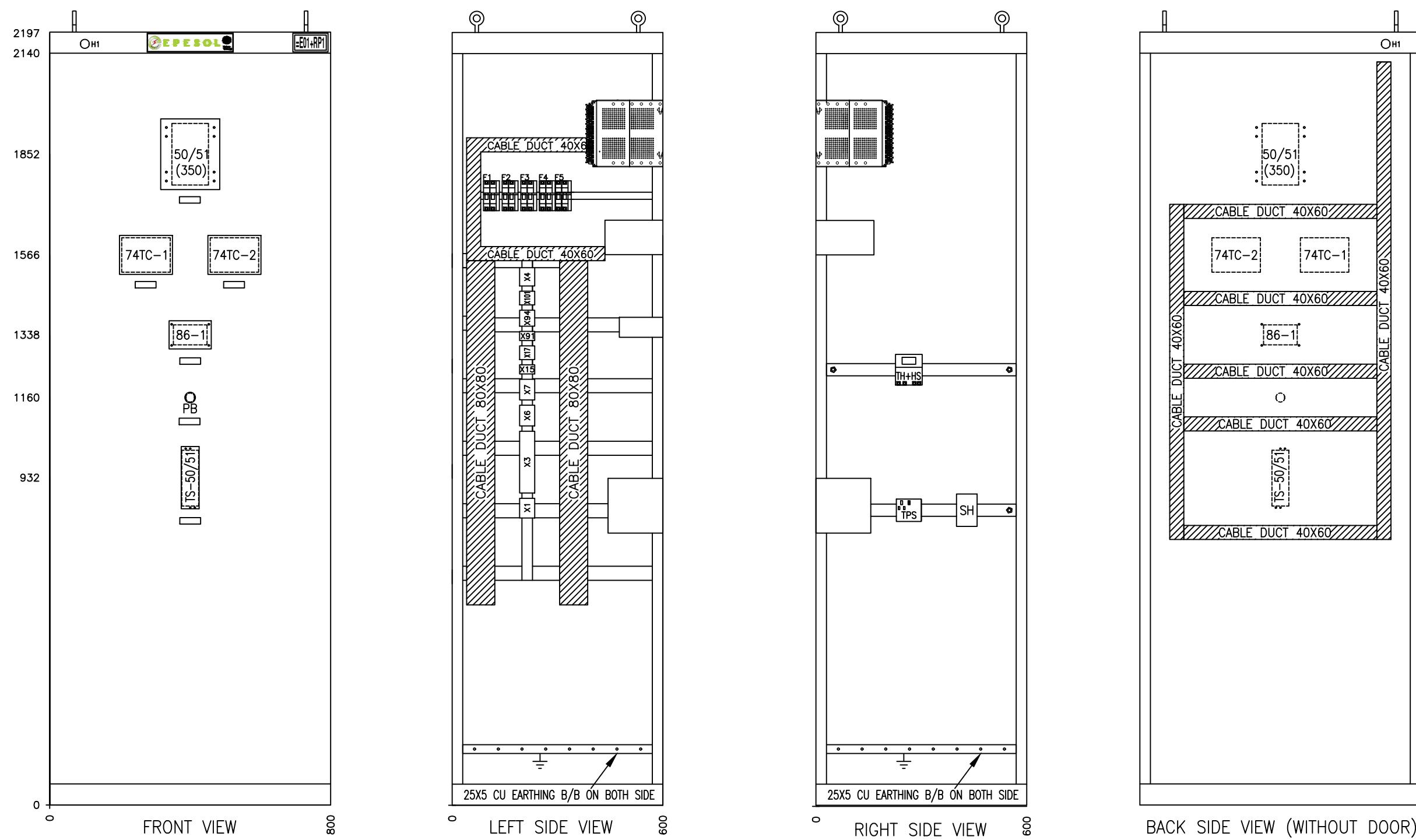


# LAYOUT DRAWING

# 132kV BUS COUPLER PROTECTION PANEL

# TYPE RP1

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: COVER SHEET 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	E P E S O L P v t L t d . 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1423 DATE:15.02.2019	SHT: 01 OF 03 AS BUILT REV: 0
NAH	MFT	MUR					



BACK SIDE VIEW (WITHOUT DOOR)  
FOR FIXING OF CABLE DUCT

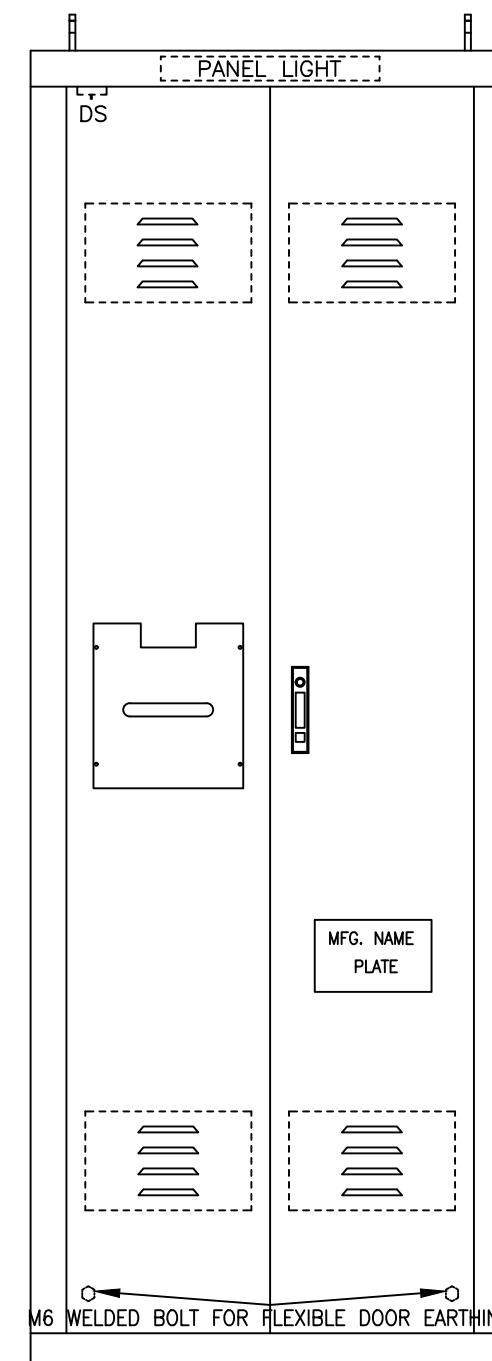
NOTES

1. RELAY PANEL: 800x600x2200 mm
2. FACE SHEET: 800x2200 mm
3. EARTHING BUSBAR 25x5 mm<sup>2</sup>
4. FLEXIBLE EARTHING STRAP 16mm<sup>2</sup>
5. COLOUR: RAL7032
6. CLASS OF PROTECTION: IP51
7. APPLICABLE SPECS: P151:2008

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: LAYOUT DIAGRAM 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	DWG# EPE/ENU-18/P1423 DATE:15.02.2019	SHT: 02 OF 03 AS BUILT REV: 0
NAH	MFT	MUR				

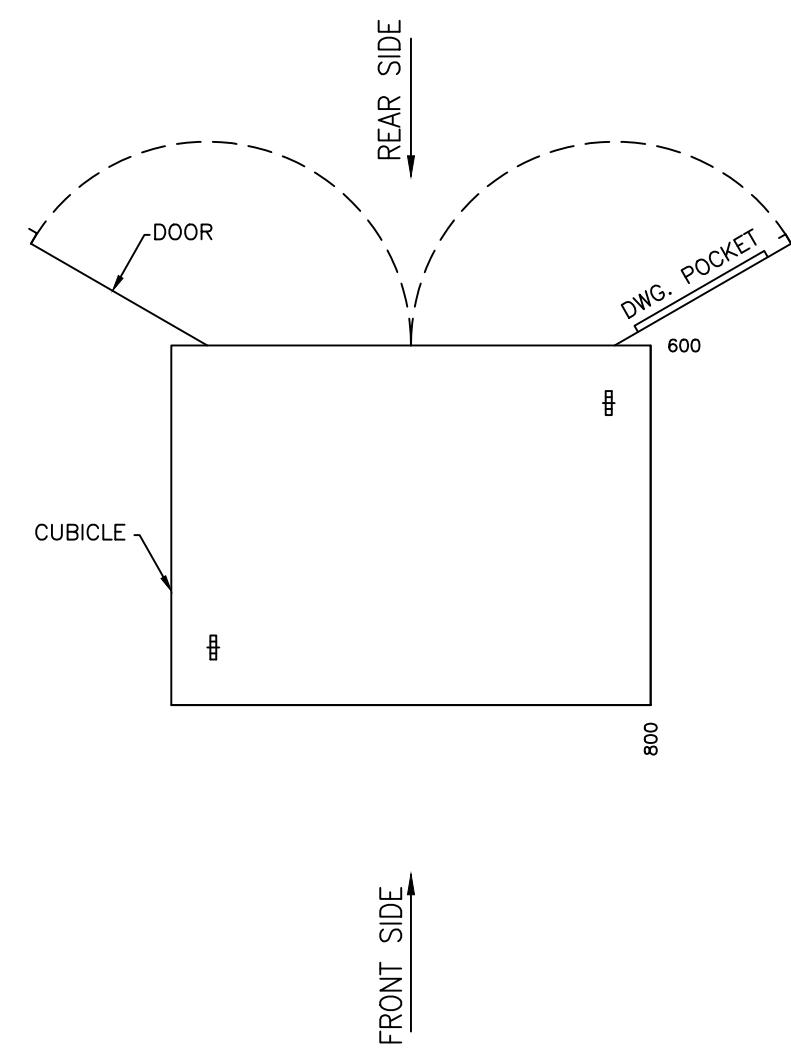


**EPESOL** Pvt. Ltd.  
71-B Garden Block, New Garden Town, Lahore, Pakistan



REAR VIEW (WITH DOOR)

40 [:: PANEL LIGHT ::]

TOP VIEW  
DOOR OPENING DETAIL

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132KV RELAY, CONTROL PANELS	TITLE: LAYOUT DIAGRAM 132KV BUS COUPLER PROTECTION PANEL TYPE RP1	EPE SOL Pvt Ltd 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1423	SHT: 03 OF 03
NAH	MFT	MUR				DATE:15.02.2019	AS BUILT

# LIST OF APPARATUS

## 132kV BUS COUPLER PROTECTION PANEL

### TYPE RP1

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: COVER SHEET 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 <b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1424	SHT: 01 OF 03
NAH	RAA	MUR				DATE:15.02.2019	AS BUILT

