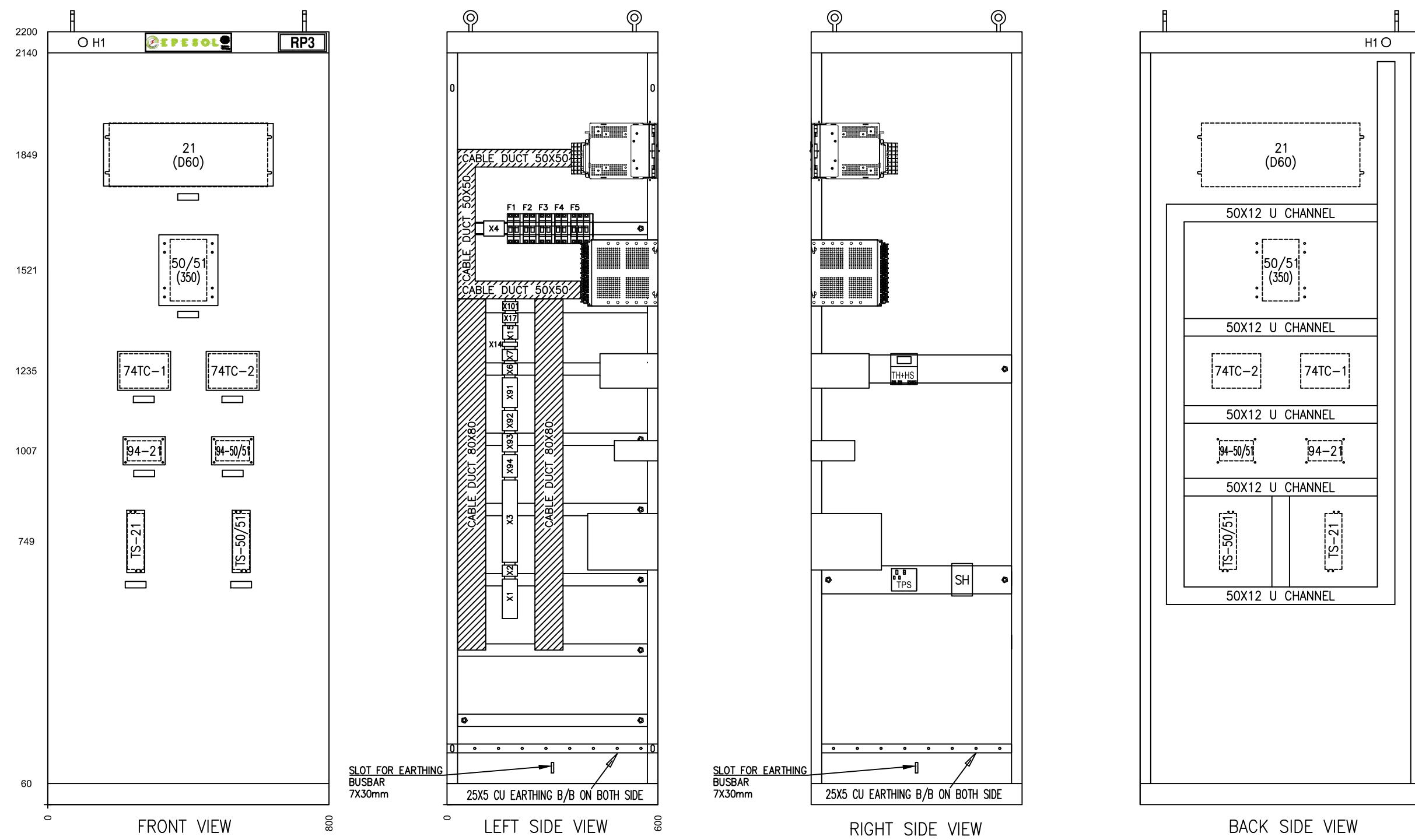


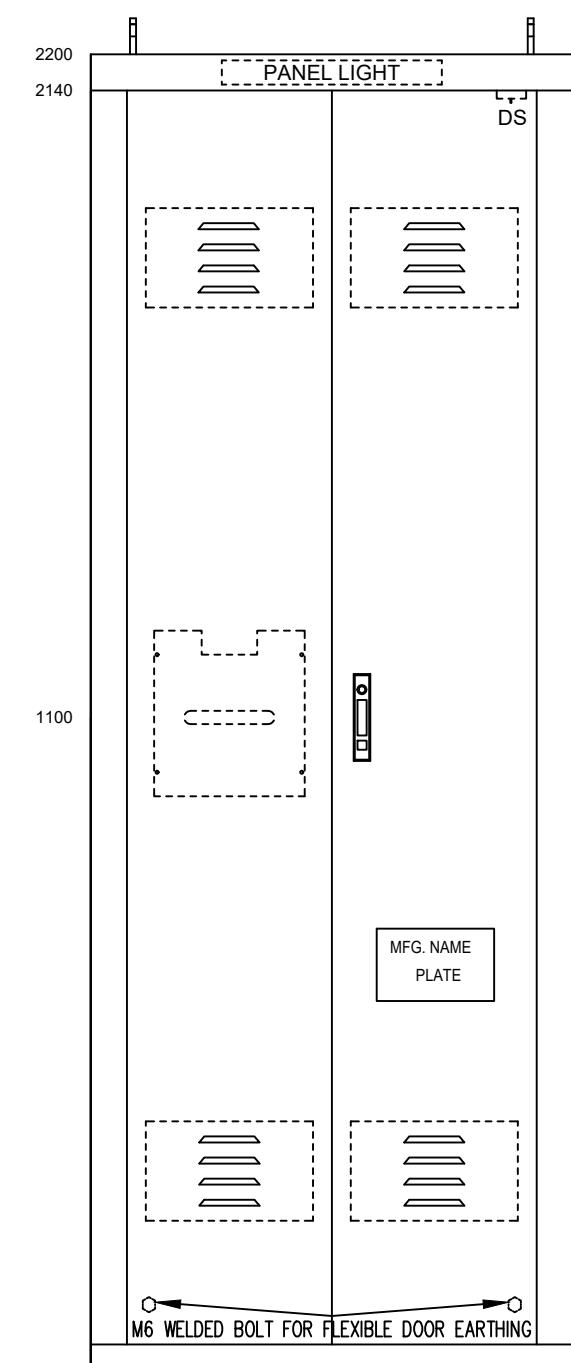
LAYOUT DRAWING OF 132kV LINE PROTECTION PANEL TYPE RP3

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: COVER SHEET 132kV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1403 71-B Garden Block, New Garden Town, Lahore, Pakistan	SHT: 01 OF 03 REV: 0
NAH	ABA	MSC		 E P E S O L <i>Pvt. Ltd.</i> 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE:27.01.2018 FOR APPROVAL	

