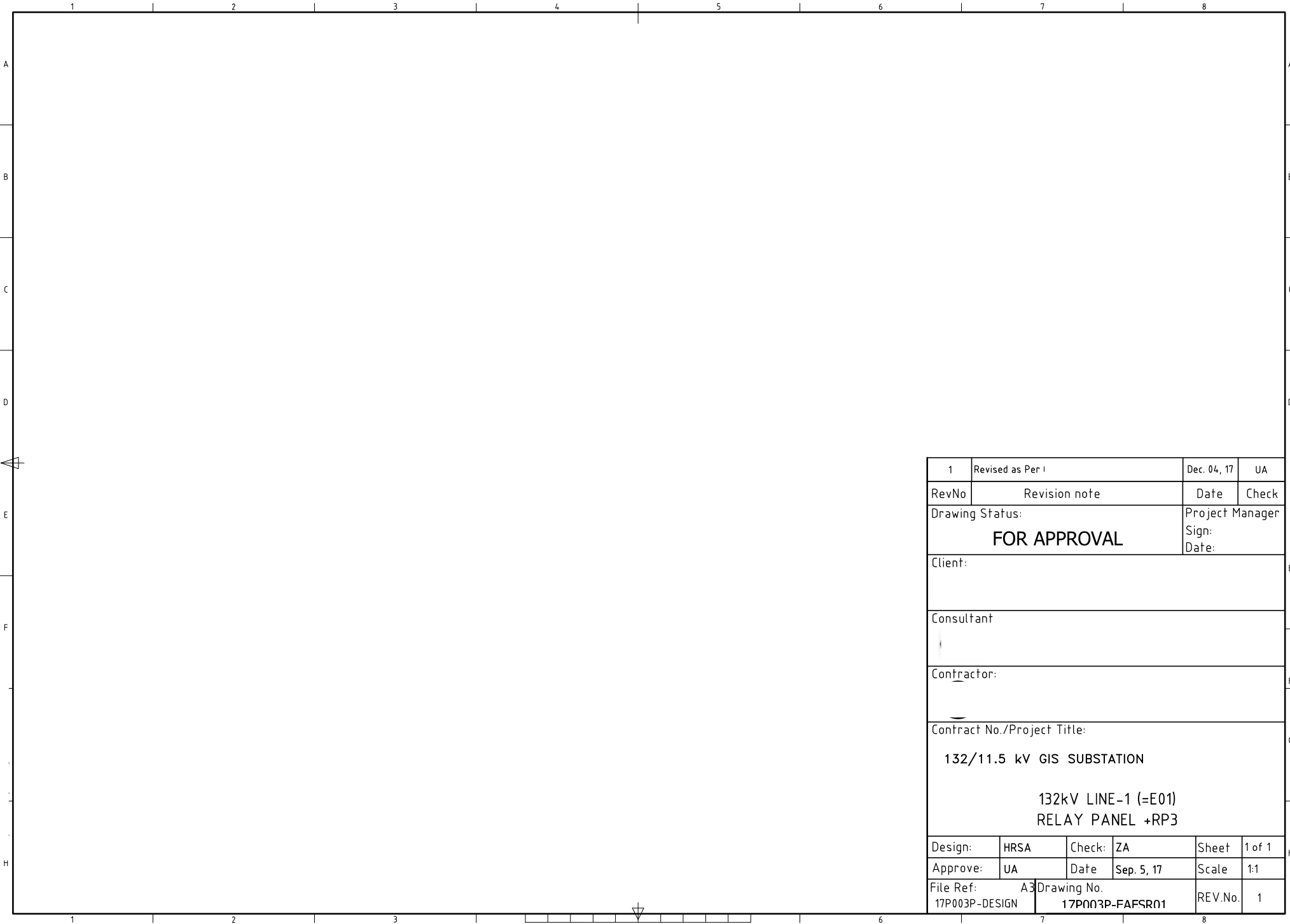


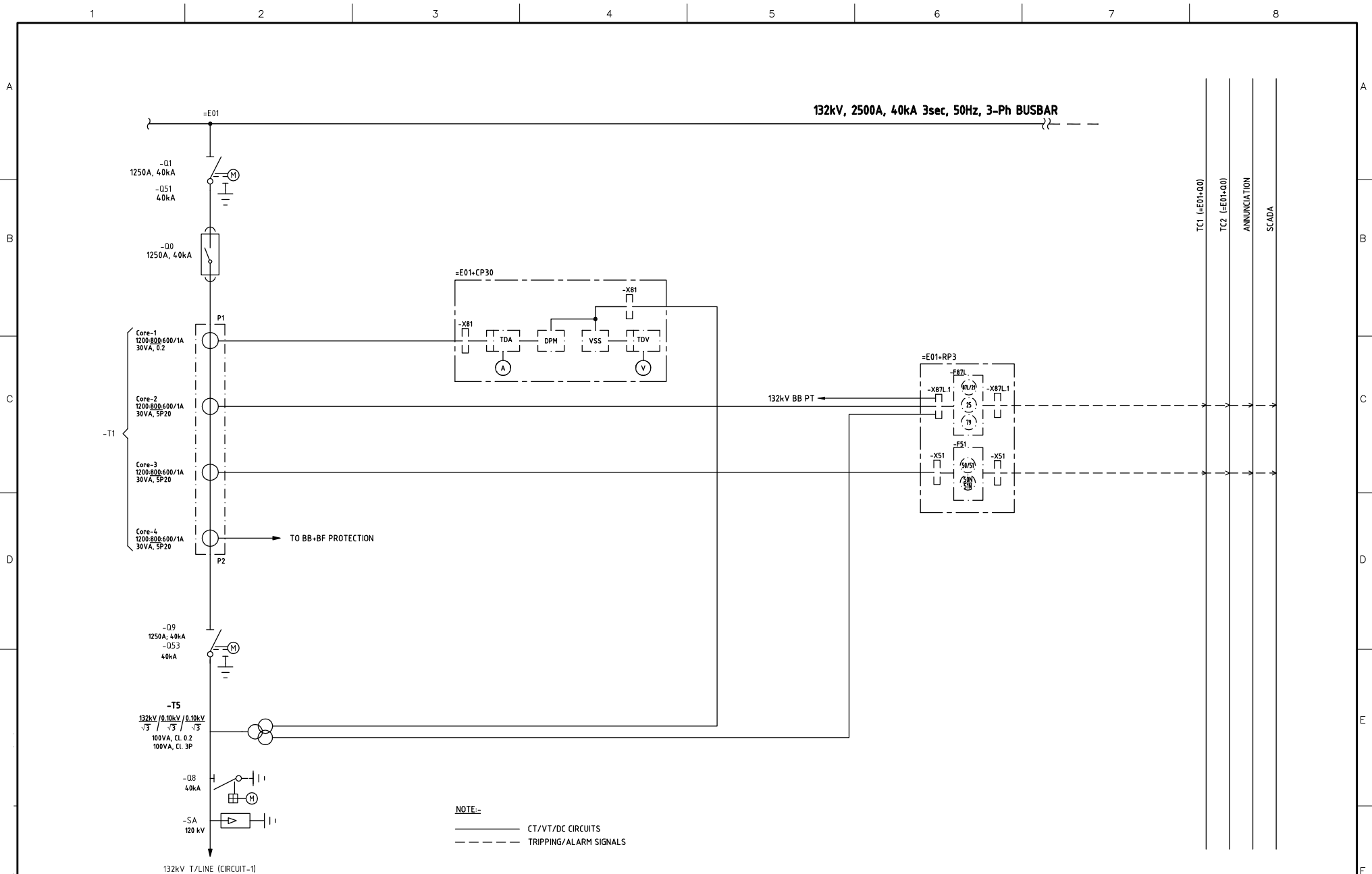


1	Revised as Per l	Dec. 04, 17	UA		
RevNo	Revision note	Date	Check		
Drawing Status: FOR APPROVAL		Project Manager Sign: Date:			
Client:					
Consultant					
Contractor:					
Contract No./Project Title: 132/11.5 kV GIS SUBSTATION 132kV LINE-1 (=E01) RELAY PANEL +RP3					
Design:	HRSA	Check:	ZA	Sheet	1 of 1
Approve:	UA	Date	Sep. 5, 17	Scale	1:1
File Ref: 17P003P-DESIGN		A3 Drawing No. 17P003P-FAFSR01		REV.No.	1

