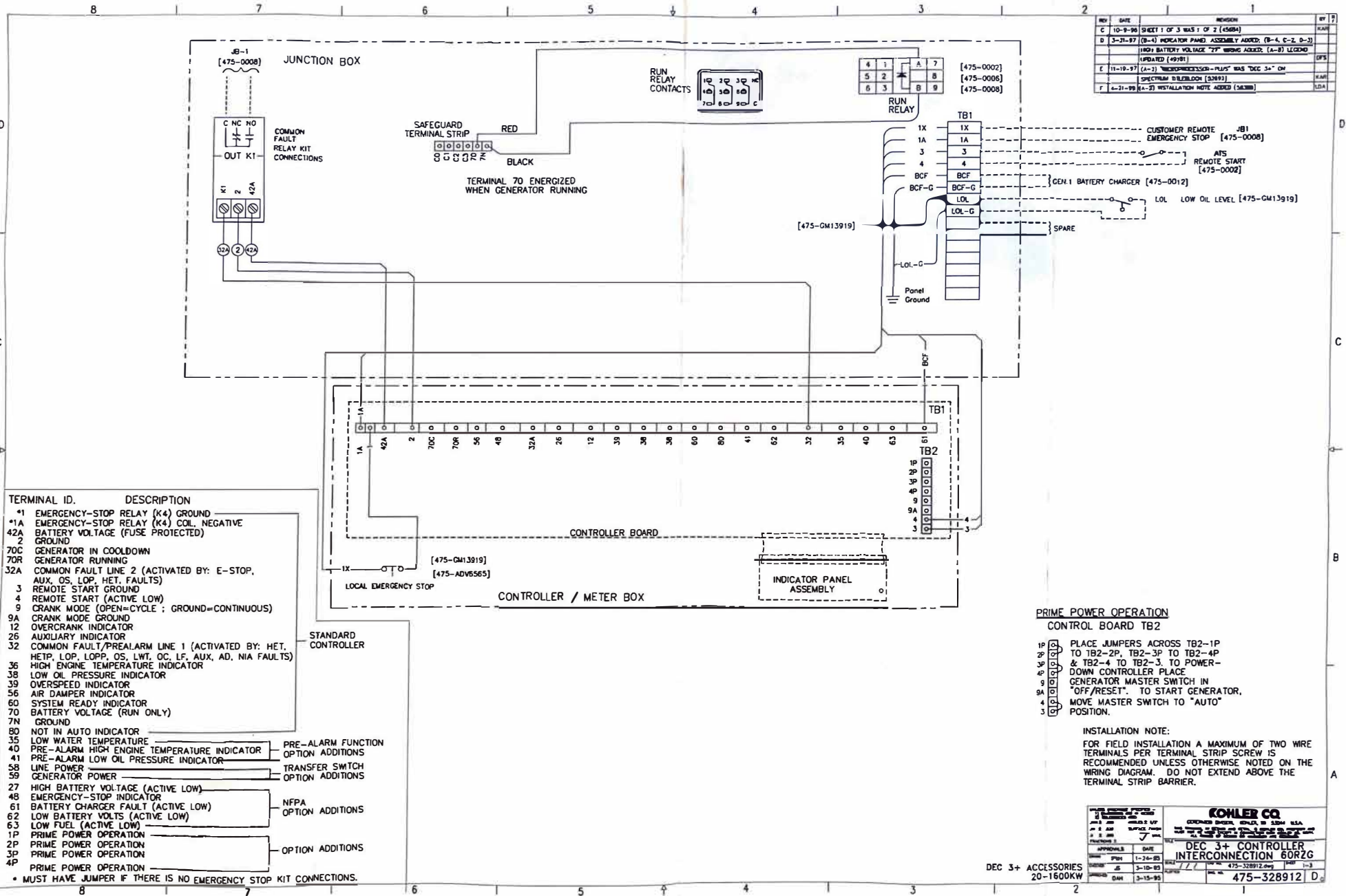
APPROVALS	DATE	REVISION	BY	7
JS	3-31-00			JS

