

DEVICE No.	FUNCTION	RATING	MFR	TYPE	CAT. AND REF. Dwg. No.	REMARKS
GEN 21	GEN 22					
A	AMMETER @ CONTROL BOARD @ SWGR CELL				3	
W	WATTMETER DIESEL GEN				3	
VAR	VARIOMETER				3	
WTD	WATT TRANSDUCER				3	
DR-A-21	DR-B-22	DROOP RELAY A			10	
VRTD	VRTD	VAR TRANSDUCER DIESEL GEN			3	
VTD	VTD	VOLT TRANSDUCER			3	
RW	RW	RECORDING WATTS			3	
RF	RF	RECORDING FREQ	YOKOGAWA	DX100N	3	
RVAR	RVAR	RECORDING VAR	YOKOGAWA	DX100N	3	
RV	RV	RECORDING VOLTMETER	YOKOGAWA	DX100N	3	
WH	WH	WATT HOUR METER			3	
F	F	FREQUENCY METER			3	
KWS-21	KWS-22	KILO WATT SENSOR	BASLER ELECTRIC			
DR-B-21	DR-B-22	DROOP RELAY B			10	
32HG5	32HH7	DIRECTIONAL POWER RELAY			3	
40HG5	40HH7	LOSS OF FIELD RELAY			3	
46HG5	46HH7	UNIT NEGATIVE SEQUENCE RELAY			3	ALARM ONLY
50HG5	50HH7	6ND. CURRENT SENSOR RELAY			3	ALARM ONLY
51HG5	51HH7	DIESEL GENERATOR O/C RELAY			3	
52HG5	52HH7	AIR CIRCUIT BREAKER			3	
52HG6	52HH6	DIESEL GEN. DIFF. O/C RELAY			3	
K5-21	K5-22	FIELD FLASH CUT-OUT RELAY	POTTER BROMFIELD			PRIIAY-110
FTD	FTD	FREQ. TRANSDUCER			14	
RTM	RTM	RUNNING TIME METER			14	
V	V	VOLTMETER			14	
F	F	FREQ. METER			14	
MASL-21	MASL-22	MANUAL AUTO SW. FOR VOLTAGE REG.			14	
29-21	29-22	DIESEL CONTROL ISOLATING SW.			10	

CONTACTS	OFF	PHASE A-B	PHASE B-C	PHASE C-A	REMARKS
A	X				THIS DWG.
B	X				THIS DWG.
C	X				THIS DWG.
D	X				SPARE
E	X				THIS DWG.
F					SPARE

CONTACTS	LOWER	OFF	RAISE	REMARKS
A	X			THIS DWG.
B	X			THIS DWG.
C	X			THIS DWG.
D	X			SPARE
E	X			THIS DWG.
F				SPARE

DAS (PANEL)	POWER SOURCE	HMI	REF.
GEN 21	PM-DST21	1YDG21	DST-MNTR
GEN 22	PM-DST22	1YDG22	DST-MNTR

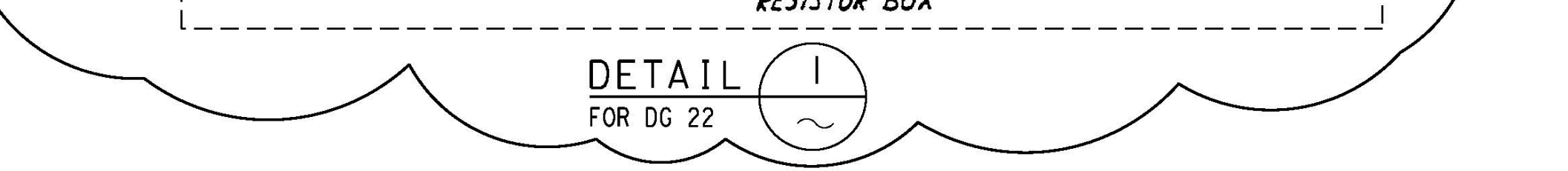
- NOTES:
- BUS DIFF CT AND POTENTIAL TRANSFORMER ARE NOT SHOWN SEE REF. NO'S 7 & 8.
 - NAMEPLATE VALUES DEPICTED ON THIS DRAWING, REFER TO CALC 015-DC (SAP* 9x37160) FOR RATED VALUES.
 - MPI MOUNTED ON ENGINE SKID (DG 21 ONLY)
 - NOT USED (DG 21 ONLY)