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SHEET NO.		DRAWING_TITLE_01		DRAWING_TITLE_02		DRAWING_TITLE_03		FILE_REF		REV_NO.0		REV_NO.1		REV_NO.2		FOR PRODUCTION		AS MANF.		AS BUILT	
A	01	132kV LINE-1 (=E01)		RELAY PANEL +RP3		COVER SHEET		=E01+RP3				X									
	02	132kV LINE-1 (=E01)		RELAY PANEL +RP3		LIST OF CONTENTS		=E01+RP3				X									
	03	132kV LINE-1 (=E01)		RELAY PANEL +RP3		GENERAL CHARACTERISTICS		=E01+RP3				X									
	04	132kV LINE-1 (=E01)		RELAY PANEL +RP3		SYMBOLS AND LEGENDS		=E01+RP3				X									
	05	132kV LINE-1 (=E01)		RELAY PANEL +RP3		SINGLE LINE DIAGRAM		=E01+RP3				X									
B	06	132kV LINE-1 (=E01)		RELAY PANEL +RP3		LIST OF APPARATUS		=E01+RP3				X									
	10	132kV LINE-1 (=E01)		RELAY PANEL +RP3		AC SUPPLY DISTRIBUTION		=E01+RP3				X									
	20	132kV LINE-1 (=E01)		RELAY PANEL +RP3		DC SUPPLY DISTRIBUTION		=E01+RP3				X									
	21	132kV LINE-1 (=E01)		RELAY PANEL +RP3		DC FAILURE INDICATION		=E01+RP3				X									
	25	132kV LINE-1 (=E01)		RELAY PANEL +RP3		LINE DIFF PROTECTION CT & VT CIRCUIT		=E01+RP3				X									
C	26	132kV LINE-1 (=E01)		RELAY PANEL +RP3		O/C & E/F PROTECTION CT CIRCUIT		=E01+RP3				X									
	30	132kV LINE-1 (=E01)		RELAY PANEL +RP3		AUX. SUPPLY OF PROTECTION RELAYS		=E01+RP3				X									
	31	132kV LINE-1 (=E01)		RELAY PANEL +RP3		LINE DIFF RELAY LOGICAL INPUTS		=E01+RP3				X									
	31A	132kV LINE-1 (=E01)		RELAY PANEL +RP3		LINE DIFF RELAY LOGICAL INPUTS		=E01+RP3				X									
	32	132kV LINE-1 (=E01)		RELAY PANEL +RP3		OVER CURRENT & EARTH FAULT LOGICAL INPUTS		=E01+RP3				X									
D	33	132kV LINE-1 (=E01)		RELAY PANEL +RP3		TRIP SIGNALS & TRIP CIRCUIT STATUS		=E01+RP3				X									
	34	132kV LINE-1 (=E01)		RELAY PANEL +RP3		TRIP CIRCUIT-1		=E01+RP3				X									
	35	132kV LINE-1 (=E01)		RELAY PANEL +RP3		TRIP CIRCUIT-2		=E01+RP3				X									
	36	132kV LINE-1 (=E01)		RELAY PANEL +RP3		B.F INITIATION CIRCUIT		=E01+RP3				X									
	37	132kV LINE-1 (=E01)		RELAY PANEL +RP3		AR ,CLOSE BLOCK & PERMISSIVE SIGNALS		=E01+RP3				X									
E	40	132kV LINE-1 (=E01)		RELAY PANEL +RP3		ALARM ANNUNCIATION		=E01+RP3				X									
	43	132kV LINE-1 (=E01)		RELAY PANEL +RP3		ANNUNCIATIONS		=E01+RP3				X									
	44	132kV LINE-1 (=E01)		RELAY PANEL +RP3		TRIP CIRCUIT BLOCKING		=E01+RP3				X									
	90	132kV LINE-1 (=E01)		RELAY PANEL +RP3		DEVICE DETAIL (LINE DIFF PROTECTION RELAY)		=E01+RP3				X									
	91	132kV LINE-1 (=E01)		RELAY PANEL +RP3		DEVICE DETAIL (OVER CURRENT & EARTH FAULT RELAY)		=E01+RP3				X									
F	92	132kV LINE-1 (=E01)		RELAY PANEL +RP3		DEVICE DETAIL (RELAYS & MCBs)		=E01+RP3				X									
	93	132kV LINE-1 (=E01)		RELAY PANEL +RP3		DEVICE DETAIL (RELAY TEST BLOCKS)		=E01+RP3				X									
	100	132kV LINE-1 (=E01)		RELAY PANEL +RP3		GENERAL ARRANGEMENT (FRONT VIEW)		=E01+RP3				X									
	101	132kV LINE-1 (=E01)		RELAY PANEL +RP3		GENERAL ARRANGEMENT (SIDE & REAR VIEW)		=E01+RP3				X									
						Prepared Sep. 5, 17 HRSA		132kV LINE-1 (=E01) RELAY PANEL +RP3				FOR APPROVAL									
1		Revised as Per Comments Date:Nov. 15, 17		UA Dec. 04, 17		Approved Sep. 5, 17 UA				LIST OF CONTENTS				Department POWER PROJECTS Rev. 1 File Ref: =E01+RP3							
0		FOR APPROVAL		UA Sep. 5, 17		132/115 kV GIS SUBSTATION				DRAWING NUMBER 17P003P-EAFSR01				Sheet 02							
Rev. 26		Revision Note		Appd Date										Cont 03							
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A	RELAY LINE DIFFERENTIAL PROTECTION: ☒ SEL-411L ☐ REL511 ☐ MICOM P442 ☐ OTHERS. O/C & E/F PROTECTION: ☒ SEL-751A ☐ SPAJ140C ☐ MICOM P122 ☐ OTHERS. TRIPPING RELAY: ☒ 6RJ21 ☐ MVAJ 101 ☐ 6RJ23 ☐ OTHERS. DC SUPERVISION RELAY: ☒ 6RX31 ☐ TS-101 ☐ MVAX-31 ☐ OTHERS. RELAY TEST BLOCK: ☐ RTXP-18 ☐ MMLG 01 ☒ 4M300B		APPARATUS MOUNTING: ☒ FIXED ☐ PLUG-IN ☐ DRAW-OUT ☐ OPERATION: ☐ BEHIND DOOR ☐ PADLOCKING ☐ THROUGH DOOR ☐ INTER LOCK ☐ SHUTTER ☒ AS PER SPEC.		DEGREE OF PROTECTION PROTECTION: ☐ IP 30 ☐ IP 40 ☐ IP 44 ☒ IP 55		LABEL LABEL: ☒ STAINLESS STEEL ☒ RIVETED ☐ ALUMINUM ☐ SCREWED ☐ PLASTIC ☐ SELF STICK ☒ ENGRAVED ☐ GLUED ☐ PRINTED ☐ OTHERS COLOR: <u>BLACK PRINTING</u> LANGUAGE: <u>ENGLISH</u>			
B			CONNECTIONS CONNECTION: ☐ DIRECT ☐ TO LUGS ☒ TO TERMINALS ☐ ACCESS: ☐ FRONT ☒ REAR ☐ LEFT/RIGHT SIDE CABLE ENTRY: ☐ TOP ☒ BOTTOM ☐ LEFT/RIGHT SIDE ACCESSORIES: ☐ SCREWS ☒ GLAND PLATE ☒ CABLE GLAND		ENCLOSURE ENCLOSURE: ☐ WEATHERPROOF ☐ END SHEETS ☐ CABLE DUCT ☒ UNIVERSAL PRESENTATION: ☒ FIXED FRONT ☒ PLAIN DOOR (REAR) WITH HANDLE WITH KEY ☐ TRANSPARENT DOOR ☒ ☐ FUNCTIONAL DOOR ☐ PAD LOCKABLE ☐ OTHERS DIMENSION: ☐ 600x600x2200mm ☐ 800x600x2200mm ☐ OTHERS ☒ 800x800x2200mm COLOR PAINTING: ☐ STANDARD ☒ EXTERIOR: RAL 7035 ☒ INTERIOR: RAL 9001 ☐ SPECIAL REQUIREMENT		PACKING ☒ LAND TRANSPORT ☐ OTHERS APPROXIMATE WEIGHT: _____			
C	ALARM & ANNUNCIATION ANNUNCIATOR: <u>AC 220V</u> <u>DC 220V</u> ☐ 8-WINDOWS ☐ 8-WINDOWS ☐ 16-WINDOWS ☐ 16-WINDOWS ☐ OTHERS. ☐ OTHERS. ALARM: <u>AC 230V</u> <u>DC220V</u> ☐ HOOTER ☐ HOOTER ☐ BELL ☐ SIREN ☐ OTHERS. ☐ OTHERS.		AUXILIARY WIRING VT CIRCUIT: ☐ 1.0 MM SQ. ☒ 2.5 MM SQ. ☐ 4.0 MM SQ. ☐ CT CIRCUIT: ☐ 2.5 MM SQ. ☒ 6.0 MM SQ. ☐ 4.0 MM SQ. ☐ EARTHING: ☒ 4.0 MM SQ. ANNUNCIATION & CONTROL CIRCUIT: ☒ 15 MM SQ. ☐ 2.5 MM SQ. ☐ 4.0 MM SQ. ☐ COLOR: CT & VT: ☒ R, Y, B ☐ BLACK DC CIRCUIT ☒ GRAY ☐ BLACK TRIP CIRCUIT ☒ RED FERRULE MARKED T IN BLACK ☐ BLACK		PARTICULAR NOTES ☒ APPARATUS DEFINED ☐ PARTICULAR DIMENSIONS ☐ EXTENSION OF ☐ SIMILAR TO ☒ SPECIFICATION <u>CPM SPECS BY O&M SOLUTION</u> ☐ DEVIATION <u>NIL.</u> ☐ LOSS MATERIAL DRAWINGS: ☐ FOR INFORMATION ☐ AS MANUFACTURED ☒ FOR APPROVAL ☐ FOR PRODUCTION					
D	SUPPLY OF AUXILIARIES VOLTAGE: <u>AC</u> <u>DC</u> ☐ 110V ☐ 48V ☒ 230V ☐ 110V ☐ 415V ☒ 220V PT SUPPLY: ☒ 100V CT: ☒ 1A ☐ 5A				PUSH BUTTONS/LAMPS LAMP: <u>TYPE</u> <u>VOLTAGE</u> ☒ LED TYPE ☒ 220 Vd.c ☐ NEON LAMP ☐ 110 Va.c ☐ TRANSFORMER TYPE ☒ 230 Va.c PUSH BUTTON: ☒ SPRING LOADED ☐ KEY LOCK ☐ MASHROM HEAD					
	ATMOSPHERIC CONDITION TYPE OF CLIMATE: ☐ TROPICAL ☒ NORMAL TYPE OF ATMOSPHERE: ☒ AS PER SPECIFICATION ☐ ORDINARY ☐ POLLUTED ☐ POLLUTION RISKS: -MOUNTING: ☒ INDOOR ☐ OUTDOOR -AMBIENT TEMPERATURE: ☒ 50°C ☐ 55°C -RELATIVE HUMIDITY: ☐ 95% ☒ 100% ALTITUDE: ☒ UP TO 1000M ☐ MORE THAN 1000M		MARKING OF CIRCUIT POWER: ☒ STANDARD ☐ OTHERS AUXILIARY: ☐ LOCAL END ☒ OPPOSITE END ☐ COMPOSITE		INDICATING INSTRUMENTS (METERS) AMPERE/VOLT METER: ☐ ANALOG ☐ DIGITAL MW/MVAR METER: ☐ ANALOG ☐ DIGITAL ENERGY METER: ☐ ELECTRO MECHANICAL ☐ TOD ☐ TOU			REMARKS _____ _____ _____ _____ _____ _____ _____ _____		
			Prepared Sep. 5, 17 HRSA	132kV LINE-1 (=E01) RELAY PANEL +RP3 GENERAL CHARACTERISTICS		FOR APPROVAL				
			Approved Sep. 5, 17 UA			Department POWER PROJECTS		Rev. 1		
1	Revised as Per Comments Date:Nov. 15, 17	UA	Dec. 04, 17			DRAWING NUMBER		File Ref: =E01+RP3		
0	FOR APPROVAL	UA	Sep. 5, 17	132/115 kV GIS SUBSTATION		17P003P-EAFSR01		Sheet 03		
Rev.	Revision Note	Appd	Date					Cont 04		
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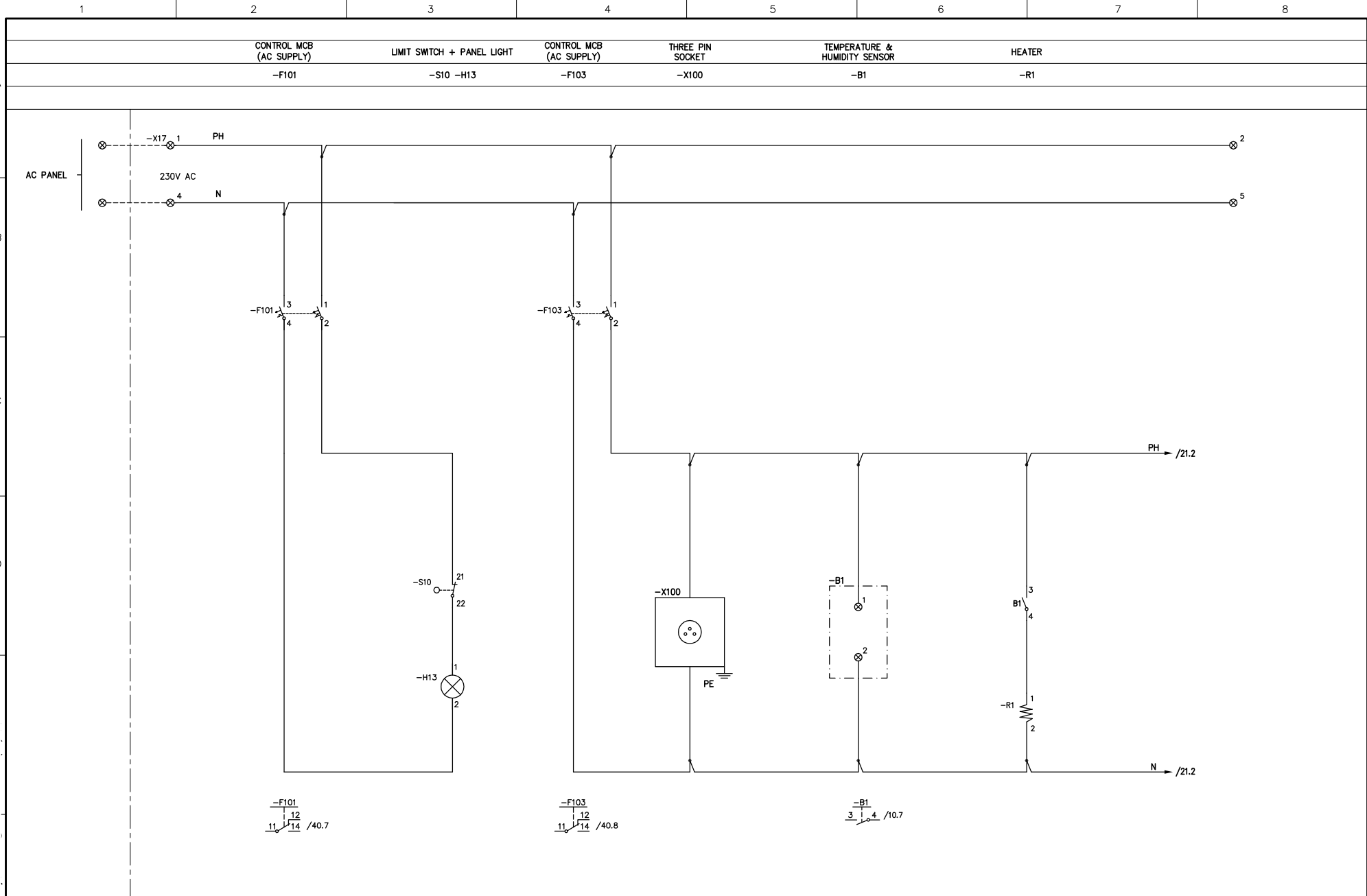
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		Prepared Sep. 5, 17 HRSA		132kV LINE-1 (=E01)		FOR APPROVAL	
		Approved Sep. 5, 17 UA		RELAY PANEL +RP3		Department POWER PROJECTS	
1		Revised as Per Comments Date Nov. 15, 17		SINGLE LINE DIAGRAM		Rev. 1	
0		FOR APPROVAL				File Ref: =E01+RP3	
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SERIAL NO.	ITEM DESIGNATION IN SCHEMATICS	DESCRIPTION	QTY.	TYPE	MAKE	SHEET #	REMARKS
1	-F21	LINE DIFFERENTIAL PROTECTION SUITABLE FOR 1A CT, 100V PT SUPPLY AUXILIARY VOLTAGE : 220Vdc , O/C : (0411L0X6X1C6DDX352525XX)	1	411L	SEL (USA)	90	
2	-F51	LINE OVER-CURRENT & EARTH FAULT PROTECTION SUITABLE FOR 1A CT AUXILIARY VOLTAGE : 220Vdc, O/C : (751A51G1G0X0X810210)	1	751A	SEL (USA)	91	
3	-F74.1, -F74.2	TRIP CIRCUIT SUPERVISION RELAY (2 C/O) AUXILIARY VOLTAGE : 220Vdc	2	6RX31	RMS (AUS)	34, 35	
4	-F101	DP, MCB, 6A, 10kA WITH 1C/O AUXILIARY SWITCH FOR AC SUPPLY	1	iC60N	SCHNEIDER	10	
5	-F103	DP, MCB, 16A, 10kA WITH 1C/O AUXILIARY SWITCH FOR AC SUPPLY	1	iC60N	SCHNEIDER	10	
6	-F201	DP, MCB, 10A, 10kA WITH 1C/O AUXILIARY SWITCH FOR DC SUPPLY	1	C60H-DC	SCHNEIDER	20	
7	-F86.1, -F86.2	TRIPPING & LOCKOUT RELAYS	2	6RJ25	RMS(AUS)	30	
8	-H1	LED TYPE SUPERVISION LAMP, COLOR 'GREEN', 22mmdia, 230 Va.c	1	PLML	GG(ITALY)	21	
9	-H13	PANEL LIGHT, 10W, 230 Va.c	1		LOCAL	10	
10	-PB	PUSH BUTTON FOR ELECTRICAL RESET	1	PPRN3CL	GG(ITALY)	30	
11	-K12.....-K14	AUXILIARY RELAY(4C/O) 220Vdc WITH BASE	3	55.34	FINDER (ITALY)	20, 33	
12	-K15	AUXILIARY RELAY (4-C/O), 230 Va.c WITH BASE	1	55.34	FINDER (ITALY)	21	
13	-S101	KEY LOCKABLE SELECTOR SWITCH (ON/OFF) (4C/O CONTACTS)	1	P012	GG(ITALY)	31	
14	-R1	PANEL HEATER, 60W, 230 Va.c	1		E-LABS (PAK.)	10	
15	-B1	TEMPERATURE AND HUMIDITY SENSOR, 230 Va.c	1	ELH-220	E-LABS (PAK.)	10	
16	-S10	DOOR SWITCH FOR PANEL LIGHT	1		GG (ITALY)	10	
17	-X87L.1,-X87L.2, -X51	RELAY TEST BLOCKS	3	4M300B	RMS (AUSTRALIA)	92	
18	-X100	3-PIN SOCKET, 16A	1		LOCAL	10	
19	-X1-1, -X1-2	SHORTING TYPE TERMINAL SCREW CONNECTIONS ON BOTH SIDES (WITH ACCESSORIES)	LOT-1	SCB-6	CABUR (ITALY)		
20	-X2, -X102, -X103, -X105, -X106, -X3, -X4, -X6, -X7, -X9, -X11, -X13 -X17, -X101, -X104	THROUGH TYPE TERMINAL SCREW CONNECTIONS ON BOTH SIDES (WITH ACCESSORIES)	LOT-1	CBD-4	CABUR (ITALY)		

