ITEM NUMBER	DESCRIPTION	F.M. PART NO. SHIPPED LOOSE ITEMS	MOUNTING LOCATION: ENGINE	MOUNTING LOCATION: SKID	MOUNTING LOCATION: CUSTOMER PIPING	ASME SECTION III CLASS 3 COMPONENT	F.M. ELECTRICAL CODE INTERFACE	SETTING OF DEVICE	REMARKS
1a	COMPRESSOR, MOTOR 15HP, 3 PH, 60Hz 460V.	—	—	X	—	NO	ACM1	—	—
1b	COMPRESSOR, MOTOR 15HP, 3 PH, 60Hz 460V.	—	—	X	—	NO	ACM2	—	—
2	AIR TANKS, QTY. (2)	—	—	X	—	YES	—	—	—
3a	ISOLATION VALVE, W/LIMIT SWITCH FOR ALARM WHEN NOT WIDE OPEN.	—	—	X	—	YES	AVC3	—	—
3b	ISOLATION VALVE, W/LIMIT SWITCH FOR ALARM WHEN NOT WIDE OPEN.	—	—	X	—	YES	AVC4	—	—
4a	ISOLATION VALVE, W/LIMIT SWITCH FOR ALARM WHEN NOT WIDE OPEN.	—	—	X	—	YES	AVC1	—	VALVE'S TEE HANDLE IS TACK WELDED TO VALVE STEM HOUSING. REF. NCN 2866
4b	ISOLATION VALVE, W/LIMIT SWITCH FOR ALARM WHEN NOT WIDE OPEN.	—	—	X	—	YES	AVC2	—	
5	SOLENOID VALVE, SHUTDOWN. 125 V.D.C.	—	—	X	—	YES	SDS	ENERGIZE TO SHUTDOWN	—
6a	BARRING GEAR INTERLOCK W/MICRO-SWITCH	—	X	—	—	NO	BD1	—	—
6b	BARRING GEAR INTERLOCK W/MICRO-SWITCH	—	X	—	—	NO	BD2	—	—
7a	SOLENOID VALVE, AIR START. 125V. D.C.	—	X	—	—	YES	AS1	ENERGIZE TO START	—
7b	SOLENOID VALVE, AIR START. 125V. D.C.	—	X	—	—	YES	AS2	ENERGIZE TO START	—
8a	COMPRESSOR START/STOP PRESSURE SWITCHES.	—	—	X	—	NO	APC1	START COMPR. 375 PSI, DECR. STOP COMPR. 415 PSI, INCR. EITHER, OR BOTH COMPR. CONTROLLED BY EITHER SWITCH.	
8b	COMPRESSOR START/STOP PRESSURE SWITCHES.	—	—	X	—	NO	APC2		
9a	SWITCH, WATER IN AIR STORAGE TANK ALARM ⑩	—	—	X	—	NO	AWH1	NON ADJUSTABLE	—
9b	SWITCH, WATER IN AIR STORAGE TANK ALARM ⑩	—	—	X	—	NO	AWH2	NON ADJUSTABLE ⑩	—
10a	SWITCH, LOW PRESSURE ALARM	—	—	X	—	NO	APL1	275 PSI, DECR.	—
10b	SWITCH, LOW PRESSURE ALARM	—	—	X	—	NO	APL2	275 PSI, DECR.	—
11	REFRIGERATED TYPE AIR DRYER	—	—	X	—	NO	AD	—	—
12	SWITCH, AFTERCOOLER TEMP. HIGH ALARM ⑩	—	—	X	—	NO	ATHA	130°F MAX	—
13	MOISTURE SEPARATOR	—	—	X	—	NO	—	—	—
14	AFTERCOOLER	—	—	X	—	NO	—	—	—
15	ORIFICE, QTY (4)	—	—	X	—	NO	—	—	.040 DIA. ORIFICE
16	AUTOMATIC DRAIN TRAP ⑩	—	—	X	—	NO	—	—	—

GENERAL NOTES APPLICABLE TO THE DETAILS OF THIS DRAWING ONLY :

6/1. RECOMMENDED CUSTOMER PIPING BETWEEN SKID AND AIR SKID TO BE EITHER SCHEDULE 80 BLACK IRON WITH 600 LB. FITTINGS & SCREWED FITTINGS OR ASTM B88 TYPE "K" COPPER TUBING

6/2. IN THE EVENT OF LOADLESS LINE BREAKAGE, A FLOW OF APPROXIMATELY 1.5 CFM @ 425 PSI WILL OCCUR PER ORIFICE.