	1	2	3	4	5	6	7	8		
SR. #	ITEM DESIGNATION		DESCRIPTION		QTY	TYPE	MAKE	COUNTRY OF ORIGIN	ORDERING INFORMATION	SHEET NO
A										A
1	50/51		OVER CURRENT & EARTH FAULT PROTECTION RELAY		1	350	GE	SPAIN	350-E-P5-C5-H-E-E-N-N-3E-D-N	15
2	86-1		TRIP RELAY, LOCKOUT TYPE, ELECTRICAL & HAND RESET WITH 16 C/O CONTACTS, 110 VDC, WITH BASE		1	BJ-8RP	ARTECHE	SPAIN	BJ-8RP-HB-110VDC	06
3	TS-50/51		TEST BLOCK (14 FINGER)		1	saTECH-TSB14	ARTECHE	SPAIN	111111111AAAB	17
B										B
4	F1, F2		DC MCB, 2 POLE, 10A, WITH ONE C/O CONTACT, 10KA		2	EP100	GE	HUNGARY	EP102UCC10	06
5	F3, F4		AC MCB, 2 POLE, 10A, WITH ONE C/O CONTACT, 10KA		2	G60	GE	HUNGARY	G62C10	13
6	F5		AC ELCB, 2POLE, 16A, 30mA, WITH ONE C/O CONTACT		1	DM100	GE	HUNGARY	DM100C16/030+(CAH1)	13
7	74TC-1, 74TC-2		TRIP CIRCUIT SUPERVISION RELAY		2	TS101	E-LABS	PAKISTAN	TS101	16
8	TH+HS		HUMIDSTAT & THERMOSTAT		1	ELH-220	E-LABS	PAKISTAN		13
c										c
9	SH		SPACE HEATER		1	ELH-220	E-LABS	PAKISTAN		13
10	DS		DOOR SWITCH COVER		1	YSPR+YSMS	YONGSUNG	SOUTH KOREA	YSRP3315 GWB + YSMS-C	13
11	IL		CUBICLE LIGHTING, 3W, 240 VAC		1	YST8	YONGSUNG	SOUTH KOREA	YST8-30-5W	13
D										D
12	TPS		240 VAC, 16A, THREE PIN SOCKET OUTLET		1		LEAR	CHINA		13
13	H1		INDICATION LAMP RED		1	YSPL	YONGSUNG	SOUTH KOREA	YSPL2-DL12 RW	06
14	PB		RESET PUSH BUTTON		1	YSAP1	YONGSUNG	SOUTH KOREA	YSAP12-33R DW	06
E										E
15	X1		DISCONNECTING TERMINAL BLOCK (SCREW TYPE) FOR CT WITH SHORTENING ARRANGEMENT		7	SCB-6	CABUR	ITALY		
16	X3		TERMINAL BLOCKS FOR CONTROL FUNCTION		28	CBD-4	CABUR	ITALY		
E										E
17	X6		TERMINAL BLOCKS FOR TRIP CIRCUIT-1		9	CBD-4	CABUR	ITALY		
18	X7		TERMINAL BLOCKS FOR TRIP CIRCUIT-2		9	CBD-4	CABUR	ITALY		
F										F
19	X15		TERMINAL BLOCKS FOR RS485 COMMUNICATION		4	CBD-4	CABUR	ITALY		
20	X17		TERMINAL BLOCKS FOR AC SUPPLY DISTRIBUTION		10	CBD-4	CABUR	ITALY		
F										F
201	X91		TERMINAL BLOCKS FOR ANNUNCIATOR ALARMS		9	CBD-4	CABUR	ITALY		
APPROVED	CHECKED	DRAWN	PROJECT:  DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132KV RELAY, CONTROL PANELS	TITLE: LIST OF APPARATUS 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 <b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1424		SHT: 02 OF 03		
NAH	RAA	MUR						DATE:15.02.2019	AS BUILT	REV: 0

	1	2	3	4	5	6	7	8		
SR. #	ITEM DESIGNATION	DESCRIPTION			QTY	TYPE	MAKE	COUNTRY OF ORIGIN	ORDERING INFORMATION	SHEET NO
A										A
22	X94	TERMINAL BLOCKS FOR ANNUNCIATION ALARMS			9	CBD-4	CABUR	ITALY		
23	X101	TERMINAL BLOCKS FOR DC SUPPLY DISTRIBUTION			8	CBD-4	CABUR	ITALY		
24	X4	SPARE TERMINAL BLOCKS			8	CBD-4	CABUR	ITALY		
B										B
c										c
D										D
E										E
F										F
APPROVED	CHECKED	DRAWN	PROJECT:  DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132KV RELAY, CONTROL PANELS	TITLE: LIST OF APPARATUS 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 <b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan			DWG# EPE/ENU-18/P1424	SHT: 03 OF 03	
NAH	RAA	MUR						DATE:15.02.2019	AS BUILT	REV: 0

# SCHEMATIC DIAGRAMS

## 132kV BUS COUPLER PROTECTION PANEL

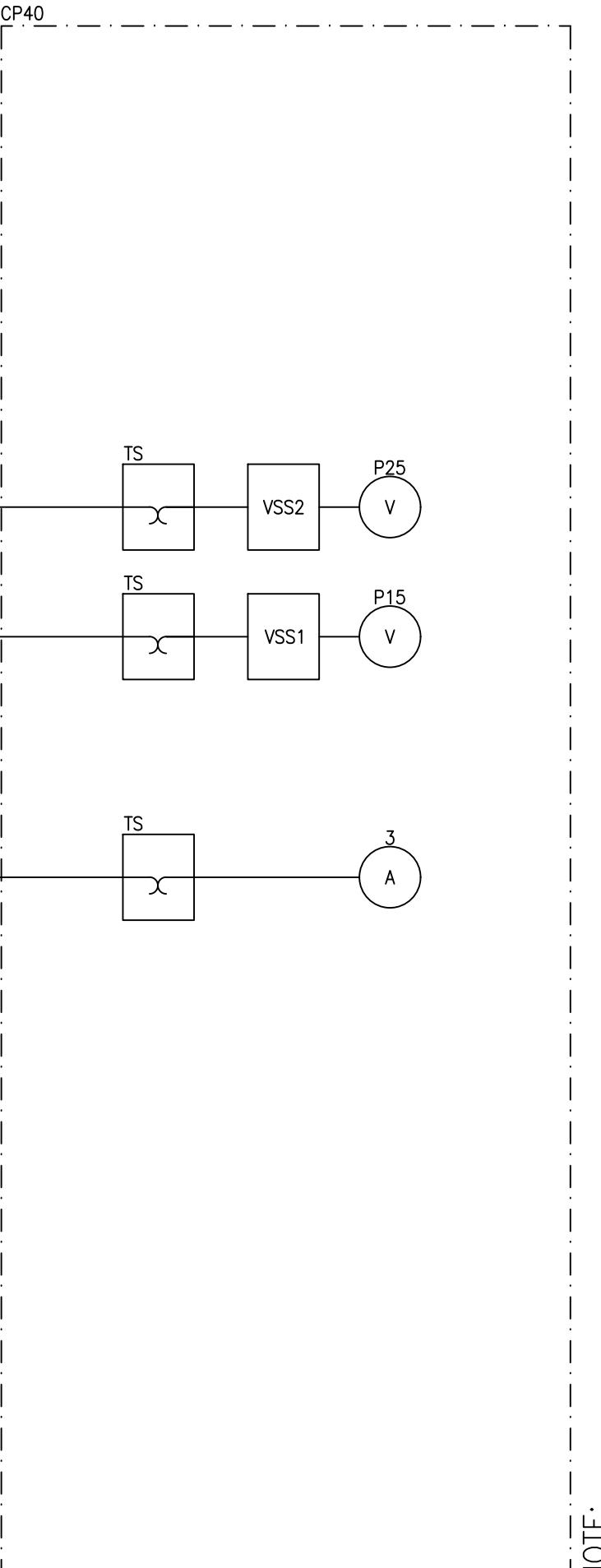
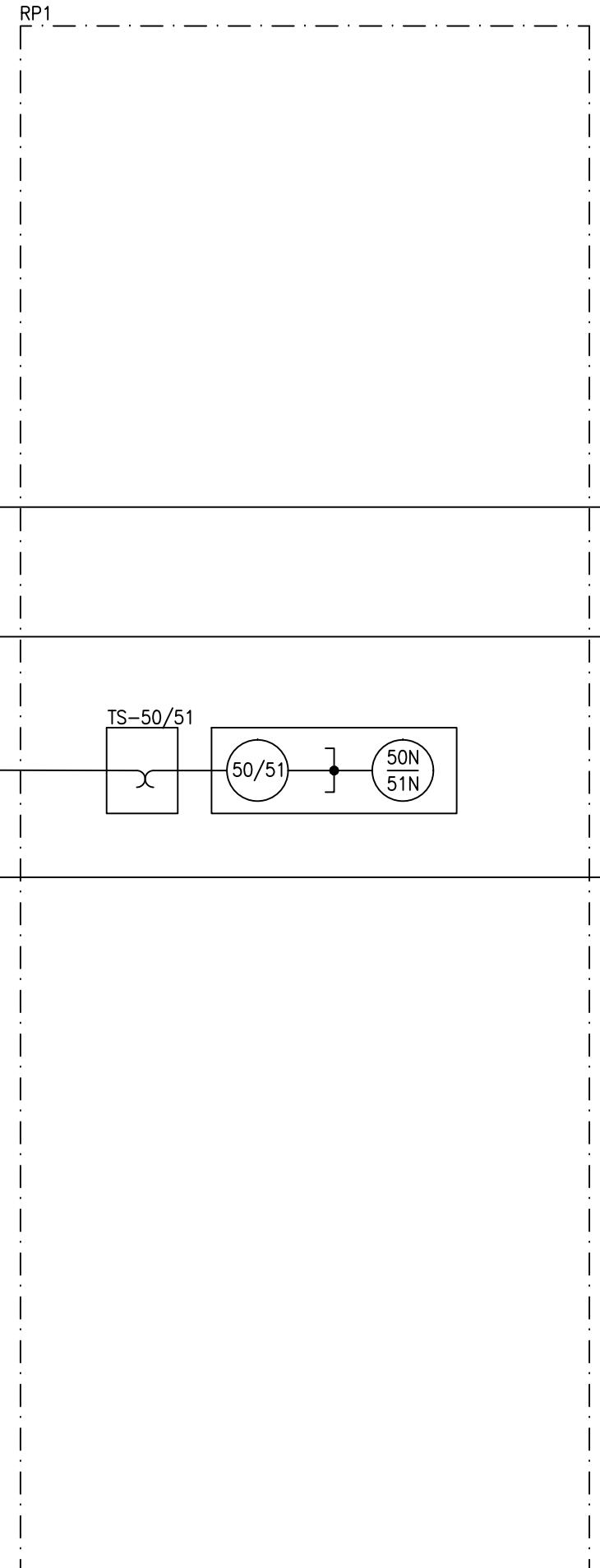
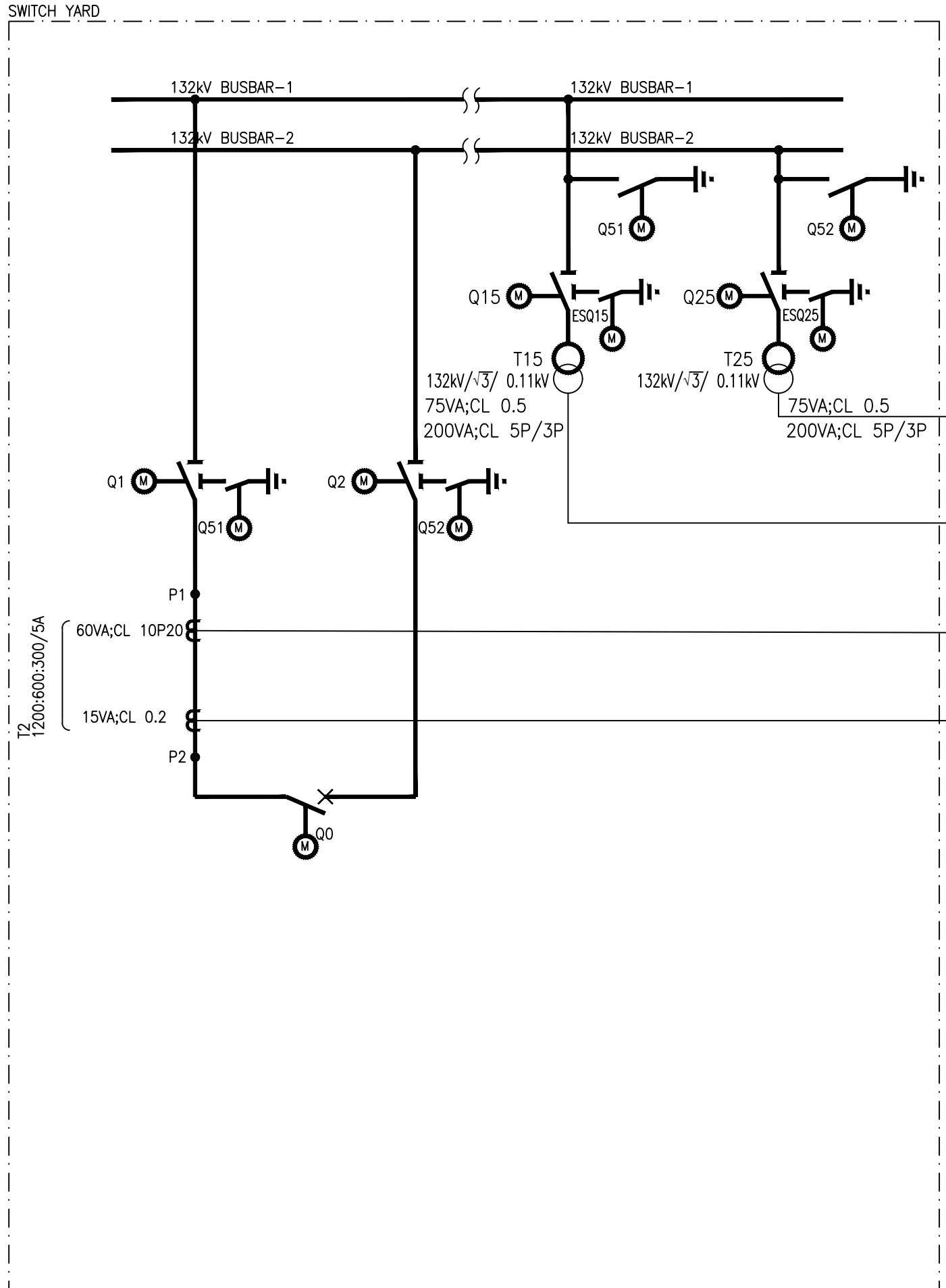
### TYPE RP1