1	Revised as Per	Comments Date Nov. 15, 17	UA	Dec. 04, 17	132kV LINE-1 (=E01) RELAY PANEL +RP3 LIST OF APPARATUS	FOR APPROVAL	Department POWER PROJECTS	Rev. 1	File Ref: =E01+RP3
0	FOR APPROVAL		UA	Sep. 5, 17		DRAWING NUMBER	17P003P-EAFSR01		
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				Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01) RELAY PANEL +RP3 AC SUPPLY DISTRIBUTION	FOR APPROVAL			
				Approved Sep. 5, 17	UA		Department POWER PROJECTS		Rev. 1	File Ref: =E01+RP3
1	Revised as Per	Comments Date Nov. 15, 17	UA	Dec. 04, 17			DRAWING NUMBER		17P003P-EAFSR01	
0	FOR APPROVAL		UA	Sep. 5, 17	132/115 kV GIS SUBSTATION				Sheet	10
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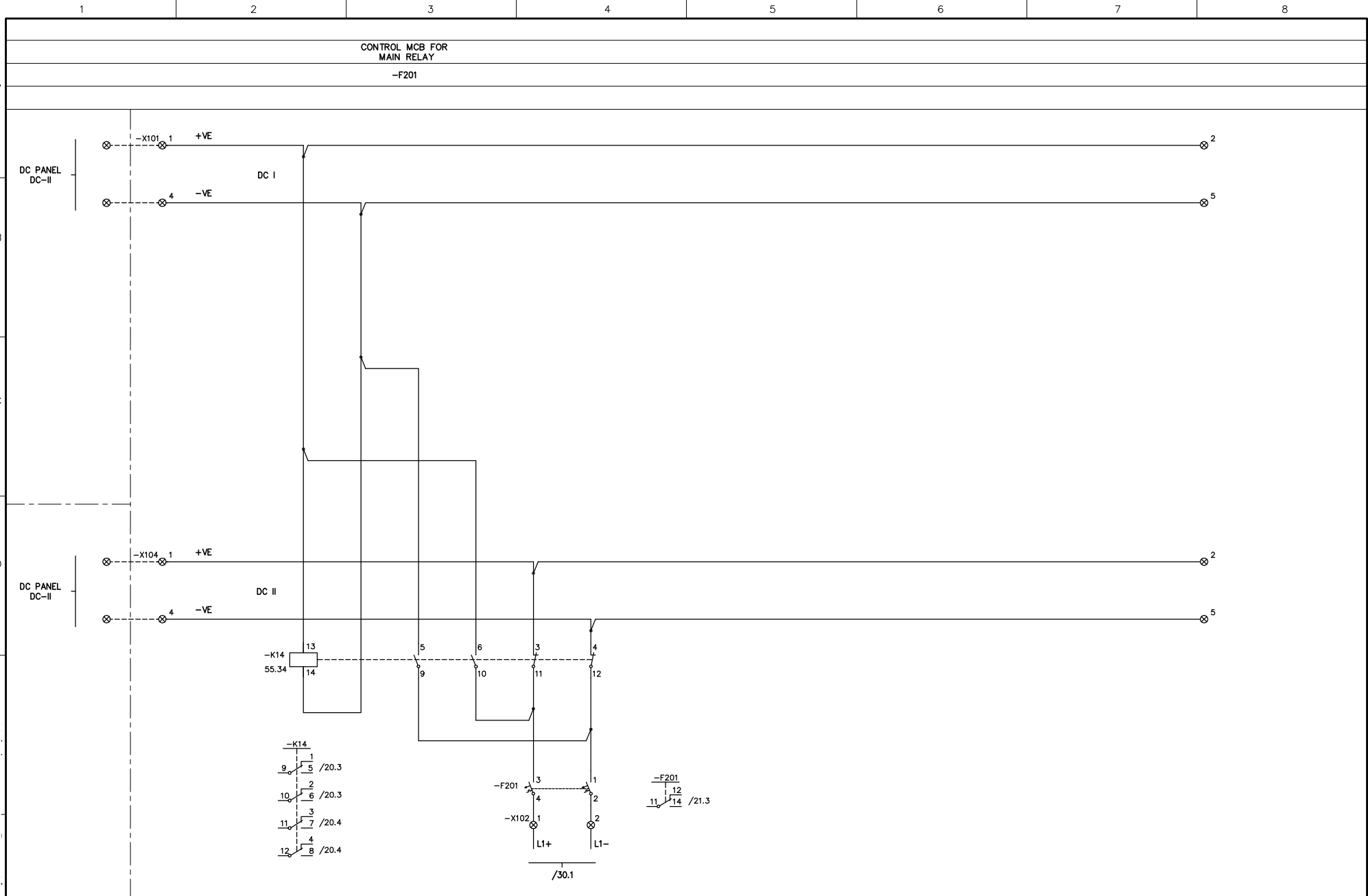
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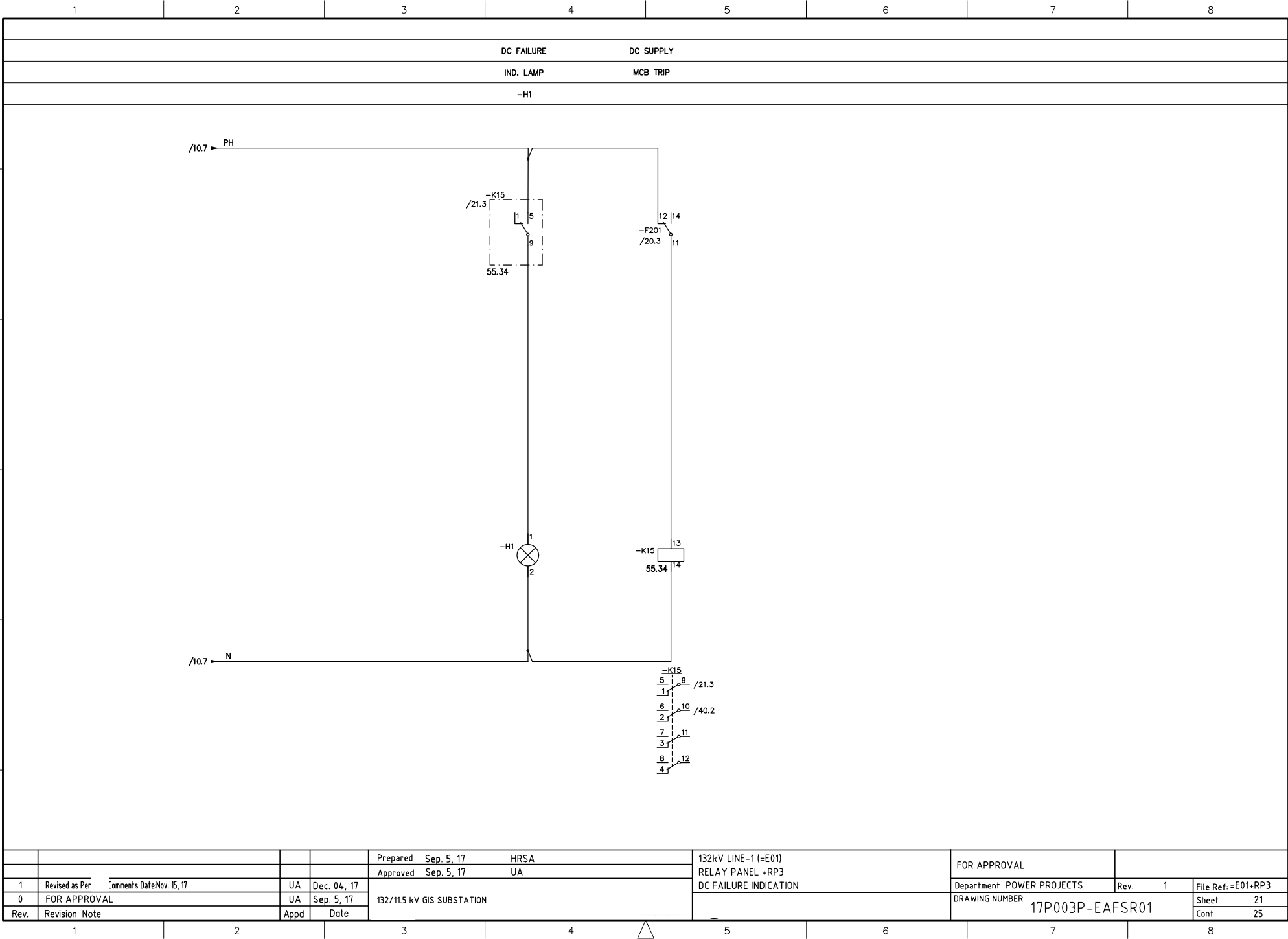
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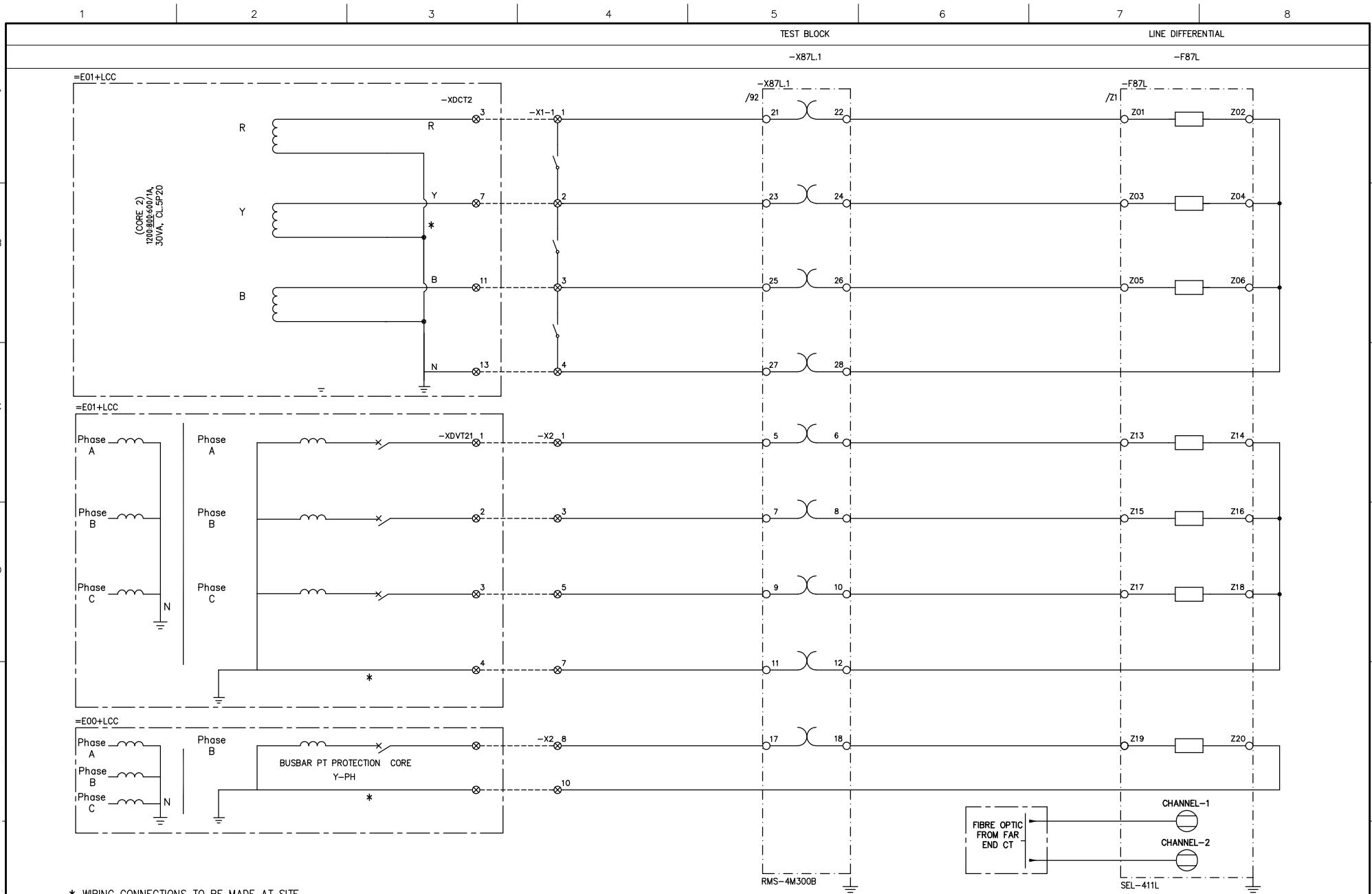
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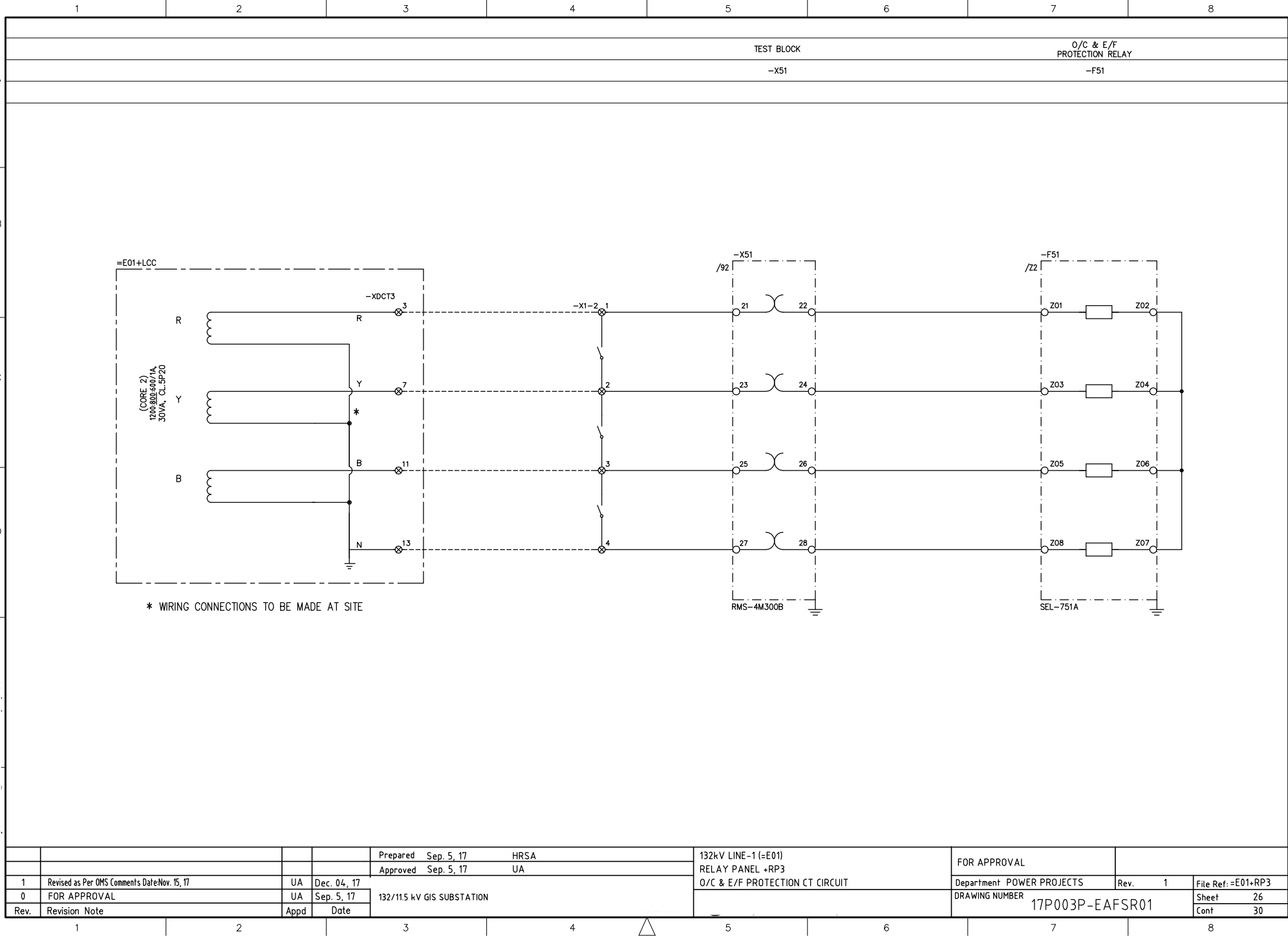
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				Approved Sep. 5, 17 UA	RELAY PANEL +RP3	Department POWER PROJECTS	Rev. 1	File Ref: =E01+RP3
1	Revised as Per Comments Date Nov. 15, 17	UA	Dec. 04, 17	132/115 kV GIS SUBSTATION	DC SUPPLY DISTRIBUTION	DRAWING NUMBER 17P003P-EAFSR01		
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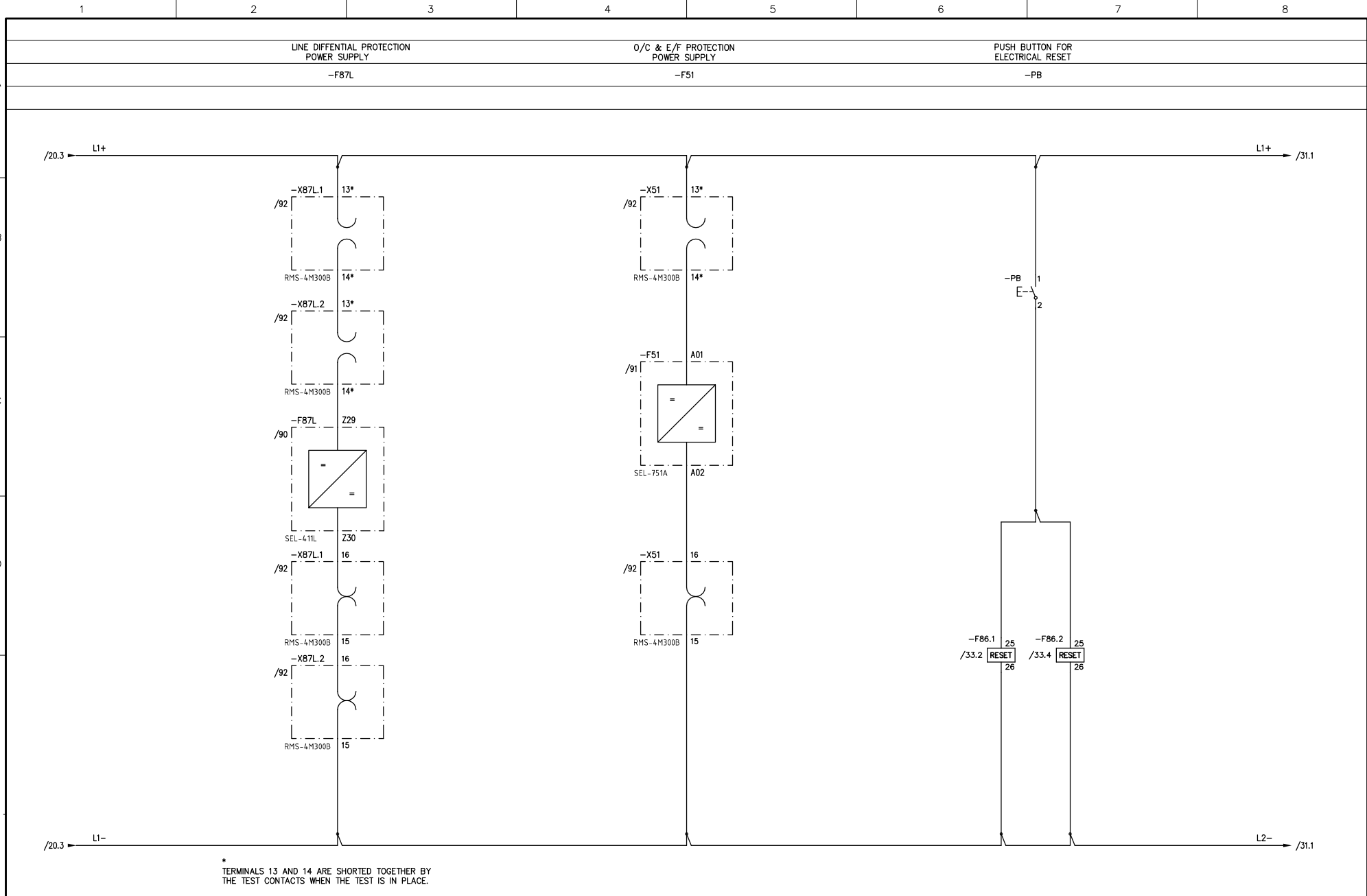
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				Approved Sep. 5, 17	UA	RELAY PANEL +RP3	Department POWER PROJECTS	Rev. 1
1	Revised as Per	Comments Date Nov. 15, 17	UA	Dec. 04, 17		DC FAILURE INDICATION	DRAWING NUMBER	File Ref: =E01+RP3
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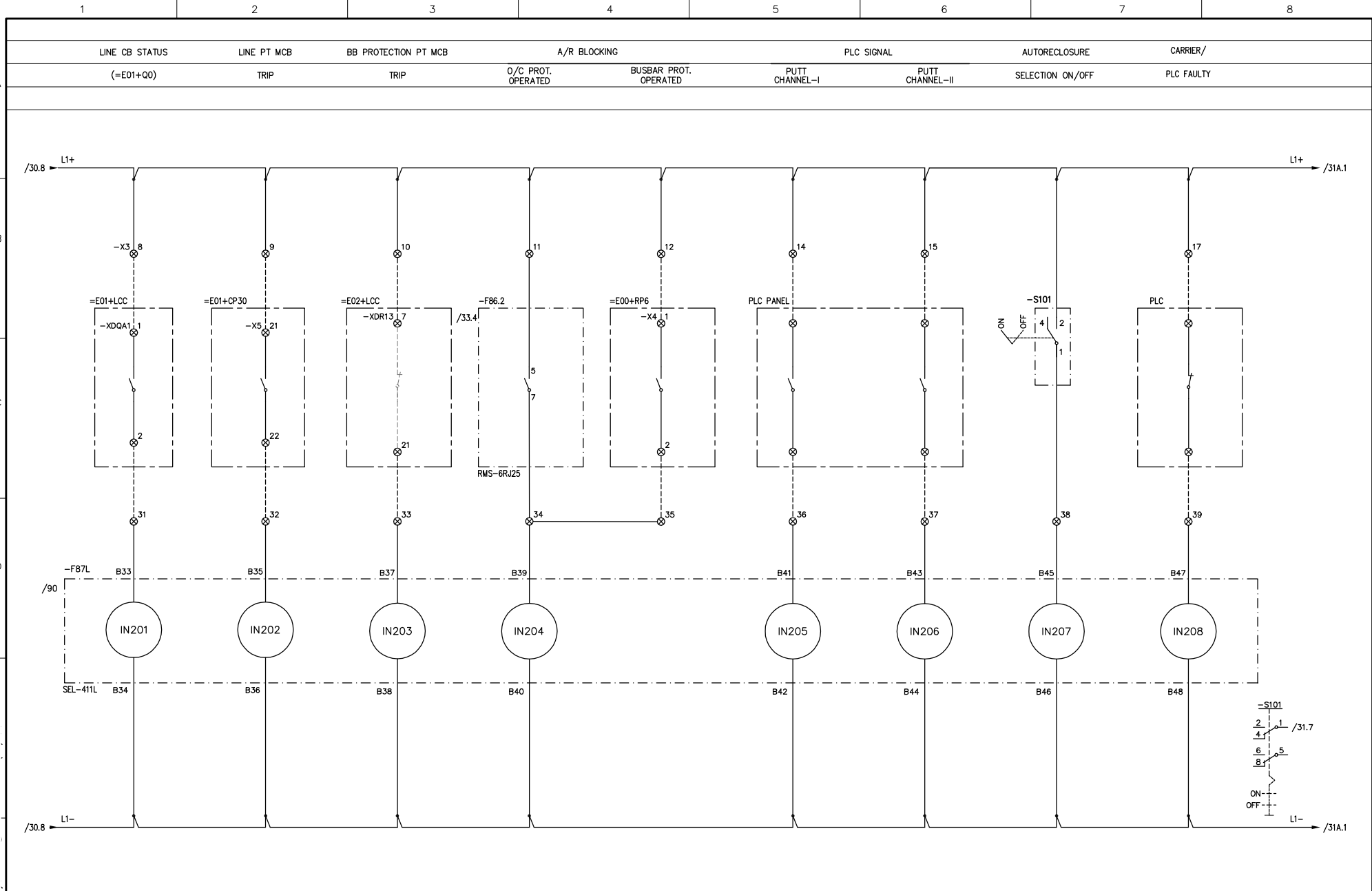
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		Approved Sep. 5, 17 UA		RELAY PANEL +RP3		Department POWER PROJECTS	
1		Revised as Pe Comments Date Nov. 15, 17		LINE DIFF PROTECTION CT & VT CIRCUIT		Rev. 1	
0		FOR APPROVAL				File Ref: =E01+RP3	
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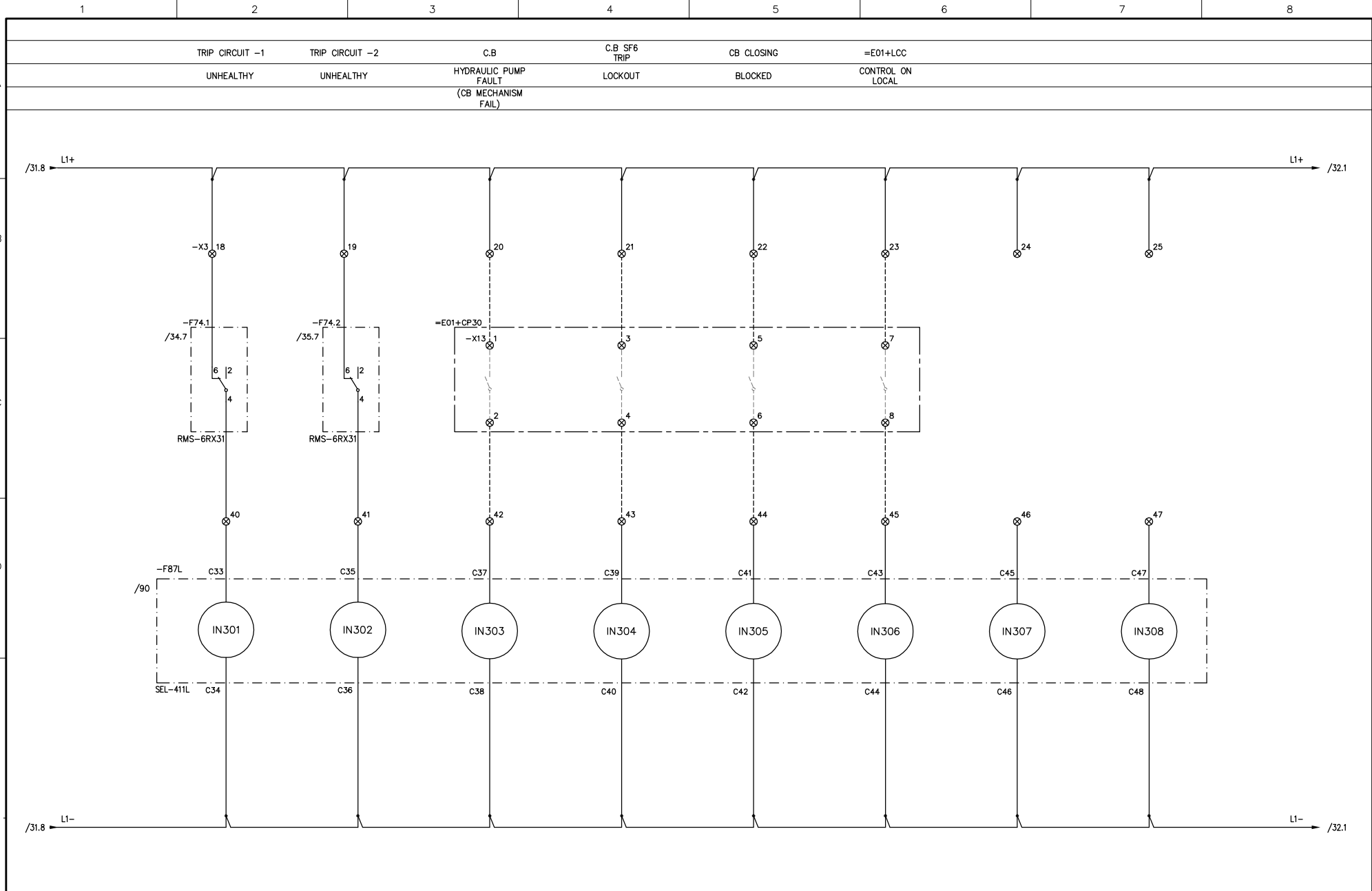
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				Approved Sep. 5, 17	UA		Department POWER PROJECTS	Rev. 1	File Ref: =E01+RP3	
1	Revised as Per OMS Comments Date Nov. 15, 17	UA	Dec. 04, 17	132/115 kV GIS SUBSTATION			DRAWING NUMBER 17P003P-EAFSR01			Sheet 26
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Rev.	Revision Note	Appd	Date							