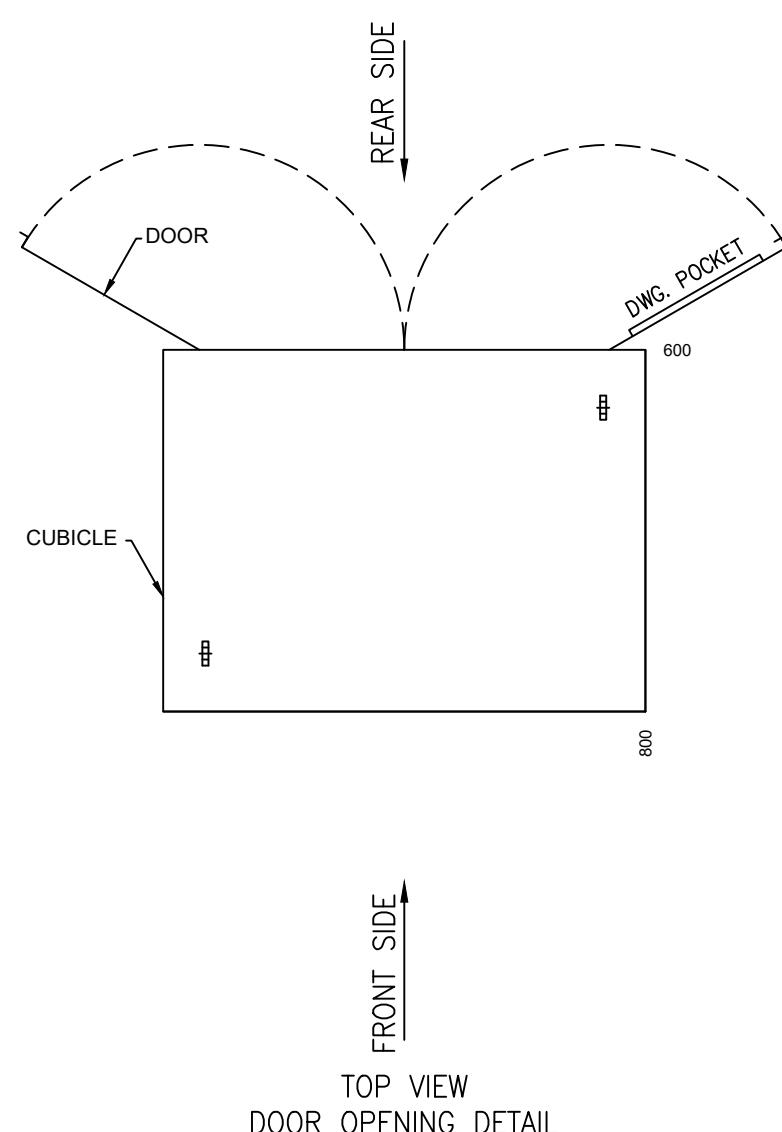
NOTES

1. RELAY PANEL: 800x600x2200 mm
2. FACE SHEET: 800x2200 mm
3. EARTHING STRIP 25x5 mm²
4. EARTHING STRAP 16mm²
5. COLOR: RAL7032
6. PROTECTION CLASS: IP51
7. APPLICABLE SPECS: P-151:2008

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: LAYOUT DIAGRAM 132KV LINE PROTECTION PANEL TYPE RP3	EPE SOL Pvt Ltd 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1403	SHT:02 OF 03
NAH	ABA	MSC				DATE:27.01.2018	FOR APPROVAL



PANEL LIGHT



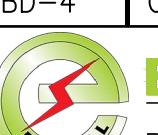
APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132kV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: LAYOUT DIAGRAM 132kV LINE PROTECTION PANEL TYPE RP3	EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1403	SHT:03 OF 03	
NAH	ABA	MSC				DATE:27.01.2018	FOR APPROVAL	REV: 0

LIST OF APPARATUS

132kV LINE PROTECTION PANEL

TYPE RP3

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: COVER SHEET 132kV LINE PROTECTION PANEL TYPE RP3	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1404	SHT: 01 OF 03
NAH	ABA	MSC				DATE:27.01.2018	FOR APPROVAL 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	1	21	DISTANCE PROTECTION RELAY		1	D60	GE	CANADA	D60-U03-HKH-F8L-H6P-M6C-PXX -UXX-WXX	16
	2	50/51	OVER CURRENT & EARTH FAULT PROTECTION RELAY		1	350	GE	SPAIN	350-E-P5-G5-H-E-E-N-N-3E-D-N	17
B	3	94-21, 94-50/51	TRIP RELAY, SELF RESET TYPE, 8 CO CONTACTS HIGH BURDEN, 110 VDC		2	RJ8R	ARTECHE	SPAIN	RJ8R-HB-110VDC	09
	4	TS-21, TS-50/51	TEST SWITCH FOR METERING CIRCUIT, 14 FINGER		2	sATECH-TSB14	ARTECHE	SPAIN	TSB14-111111222AAAB/1111111111AAAB	18
B	5	F1, F2	DC MCB, 2 POLE, 10A, WITH ONE C/O CONTACT, 10KA		2	EP-100	GE	HUNGARY	EP102UCC10+(CAH1)	07
	6	F3, F4	AC MCB, 2 POLE, 10A, WITH ONE C/O CONTACT, 10KA		2	G60	GE	HUNGARY	G62C10+(CAH1)	14
C	7	F5	AC MCB, 3 POLE, 4A WITH TWO C/O CONTACT, 10KA		1	G60	GE	HUNGARY	G63C04+(CAH1)	05
	8	74TC-1, 74TC-2	TRIP CIRCUIT SUPERVISION RELAY		2	TS101	E-LABS	PAKISTAN	TS101	17
C	9	TH+HS	THERMOSTAT AND HUMIDSTAT		1	ELH-220	E-LABS	PAKISTAN	ELH-220	14
	10	SH	SPACE HEATER		1	ELH-220	E-LABS	PAKISTAN	ELH-220	14
D	11	DS	DOOR SWITCH		1	YSP+YSMS	YONGSUNG	SOUTH KOREA	YSP3315GW-B+YSMS-C	14
	12	IL	CUBICLE LIGHTING , 5W, 260 VAC		1	YST8	YONGSUNG	SOUTH KOREA	YST8-30-5W	14
D	13	TPS	240 VAC, 16A, THREE PIN SOCKET OUTLET		1		LEAR	CHINA		14
	14	H1	INDICATION LAMP RED		1	YSPL	YONGSUNG	SOUTH KOREA	YSPL2-DL12RW	08
E	15	X1	DISCONNECTING TERMINAL BLOCK (SCREW TYPE) FOR CT CIRCUIT WITH SHORTENING ARRANGEMENT		14	SCB-6	CABUR	ITALY		
	16	X2	DISCONNECTING TERMINAL BLOCK (SCREW TYPE) FOR VT CIRCUITS		4	SCB-6	CABUR	ITALY		
E	17	X3	TERMINAL BLOCKS FOR CONTROL FUNCTION		39	CBD-4	CABUR	ITALY		
	18	X6	TERMINAL BLOCKS FOR TRIP CIRCUIT-1		5	CBD-4	CABUR	ITALY		
F	19	X7	TERMINAL BLOCKS FOR TRIP CIRCUIT-2		5	CBD-4	CABUR	ITALY		
	20	X14	TERMINAL BLOCKS FOR SCADA/TELECOM		2	CBD-4	CABUR	ITALY		
F	21	X15	TERMINAL BLOCKS FOR COMMUNICATION CHANNEL		6	CBD-4	CABUR	ITALY		
APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: LIST OF APPARATUS 132kV LINE PROTECTION PANEL TYPE RP3	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan			DWG# EPE/ENU-18/P1404	SHT: 02 OF 03	
NAH	ABA	MSC						DATE: 27.01.2018	FOR APPROVAL	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 22	X17	TERMINAL BLOCKS FOR AC SUPPLY DISTRIBUTION			4	CBD-4	CABUR	ITALY		A
23	X91	TERMINAL BLOCK FOR ANNUNCIATOR ALARMS			13	CBD-4	CABUR	ITALY		
24	X92	TERMINAL BLOCK FOR ANNUNCIATOR ALARMS			9	CBD-4	CABUR	ITALY		
25	X93	TERMINAL BLOCK FOR ANNUNCIATOR ALARMS			8	CBD-4	CABUR	ITALY		B
B 26	X94	TERMINAL BLOCK FOR ANNUNCIATOR ALARMS SPARE			8	CBD-4	CABUR	ITALY		B
27	X101	TERMINAL BLOCK FOR DC SUPPLY DISTRIBUTION			4	CBD-4	CABUR	ITALY		
28	X4	SPARE TERMINAL BLOCK			8	CBD-4	CABUR	ITALY		
c										c
d										d
e										e
f										f
APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4			TITLE: LIST OF APPARATUS 132kV LINE PROTECTION PANEL TYPE RP3	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan		DWG# EPE/ENU-18/P1404	SHT: 03 OF 03
NAH	ABA	MSC						DATE:27.01.2018	FOR APPROVAL	REV: 0

SCHEMATIC DIAGRAMS

132kV LINE PROTECTION PANEL

TYPE RP3

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: COVER SHEET 132kV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1405 71-B Garden Block, New Garden Town, Lahore, Pakistan	SHT: 01 OF 18 REV: 0
NAH	ABA	MSC		 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE:27.01.2018 FOR APPROVAL	