⑩ 6/3. AFTERCOOLER & AIR DRYER OPERATION :

a. NORMAL : VALVES [1][2] & [3] OPEN; VALVES [4] & [5] CLOSED. SERVICE WATER RUNS CONTINUOUSLY THROUGH AFTER-COOLER. AIR DRYER RUNS CONTINUOUSLY. AIR OUT < 40°F. CAUTION: OPERATION OF COMPRESSOR(S) WITHOUT SERVICE WATER FLOW THRU AFTERCOOLER MAY DAMAGE BOTH AFTERCOOLER & AIR DRYER.

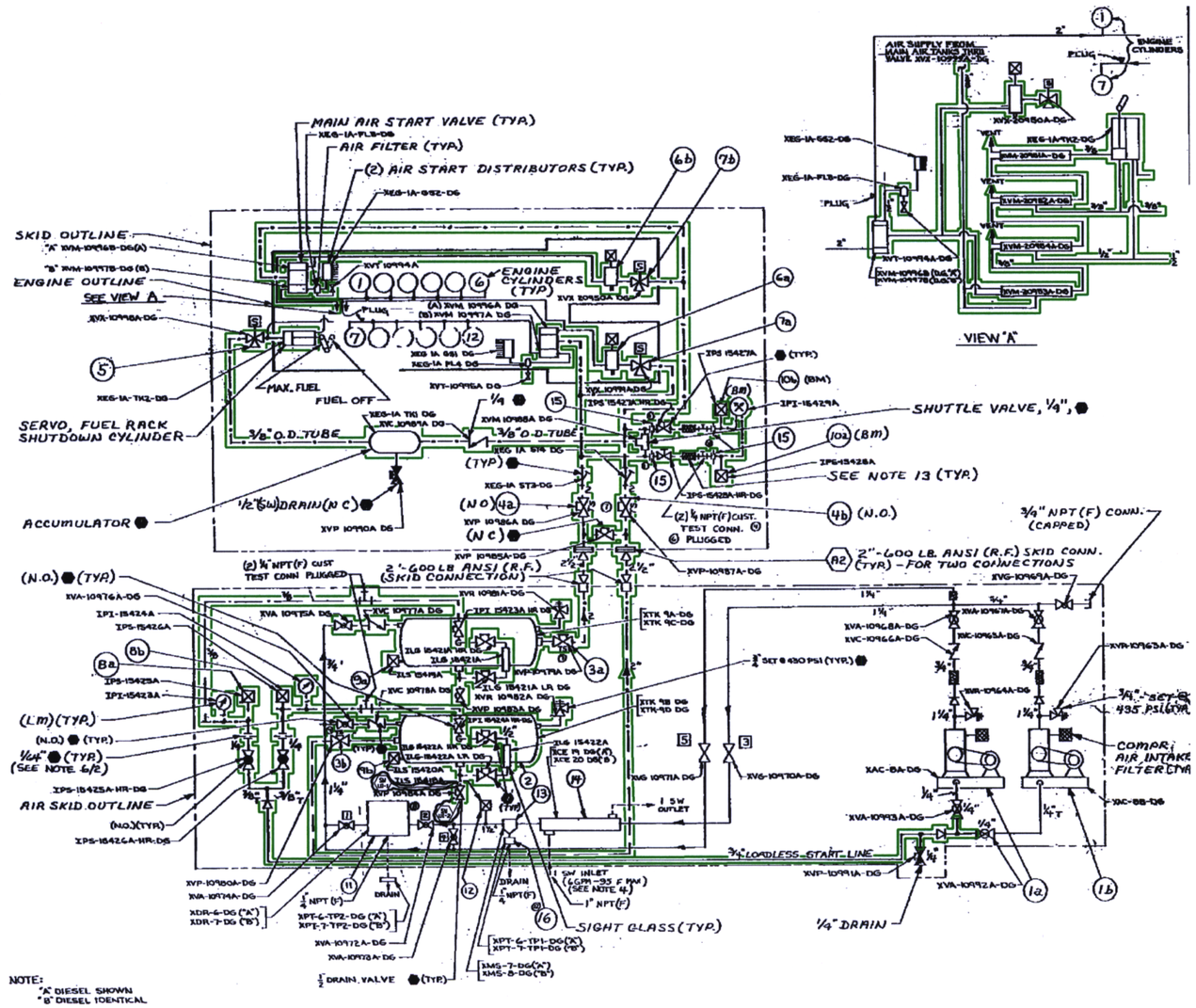
b. AIR DRYER INOP.: VALVES [3] & [4] OPEN; VALVES [1][2] & [5] CLOSED. SERVICE WATER RUNS CONTINUOUSLY THRU AFTERCOOLER. AIR OUT APPROXIMATELY 100° F.