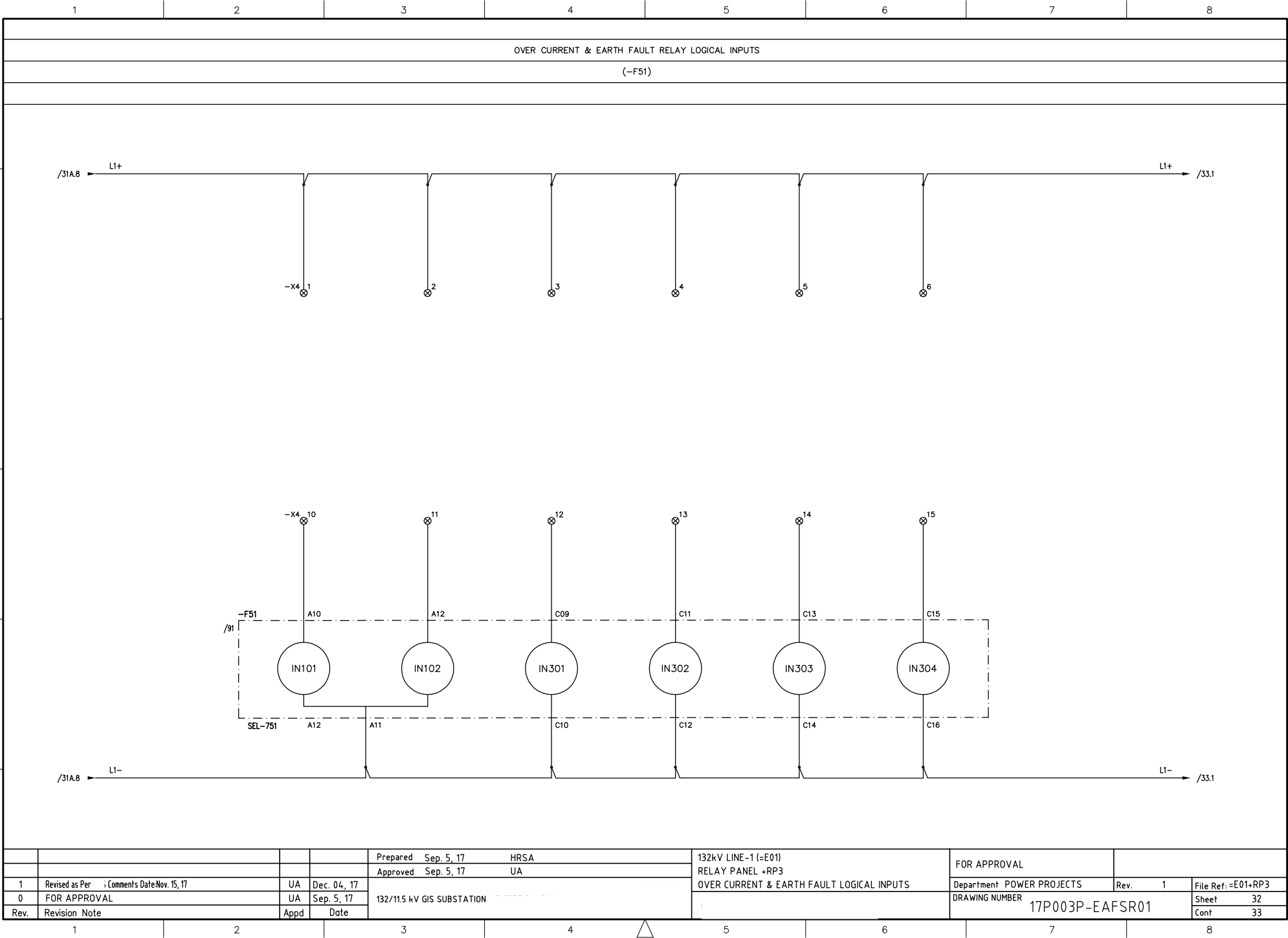
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1		Revised as Per Comments Date Nov. 15, 17	UA	Dec. 04, 17			Department POWER PROJECTS	Rev. 1	File Ref: =E01+RP3
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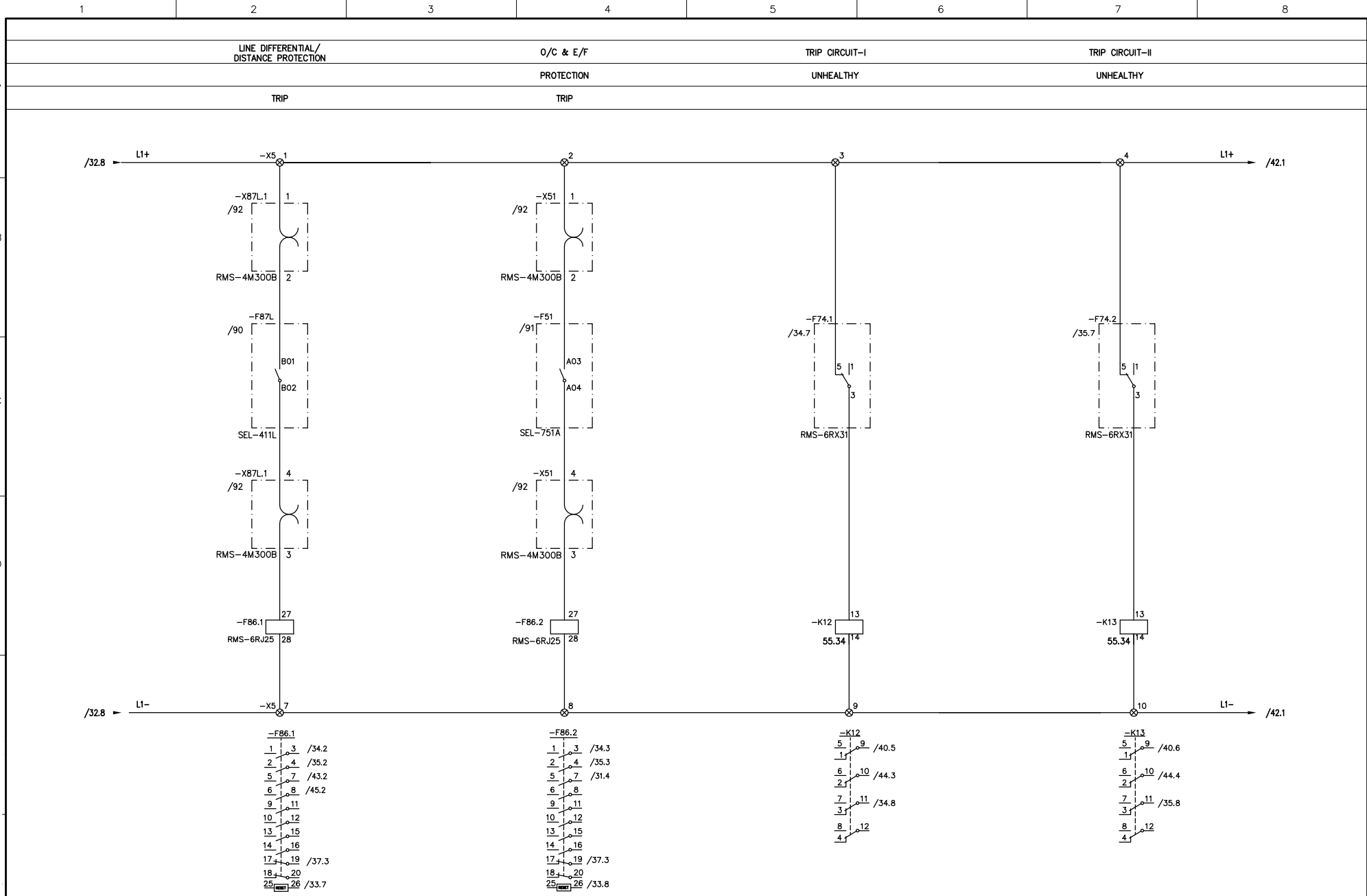