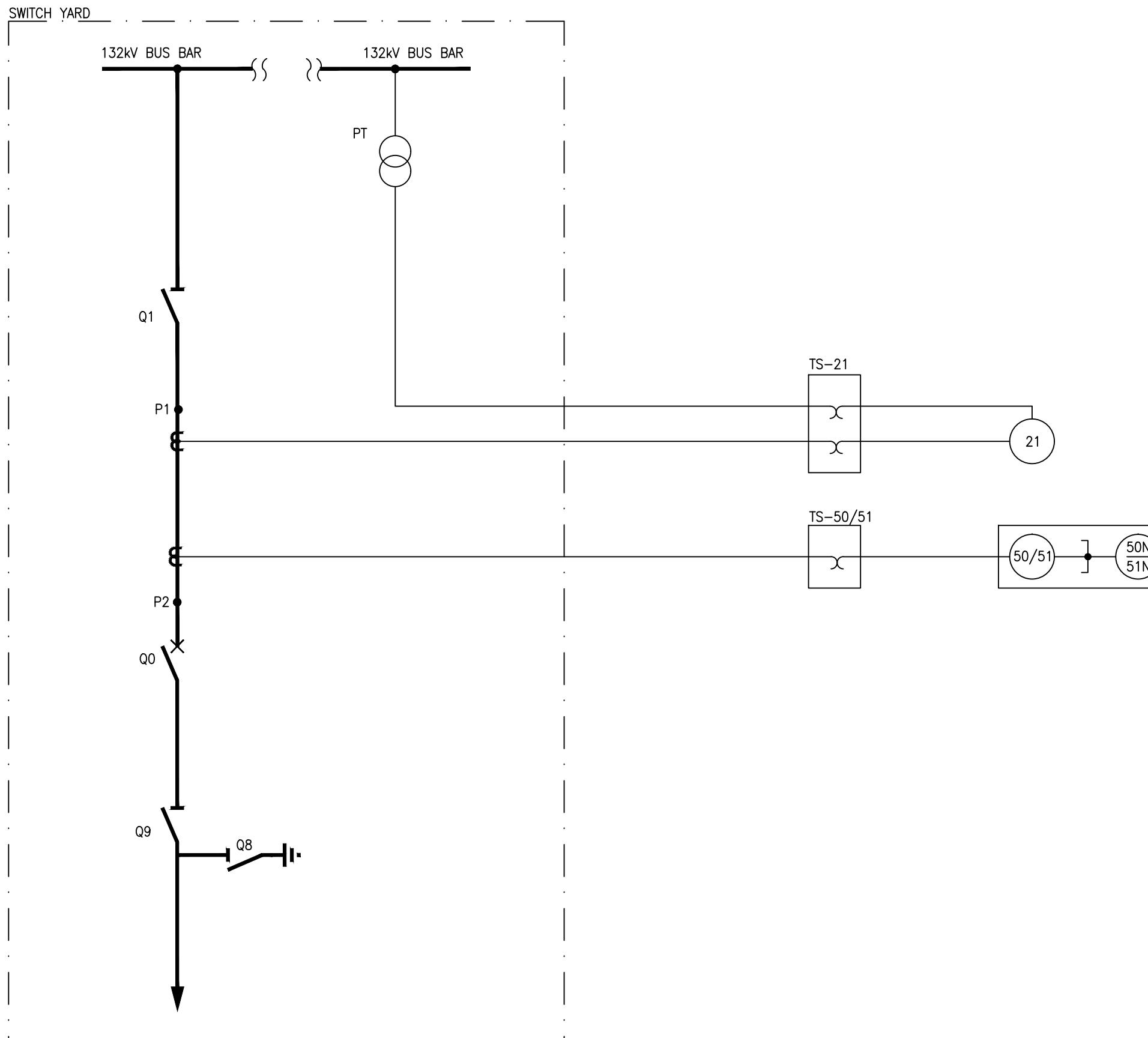
DESCRIPTION	SHEET NO
COVER SHEET	01
LIST OF CONTENTS	02
LIST OF SYMBOLS	03
SINGLE LINE DIAGRAM	04
AC SCHEMATIC DIAGRAM	05
AC SCHEMATIC DIAGRAM	06
21 RELAY BINARY INPUTS & POWER SUPPLY	07
TRIP RELAY INITIATION	08
PROTECTION ALARMS	09
PROTECTION ALARMS	10
CB TRIP CIRCUIT-1	11
CB TRIP CIRCUIT-2	12
TRIP CIRCUIT INDICATIONS, 50/51 SPARE IOs	13

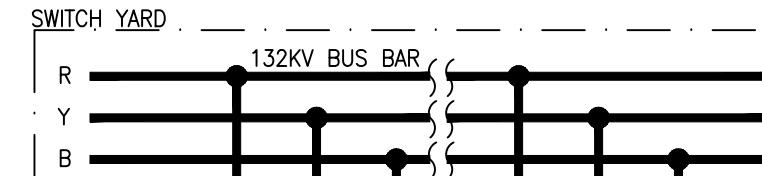
DESCRIPTION	SHEET NO
AC SUPPLY DISTRIBUTION	14
21 RELAY TYPE D60 DETAILS	15
50/51 RELAY TYPE 350 & TRIP CKT SUPVN. RELAY DETAILS	16
TEST BLOCK TYPE TSB14 DETAILS	17

LIST OF SYMBOLS			
	HV DISCONNECTOR		COIL
	HV CIRCUIT BREAKER		EQUIPMENT WITHIN PANEL
	CURRENT TRANSFORMER		INDEPENDENT PANEL
	VOLTAGE TRANSFORMER		INDEPENDENT PANEL
	132/11 KV POWER TRANSFORMER	21	DISTANCE RELAY
	RELAY PANEL TERMINAL BLOCK	50/51	OVER CURRENT & EARTH FAULT RELAY
	CONTROL PANEL TERMINAL BLOCK	TS	TEST BLOCK
	EARTH CONNECTION	94	TRIP RELAY SELF RESET
	TEST BLOCK TERMINAL	74TC	TRIP CIRCUIT SUPERVISION RELAY
	NORMALLY CLOSED CONTACT	X	TERMINAL BLOCK
	NORMALLY OPEN CONTACT		DISCONNECTING TERMINAL BLOCK (SCREW TYPE) WITH SLIDING LINK (USED WITH X1 & X2)
	CHANGE OVER CONTACT		
	MINIATURE CIRCUIT BREAKER		
	INDICATING BULB/LED/CUBICLE LIGHT		
	220V SOCKET		
	SPACE HEATER		
	DIODE		

NOTE:

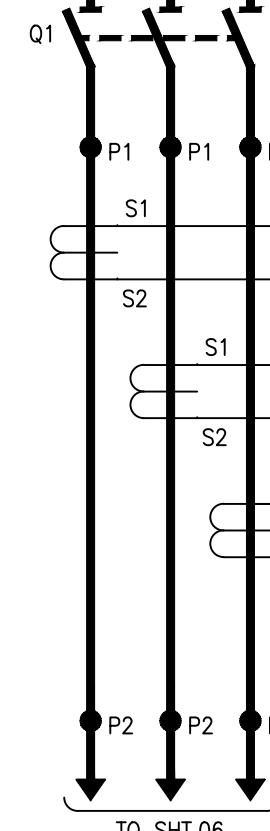
THIS SWITCH YARD PART OF THE DRAWING HAS BEEN INCLUDED
FOR CONCEPTUAL UNDERSTANDING OF THE AC SCHEME.





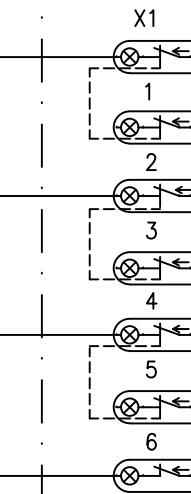
132/ $\sqrt{3}$ / 0.11/ $\sqrt{3}$ KV
BUS VT

132/ $\sqrt{3}$ / 0.11/ $\sqrt{3}$ KV
BUS VT

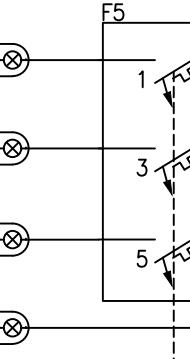


TO SHT.06

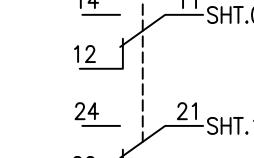
MK-LINE



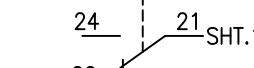
NOTE:1



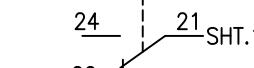
NOTE:2



SHT.07/7B



SHT.18



SHT.16



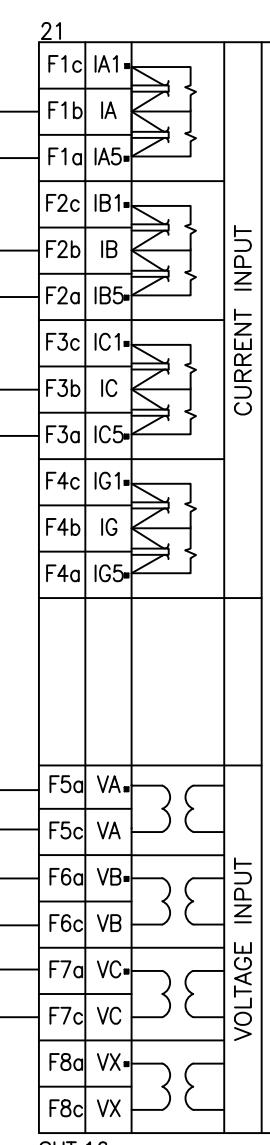
SHT.10/4B



SHT.10/4B

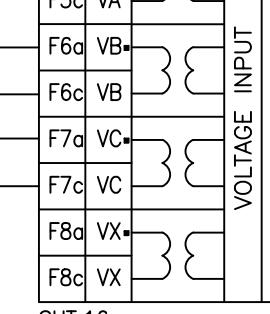
NOTE:

- ALL CT WIRING SHALL BE OF 4mm² WIRES
- ALL VT WIRING SHALL BE OF 2.5mm² WIRES
- THE SWITCH YARD PART IS INCLUDED FOR CONCEPTUAL UNDERSTANDING OF AC SCHEME.



