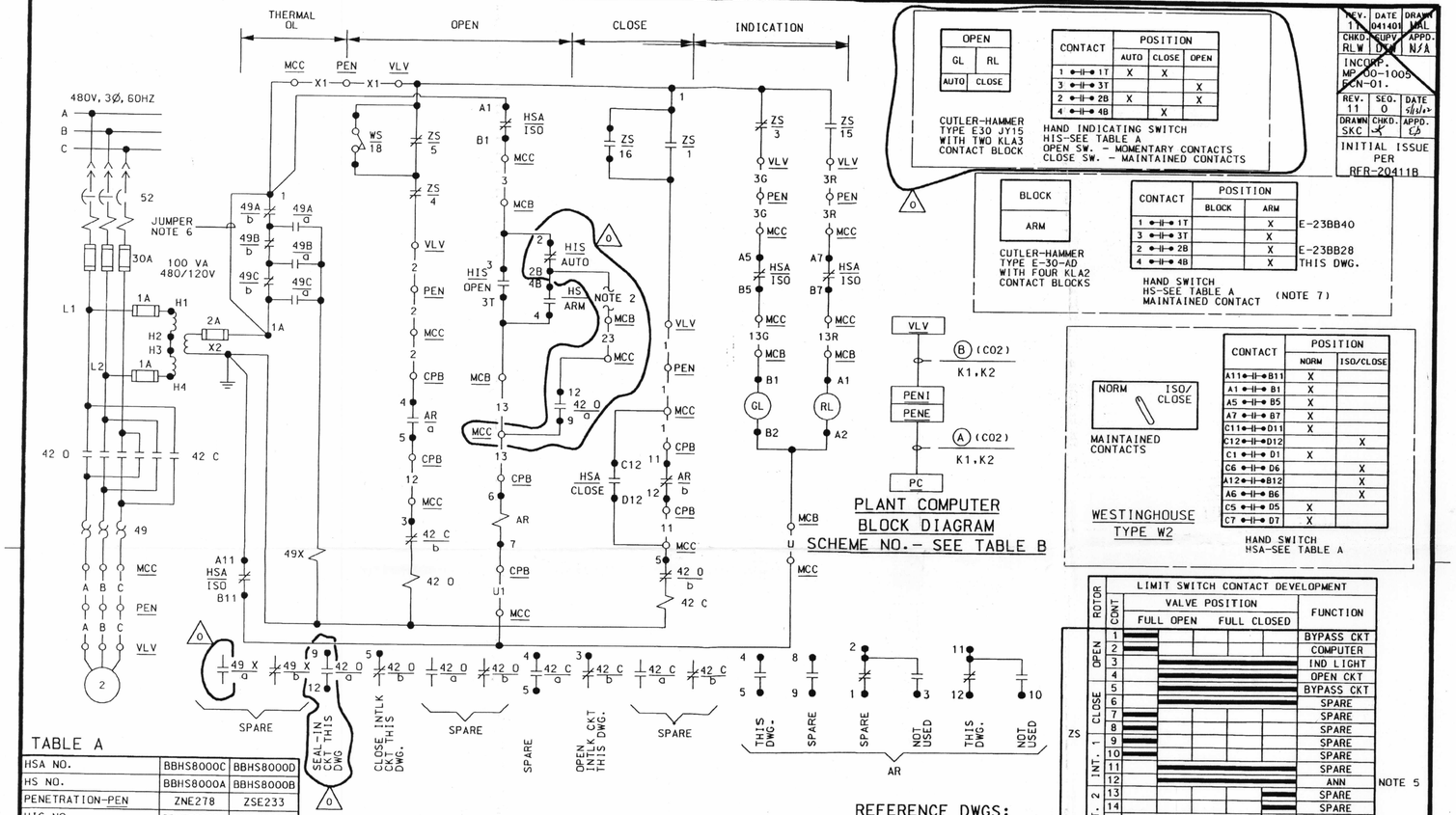

CUTLER-HAMMER TYPE E30 JY15 WITH TWO KLA3 CONTACT BLOCK

OPEN	
GL	RL
AUTO	CLOSE

HAND INDICATING SWITCH HIS-SEE TABLE A
OPEN SW. - MOMENTARY CONTACTS
CLOSE SW. - MAINTAINED CONTACTS

CONTACT	POSITION		
	AUTO	CLOSE	OPEN
1 ●-||-● 1T	X	X	
3 ●-||-● 3T			X
2 ●-||-● 2B	X		X
4 ●-||-● 4B		X	

REV.	DATE	DRAWN
1T	041401	MAL
CHKD.	SUPV.	APPD.
RLW	DLM	N/A

INCORP. MP-00-1005 FCN-01.