**DIAGRAM WIRING 60RZC**

475-GM13919







**PRIME POWER OPERATION  
CONTROL BOARD TB2**

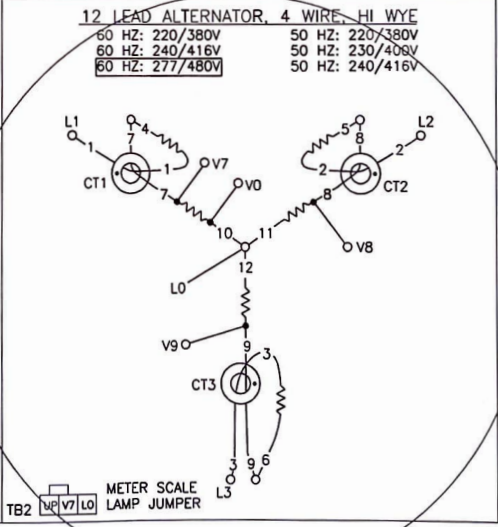
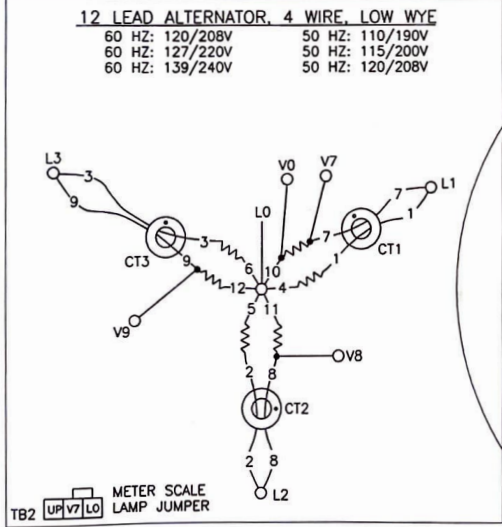
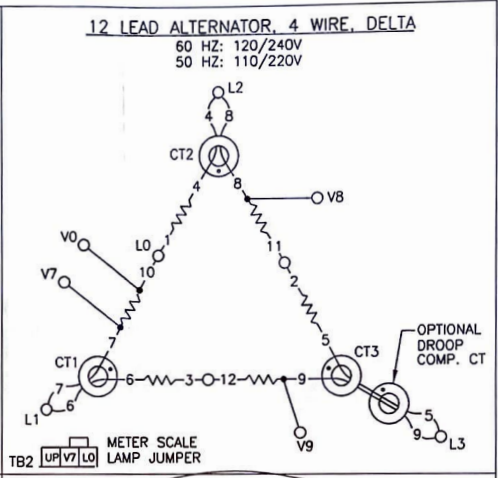
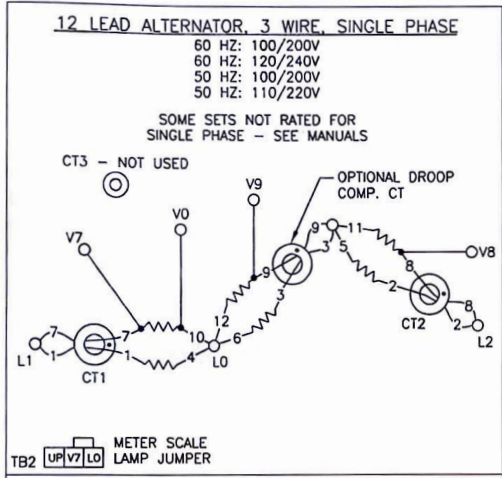
- 1P PLACE JUMPERS ACROSS TB2-1P TO TB2-2P, TB2-3P TO TB2-4P & TB2-4 TO TB2-3. TO POWER-DOWN CONTROLLER PLACE GENERATOR MASTER SWITCH IN "OFF/RESET". TO START GENERATOR, MOVE MASTER SWITCH TO "AUTO" POSITION.

**INSTALLATION NOTE:**

FOR FIELD INSTALLATION A MAXIMUM OF TWO WIRE TERMINALS PER TERMINAL STRIP SCREW IS RECOMMENDED UNLESS OTHERWISE NOTED ON THE WIRING DIAGRAM. DO NOT EXTEND ABOVE THE TERMINAL STRIP BARRIER.