		Prepared Sep. 5, 17 HRSA		132kV LINE-1 (=E01) RELAY PANEL +RP3		FOR APPROVAL	
1 Revised as Per Comments Date: Nov. 15, 17		Approved Sep. 5, 17 UA		LINE DIFF RELAY LOGICAL INPUTS		Department POWER PROJECTS Rev. 1 File Ref: =E01+RP3	
0 FOR APPROVAL		UA Sep. 5, 17		132/115 kV GIS SUBSTATION		DRAWING NUMBER 17P003P-EAFSR01	
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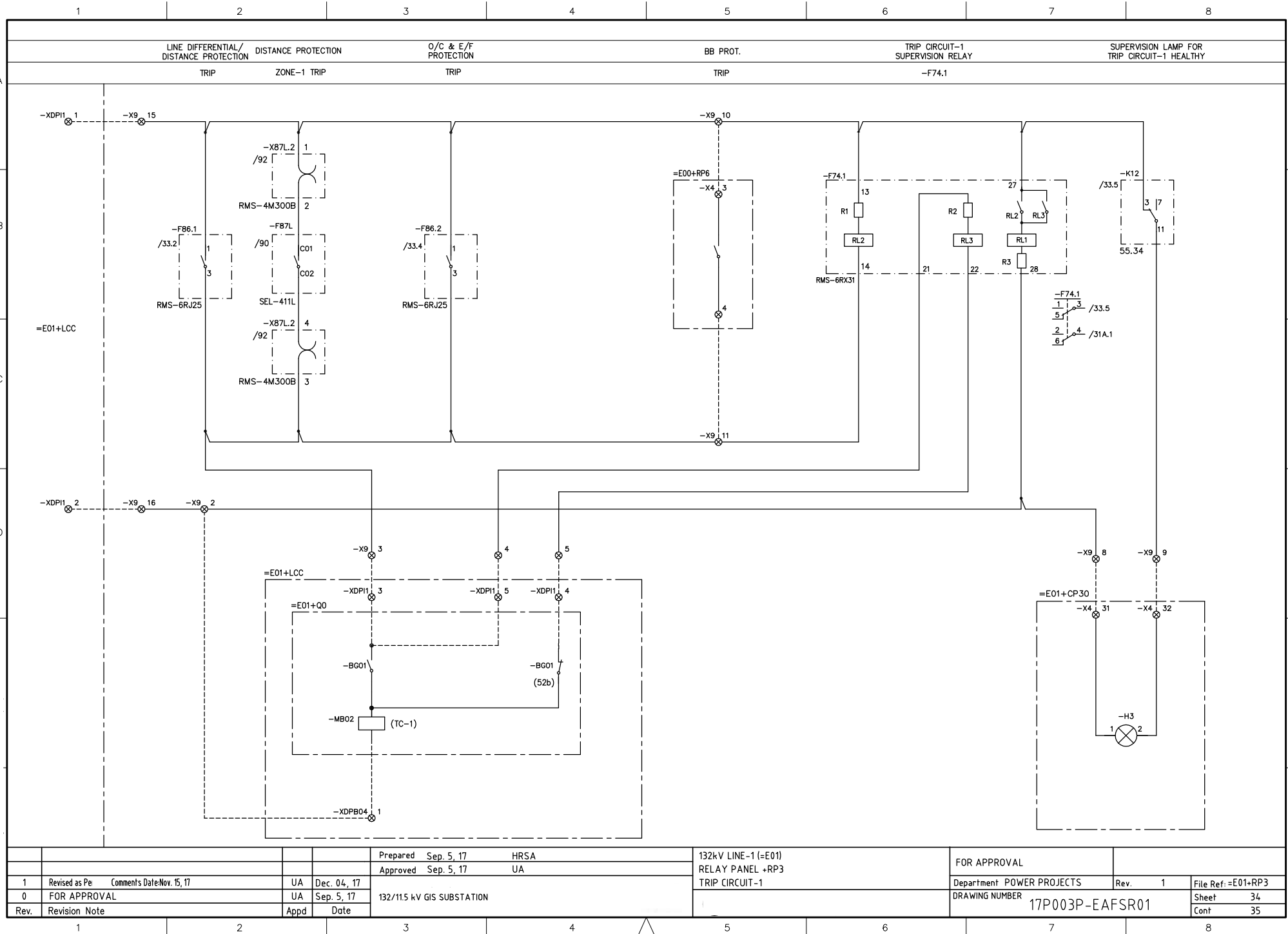