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: COVER SHEET 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	E P E S O L P v t . L t d . 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1425 DATE:15.02.2019 AS BUILT	SHT: 01 OF 17 REV: 0
NAH	RAA	MUR					

DESCRIPTION	SHEET NO
COVER SHEET	01
LIST OF CONTENTS	02
LIST OF SYMBOLS	03
SINGLE LINE DIAGRAM	04
AC SCHEMATIC DIAGRAM	05
LOCKOUT RELAY INITIATION	06
HV CB TRIP CIRCUIT-1	07
HV CB TRIP CIRCUIT-2	08
HV CB CLOSE BLOCK & BREAKER FAILURE INITIATION	09
PROTECTION ALARMS	10
PROTECTION ALARMS	11
50/51 SPARE IOs	12
AC SUPPLY DISTRIBUTION	13
RS485 COMMUNICATION	14
50/51 RELAY TYPE 350 DETAILS	15
TRIP CIRCUIT SUPERVISION RELAY TYPE TS101 DETAILS	16
TEST BLOCK TYPE TSB-14 DETAILS	17

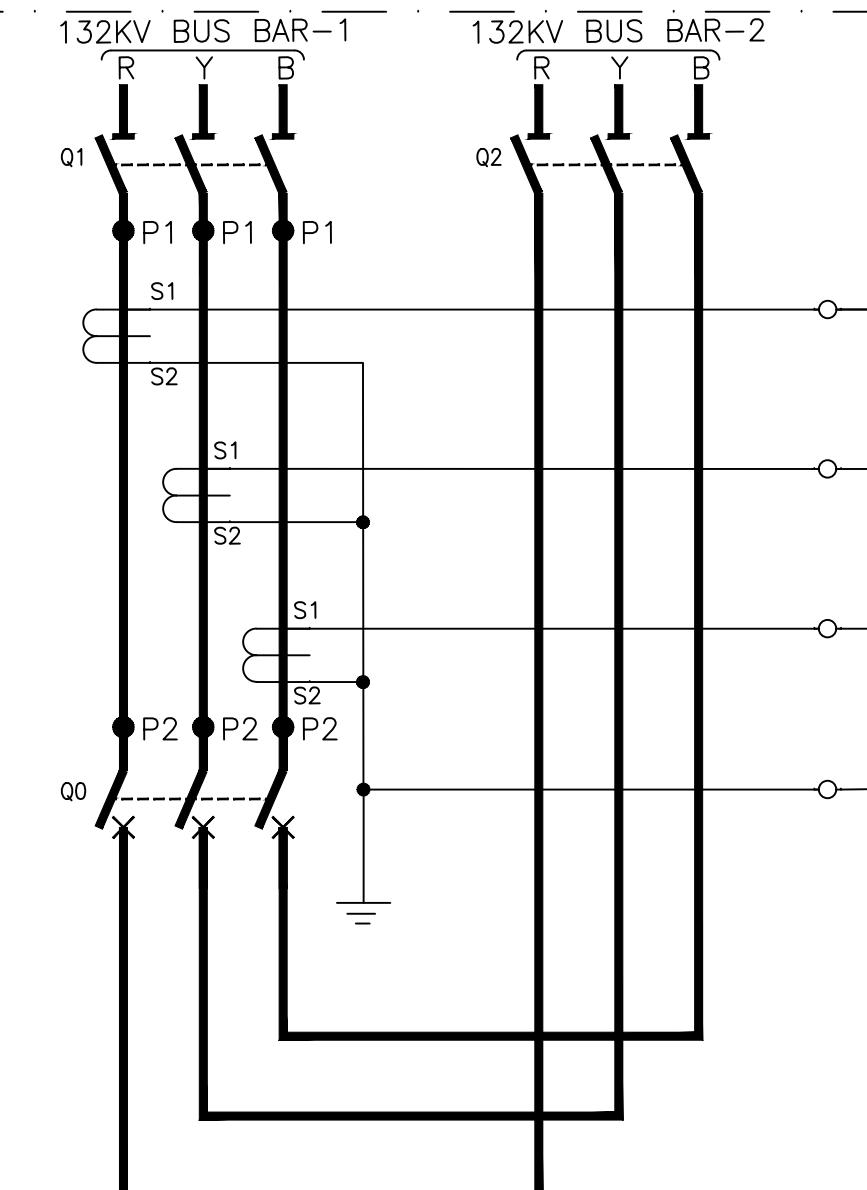
## LIST OF SYMBOLS

	HV DISCONNECTOR		EQUIPMENT WITHIN PANEL
	HV CIRCUIT BREAKER		INDEPENDENT PANEL
	CURRENT TRANSFORMER		INDEPENDENT PANEL
	RELAY PANEL TERMINAL BLOCK	50/51	OVER CURRENT & EARTH FAULT PROTECTION RELAY
	CONTROL PANEL TERMINAL BLOCK	TS	TEST BLOCK
	EARTH CONNECTION	86	LOCKOUT RELAY
	TEST BLOCK TERMINAL	74TC	TRIP CIRCUIT SUPERVISION RELAY
	PUSH BUTTON		DISCONNECTING TERMINAL BLOCK (SCREW TYPE) WITH SLIDING LINK, FOR CT CIRCUIT WITH SHORTENING ARRANGEMENT
	NORMALLY CLOSED CONTACT	X	TERMINAL BLOCK
	NORMALLY OPEN CONTACT		
	CHANGE OVER CONTACT		
	MINIATURE CIRCUIT BREAKER		
	INDICATING BULB/LED/CUBICLE LIGHT		
	220V SOCKET		
	SPACE HEATER		
	DIODE		
	COIL		



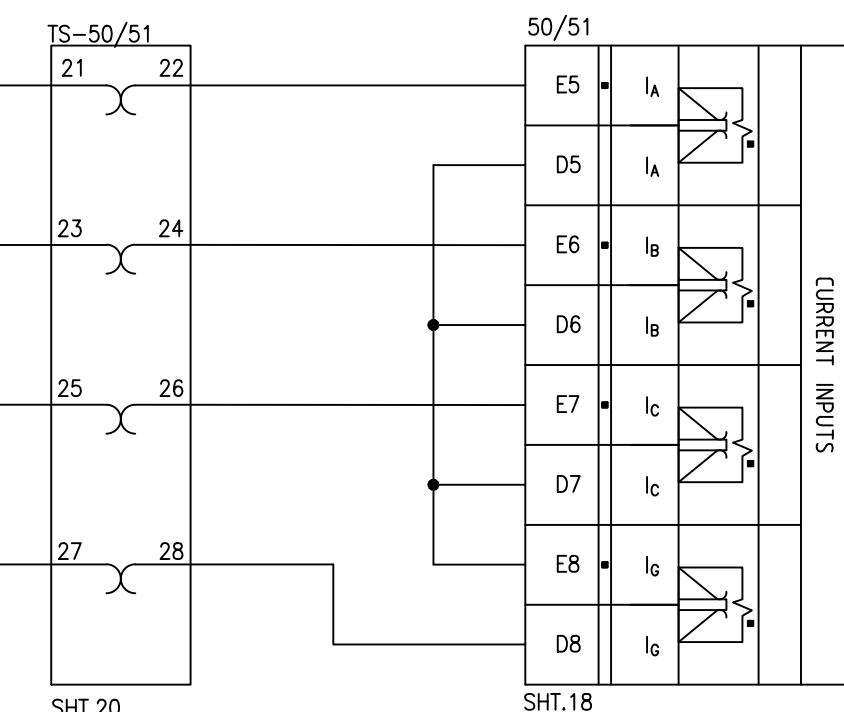
**NOTE:** THE SWITCH YARD AND THE RELAY PANEL PART OF THE DRAWING HAS BEEN INCLUDED ONLY FOR CONCEPTUAL UNDERSTANDING OF AC SCHEME.