<b>KOHLER CO.</b> COMPANY ENGINE, DIVISION OF JOHN DEERE 2500 N. LINCOLN AVENUE MILWAUKEE, WI 53212-0001 PHONE: 414/353-3000 FAX: 414/353-3001 WWW: WWW.KOHLER.COM		<b>DEC 3+ CONTROLLER INTERCONNECTION 60RZG</b>
APPROVALS: DESIGNED BY: JH DRAWN BY: JH CHECKED BY: JH DATE: 1-24-93	DATE: 1-24-93 PART NO: 475-328912.dwg SHEET: 1-3	475-328912 D

REV	DATE	REVISION	BY	WT
B	11-4-98	(B-1,2,3,4 C-1) OPTIONAL DROOP MOVED FROM L2 TO L3 [5679]		
C	6-2-99	(C-3) MARINE ONLY: L0 REMOVED, L0 WAS L1, L1 WAS L2, TAPE TWO PLACES WAS ONE [58896]	JS	
D	6-17-99	DIAGRAMS UPDATED: (B-2, C-4) NOTE & CT'S ADDED FOR 20-50 KW W/ DECISION-MAKER 340 & DIGITAL CONTROLLERS [59021]	SAM	
			KAR	



NOTES:  
CURRENT TRANSFORMER DOT OR "H1" TOWARD GENERATOR.  
CURRENT TRANSFORMERS NOT USED ON ALL SETS.

PHASE ROTATION  
A B C  
L1 L2 L3

KOHLER FRII ALTERNATORS

UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: X ± .030 SURFACE FINISH X ± .040		KOHLER CO. GENERATOR DIVISION, KOHLER, WI 53044 U.S.A. THIS DRAWING, IN DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED OUTSIDE IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	
APPROVALS		DATE	
DRAWN DFS	7-28-92	SCALE NONE	SHEET 1-2
CHECKED TLK	6-23-99	DWG NO. 475-ADV5875ADWG	
APPROVED JMH	6-25-99	475-ADV5875	C