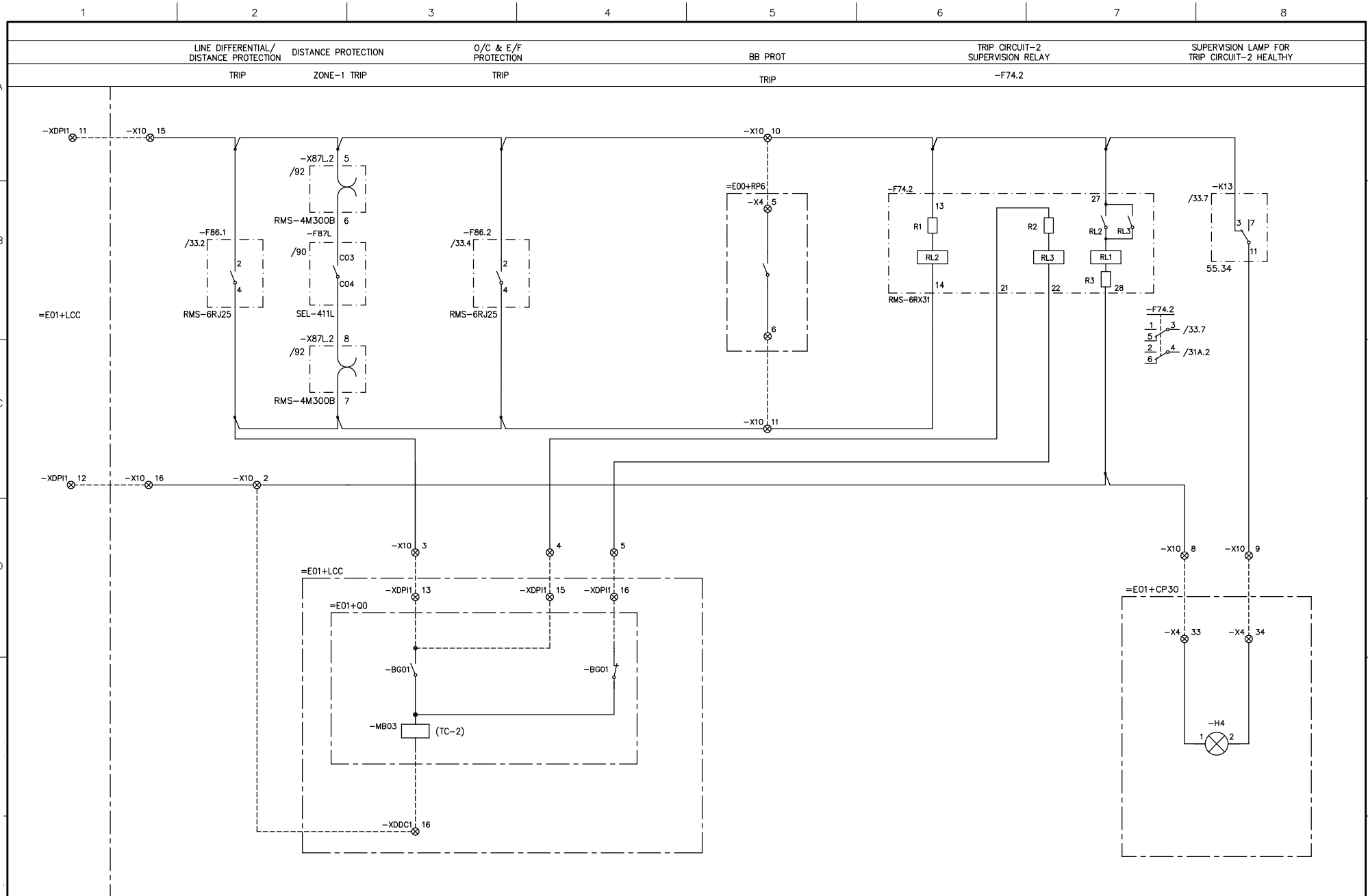
				Prepared Sep. 5, 17 HRSA		132kV LINE-1 (=E01) RELAY PANEL +RP3 LINE DIFF RELAY LOGICAL INPUTS		FOR APPROVAL			
1		Revised as Pe	Comments Date: Nov. 15, 17	UA	Dec. 04, 17	Approved Sep. 5, 17 UA		Department POWER PROJECTS		Rev. 1	File Ref: =E01+RP3
0		FOR APPROVAL		UA	Sep. 5, 17	132/115 kV GIS SUBSTATION		DRAWING NUMBER		17P003P-EAFSR01	
Rev.	Revision Note		Appd	Date						Sheet	31A
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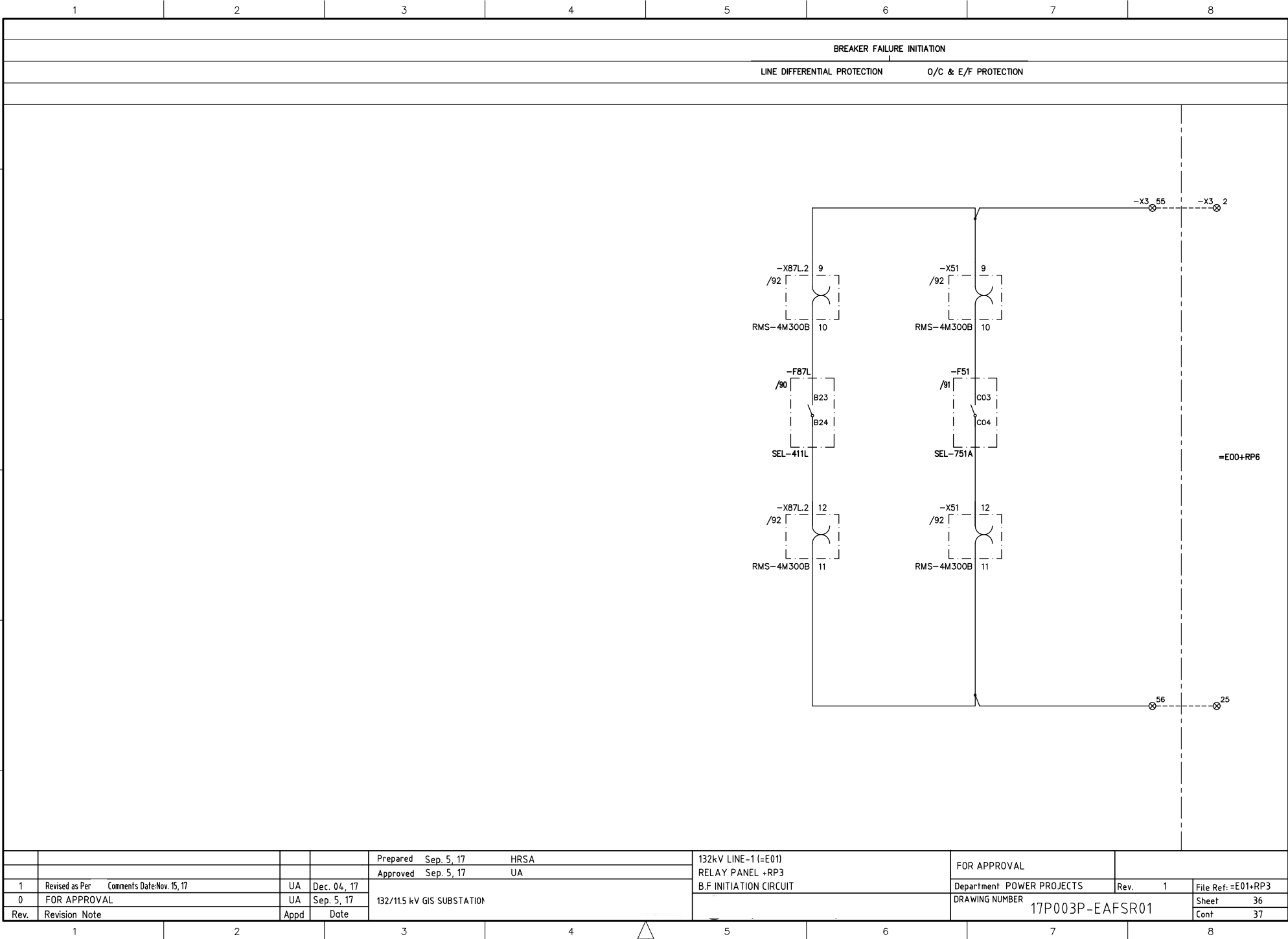


		Prepared Sep. 5, 17		HRSA		132kV LINE-1 (=E01)		FOR APPROVAL			
		Approved Sep. 5, 17		UA		RELAY PANEL +RP3		Department POWER PROJECTS		Rev. 1	
1		Revised as Per OMS Comments Date Nov. 15, 17		UA		TRIP SIGNALS & TRIP CIRCUIT STATUS		DRAWING NUMBER		File Ref: =E01+RP3	
0		FOR APPROVAL		UA				17P003P-EAFSR01		Sheet 33	
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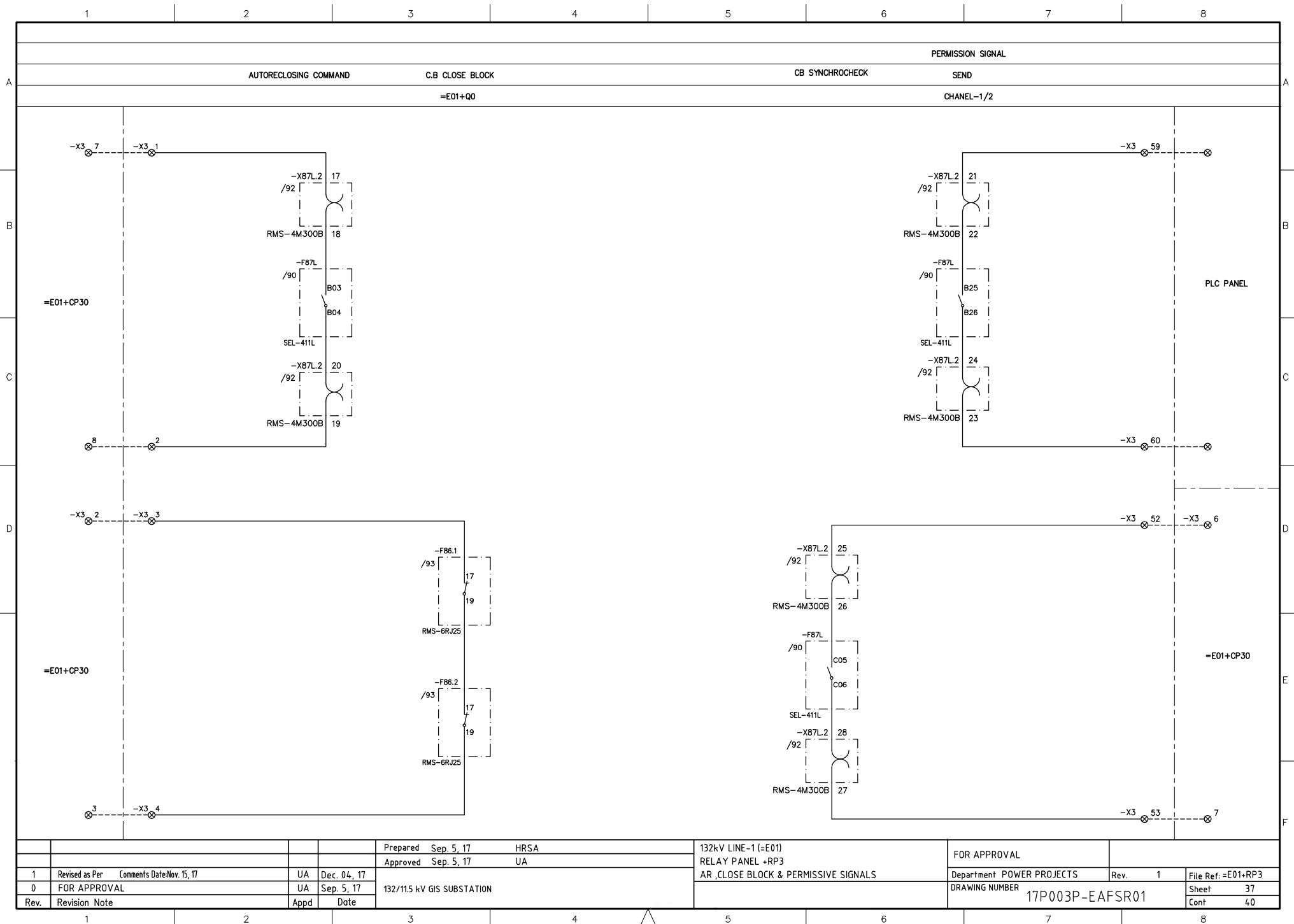