CURRENT INPUT

F8L



VOLTAGE INPUT

F8C

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
TS-21	TEST BLOCK	TSB14	ARTECHE
21	DISTANCE RELAY	D60	GE
F5	AC MCB 3P	G60	GE

NOTE:3

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4
NAH	ABA	MSC	

TITLE:
AC SCHEMATIC DIAGRAM
132kV LINE PROTECTION PANEL TYPE RP3

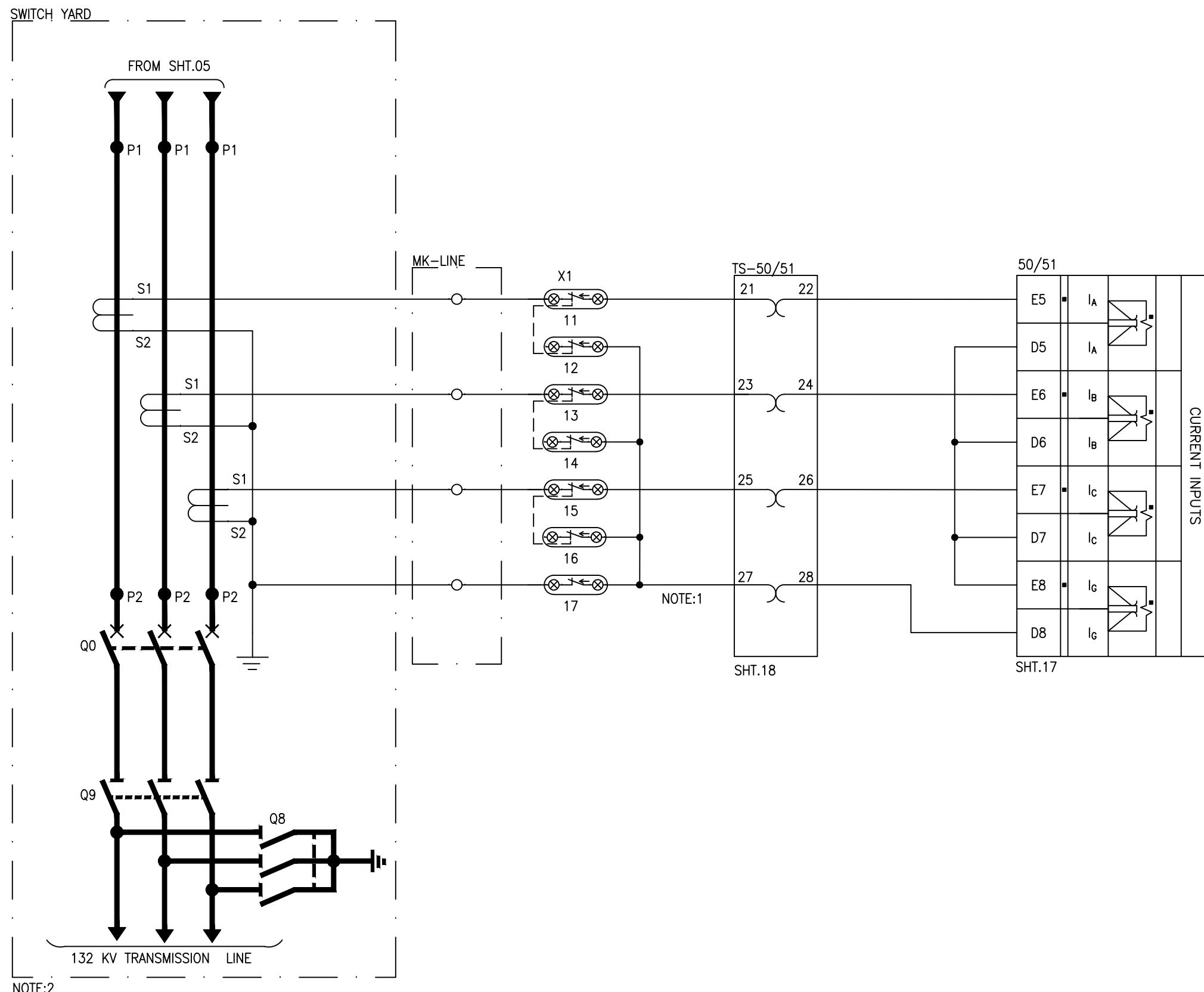


DWG# EPE/ENU-18/P1405 SHT: 05 OF 18
DATE:27.01.2018 FOR APPROVAL REV: 0

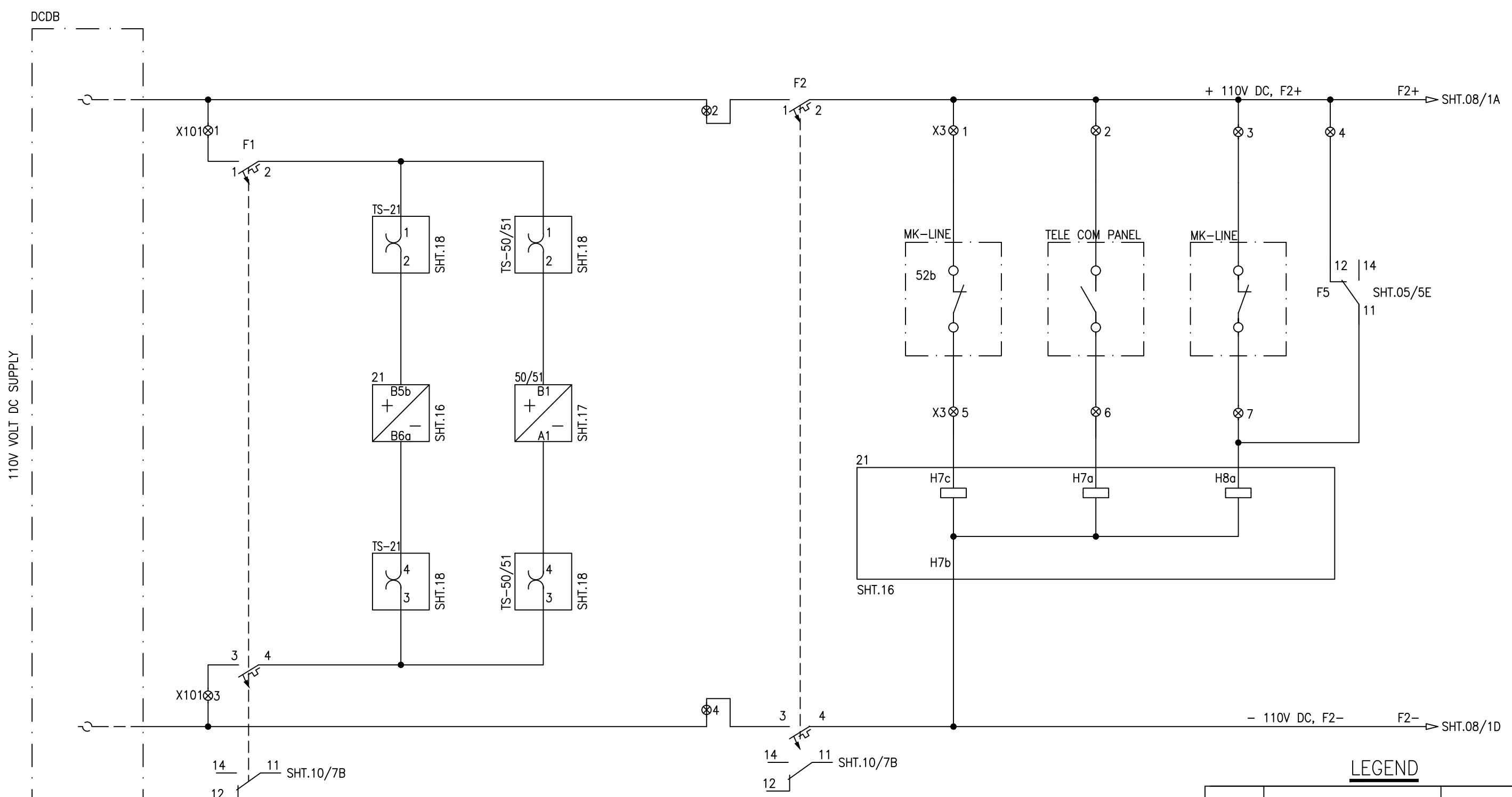


NOTE:

1. ALL CT WIRING SHALL BE OF 4mm^2 WIRES
2. THE SWITCH YARD PART IS INCLUDED FOR CONCEPTUAL UNDERSTANDING OF AC SCHEME ONLY.