DIAGRAM, 3 Ø RECONNECTABLE 60RZG



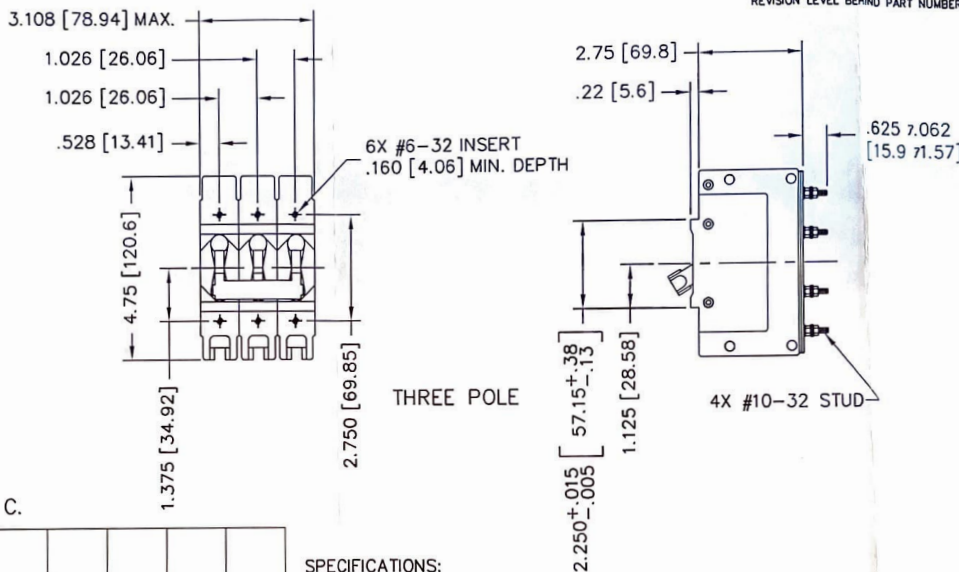


PART NO.	REV. LEVEL	F.L. AMPS	TYPE
X-796-3	U	3.5	THREE POLE

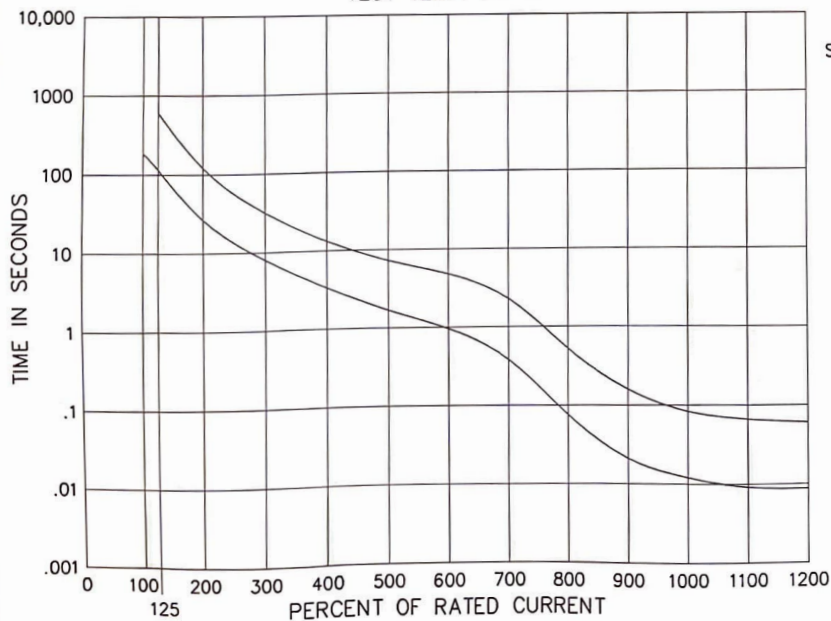
REV	DATE	REVISION	BY	#
P	10-13-86	X-796-5 VOIDED	JC	
R	6-12-89	REDRAWN	JC	
S	12-1-85	"WIPING" WAS "MIRING"	VM	
T	2-12-96	(D-4) TRIP AMPS COLUMN REMOVED. [44831]	LRH	
U	11-21-01	METRIC EQUIVALENTS ADDED TO DIMENSIONS [66097]	BTW	

NOTE:  
DIMENSIONS IN [ ] ARE MILLIMETER EQUIVALENTS.

REVISION BLOCK INDICATES REVISION LEVEL OF DRAWING ONLY. SEE PART REVISION LEVEL BEHIND PART NUMBER FOR CURRENT PART REVISION LEVEL.



TEST TEMP. 25° C.



SPECIFICATIONS:

- SPECIAL CURVE TO MEET CURVE DATA AS SHOWN.
- VENDOR TO SUPPLY CERTIFICATE OF COMPLIANCE THAT BREAKER WILL OPERATE WITHIN CURVE LIMITS.
- MUST BE UL LISTED OR RECOGNIZED.
- 3 POLES - 3 CONTACTS, 3 COILS 240 VOLTS - RELAY TRIP.
- CONTACT DATA
  - 50 AMP RATING
  - THE NUMBER 50 MAY APPEAR ON THE FRONT OF THE BREAKER BECAUSE OF UL REQUIREMENTS.
  - MAXIMUM CONTACT RESISTANCE 0 TO .020 OHMS.
  - CONTACTS TO CARRY .5 AMPS AT 12 VOLTS D.C.
  - CONTACTS MUST HAVE WIPING ACTION.

UNLESS OTHERWISE SPECIFIED -	UNLESS OTHERWISE SPECIFIED -
1) DIMENSIONS ARE IN MILLIMETERS	1) DIMENSIONS ARE IN INCHES
2) TOLERANCES ARE:	2) TOLERANCES ARE:
.XX ± .01	.XX ± .010
.X ± .005	.X ± .005
.X ± .002	.X ± .002
ANGLES ± 1/2°	ANGLES ± 1/2°
	SURFACE FINISH
	✓ MAX.
	FRACTIONS ±

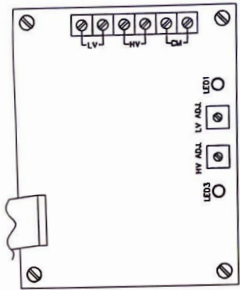
APPROVALS	DATE
DRAWN BW	9-7-76
CHECKED EB	11-10-76
APPROVED LB	11-10-76