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: SINGLE LINE DIAGRAM 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	DWG# EPE/ENU-18/P1425	SHT: 04 OF 17
NAH	RAA	MUR		<b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE:15.02.2019	AS BUILT



NOTE:

1. ALL CT WIRING SHALL BE OF 4mm<sup>2</sup> SIZE.
2. THE SWITCH YARD PART IS INCLUDED FOR CONCEPTUAL UNDERSTANDING OF AC SCHEME ONLY.



CURRENT INPUTS

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
TS-50/51	TEST BLOCK	saTECH	ARTECHE
50/51	OC & EF RELAY	350	GE

NOTE:2

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: AC SCHEMATIC DIAGRAM 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	DWG# EPE/ENU-18/P1425	SHT: 05 OF 17
NAH	RAA	MUR				

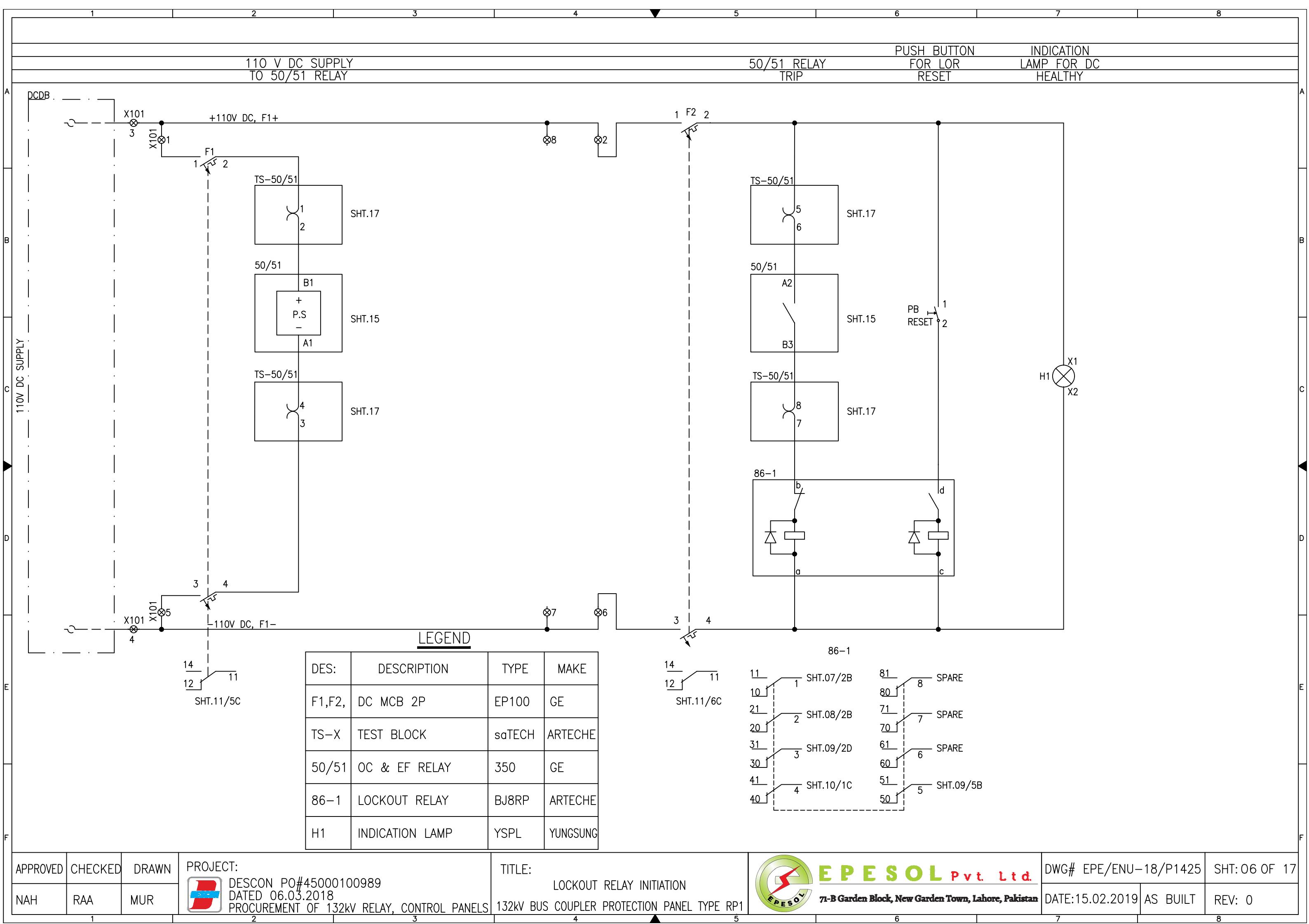


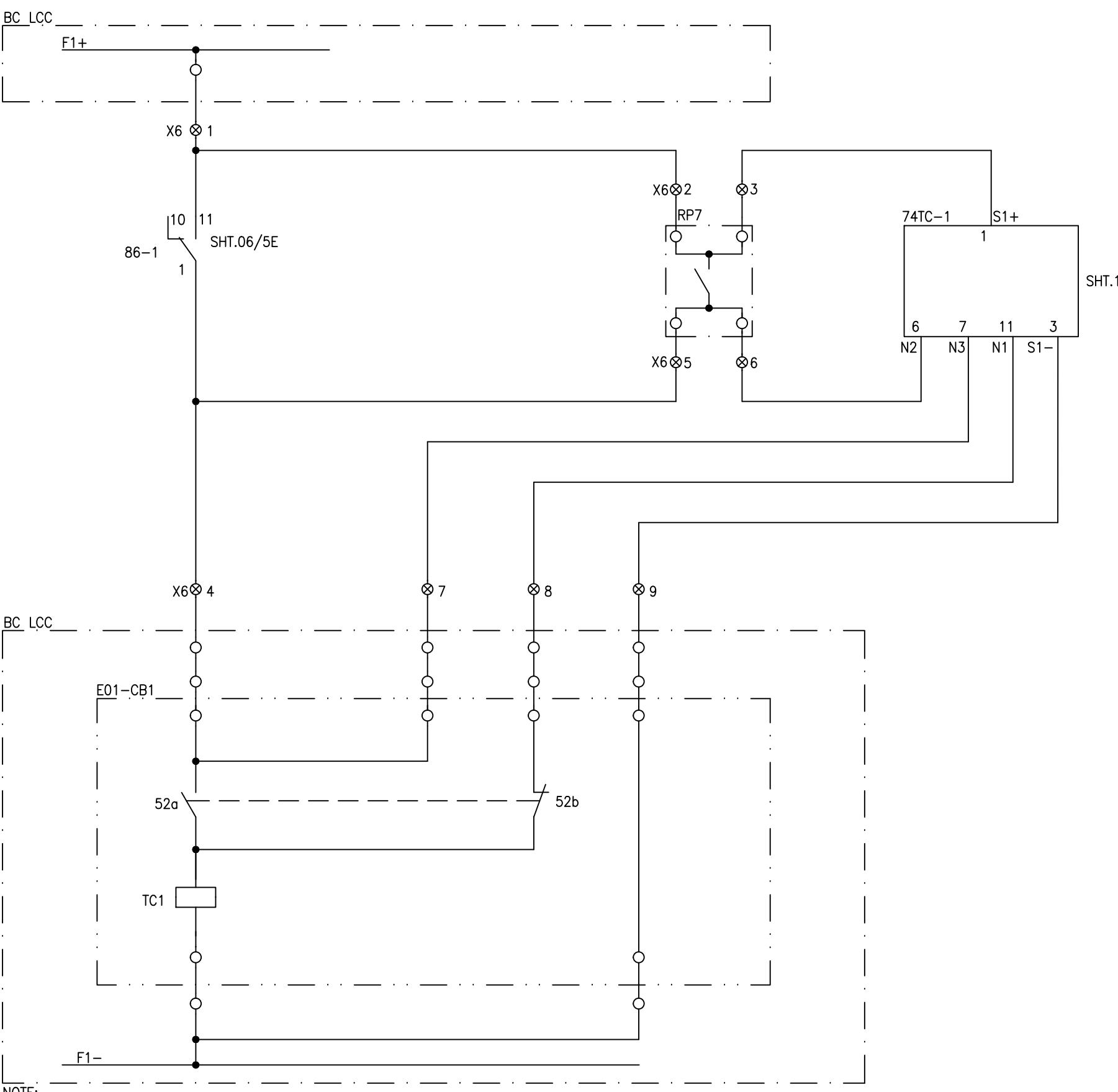
**E P E S O L** Pvt. Ltd.  
71-B Garden Block, New Garden Town, Lahore, Pakistan