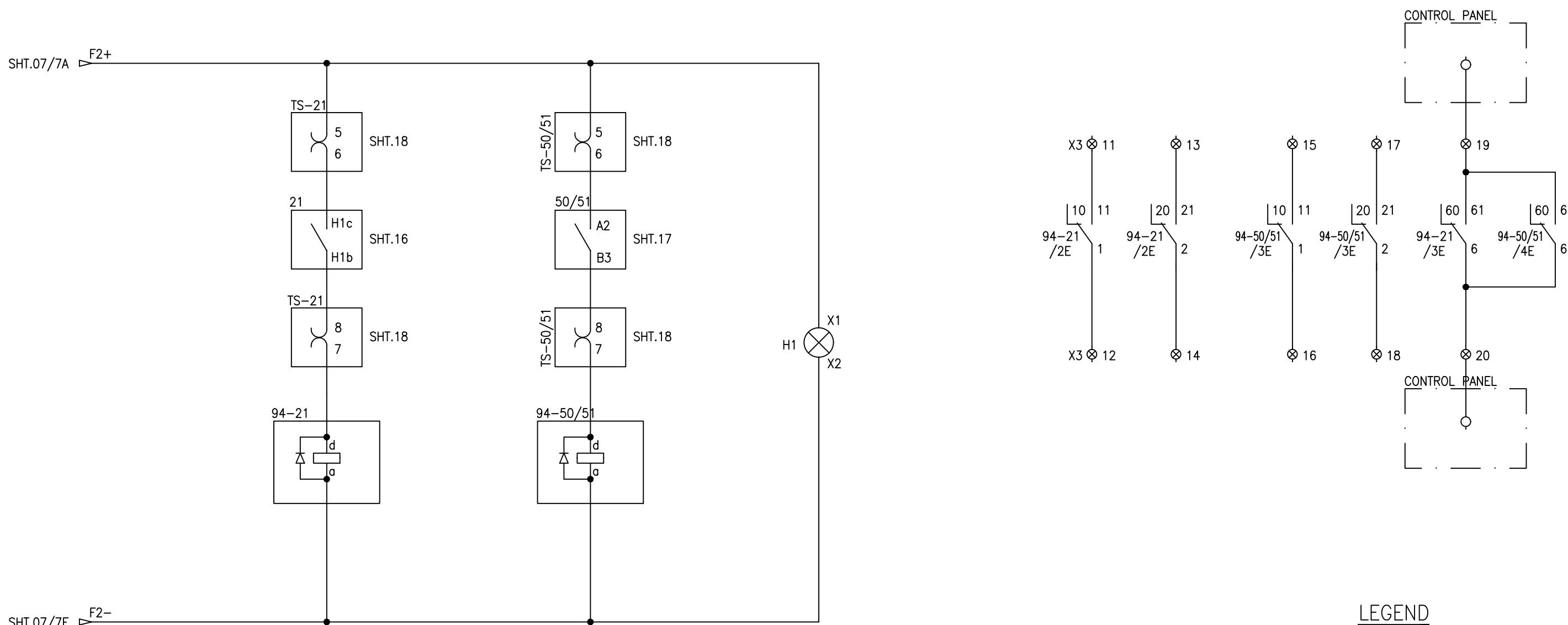
LEGEND

DES:	DESCRIPTION	TYPE	MAKE
TS-50/51	TEST BLOCK	TSB14	ARTECHE
50/51	OC & EF RELAY	350	GE

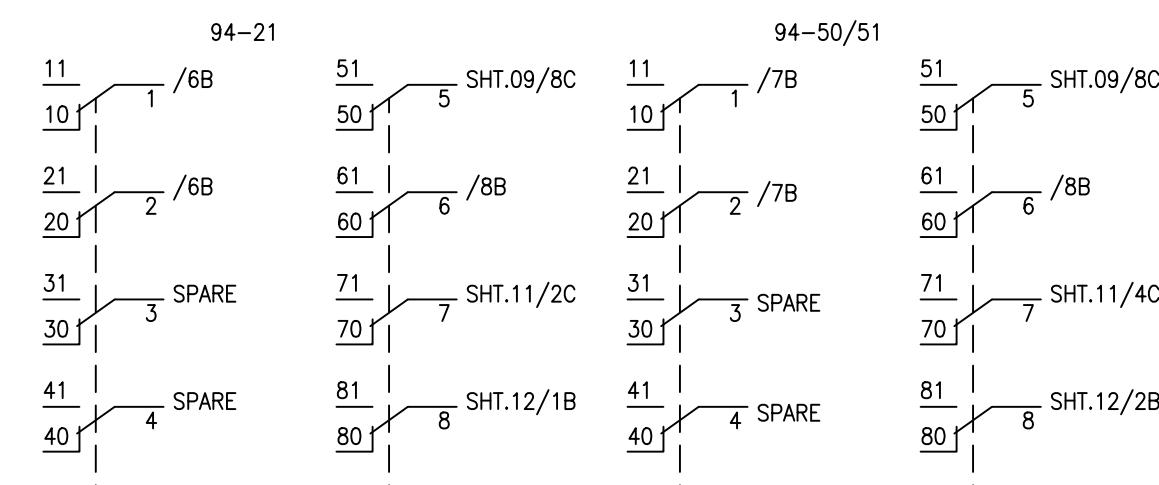
110V DC SUPPLY
DISTANCE RELAY OC & EF RELAYCB OPEN DISTANCE PROTECTION VT MCB TRIPPED
CARRIER RECEIVE VT BOX PANEL MCB

DES:	DESCRIPTION	TYPE	MAKE
TS-21, TS-50/51	TEST BLOCK	TSB14	ARTECHE
21	DISTANCE RELAY	D60	GE
F1, F2	DC MCB 2P	EP-100	GE

DISTANCE PROTECTION RELAY GENERAL TRIP	OC & EF PROTECTION RELAY GENERAL TRIP	LAMP FOR DC HEALTHY	INDICATION	OUT PUT CONTACTS
				94-21 SPARES 94-50/51 SPARES FOR CB TRIP
				94-50/51 SPARES ALARM