<b>KOHLER CO.</b>			
GENERATOR DIVISION, KOHLER, WI 53044 U.S.A.			
THIS DRAWING IS DESIGN AND DETAIL, IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			
FIELD BREAKER 60RZG			
SCALE 2X	DWG NO. 475-X796.DWG	SHEET 1-1	
PLOTTED	DWG NO. 475-X796		

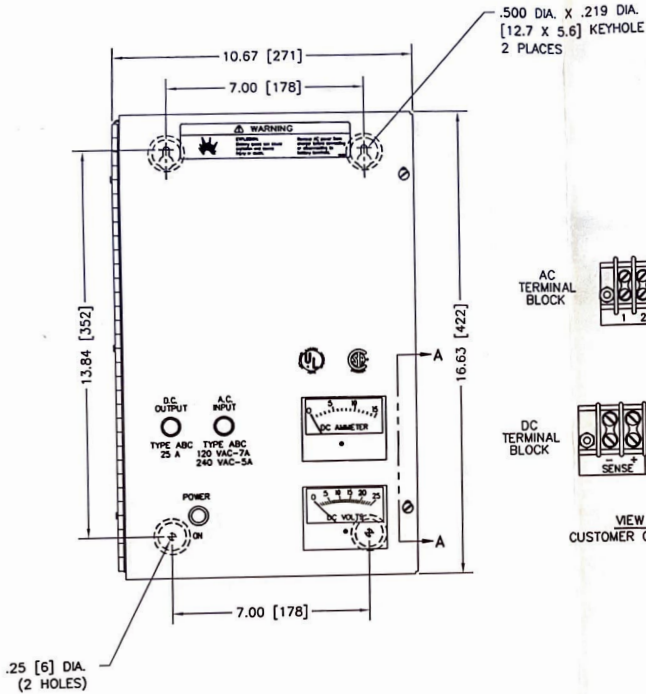


REV	DATE	REVISION	BY
A	12-8-97	(A-4) DC WIRE RECOMMENDATION NOTE REVISED [33068]	KAR

- LV - N.O. CONTACTS, CLOSE ON LOW BATTERY VOLTAGE
- HV - N.O. CONTACTS, CLOSE ON HIGH BATTERY VOLTAGE
- CM - N.O. CONTACTS, CLOSE ON LOSS OF AC INPUT OR LOSS OF DC OUTPUT



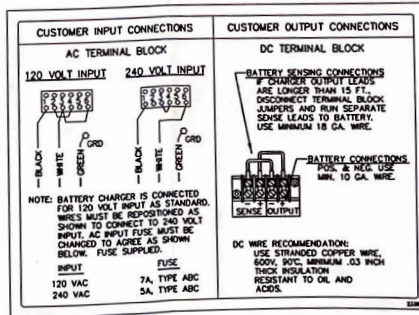
VIEW A-A  
OPTIONAL ALARM BOARD



VIEW B-B  
CUSTOMER CONNECTIONS



.25 [6] DIA.  
(2 HOLES)



NOTE:  
DIMENSIONS IN [ ] ARE MILLIMETERS.

APPROVALS		DATE
DESIGNED	JSM	6-28-94
DRAWN	JSM	6-28-94
CHECKED	JSM	6-29-94

UNLESS OTHERWISE SPECIFIED:  
1) DIMENSIONS ARE IN INCHES  
2) DIMENSIONS ARE IN MILLIMETERS  
3) DIMENSIONS ARE IN MILLIMETERS  
4) DIMENSIONS ARE IN MILLIMETERS  
5) DIMENSIONS ARE IN MILLIMETERS

**KOHLER CO.**  
CONSUMER SERVICE DEPT. 13344 U.S.A.  
THIS CHARGER IS DESIGNED AND MANUFACTURED BY KOHLER CO. PROPERTY AND MADE UP OF BEST MATERIALS IN CONNECTION WITH KOHLER CO. WORK.  
ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