DATE: 15.02.2019

AS BUILT

REV: 0

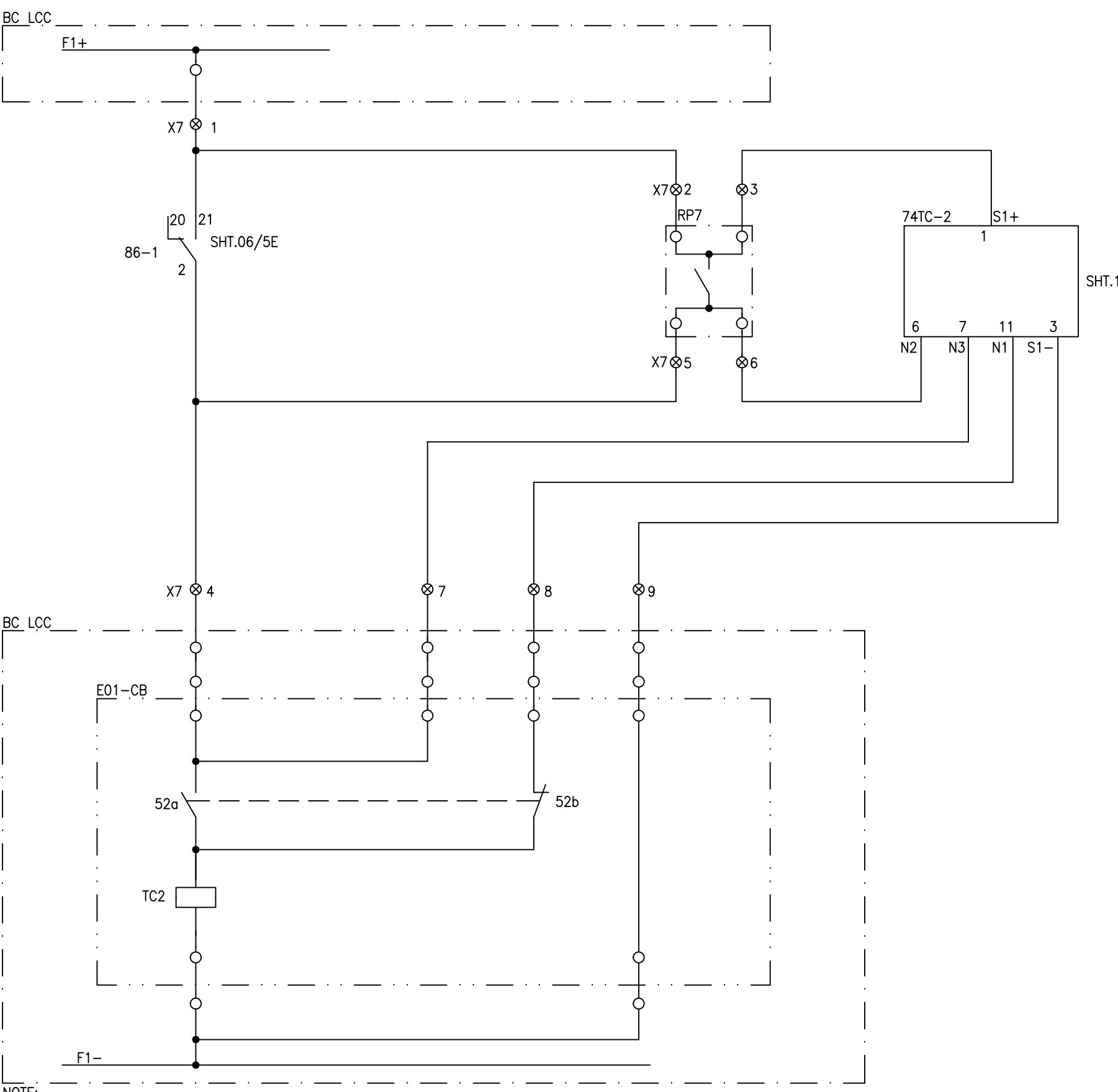


50/51 RELAY  
TRIPBB/BF RELAY  
TRIPTRIP CIRCUIT-1  
SUPERVISION RELAYNOTE:

CONTROL PANEL &amp; MK CONNECTIONS ARE SHOWN FOR THE CONCEPTUAL UNDERSTANDING OF THE TRIP CIRCUIT SUPERVISION SCHEME.

LEGEND

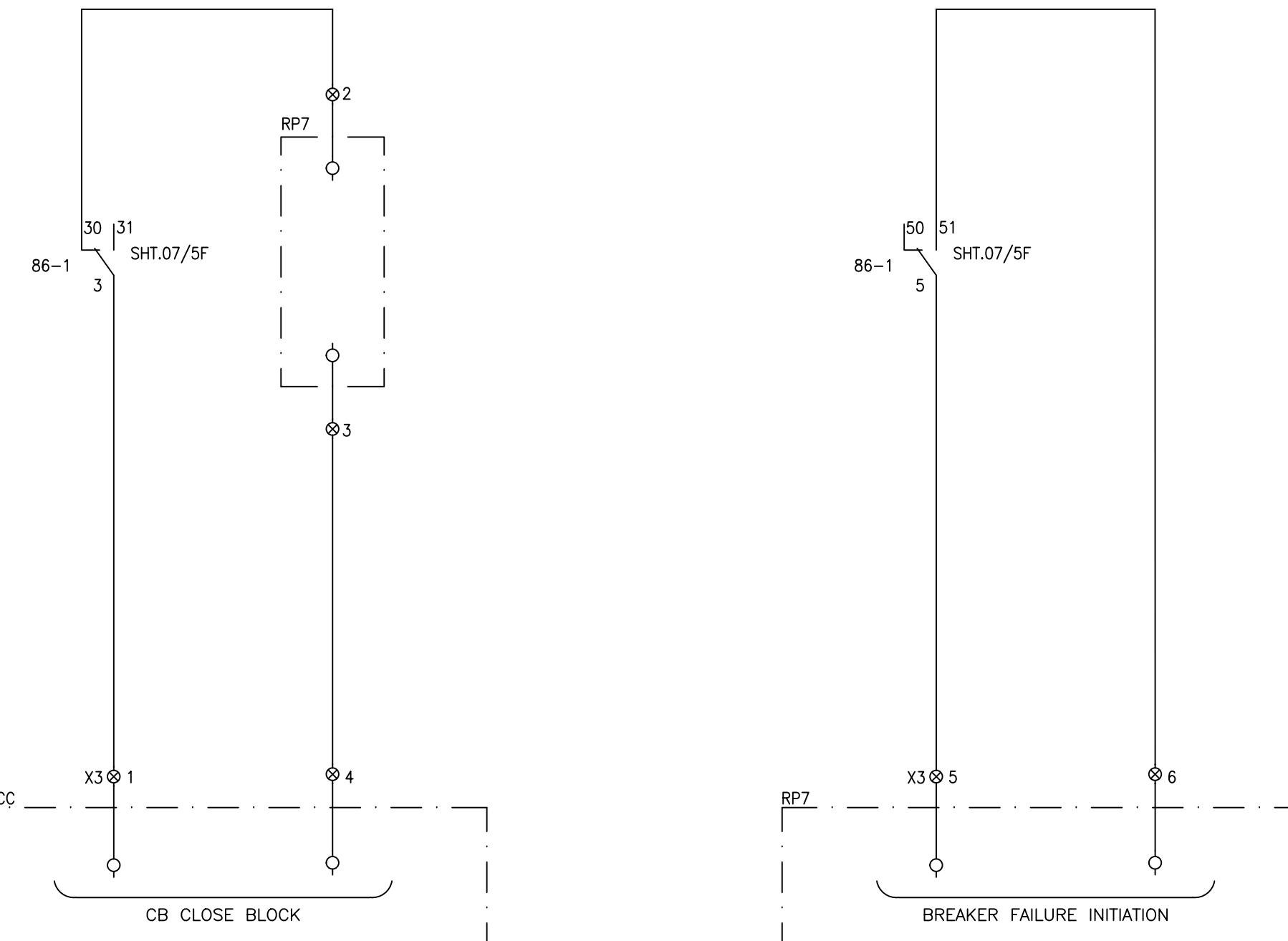
DES:	DESCRIPTION	TYPE	MAKE
86-X	LOCKOUT RELAY	BJ-8RP	ARTECHE
74TC-1	TRIP CIRCUIT SUPERVISION RELAY	TS101	ELABS

50/51 RELAY  
TRIPBB/BF RELAY  
TRIPTRIP CIRCUIT-2  
SUPERVISION RELAYNOTE:

CONTROL PANEL & MK CONNECTIONS ARE SHOWN FOR THE CONCEPTUAL UNDERSTANDING OF THE TRIP CIRCUIT SUPERVISION SCHEME.

LEGEND

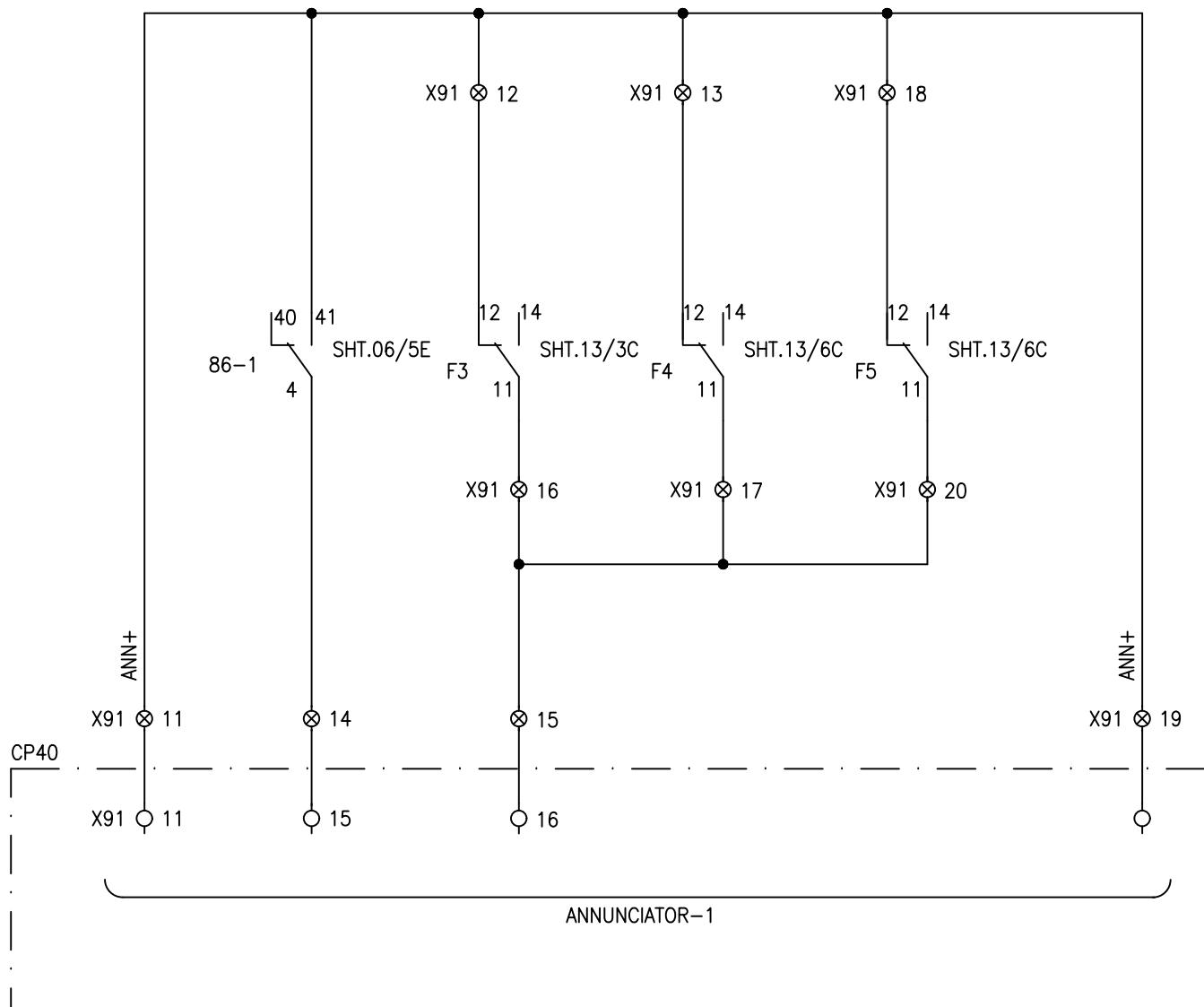
DES:	DESCRIPTION	TYPE	MAKE
86-X	LOCKOUT RELAY	BJ-8RP	ARTECHE
74TC-2	TRIP CIRCUIT SUPERVISION RELAY	TS101	ELABS