LEGEND

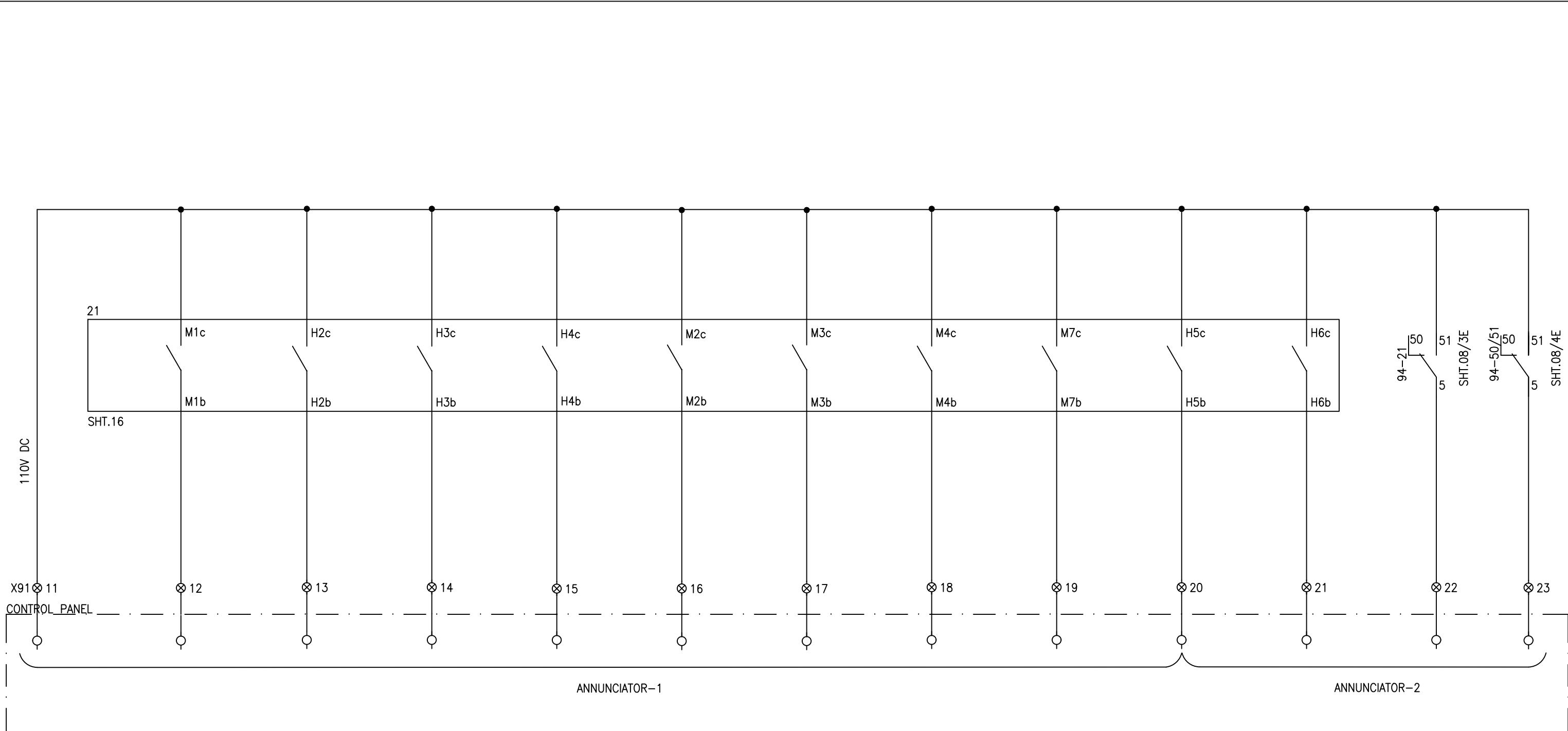
DES:	DESCRIPTION	TYPE	MAKE
TS-21, TS-50/51	TEST BLOCK	TSB14	ARTECHE
21	DISTANCE RELAY	D60	GE
94-21	TRIP RELAY SELF RESET	RJ8R	ARTECHE
94-50/51	TRIP RELAY SELF RESET	RJ8R	ARTECHE
50/51	OC & EF RELAY	350	GE
H1	INDICATION LAMP RED	PLM1L110S	GGT



DISTANCE PROTECTION RELAY

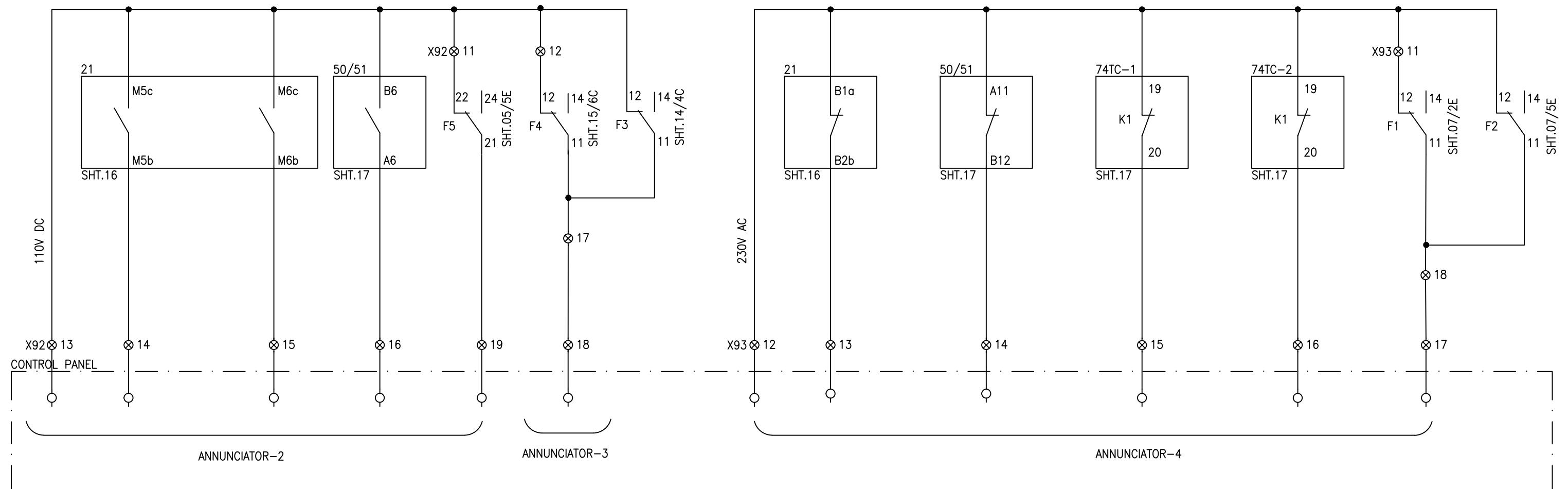
50/51

PICKUP	R PHASE TRIP	Y PHASE TRIP	B PHASE TRIP	ZONE-1 TRIP	ZONE-2 TRIP	ZONE-3 TRIP	POWER SWING BLOCKED	AUTO RECLOSER OPERATED	AUTO RECLOSER BLOCKED	GENERAL TRIP	GENERAL TRIP
--------	--------------	--------------	--------------	-------------	-------------	-------------	---------------------	------------------------	-----------------------	--------------	--------------

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
21	DISTANCE RELAY	D60	GE
94-21	TRIP RELAY SELF RESET	RJ8R	ARTECHE
94-50/51	TRIP RELAY SELF RESET	RJ8R	ARTECHE

21	50/51	VT MCB	AC SUPPLY	21	50/51	TRIP CIRCUIT-1	TRIP CIRCUIT-2	CONTROL RELAY DC
CARRIER RECEIVE	CARRIER SEND	HIGH SET TRIP	FAIL	FAULTY	FAULTY	FAULTY	FAULTY	DC FAIL SUPPLY FAIL

LEGEND

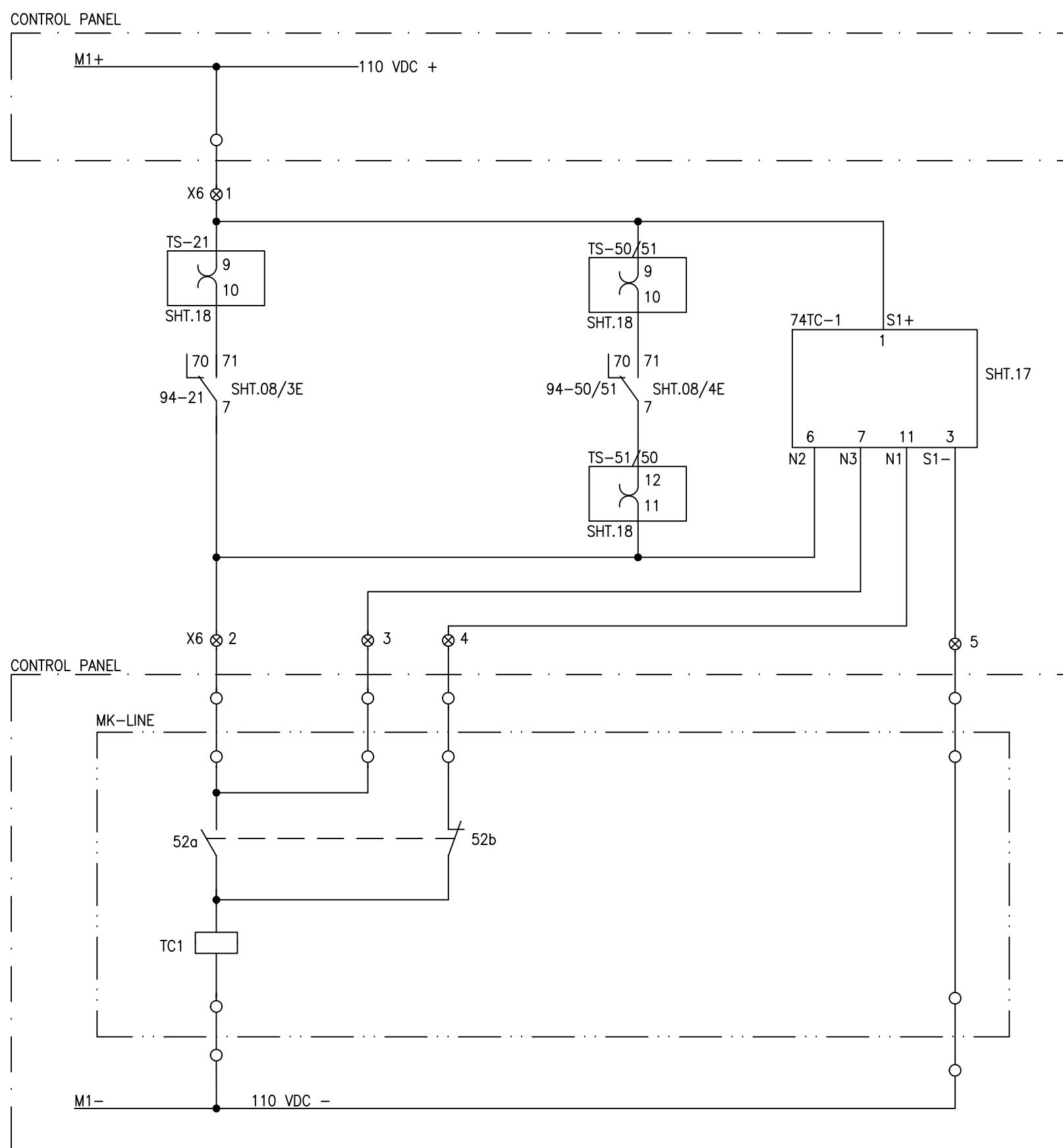
DES:	DESCRIPTION	TYPE	MAKE
50/51	OC & EF RELAY	350	GE
21	DISTANCE RELAY	D60	GE
74TC-1	TRIP CIRCUIT SUPER-VISION RELAY	TS101	ELABS
74TC-2	TRIP CIRCUIT SUPER-VISION RELAY	TS101	ELABS