REV.	SEQ.	DATE
11	0	5/31/01
DRAWN	CHKD.	APPD.
SKC		

INITIAL ISSUE PER RFR-20411B

CUTLER-HAMMER TYPE E-30-AD WITH FOUR KLA2 CONTACT BLOCKS

BLOCK	
ARM	

HAND SWITCH HS-SEE TABLE A MAINTAINED CONTACT (NOTE 7)

CONTACT	POSITION		
	BLOCK	ARM	
1 ●-||-● 1T		X	E-23BB40
3 ●-||-● 3T		X	
2 ●-||-● 2B		X	E-23BB28
4 ●-||-● 4B		X	THIS DWG.

CONTACT	POSITION	
	NORM	ISO/CLOSE
A11 ●-||-● B11	X	
A1 ●-||-● B1	X	
A5 ●-||-● B5	X	
A7 ●-||-● B7	X	
C11 ●-||-● D11	X	
C12 ●-||-● D12		X
C1 ●-||-● D1	X	
C6 ●-||-● D6		X
A12 ●-||-● B12		X
A6 ●-||-● B6		X
C5 ●-||-● D5	X	
C7 ●-||-● D7	X	

NORM ISO/CLOSE

HAND SWITCH HSA-SEE TABLE A

LIMIT SWITCH CONTACT DEVELOPMENT

ROTOR CONT		VALVE POSITION FULL OPEN	VALVE POSITION FULL CLOSED	FUNCTION
ZS OPEN	1	■		BYPASS CKT
	2	■		COMPUTER
	3	■		IND LIGHT
	4	■		OPEN CKT
	5	■		BYPASS CKT
CLOSE	6	■		SPARE
	7		■	SPARE
	8		■	SPARE
	9		■	SPARE
	10		■	SPARE
INT. 1	11		■	SPARE
	12		■	ANN
INT. 2	13		■	SPARE
	14		■	SPARE
	15		■	IND LIGHT
	16		■	CLOSE CKT
WS	17	TORQUE SW		OPENS ON HI CLOSING TORQUE
	18	TORQUE SW		OPENS ON HI OPENING TORQUE

NOTE 5

■ SOLID BAR INDICATES CONTACT CLOSED.

TABLE A

HSA NO.	BBHS8000C	BBHS8000D
HS NO.	BBHS8000A	BBHS8000B
PENETRATION-PEN	ZNE278	ZSE233
HIS NO.	BBHIS8000A	BBHIS8000B
HS,HIS LOCATION-MCB	RL021	RL021
HSA & MCC LOC.-MCC	NG01BBR3	NG02BDF1
AUX.RELAY LOC.-CPB	RP139	RP140
AUX. RELAY NO.	3XBB3	3XBB4
VALVE NO.-VLV	BBHV8000A	BBHV8000B
SCHEME NO.	1BBG39A	4BBG39B

TABLE B

COMPUTER REF. DWG. NO.	J-106-00115	J-106-00115
PENETRATION-PEN	ZNE278	ZSE233
COMPUTER POINT	BBZ8000A	BBZ8000B
COMPUTER LOCATION-PC	RJ159A	RJ160A
VALVE NO.-VLV	BBHV8000A	BBHV8000B
COMPUTER SCHEME NO.	1BBR39A	4BBR39B

NOTES:

1. DELETED.
2. HS(A) IS USED FOR VALVES 8000A & PCV455A. HS(B) IS USED FOR VALVES 8000B & PCV456A. FOR VALVES PCV455A & PCV456A, SEE E-23BB40(Q).
3. DELETED.
4. CIRCUITS RELATED TO BBHV8000A MUST BE SEPARATED AND INDEPENDENT FROM CIRCUITS RELATED TO BBPCV455A. CIRCUITS RELATED TO BBHV8000B MUST BE SEPARATED AND INDEPENDENT FROM CIRCUITS RELATED TO BBPCV456A. REFER TO E-23BB40.
5. FOR ANNUNCIATOR CKT, SEE DWG. E-23BB28(Q).
6. JUMPER TO BE INSTALLED PRIOR TO CORE LOADING.
7. HANDSWITCHES BB-HS8000A & B HAVE "STOP AND THINK" COVERS INSTALLED.
8. DELETED.

RFR NO.	DRAWING NO.	REV.	SEQ.
20411B	E-23BB39	011	000

~~AS-BUILT CLASS 1~~

DRAWN (DATE) N/A	SCHEMATIC DIAGRAM PRESSURIZER RELIEF ISOLATION VALVES		
CHKD. (DATE) N/A			
SUPV. (DATE) N/A			
APPD. (DATE) N/A	LOCATION CALLAWAY PLANT		CLASS
UNION ELECTRIC COMPANY ST. LOUIS, MO	~~E-23BB39(Q)~~		REV. ~~11~~

D-01