50/51 RELAY  
TRIPBB/BF RELAY  
TRIP50/51 RELAY  
TRIPLEGEND

DES:	DESCRIPTION	TYPE	MAKE
86-X	LOCKOUT RELAY	BJ-8RP	ARTECHE

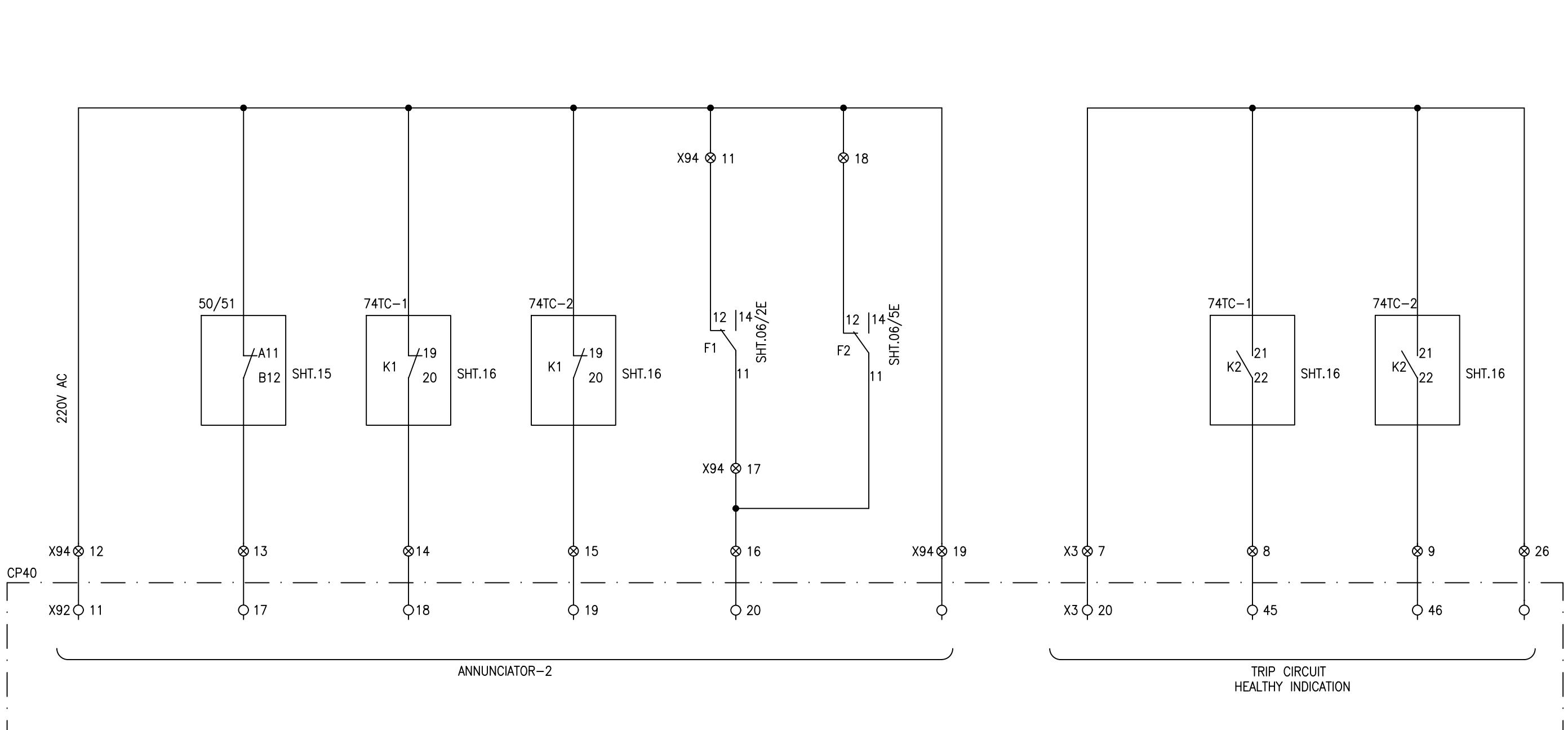
APPROVED	CHECKED	DRAWN	PROJECT:  DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: CB CLOSE BLOCK & BFI 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1425 DATE:15.02.2019	SHT:09 OF 17 AS BUILT REV: 0
NAH	RAA	MUR					

50/51 RELAY      AC SUPPLY  
TRIP                FAIL

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
86-1	LOCKOUT RELAY	BJ-8RP	ARTECHE
F3, F4	AC MCB 2P	G60	GE

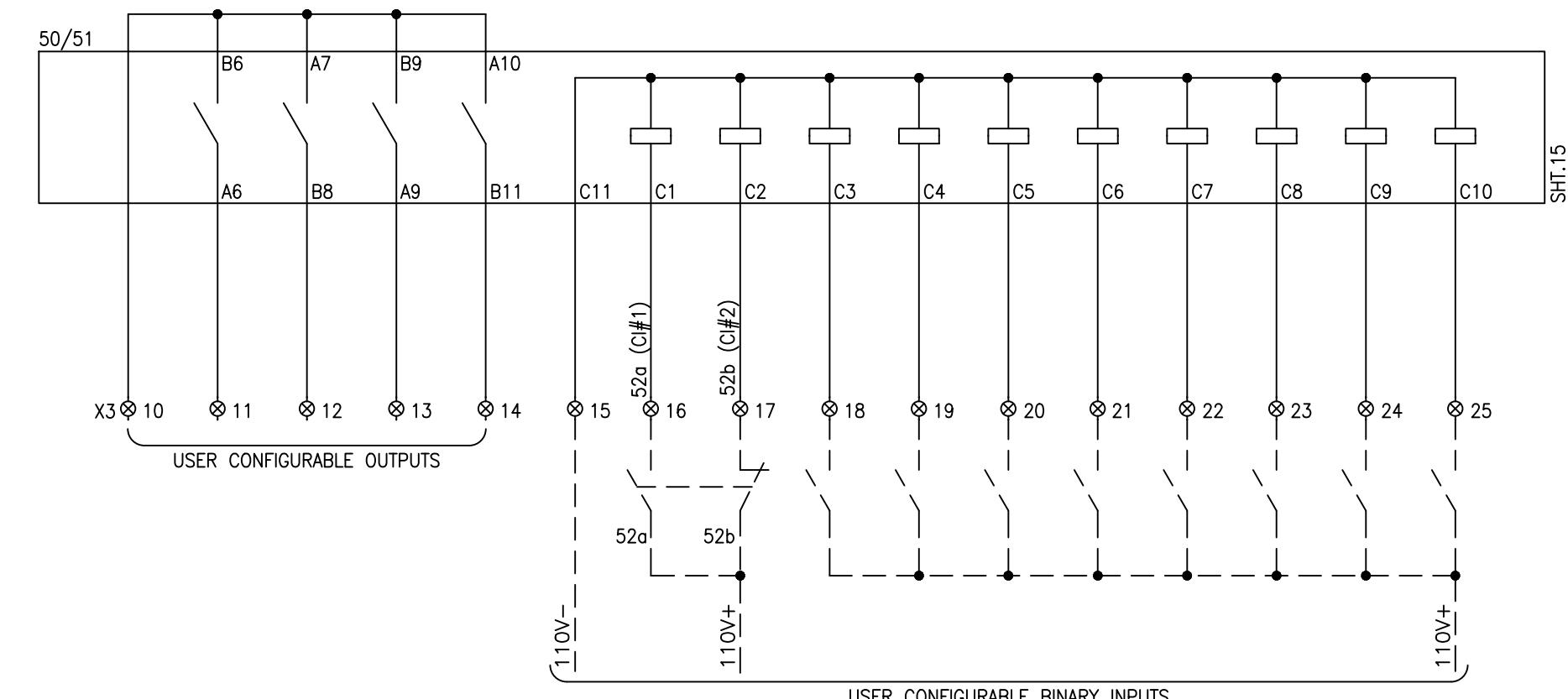
50/51 RELAY FAULTY	TRIP CIRCUIT-1 FAULTY	TRIP CIRCUIT-2 FAULTY	CONTROL DC SUPPLY FAULTY	RELAY DC SUPPLY FAULTY	TRIP CIRCUIT-1 HEALTHY	TRIP CIRCUIT-2 HEALTHY
-----------------------	--------------------------	--------------------------	--------------------------------	------------------------------	---------------------------	---------------------------

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
74TC-X	TRIP CIRCUIT SUPV. RELAY	TS101	ELABS
50/51	OC & EF RELAY	350	GE
F1,F2	DC MCB 2P	EP100	GE

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: PROTECTION ALARMS 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	DWG# EPE/ENU-18/P1425 71-B Garden Block, New Garden Town, Lahore, Pakistan	SHT: 11 OF 17
NAH	RAA	MUR			DATE:15.02.2019 AS BUILT	REV: 0