**DIMENSION PRINT**  
**60RZG**

12 & 24 VOLT BATTERY CHARGER

475-ADV5971

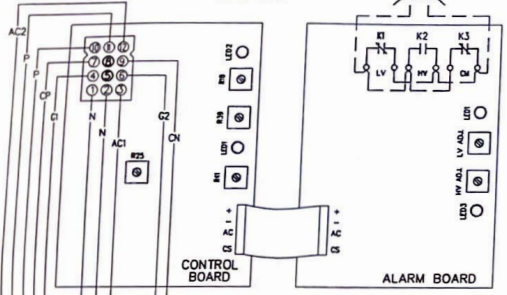
AUTO-FLOAT  
12 & 24 VOLT  
BATTERY CHARGER

DATE 6-28-94  
SCALE 1/2  
SHEET 1-1  
475-ADV5971

REV	DATE	REVISION	BY
A	2-1-93	(C-5) AC & DC FUSE SYMBOLS REVERSED	PSH

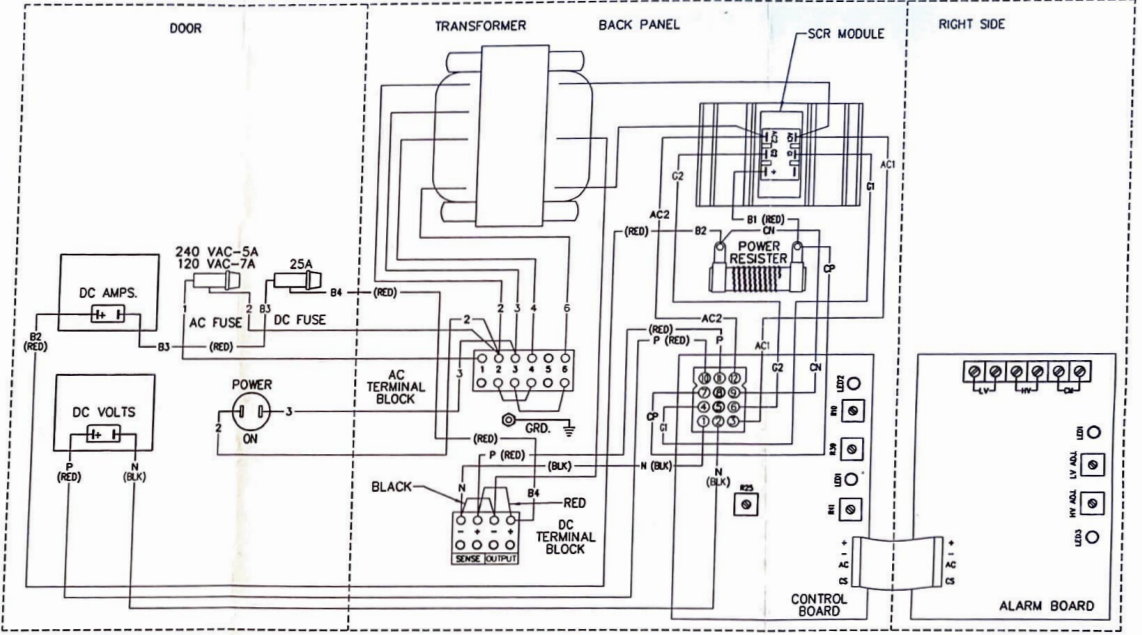
SCHMATIC

[475-328912]



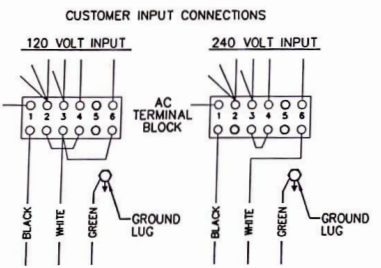
CONTROL BOARD

ALARM BOARD



AC INPUT FUSE  
120 VAC-7A  
240 VAC-5A

120 V. INPUT



NOTE:  
WHEN CHANGING AC INPUT VOLTAGE, THE AC INPUT FUSE MUST BE CHANGED TO AGREE AS SHOWN.