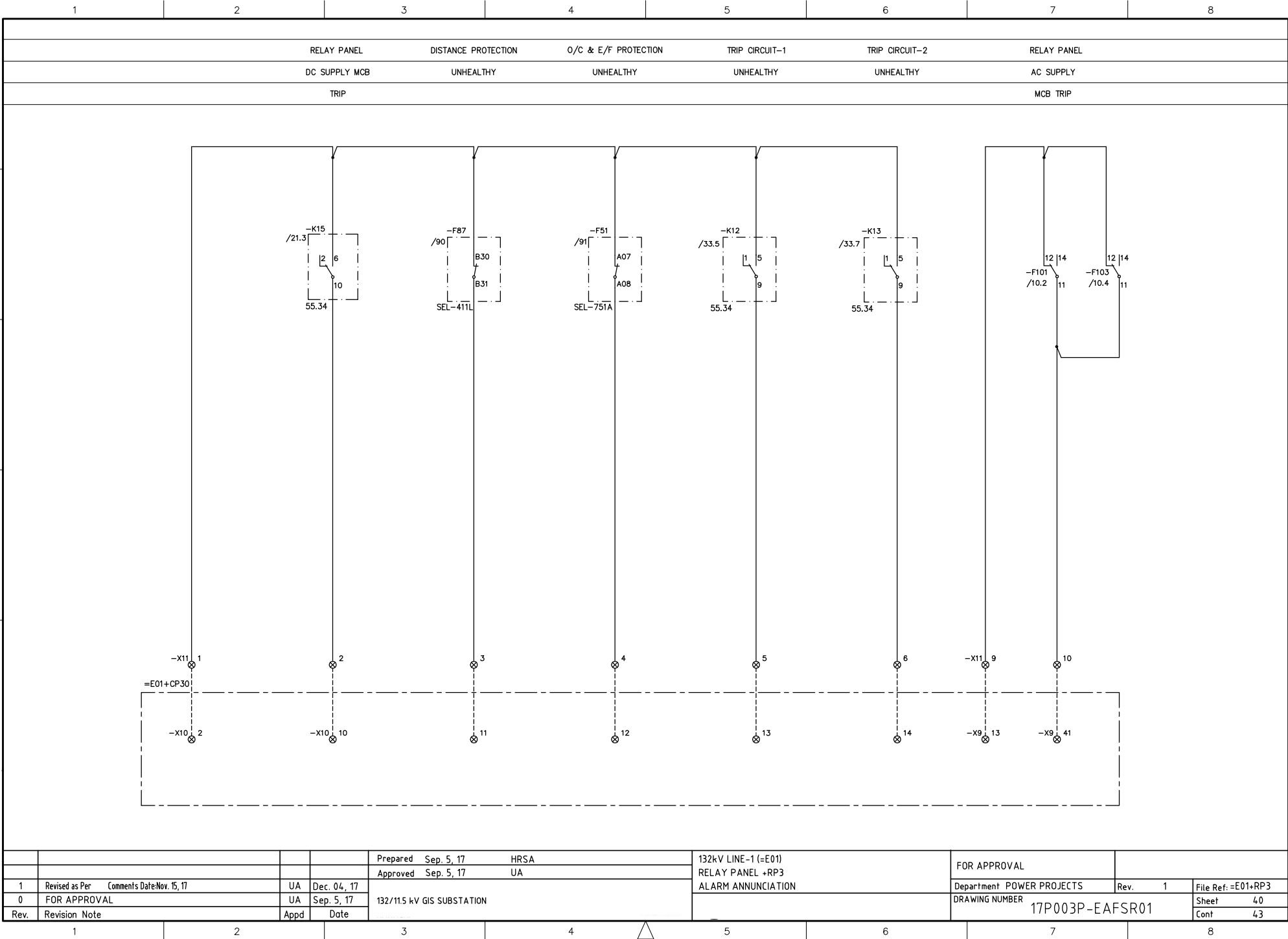


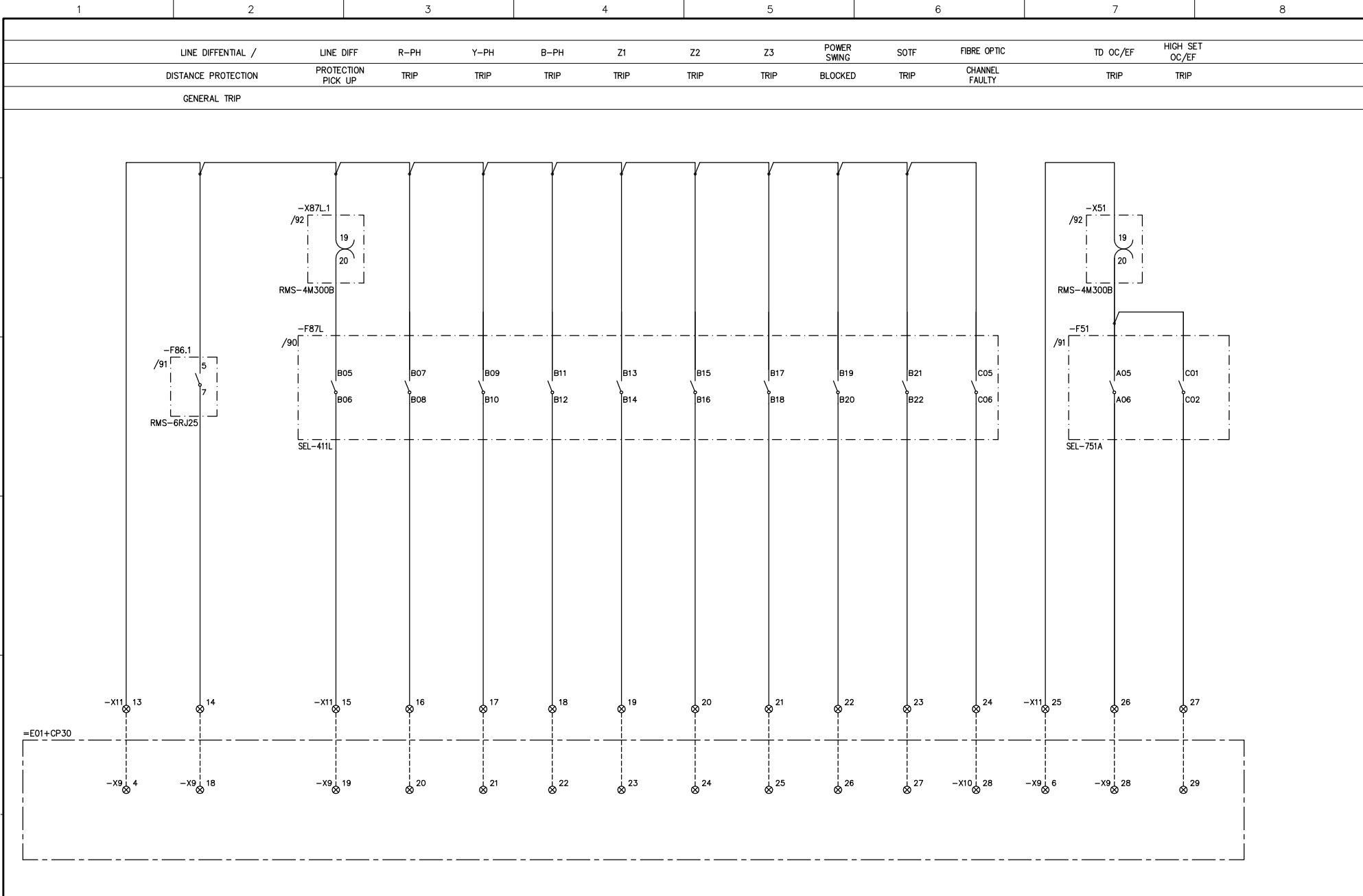
		Prepared Sep. 5, 17 HRSA		132kV LINE-1 (=E01)		FOR APPROVAL	
		Approved Sep. 5, 17 UA		RELAY PANEL +RP3		Department POWER PROJECTS	
1		Revised as Per Comments Date: Nov. 15, 17		TRIP CIRCUIT-2		Rev. 1	
0		FOR APPROVAL				File Ref: =E01+RP3	
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		Appd Date				17P003P-EAFSR01	
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				Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01)	FOR APPROVAL	
				Approved Sep. 5, 17	UA	RELAY PANEL +RP3	Department POWER PROJECTS	Rev. 1
1	Revised as Per	Comments Date: Nov. 15, 17	UA	Dec. 04, 17		B.F. INITIATION CIRCUIT	DRAWING NUMBER	File Ref: =E01+RP3
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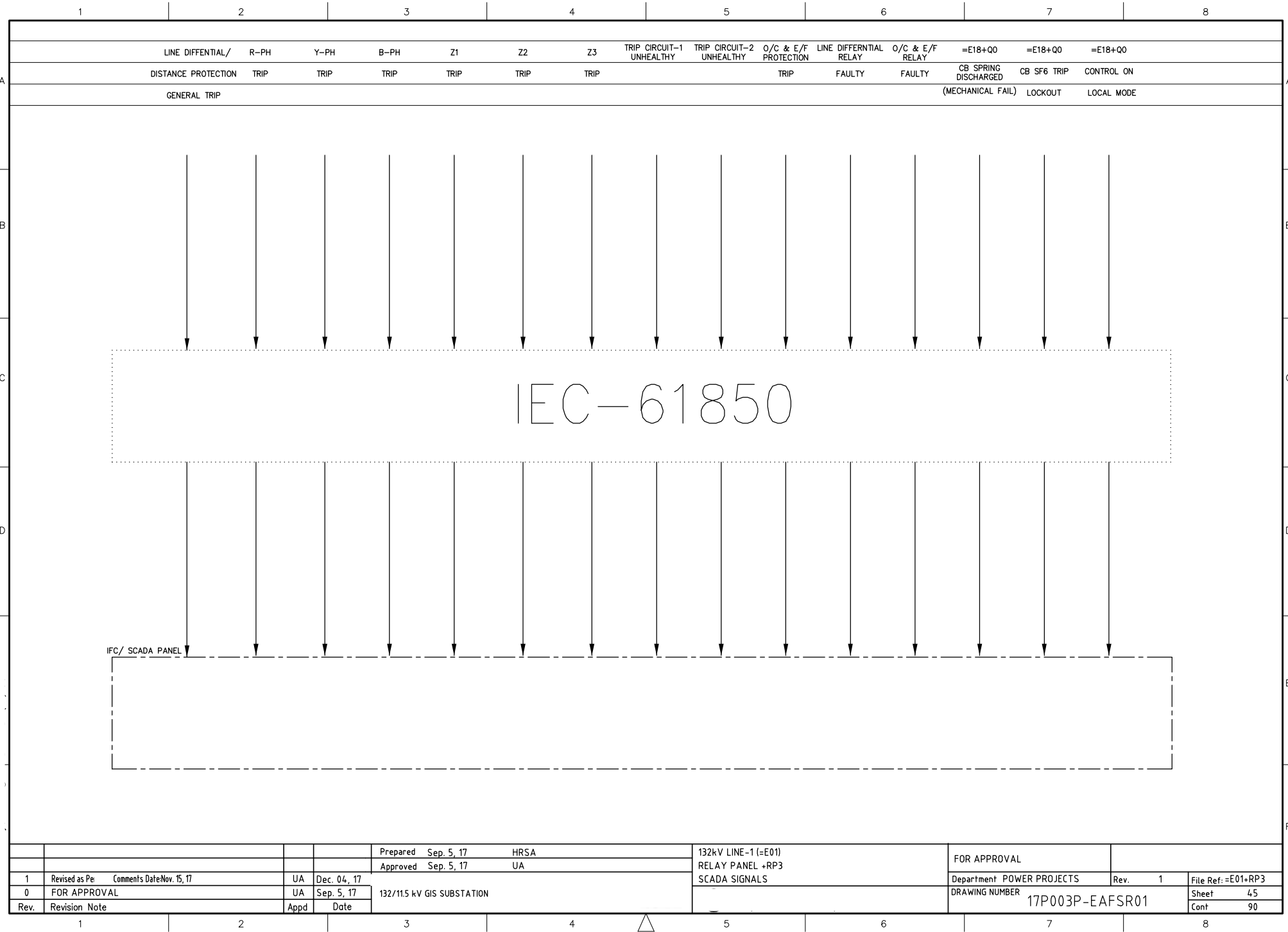




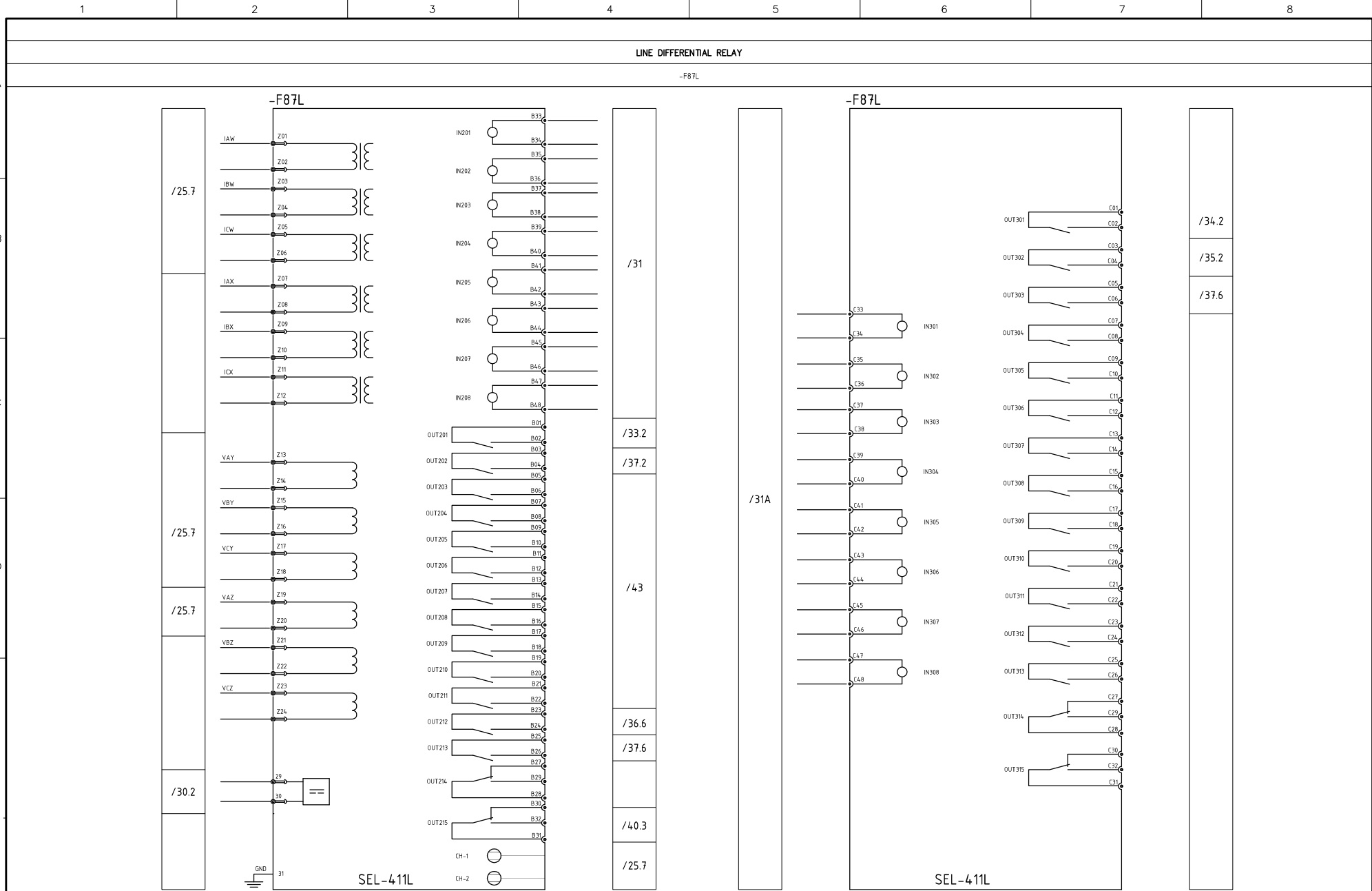


				Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01) RELAY PANEL +RP3 ANNUNCIATIONS	FOR APPROVAL			
				Approved Sep. 5, 17	UA		Department POWER PROJECTS		Rev. 1	File Ref: =E01+RP3
1	Revised as Per Comments Date Nov. 15, 17	UA	Dec. 04, 17	132/115 kV GIS SUBSTATION			DRAWING NUMBER 17P003P-EAFSR01		Sheet 43	
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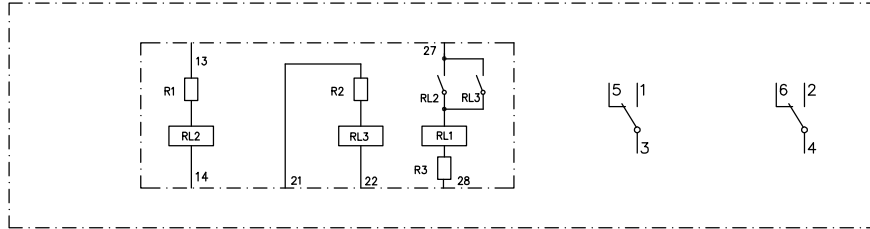
				Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01) RELAY PANEL +RP3 SCADA SIGNALS	FOR APPROVAL	
				Approved Sep. 5, 17	UA		Department POWER PROJECTS	Rev. 1
1	Revised as Per	Comments Date Nov. 15, 17	UA	Dec. 04, 17			DRAWING NUMBER	17P003P-EAFSR01
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				Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01)		FOR APPROVAL			
				Approved Sep. 5, 17	UA	RELAY PANEL +RP3		Department POWER PROJECTS		Rev. 1	File Ref: =E01+RP3
1	Revised as Per Comments Date Nov. 15, 17	UA	Dec. 04, 17			DEVICE DETAIL (LINE DIFF PROTECTION RELAY)		DRAWING NUMBER		17P003P-EAFSR01	Sheet 90
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TRIP CIRCUIT SUPERVISION RELAY