**50/51 RELAY SPARE BINARY INPUTS & OUTPUTS  
USER CONFIGURABLE**

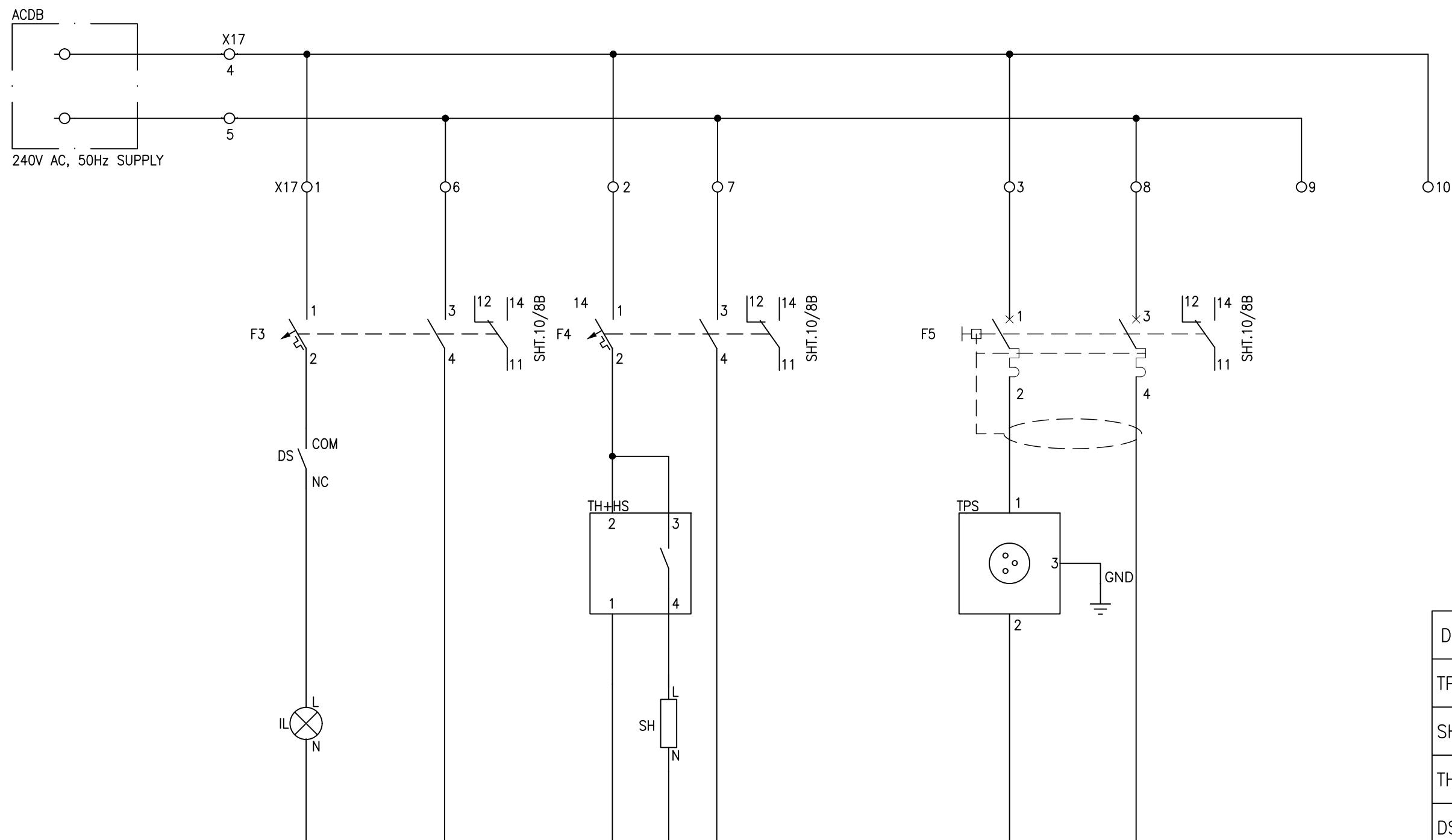


**LEGEND**

DES:	DESCRIPTION	TYPE	MAKE
50/51	OC & EF RELAY	350	GE

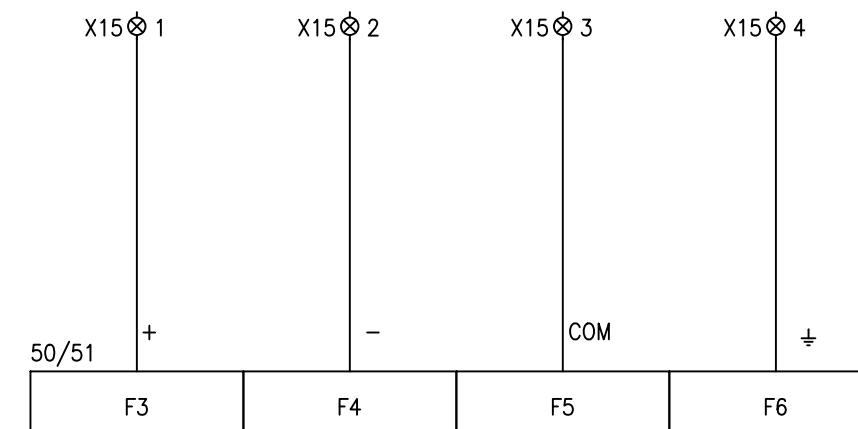
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NAH	RAA	MUR				DATE:15.02.2019	AS BUILT

## AC SUPPLY DISTRIBUTION

DOOR SWITCH &  
CUBICLE LIGHTSPACE HEATER  
THERMOSTATTHREE  
PIN SOCKETLEGEND

DES:	DESCRIPTION	TYPE	MAKE
TPS	THREE PIN SOCKET 240 VAC	-	LEAR
SH	SPACE HEATER	ELH220	ELABS
TH+HS	THERMOSTAT & HUMIDSTAT	ELH220	ELABS
DS	DOOR SWITCH	YSP+YSMS	YONGSUNG
F3,F4	AC MCB, 2P, 10A	G60	GE
IL	ILLUMINATION LIGHT	YST8	YONGSUNG
F5	ELCB	DM100	GE

## RS485 COMMUNICATION

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
50/51	O/C & E/F RELAY	350	GE
87T	TRAFO. DIFF. RELAY	345	GE

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132KV RELAY, CONTROL PANELS	TITLE: RS485 COMMUNICATION 132KV BUS COUPLER PROTECTION PANEL TYPE RP1	DWG# EPE/ENU-18/P1425 71-B Garden Block, New Garden Town, Lahore, Pakistan	SHT: 14 OF 17
NAH	RAA	MUR			DATE:15.02.2019 AS BUILT	REV: 0



**E P E S O L** *Pvt. Ltd.*  
71-B Garden Block, New Garden Town, Lahore, Pakistan

SPARE  
DIGITAL INPUTS SHT.12

DIGITAL INPUTS							
C1	52a (C1#1)						
C2	52b (C1#2)						
C3	INPUT 3						
C4	INPUT 4						
C5	INPUT 5						
C6	INPUT 6						
C7	INPUT 7						
C8	INPUT 8						
C9	INPUT 9						
C10	INPUT 10						
C11	COMMON						
C12	CHASSIS GND						

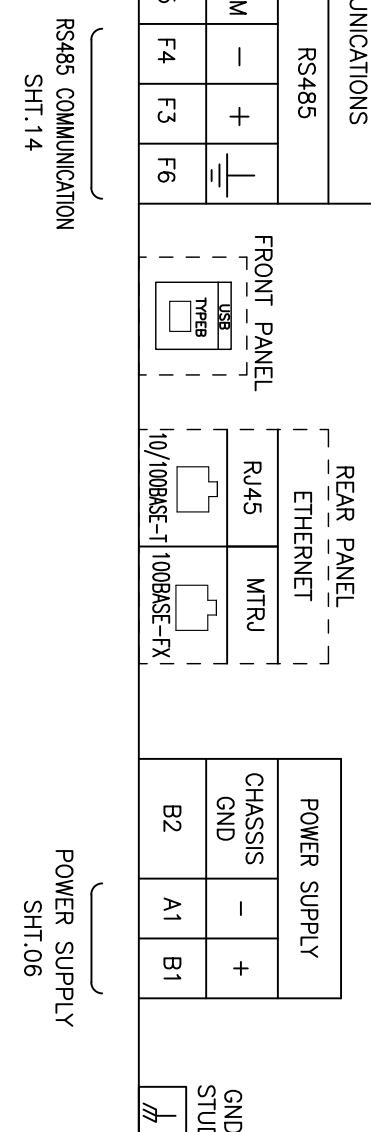
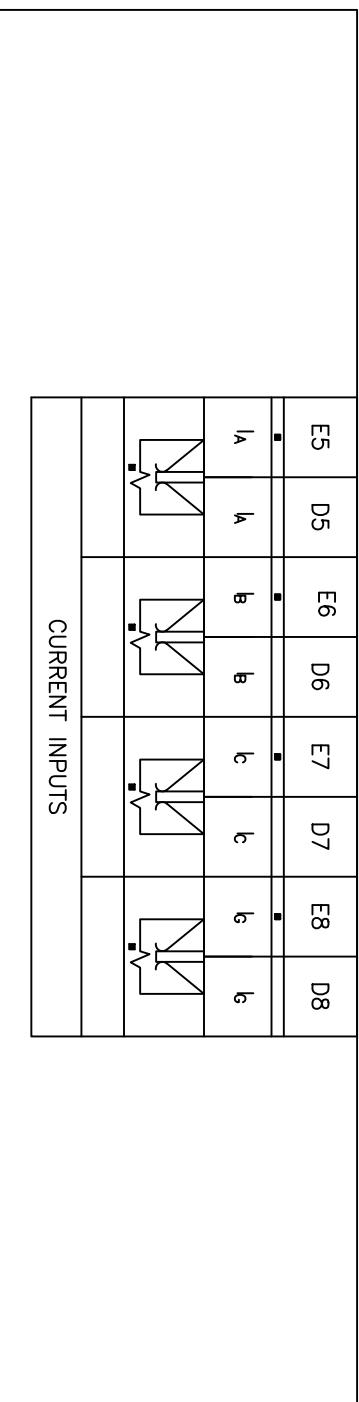
GE 350  
FEEDER PROTECTION SYSTEM

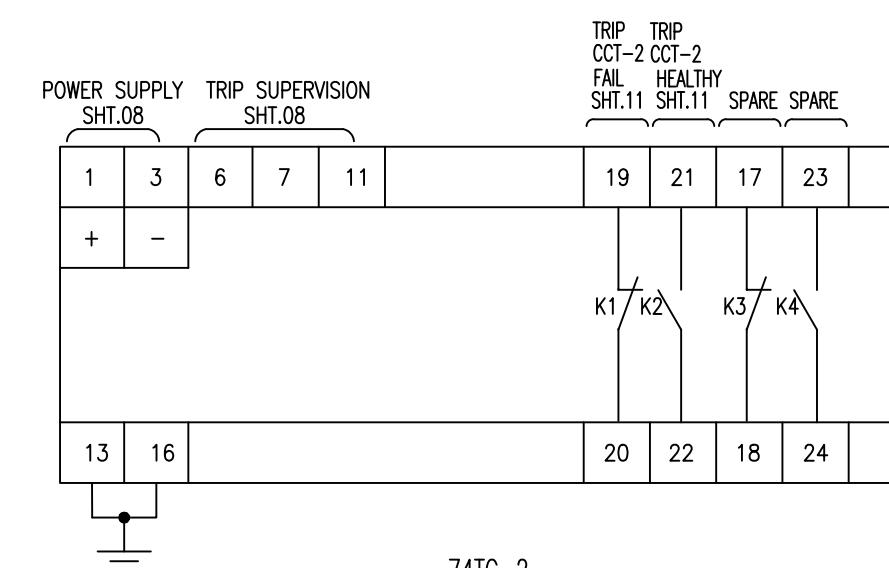
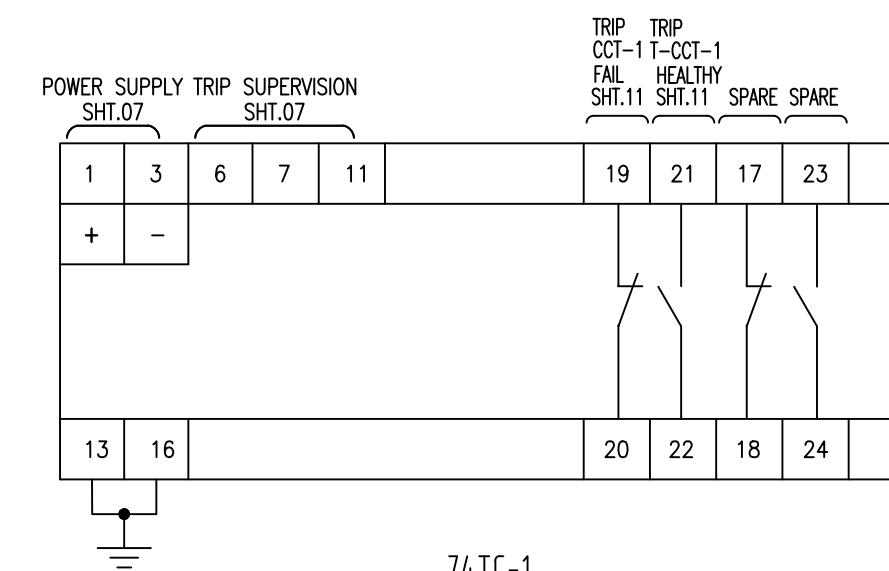
OUTPUT RELAYS							
1 TRIP				A2			
2 CLOSE				B3			
3 AUXILIARY				B4			
4 AUXILIARY				B5			
5 AUXILIARY				A5			
6 AUXILIARY				B6			
7 CRITICAL FAILURE RELAY				B7			