INPUT	FUSE
120 VAC	7A, TYPE ABC
240 VAC	5A, TYPE ABC

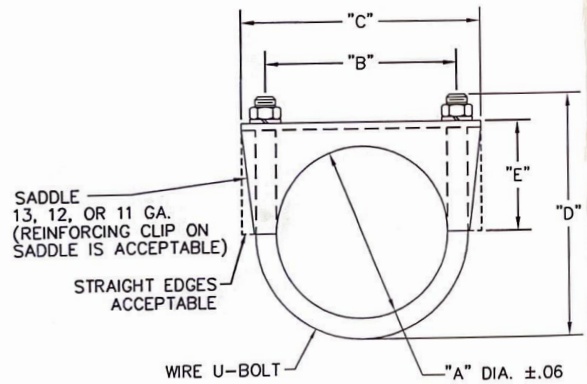
AUTO-FLOAT  
12 VOLT  
BATTERY CHARGER

<small>UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE.</small>		<b>KOHLER CO.</b> <small>GENERATOR DIVISION, KOHLER CO., 33344 U.S.A.</small>	
<small>DATE: JAN 2 1993</small> <small>DESIGNER: J.S.</small> <small>DRAWN: D.H.</small>	<small>PROFILES: 1/2"</small> <small>SURFACE FINISH: 3.0</small>	<small>APPROVED: J.S.</small> <small>DATE: 2-11-92</small>	<small>SCALE: 1-1</small> <small>FILE NO: 475-233967.DWG</small> <small>475-233967</small>

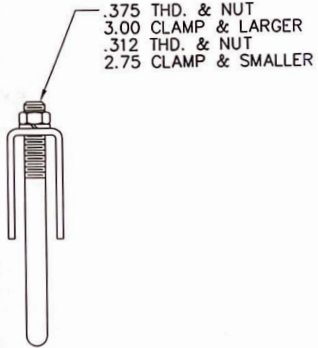
PART NO.	REV.	TYPE	NOMINAL SIZE	A (DIA.)	B (REF)	C (REF)	D (REF)	E (REF)	GA.(REF)	MAT'L	FINISH
286283	AB	1	3.0	3.12	3.55	4.50	4.37	2.00	11	1	1

REV	DATE	REVISION	BY	APP
Y	3-22-96	(C-4, B-2) X-722-11, TYPE 2 & TYPE COLUMN ADDED; C-SIZE WAS B-SIZE [45544]		
Z	5-22-96	(D-4) X-722-5, & 288827 B, C, D, E, & GA. DIM'S. ADDED [46334]		
AA	9-9-96	(C-3) X-722-11: MAT'L: 1 WAS 2, FINISH: 1 WAS NONE [47833]		
AB	7-7-97	(B-3) LOCKWASHERS OPTIONAL NOTE REMOVED. [51136]		
AC	7-16-98	(D-4) X-722-9 REINSTATED [55261]		

REVISION BLOCK INDICATES REVISION LEVEL OF DRAWING ONLY. SEE PART REVISION LEVEL BEHIND PART NUMBER FOR CURRENT PART REVISION LEVEL.



TYPE 1



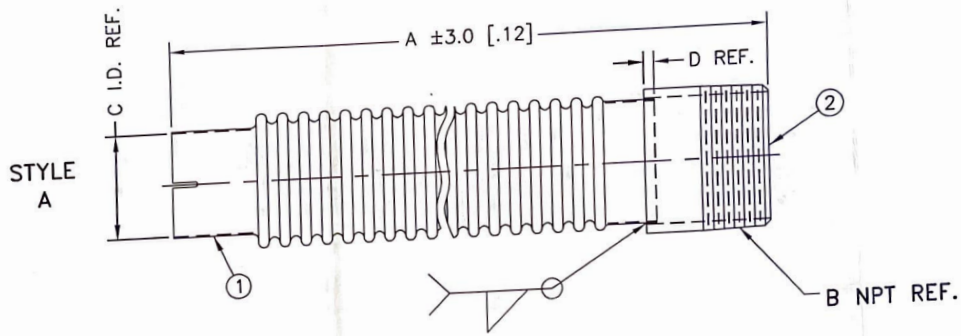
- FINISH:  
 1. ZINC PLATE W/ YELLOW CHROMATE SALT SPRAY REQUIRED 48 HOURS MINIMUM PER ASTM B117.  
 MATERIAL:  
 1. CARBON STEEL.  
 2. 304 STAINLESS STEEL.