-F74.1	/34.6	/40.5	/34.7
-F74.1	/35.6	/40.6	/35.7

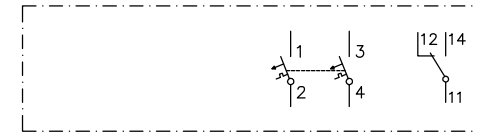


AC & DC MCBs

iC60N	-F101	/10.2	/40.7
	-F103	/10.4	/40.8
C60H-DC	-F201	/20.4	/21.3

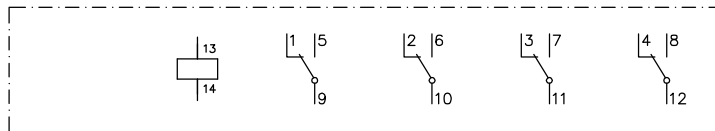
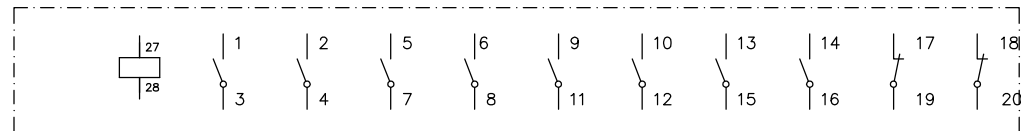
AUXILIARY RELAYS

-K1	/42.2	/25.2	/50.6		
-K2	/42.3	/43.3	/44.3		
-K3	/42.3	/43.3	/44.3		
-K4	/42.4	/43.4	/44.4		
-K5	/42.4	/43.4	/44.4		
-K6	/42.5	/43.5	/44.5		
-K7	/42.5	/43.5	/44.5		
-K8	/42.5	/43.6	/44.6		
-K9	/42.6	/43.6	/44.6		
-K10	/42.7	/21.3	/40.2		
-K11	/42.7	/21.3	/40.2		
-K12	/33.5	/40.5	/44.4		
-K13	/33.7	/40.6	/44.5		
-K14	/20.2	/20.3	/20.3	/20.4	/20.4
-K15	/21.5	/21.3	/40.2		

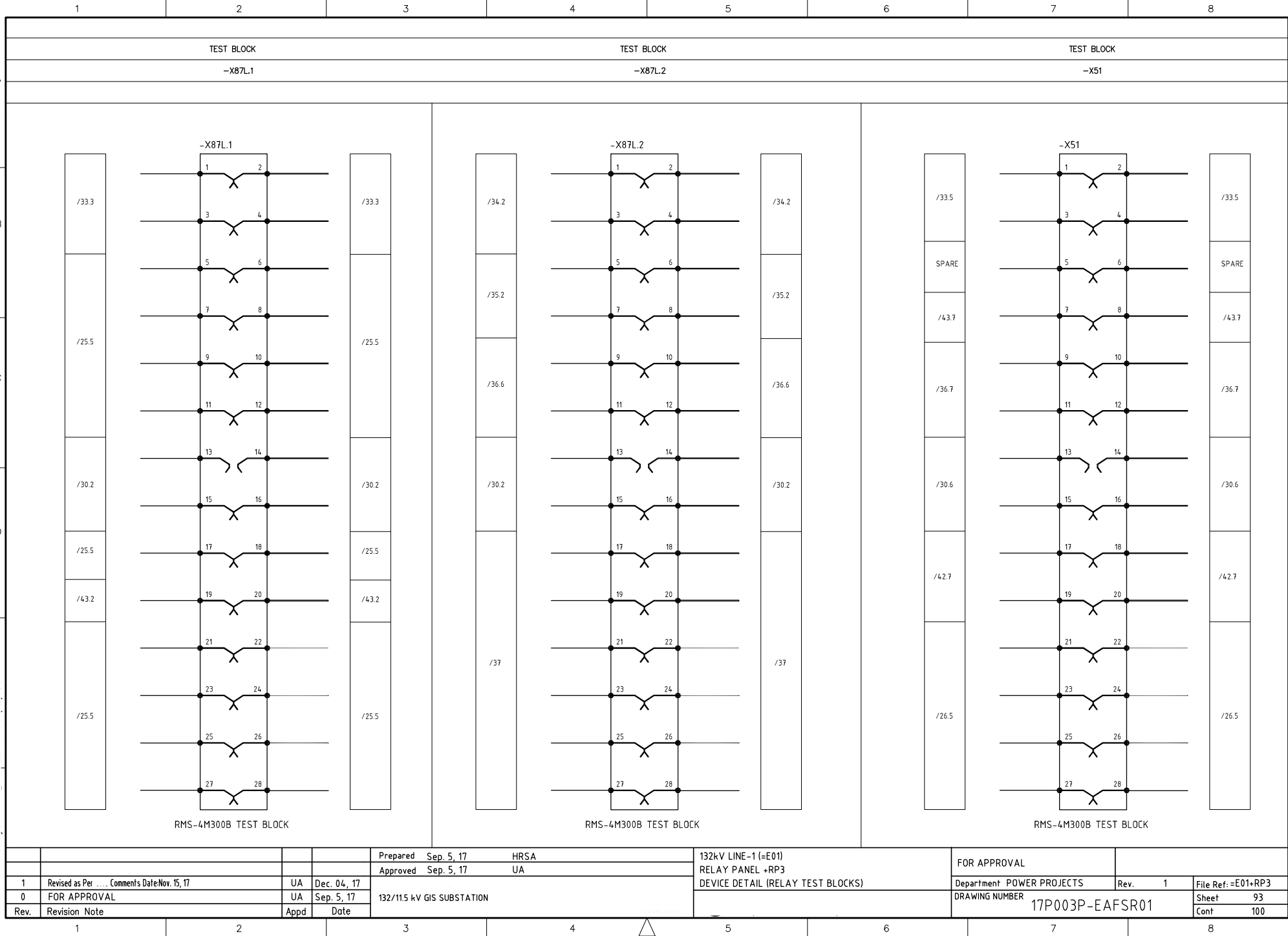


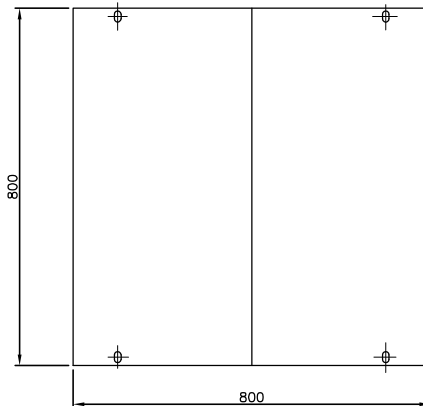
TRIPPING & LOCKOUT RELAYS

-F86.1	/33.2	/34.2	/35.2	/43.2							
-F86.2	/33.4	/34.3	/35.3	/31.4							

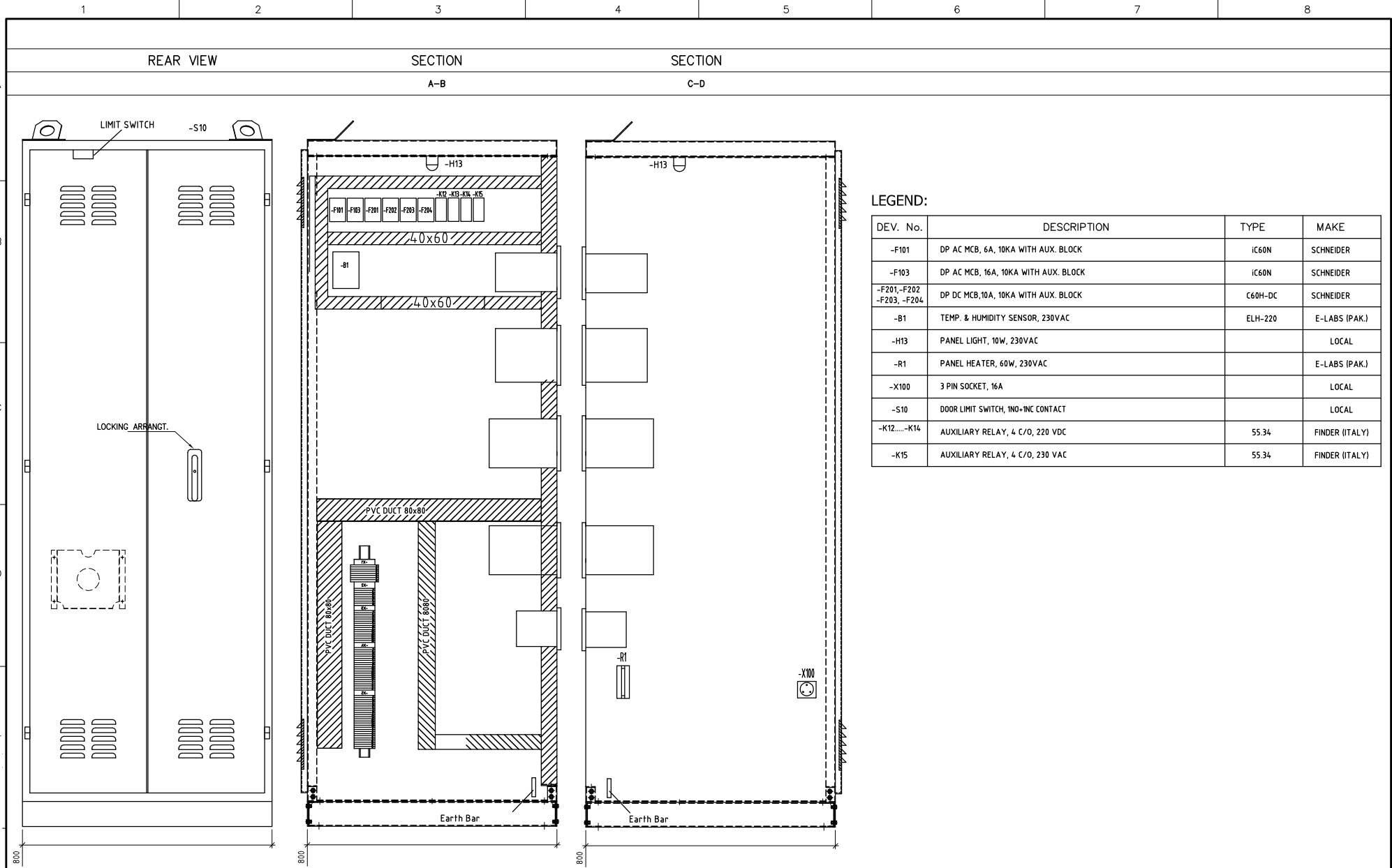


				Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01) RELAY PANEL +RP3 DEVICE DETAIL (RELAYS & MCBs)	FOR APPROVAL			
				Approved Sep. 5, 17	UA		Department POWER PROJECTS		Rev. 1	File Ref: =E01+RP3
1	Revised as Per Comments Date: Nov. 15, 17	UA	Dec. 04, 17	132/115 kV GIS SUBSTATION			DRAWING NUMBER		17P003P-EAFSR01	
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			Prepared Sep. 5, 17	HRSA	132kV LINE-1 (=E01) RELAY PANEL +RP3 GENERAL ARRANGEMENT (FRONT VIEW)	FOR APPROVAL			
			Approved Sep. 5, 17	UA		Department POWER PROJECTS	Rev. 1	File Ref: =E01+RP3	
1	Revised as Per	Comments Date: Nov. 15, 17	UA	Dec. 04, 17	132/11.5 kV GIS SUBSTATION	DRAWING NUMBER 17P003P-EAFSR01	Sheet 100	Cont 101	
0	FOR APPROVAL		UA	Sep. 5, 17					
Rev.	Revision Note		Appd	Date					



				Prepared Sep. 5, 17 HRSA	132kV LINE-1 (=E01)	FOR APPROVAL		
				Approved Sep. 5, 17 UA	RELAY PANEL +RP3			
1	Revised as Per Comments Date Nov. 15, 17	UA	Dec. 04, 17	132/115 kV GIS SUBSTATION	GENERAL ARRANGEMENT (SIDE & REAR VIEW)	Department POWER PROJECTS	Rev. 1	File Ref: =E01+RP3
0	FOR APPROVAL	UA	Sep. 5, 17			DRAWING NUMBER	17P003P-EAFSR01	
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