50/51 RELAY FAULTY SHT.11

50/51 RELAY TRIP SHT.06

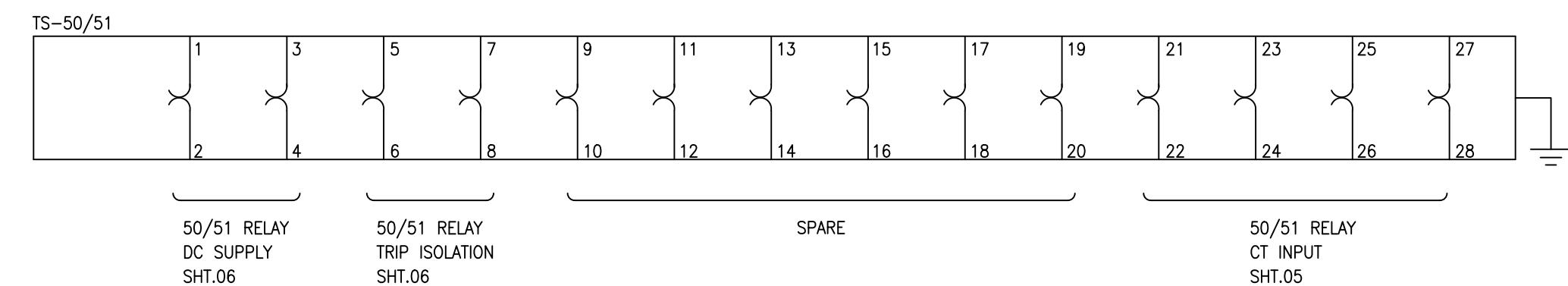
SPARE DIGITAL OUTPUTS SHT.12

OVER CURRENT & EARTH FAULT PROTECTION RELAY TYPE 350  
350-E-P5-G5-H-E-E-N-N-3E-D-NPROJECT:  
DESCON PO#45000100989  
DATED 06.03.2018  
PROCUREMENT OF 132kV RELAY, CONTROL PANELS  
TITLE: 50/51 RELAY TYPE 350 DETAILS  
132kV BUS COUPLER PROTECTION PANEL TYPE RP1E P E S O L P v t . L t d .  
71-B Garden Block, New Garden Town, Lahore, PakistanDWG# EPE/ENU-18/P1425 SHT: 15 OF 17  
DATE:15.02.2019 AS BUILT REV: 0



APPROVED	CHECKED	DRAWN	PROJECT:  DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: TRIP CIRCUIT SUPERVISION RELAY TYPE TS101 DETAILS 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1425	SHT: 16 OF 17
NAH	RAA	MUR				DATE:15.02.2019 AS BUILT	REV: 0

TS-50/51  
TEST BLOCK TYPE TSB14-11111111AAAB



#### LEGEND

DES.	DESCRIPTION	TYPE	MAKE
TS-X	TEST BLOCK	TSB14	ARTECHE

APPROVED	CHECKED	DRAWN	PROJECT:  DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: TEST BLOCK TYPE TSB14 DETAILS 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 <b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1425 DATE:15.02.2019 AS BUILT	SHT: 17 OF 17 REV: 0
NAH	RAA	MUR					

	1	2	3	4	5	6	7	8	9	10	11	12	4	5	6	7			
A	1																		
	2																		
	3																		
	4																		
	5																		
	6																		
B	7																		
	8																		
B	9																		
	10																		
	11																		
	12																		
c	1	2	3	4	5	6	7	8	9	10	11	12							
D																			
E																			
F																			
APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS						TITLE: TERMINAL DETAIL 132kV BUS COUPLER PROTECTION PANEL TYPE RP1						DWG# EPE/ENU-18/P1426			SHT:01 OF 10	
NAH	ABA	MSC													DATE:15.02.2019			AS BUILT	REV: 0

## LEGEND:



TEMPORARY SHORTENING LINK



PERMANENT LINK

D-

END COVER

REMOTE DESTINATION TERMINAL BLOCK TERMINAL NO

TERMINAL STRIP X1

LINK	REFERENCE	TERMINAL NO
------	-----------	-------------

●	05/3A	1
●	05/3B	2
●	05/3B	3
●	05/3B	4
●	05/3B	5
●	05/3C	6
●	05/3C	7

D-

TERMINATION B

ITEM DESIGNATION	TERMINAL NO
TS-50/51	21
TS-50/51	23
TS-50/51	25
TS-50/51	27



## LEGEND:



TEMPORARY SHORTENING LINK



**PERMANENT LINK**

D-

END COVER

Sr.	CABLE DESIGNATION	CORE CROSS SECTION	DESTINATION					SCHEME DWG. REF: EPE/ENU-18/P1425		
A	1									
A	2									
A	3									
A	4									
A	5									
B	6									
B	7									
B	8									
B	9									
B	10									
B	11									
B	12									
c	1	2	3	4	5	6	7	8		
c										
c										
c										
c										
c										
c										
D										
E										
F										
APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS			TITLE: TERMINAL DETAIL 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 <b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan		DWG# EPE/ENU-18/P1426	SHT:03 OF 10
NAH	ABA	MSC						DATE:15.02.2019	AS BUILT	REV: 0

	1	2	3	4
Sr.	CABLE DESIGNATION	CORE CROSS SECTION	DESTINATION	
A	1			
	2			
	3			
	4			
	5			
B	6			
	7			
	8			
	9			
	10			
C	11			
	12			
	1	2	3	4
	5	6	7	8
	9	10	11	12
D				
E				

## LEGEND:



TEMPORARY SHORTENING LINK



**PERMANENT LINK**



END COVER



E P E S O L Pvt. Ltd  
71-B Garden Block, New Garden Town, Lahore, Pakistan

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: TERMINAL DETAIL 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1426	SHT:04 OF 10	
NAH	ABA	MSC				DATE:15.02.2019	AS BUILT	REV: 0

Sr.	CABLE DESIGNATION	CORE CROSS SECTION	DESTINATION																					
A	1																							
	2																							
	3																							
	4																							
	5																							
	6																							
	7																							
B	8																							
B	9			REMOTE DESTINATION	TERMINAL BLOCK	TERMINAL NO													TERMINATION B					
B	10																							
B	11																							
B	12																							
c	1	2	3	4	5	6	7	8	9	10	11	12												
c																								
c																								
D																								
D																								
E																								
E																								
F																								
F																								
APPROVED	CHECKED	DRAWN	PROJECT:						TITLE:								DWG# EPE/ENU-18/P1426		SHT:06 OF 10					
NAH	ABA	MSC		DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS					TERMINAL DETAIL		132kV BUS COUPLER PROTECTION PANEL TYPE RP1		 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan				DATE:15.02.2019		AS BUILT		REV: 0			

## LEGEND:



TEMPORARY SHORTENING LINK



PERMANENT LINK

END COVER



## **LEGEND:**



TEMPORARY SHORTENING LINK



PERMANENT LINK

END COVER

TERMINATION B

APPROVED	CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS	TITLE: TERMINAL DETAIL 132kV BUS COUPLER PROTECTION PANEL TYPE RP1	 <b>EPESOL Pvt. Ltd.</b> 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1426	SHT:07 OF 10	
NAH	ABA	MSC				DATE:15.02.2019	AS BUILT	REV: 0



	1	2	3	4	5	6	7	8	
Sr.	CABLE DESIGNATION	CORE CROSS SECTION	DESTINATION						
A	1								
2									
3									
4									
5									
6									
7									
8									
B	9								
10									
11									
12									
c	1	2	3	4	5	6	7	8	
E									
F									
APPROVED	CHECKED	DRAWN	PROJECT:  DESCN PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132KV RELAY, CONTROL PANELS			TITLE: TERMINAL DETAIL 132kV BUS COUPLER PROTECTION PANEL TYPE RP1		DWG# EPE/ENU-18/P1426 SHT:09 OF 10	
NAH	ABA	MSC							
						DATE:15.02.2019 AS BUILT REV: 0			

### LEGEND:



TEMPORARY SHORTENING LINK



PERMANENT LINK

D-

END COVER

REMOTE DESTINATION TERMINAL BLOCK TERMINAL NO

TERMINAL STRIP X101

LINK	REFERENCE	TERMINAL NO
	06/1A	1
	06/4A	2
	06/1A	3
	06/1D	4
	06/1D	5
	06/4D	6
	06/4B	7
	06/4E	8

D-

TERMINATION B

ITEM DESIGNATION	TERMINAL NO
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F1 1

F2 1

F1 3

F2 3



**EPESOL Pvt. Ltd.**  
71-B Garden Block, New Garden Town, Lahore, Pakistan

Sr.	CABLE DESIGNATION	CORE CROSS SECTION	DESTINATION															
A	1																	
A	2																	
A	3																	
A	4																	
A	5																	
B	6																	
B	7																	
B	8																	
B	9																	
B	10																	
B	11																	
B	12																	
c	1	2	3	4	5	6	7	8	9	10	11	12						
D																		
D																		
E																		
F																		
APPROVED			CHECKED	DRAWN	PROJECT: DESCON PO#45000100989 DATED 06.03.2018 PROCUREMENT OF 132kV RELAY, CONTROL PANELS				TITLE: TERMINAL DETAIL 132kV BUS COUPLER PROTECTION PANEL TYPE RP1				DWG# EPE/ENU-18/P1426					
NAH			ABA	MSC									SHT:10 OF 10					
															DATE:15.02.2019		AS BUILT	REV: 0

## LEGEND:



TEMPORARY SHORTENING LINK



PERMANENT LINK

D-

END COVER

REMOTE DESTINATION TERMINAL BLOCK TERMINAL NO

TERMINAL STRIP X4

LINK	REFERENCE	TERMINAL NO
	SPARE	1
	SPARE	2
	SPARE	3
	SPARE	4
	SPARE	5
	SPARE	6
	SPARE	7

D-

TERMINATION B

ITEM DESIGNATION TERMINAL NO



EPESOL Pvt. Ltd.  
71-B Garden Block, New Garden Town, Lahore, Pakistan