c. AFTERCOOLER INOP. OR SERVICE WATER NOT AVAILABLE : VALVE [5] OPEN; VALVES [1] [2] & [4] CLOSED; VALVE [3] AS DESIRED. AIR BY-PASSES BOTH AFTERCOOLER & AIR DRYER. AIR OUT 400 TO 500°F.

⑩

6/4. NOTE: CUSTOMER MUST EITHER HAVE 150 PSI RELIEF VALVE IN SERVICE WATER LINE OR DISCHARGE MUST BE OPEN TO RELIEVE AIR PRESSURE IN CASE OF TUBE FAILURE.

ITEM NUMBER	G.A.H. TAG NUMBER ⑤	
	DIESEL 1A	DIESEL 1B
1a	XAC-1003A-DG	XAC-1003C-DG
1b	XAC-1003B-DG	XAC-1003D-DG
2	XTK 1003A-DG / XTK 1003B-DG	XTK 1003C-DG / XTK 1003D-DG



NOTE:
"A" DIESEL SHOWN
"B" DIESEL IDENTICAL

NOTES:

1. SYSTEM DESIGN PRESSURE QUALIFIED TO 450 PSIG.
2. XVR10981 A/B-DG & XVR10982 A/B-DG RESET TO 445 PSIG.

NOTE A: THIS DWG. SHOWS THE CURRENT STATUS OF THE STARTING & CONTROL AIR SYSTEM. DWG. IMS-32-132 IS AN INTERNAL COLT INDUSTRIES SHOP DWG. FOR REFERENCE ONLY.

D-23

PLEX Drawing TR00160-005

SOUTH CAROLINA ELECTRIC AND GAS COMPANY
PURCHASE ORDER NUMBER SN-10125-SR
VIRGIL C. SUMMER NUCLEAR STATION UNIT

BILL OF MATERIAL NUMBER: E1-1
XEG 000 1A, 1B -DG

DRAWING LEGIBILITY
CLASS 2
SCE&G CAD ENHANCED

NO.	DATE	BY	REVISION	CKD. BY	LE APPROVAL
20	11/16/99	RHM	REVISED PER CGSS-99-0519	MGR	JEG
19	08/11/97	JMR	REVISED PER CGSS-97-0395	MGR	GJR
18	12/08/94	DDJ	REVISED PER MRF-22519	MGR	RSB
17	03/30/93	JMH	REVISED PER MRF 22516	DVW	SJV

ASSOCIATED WITH FSAR Figure 9.5-6

STARTING AND CONTROL
AIR SYSTEM - COLT IND.

VENDOR DRAWING NO.: 11870080

SCE&G A SCANA COMPANY — DESIGN ENGINEERING — V. C. SUMMER NUCLEAR STATION JENKINSVILLE, S. C.

1. MADE	2. CHECKED	3. LE APPROVAL
JMH	DVW	SJVV

SCALE NTS | DRAWING NUMBER IMS-32-005 | SHT. NUMBER 6 | REV 20

1/4" = 1'-0" 0' 5' 10' 15' 20'