- EQUIPMENT LOCATION
- BTA228 DIESEL GEN 21 DC FIELD TERM. BOX
 - BTA234 NEUT CT TERM. BOX
 - G0D23 DIESEL GEN 21 GAUGE PANEL
 - SHE5 SWGR 4 KV BUS G CUB. 5
 - RHG RELAY BOARD ENG SAFEGUARD BUS G
 - SED21 DIESEL GEN 21 EXCITER CUBICLE
 - SED21A GOVERNOR CONTROL PANEL
 - G0D21 MAIN LEAD TERM. BOX
 - CHG CONTROL BOARD ENG SAFEGUARD BUS G
 - PM-DST21 - DG21 START TIMING DATA ACQUISITION (DAS) PANEL.
 - PM-DST22 - DG22 START TIMING DATA ACQUISITION (DAS) PANEL.
 - 1YDG21 - STATIC INVERTER.
 - 1YDG22 - STATIC INVERTER.
 - DST-MNTR - DG21, 22, 23 DIESEL START DATA ACQUISITION SYSTEM HMI.

- REFERENCES
- DESCRIPTION OF ELECT SCHEMATIC DIAG SYMBOLS & CIRCUIT DESIGNATIONS - DWG NO 050003
 - LIST OF EQUIPMENT LOCATION CODES - 067998
 - SINGLE LINE METER AND RELAY DIAG. 4160 V SYSTEM BUS SECTIONS G & H - 441230
 - INSTR. AC SYSTEM - 441241
 - SPARE
 - SPARE
 - SCHEMATIC DIAG. POTENTIAL AND SYNCHRONIZING 4160 V SYSTEM SH2 (BUS 61H) - 441340
 - 4160 V BUS DIFFERENTIAL SH-2 (BUS F.G.4H) - 441343
 - 4160 V DIESEL GEN AND ASSOCIATED CIRCUIT BREAKERS SH-2 - 441356
 - CONTROL SH 1 - 441357
 - CONTROL SH 2 - 441358
 - MAIN ANNUNCIATOR SH15 - 500785
 - SH16 - 500786
 - DIESEL GEN MFR DWGS. - REC NO 663082
 - VENDOR DWG - 663082-342 THRU 356
 - VENDOR GOVERNOR CONTROL SCHEMATICS (DG 21 ONLY) - 663082-407, 408, 411

AIR CKT BKR	BUS SECT	CKT No	LOCATIONS	INSTRUMENTS & RECORDERS	COMPUTER CKT
GEN 21	52HG5	G	G05H	NEUTRAL CT GEN.FIELD	115VAC CKT No
GEN 22	52HH7	H	H07H	BTA234 BTA227	TEMP. DETECTOR
				BTA233 BTA228	CT2802AG
					CT2803AH

GEN	DEVICE	CKT No	REF. DWG. NO.
GEN 21	50NHG5	46HG5	500786
GEN 21	A14301DG	AY4307DG	
GEN 22	50NHG7	46HH7	500785
GEN 22	A14201DH	AY4207DH	



KEY DWG. SECTION 2 DIESEL NO. 21 & 22 UNIT 2

DATE 01-13-2020
D.D. AJFJ
R.E. RXG2
I.V. N/A
P.E. N/A

REVISION DESCRIPTION
Revised per DGN-21907

DWG SCALES
BILL OF MATL
SUPDS
SUPDS BY
DRAWING SHEET PAGE REV
441355 1 0 28

ELECTRICAL SCHEMATIC DIAGRAM
4KV DIESEL GENERATORS AND ASSOCIATED CIRCUIT BREAKERS
DG 21 & 22
DIABLO CANYON POWER PLANT
PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CALIFORNIA

P.G.&E. SYSTEM PHASE SEQUENCE A-C-B

RASTER=441355-1-0.dgn
DGN=441355-0.dgn
CND USER=AJFJ DATE=01-13-2020