

480V MOTOR CONTROL CENTERS

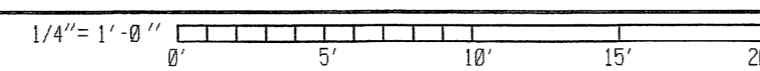
LOCATION	OVERCURRENT PROTECTION DEVICE					PENETRATION		LOAD EQUIPMENT NO SYSTEM DESCRIPTION	REMARKS		
	PARENT DEVICE NO.	UNIT NO OR TAG NO.	APPLICATION CLASS		TYPE	TEST SET POINT	RESPONSE TIME			NO. XRP	COND. SIZE
			PRI	BACK-UP							
XHCIDBZY	121M	X	X	X	SQUARE D FHL36015-13M	225 AMPS	N/A	0030	*4 AWG	XV18096B-RC/ REACTOR HEAD VENT VALVE TO PRESSURE RELIEF TANK	
XHCIDBZY	121M		X	X	SQUARE D JFL34820	60 AMPS		0030	*4 AWG	XV18096B-RC/ REACTOR HEAD VENT VALVE TO PRESSURE RELIEF TANK	
XHCIDBZY	161M	X		X	SQUARE D FHL36100	300 AMPS		0030	12 *4 AWG	XV08888B-SI ACCUMULATOR B ISOLATION VALVE	
XHCIDBZY	161M		X	X	SQUARE D JFL34100	300 AMPS		0030	12 *4 AWG	XV08888B-SI ACCUMULATOR B ISOLATION VALVE	
XHCIDBZY	181M	X		X	SQUARE D FHL36015	45 AMPS		0018	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	181M		X	X	SQUARE D JFL34815	45 AMPS		0018	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	191M	X		X	SQUARE D FHL36015	45 AMPS		0018	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	191M		X	X	SQUARE D JFL34815	45 AMPS		0018	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	201M	X		X	SQUARE D FHL36015	45 AMPS		0030	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	201M		X	X	SQUARE D JFL34815	45 AMPS		0030	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	211M	X		X	SQUARE D FHL36015	45 AMPS		0030	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	211M		X	X	SQUARE D JFL34815	45 AMPS		0030	*4 AWG	XV03180C-SM/RB RECIRCULATING UNIT C ISOLATION VALVE	
XHCIDBZY	22C0	X		X	SQUARE D FHL36015	150 AMPS		0100	*4 AWG	XV08815-SI/2 RECIRCULATING SUMP TO RBR PUMP A ISOLATION VALVE	
XHCIDBZY	22C0		X	X	SQUARE D JFL34806	150 AMPS		0100	*4 AWG	XV08815-SI/2 RECIRCULATING SUMP TO RBR PUMP A ISOLATION VALVE	
XHCIDBZY	23FJ	X		X	SQUARE D FHL36015-13M	225 AMPS	N/A	0030	*4 AWG	XV18096B-RC/ REACTOR HEAD VENT VALVE TO PRESSURE RELIEF TANK	
XHCIDBZY	23FJ		X	X	SQUARE D JFL34820	60 AMPS		0030	*4 AWG	XV18096B-RC/ REACTOR HEAD VENT VALVE TO PRESSURE RELIEF TANK	

MISCELLANEOUS FUSE PANELS (AC)

LOCATION	OVERCURRENT PROTECTION DEVICE					PENETRATION		LOAD EQUIPMENT NO SYSTEM DESCRIPTION	REMARKS		
	PARENT DEVICE NO.	UNIT NO OR TAG NO.	APPLICATION CLASS		TYPE	TEST SET POINT	RESPONSE TIME			NO. XRP	COND. SIZE
			PRI	BACK-UP							
APN4104			X	X	MAIN FUSED DISCONN. SWITCH	≥ 76 MICROHMS	N/A		1/8 AWG	PRESSURE HEATER GROUP NOS. 1-5, 21-30 47-56-RC	
APN4104					DISCONN. SWITCH 1		N/A	0022	1/8 AWG		SPARE
APN4104			X	X	FUSED DISCONN. SWITCH 2	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 28, 55, 56-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 3	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 24, 57, 58-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 4	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 5, 4, 54-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 5	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 21, 47, 48-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 6	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 1, 2, 22-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 7	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 5, 6, 27-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 8	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 5, 4, 25-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 9	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 7, 8, 38-RC	
APN4104			X	X	FUSED DISCONN. SWITCH 10	≥ 1.0 MILLIOHM	N/A	0022	1/8 AWG	PRESSURE HEATER GROUP 24, 51, 52-RC	
APN4105			X	X	MAIN FUSED DISCONN. SWITCH	≥ 76 MICROHMS	N/A	0021	1/8 AWG	PRESSURE HEATER NOS. 15-20, 38-46, 67-76-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 1	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 17, 16, 42-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 2	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 19, 20, 45-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 3	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 38, 67, 68-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 4	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 59, 61, 70-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 5	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 44, 70, 76-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 6	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 41, 71, 72-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 7	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 43, 73, 74-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 8	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 16, 16, 48-RC	
APN4105			X	X	FUSED DISCONN. SWITCH 9	≥ 1.0 MILLIOHM	N/A	0021	1/8 AWG	PRESSURE HEATER GROUP 46, 77, 78-RC	
APN4106			X	X	MAIN FUSED DISCONN. SWITCH	≥ 120 MICROHMS	N/A	0020	1/8 AWG	PRESSURE HEATER NOS. 9-14, 31-37, 59-66-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 1	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 9, 10, 32-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 2	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 11, 12, 35-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 3	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 31, 59, 60-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 4	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 36, 65, 66-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 5	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 13, 14, 37-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 6	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 33, 61, 62-RC	
APN4106			X	X	FUSED DISCONN. SWITCH 7	≥ 1.0 MILLIOHM	N/A	0020	1/8 AWG	PRESSURE HEATER GROUP 34, 63, 64-RC	

