



- LEGEND:**
- | DEVICE NUMBER | DESCRIPTION |
|---------------------------------|--|
| 27/TA-1, 1A, 1A-1, 1A-2, 1-4A | DC UNDERVOLTAGE RELAY GENERAL ELECTRIC TYPE NGV |
| 27/1A-SA, 1B-SB, 1A1-SA, 1B1-SB | DC UNDERVOLTAGE RELAY, ASE BROWN BOVERTI TYPE 275 AC UNDERVOLTAGE RELAY, G.E. TYPE IAV |
| 64G/TA-1 | 250V-GROUND DETECTOR RELAY, EXIDE GDR |
| 64G/1A-SA, 1B-SB, 1A | 125V-GROUND DETECTOR RELAY, ROCHESTER INSTRUMENTS XET-1215 |
- ABBREVIATIONS:**
- | | |
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| DS | COMPUTER DATA SYSTEM |
| N.O. | NORMALLY OPEN |
| N.C. | NORMALLY CLOSED |
| I | INDICATING INSTRUMENT (A-AMMETER, V-VOLTMETER) |
| TR | TRANSFORMER |
| BBC | BROWN BOVERTI ELECTRIC INC |
- SYMBOLS:**
- FOR GRAPHICAL SYMBOLS SEE EBASCO DESIGN GUIDE E-9.
- * - MOLDED CASE SWITCH
 Δ - MAIN CONTROL PANEL
 ■ - AUX CONTROL PANEL

- NOTES:**
- ALL DC SYSTEM CIRCUIT BREAKERS AND FUSED SWITCHES ARE 2-POLE UNLESS OTHERWISE INDICATED. ALL AC SYSTEM CIRCUIT BREAKERS AND FUSED SWITCHES ARE 1-POLE UNLESS OTHERWISE INDICATED.
 - ALL FUSES AND CIRCUIT BREAKERS HAVE INTERRUPTING CAPACITIES EQUAL TO OR EXCEEDING THE SHORT CIRCUIT CURRENT RATING SHOWN FOR THE RESPECTIVE DC BUSES.
 - FUSES FOR INSTRUMENTS AND RELAYS SHALL BE 10 AMPERE UNLESS OTHERWISE INDICATED.
 - NUMBER OF CONDUCTORS SHOWN FOR AC & DC FEEDERS ARE TOTAL REQUIRED.
 - CABLES FROM BATTERY TO BUS SHALL BE RUN IN CONDUIT AND EACH POLARITY IN SEPARATE CONDUIT. CABLES IN CONDUIT FROM BUS TO EQUIPMENT MAY BE RUN IN THE SAME CONDUIT.
 - CLASS IE PP AND ASSOCIATED TRANSFORMERS ARE LOCATED IN THEIR RESPECTIVE MOTOR CONTROL CENTERS.
 - ALL INSTRUMENTS AND RELAYS ARE LOCATED LOCALLY UNLESS OTHERWISE INDICATED.
 - DESCRIPTION OF FEEDER CIRCUITS-REFER TO POWER DISTRIBUTION AND MOTOR DATA SHEETS DWG. CAR-1364-8-841.
 - CIRCUIT BKRS SHOWN BY SYMBOL SHALL BE KIRK KEY INTERLOCKED SUCH THAT ONLY ONE MAY BE CLOSED AT ANY ONE TIME.
 - BATTERY CHARGERS SHALL BE SUITABLE FOR PARALLEL OPERATION.
 - ALL EQUIPMENT IS LOCATED IN THE REACTOR AUXILIARY BUILDING UNLESS OTHERWISE NOTED.
 - OVERLOAD CONTACTS ARE USED FOR ALARM AND SUPERVISORY PURPOSE ONLY (SEE WESTINGHOUSE DWGS CAR-1364-946, CAR-1364-2518).
 - THE 2-1/2" #4/B CABLE FROM BUS DP-1A-1A IS SPliced IN BOX B512(151); & BOX B512(151).
 - 250VDC BATT CHARGER CABLES ARE SPliced IN B6073 & B6074 SUCH THAT CABLE ROUTED IN TRAY IS 2/PHASE #2 AWG AND CABLE ROUTED THROUGH RAB CONDUIT IS 1/PHASE #2 AWG.

- REFERENCE DRAWINGS:**
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| 480V VOLT AUX. ONE LINE WIRING DIAGRAM UNIT 1 | CAR-2166 |
| POWER DISTRIBUTION & MOTOR DATA SHEETS | G-839 |
| UNIT 1 | B-841 |
| 230KV & 500KV SWITCHYARDS AUX. ONE LINE DIAGRAMS | G-825 |
| CONTROL WIRING DIAGRAMS UNIT 1 | B-481 |
- WESTINGHOUSE - TYPICAL DIAGRAM FOR INSTRUMENT POWER SUPPLIES DWG. #1080457 (CAR-1364-596).**

28	INCORPORATED: EC 81786 & EC 81787 (82,83,87,88,82,83)	ELECTRONICALLY SIGNED
REV	DESCRIPTION	APPROVED
PROFESSIONAL ENGINEER:		
QUALITY LEVEL: SAFETY RELATED		
CAROLINA POWER & LIGHT COMPANY NUCLEAR ENGINEERING DEPARTMENT		
PLANT: HARRIS PROJECT - UNIT 1		
TITLE: 250V DC, 125V DC & 120V UNINTERRUPTIBLE AC ONE LINE WIRING DIAGRAM		
PLANT DWG NO.: CAR 2166-G-0042 S01		