UNLESS OTHERWISE SPECIFIED - 1) DIMENSIONS ARE IN INCHES 2) TOLERANCES ARE: FRACTIONS ± .005 DECIMALS ± .010 ANGLES ± 1/2° SURFACE FINISH: ✓ MAX. J. & S. 2880		<b>KOHLER CO.</b> GENERATOR DIVISION, KOHLER, WI 53044 U.S.A. THIS DRAWING OR DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE LOANED, REPRODUCED OR COPIED WITHOUT KOHLER CO. WRITTEN PERMISSION. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	
APPROVALS		DATE	TITLE
DRW	DH	4-27-76	CLAMP, MUFFLER 60RZG
CHECKED	EB	5-18-76	SCALE 3/4
APPROVED	CAS	6-30-76	PLOTTED
		DWG. NO.	SHEET
		475-X722	1-1
		DWG. NO.	C
		475-X722	

PART NO.	REV.	ITEM 1	ITEM 2	A±3.0 [.12]	B REF.	C ID REF.	D REF.	STYLE
276249	V	X-797-31	X-533-1	457 [18.0]	3" NPT.	76.5 [3.01]	25.4 [1.00]	A

REV	DATE	DESCRIPTION	BY
V	0-18-00	DMG CONVERTED TO METRIC (C-B) GM14274 ADDED [62307]	STW
W	1-23-01	(C-B) GM18876 ADDED [64531]	STW
X	8-20-01	(C-B) GM21276 ADDED [65276]	SM
Y	8-24-01	(C-B) GM22476 ADDED [65682]	KDM
Z	10-29-01	(C-B) GM22700 ADDED [65628]	

REVISION BLOCK INDICATES REVISION LEVEL OF DRAWING NOT PART REVISION. SEE PART REVISION LEVEL BEHIND PART NUMBER FOR CURRENT PART REVISION LEVEL.



NOTES :  
 MUST BE FREE OF RUST, BURRS & WELD SPATTER.  
 PAINT ONE COAT HEAT RESISTANT ALUMINUM.  
 WIRE BRUSH ANY FLAKED PAINT AROUND WELDS.

METRIC CAD FILE

DIMENSIONS IN [ ] ARE INCH EQUIVALENTS.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES ARE: LXX & LXX .1 LXX & LXX .15 LXX & LXX .2 ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED		SURFACE FINISH ✓ MIL	
APPROVALS		TITLE	
DESIGNER	DATE	ADAPTER, FLEX EXHAUST 60RZG	
CHKD	DATE	ADAPTER, FLEX EXHAUST 60RZG	
APPV	DATE	ADAPTER, FLEX EXHAUST 60RZG	
SCALE	DATE	ADAPTER, FLEX EXHAUST 60RZG	
SCALE	DATE	ADAPTER, FLEX EXHAUST 60RZG	
SCALE	DATE	ADAPTER, FLEX EXHAUST 60RZG	

20-180 KW  
 STANDBY



5

4

3

2

1

REVISION HISTORY				
No.	DATE	BY	ZONE	COMMENTS
A	6/19/01	INS	*	OUTLINE DRAWN

205483 A

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GAS FLOW

**PHILLIPS & TEMRO**  
industries  
A Thyssen Budd Automotive Company

THIRD ANGLE PROJECTION	DRAWN BY	DATE
	INS	6/19/01
DIMENSIONS ARE IN:	APPR. BY	DATE
X IN . MM . INMM	*	*
UNLESS SPECIFIED DIMENSION TOLERANCES ARE:	DRAWING ORIGIN	
ANGLES	BP CANADA	
$\leq \pm 2^\circ$		
	INCHES	MILLIMETERS
.00 $\pm$ .13		00. $\pm$ *
.000 $\pm$ *		0.0 $\pm$ *

DESCRIPTION:	JHS-03: 3.00" NPT HOSPITAL GRADE
REF: *	
MATERIAL:	CARBON STEEL
SHEET 1 OF	
SCALE:	1:8
OUT.:	B
FAB.:	*
DRAWING No.:	475-205483
REV	A

CUSTOMER *	WORK ORDER *	FINISH HIGH TEMP. BLACK	WEIGHT 75 #
------------	--------------	-------------------------	-------------