120V AND 125V DC DISTRIBUTION PNLs-CKT. BRKR.

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	PARENT DEVICE NO.	UNIT NO OR TAG NO.	APPLICATION CLASS		TYPE	TEST SET POINT	RESPONSE TIME			NO. XRP	COND. SIZE
			PRI	BACK-UP							
APN002	BREAKER 2	X	X	X	SQUARE D Q08-115	45 AMPS	≤ 40 SEC	R0303 CONAX	*14 AWG	R0303-PS PERSONNEL AIRLOCK	PSK11X
APN002	BREAKER 4	X	X	X	SQUARE D Q08-115	45 AMPS	≤ 40 SEC	R0302 CONAX	*14 AWG	R0302-PS PERSONNEL AIRLOCK	PSK12X
APN001	BREAKER 14	X	X	X	SQUARE D Q08-115	45 AMPS	≤ 100 SEC	R0309	*12 AWG	120V CONTROL	L0K483A
APN008	BREAKER 15	X	X	X	SQUARE D FAB-TM5A	45 AMPS	≤ 100 SEC	0033	*12 AWG	120V CONTROL	E0P701X
APN001	BREAKER 2	X	X	X	SQUARE D FA-100/4BAT	120 AMPS	≤ 100 SEC	0053	*4 AWG	XP07008-CR/RD POSITION IND PANEL 1	120V AC
APN001	BREAKER 4	X	X	X	SQUARE D FA-100/4BAT	120 AMPS	≤ 100 SEC	0053	*4 AWG	XP07001-CV/RD POSITION IND PANEL 2	120V AC
APN005	BREAKER 18	X	X	X	SQUARE D EHL-0015	45 AMPS	≤ 100 SEC	0034	*12 AWG	120V CONTROL	FSK27X
APN001	BREAKER 14	X	X	X	SQUARE D FA-TM5A	45 AMPS	≤ 100 SEC	0057 0028	*12 AWG	120V CONTROL	HLJ210A HLJ470A AMW210A
APN003	BREAKER 12	X	X	X	SQUARE D FA-TM5A	45 AMPS	≤ 100 SEC	0030	*12 AWG	120V CONTROL	AHW110B
APN003	BREAKER 14	X	X	X	SQUARE D FA-TM5A	45 AMPS	≤ 100 SEC	0030	*12 AWG	120V CONTROL	AHW130B
APN006	BREAKER 25	X	X	X	SQUARE D FA-100/2BAT	60 AMPS	≤ 100 SEC	0038	*4 AWG	APN0015-EV/ TRANSFORMER POWER SUPPLY CABINET 3	120V AC
APN007	BREAKER 32	X	X	X	SQUARE D FAB-TM5A	45 AMPS	≤ 100 SEC	0017	*12 AWG	120V CONTROL	RH77A
APN008	BREAKER 21	X	X	X	SQUARE D FAB-TM5A	45 AMPS	≤ 100 SEC	0026	*12 AWG	120V CONTROL	RH140B
DPN00X-ED	BREAKER 14	X	X	X	SQUARE D FA-100/4BAT	120 AMPS	≤ 100 SEC	0053	*1/8 AWG	DPN0007C ED EMERGENCY LIGHTING PANEL 7	125V DC
DPN002-ED	BREAKER 20	X	X	X	SQUARE D FAL26815	45 AMPS	≤ 40 SEC	R0302 CONAX	*14 AWG	R0302 PS PERSONNEL AIRLOCK	PSE4X
DPN002-ED	BREAKER 21	X	X	X	SQUARE D FAL26815	45 AMPS	≤ 40 SEC	R0303 CONAX	*14 AWG	R0303 PS PERSONNEL AIRLOCK	PSE3X



NUCLEAR SAFETY RELATED

FSAR Figure 8G-4

SOUTH CAROLINA ELECTRIC & GAS COMPANY

VIRGIL C. SUMNER NUCLEAR STATION

GILBERT ASSOCIATES, INC.

ELEC. CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTION DEVICES

DESIGN ENGINEERING

APPROVED BY: JMH, DW, RCB

DATE: 08/20/03

REV. NO. 4

DATE: 08/20/03

BY: JMH

REVISION

E-224-532

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