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
F1,F2	DC MCB 2P	EP-100	GE
F3,F4	AC MCB 2P	G60	GE
F5	AC MCB 3P	G60	GE

TRIP RELAY-21

TRIP RELAY-50/51

TRIP CIRCUIT-1
SUPERVISIONNOTE:

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

LEGEND

DES:	DESCRIPTION	TYPE	MAKE
74TC-1	TRIP CIRCUIT SUPERVISION RELAY	TS101	ELABS
94-21	TRIP RELAY SELF RESET	RJ8R	ARTECHE
94-50/51	TRIP RELAY SELF RESET	RJ8R	ARTECHE
TS-X	TEST BLOCK	TSB14	ARTECHE



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

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: CB TRIP CIRCUIT-1 132kV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1405	SHT: 11 OF 18
NAH	ABA	MSC			DATE: 27.01.2018	FOR APPROVAL

TRIP RELAY-21

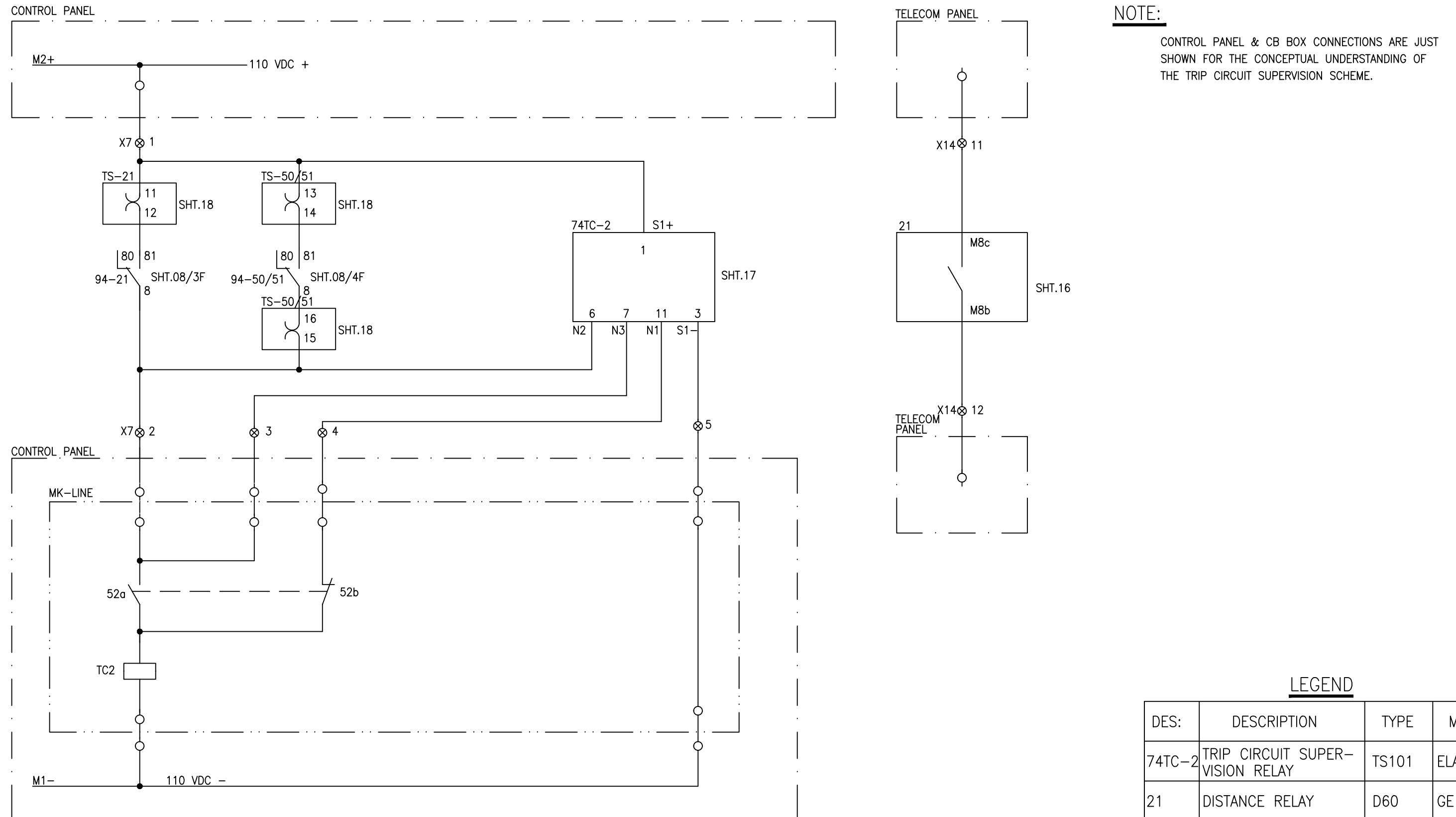
TRIP RELAY-50/51

TRIP CIRCUIT-2

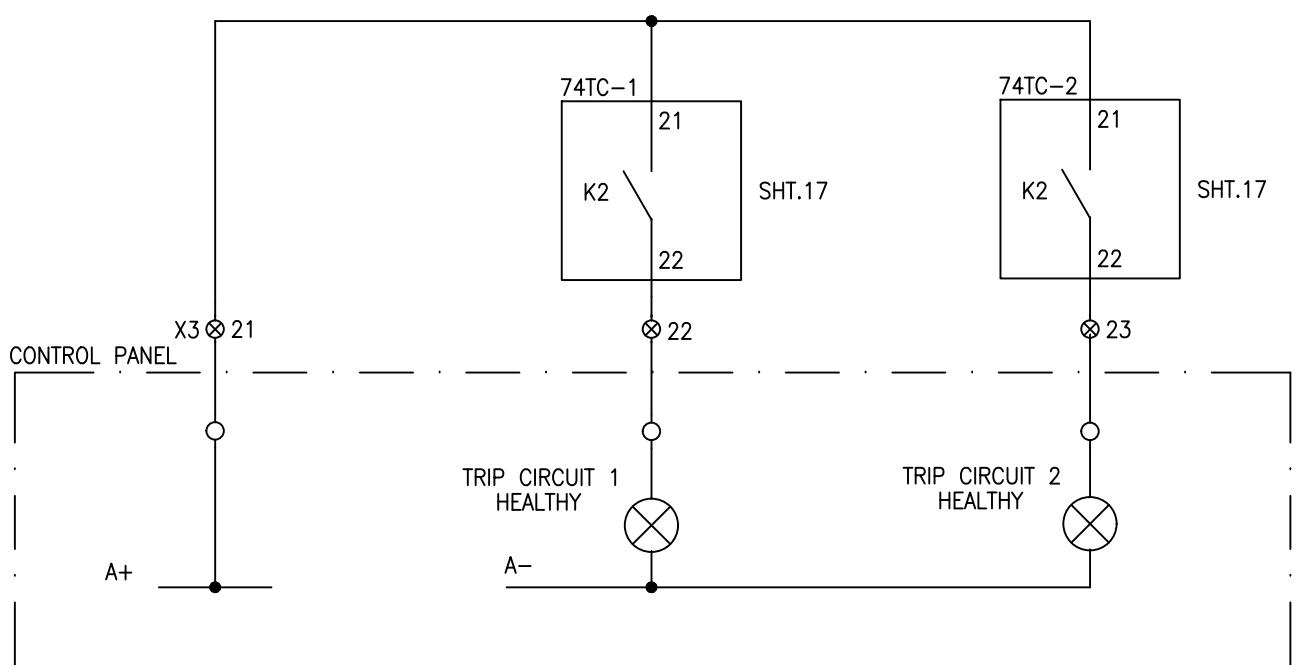
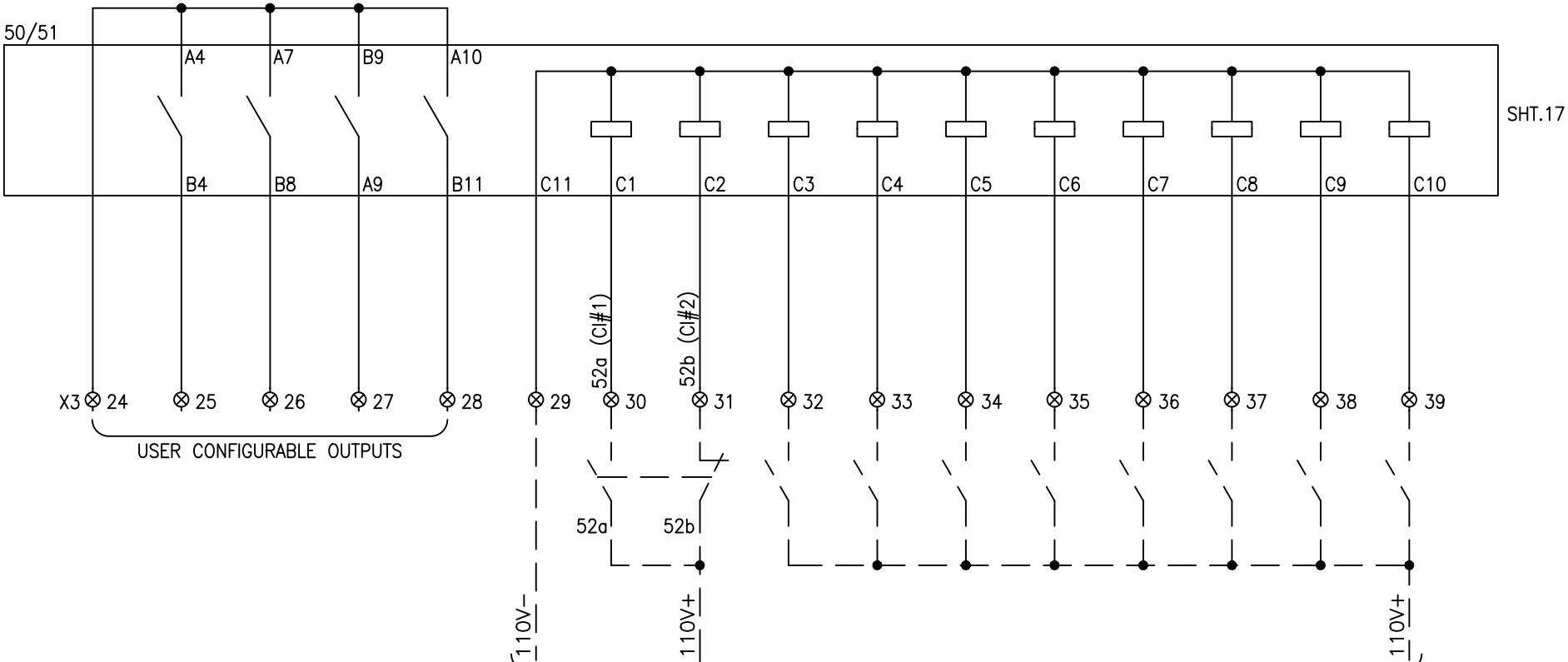
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CARRIER

SEND

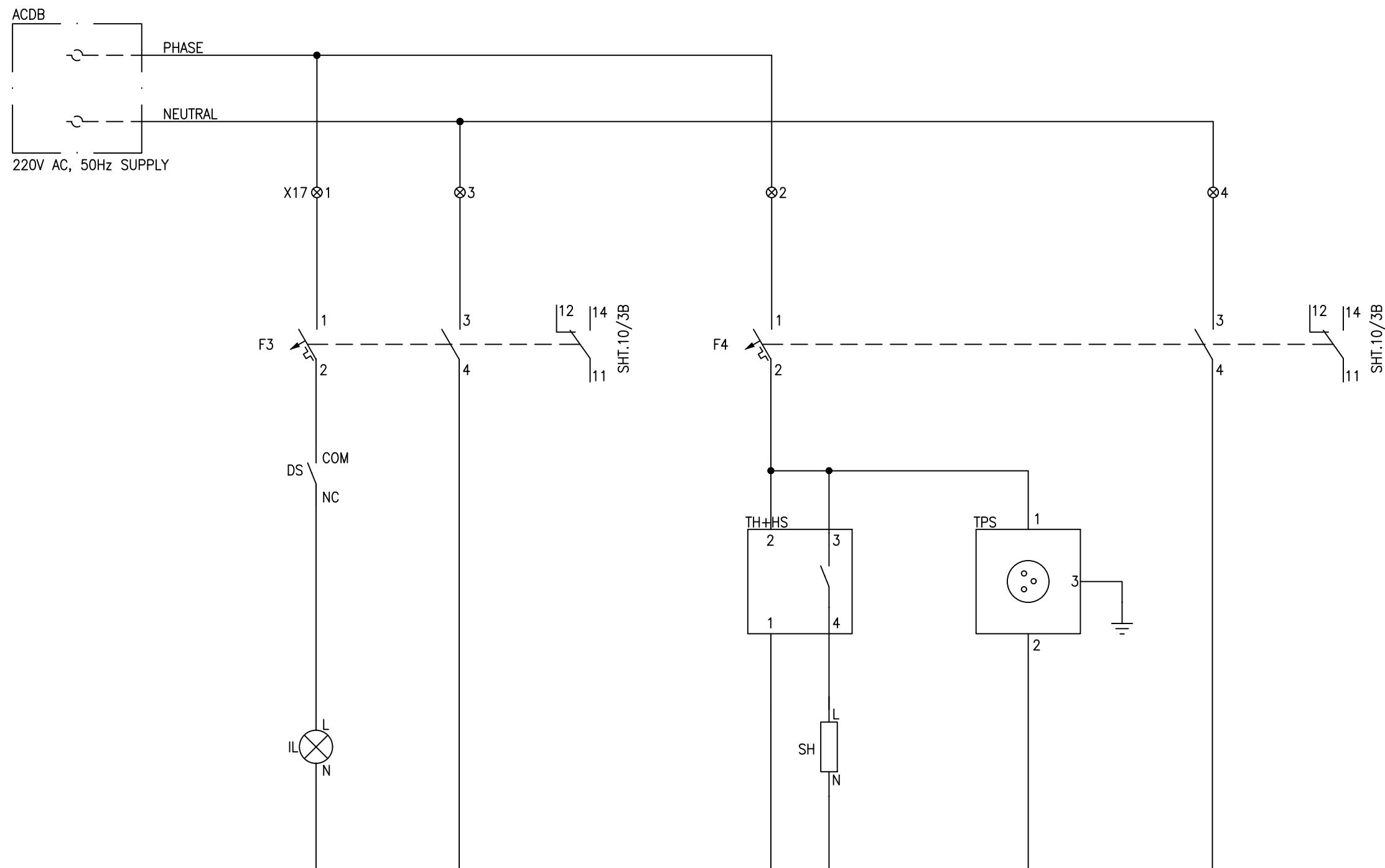
LEGEND

DES:	DESCRIPTION	TYPE	MAKE
74TC-2	TRIP CIRCUIT SUPER-VISION RELAY	TS101	ELABS
21	DISTANCE RELAY	D60	GE
94-21	TRIP RELAY SELF RESET	RJ8R	ARTECHE
94-50/51	TRIP RELAY SELF RESET	RJ8R	ARTECHE

TRIP CIRCUIT-1
HEALTHYTRIP CIRCUIT-2
HEALTHY50/51 RELAY SPARE BINARY INPUTS & OUTPUTS
USER CONFIGURABLELEGEND

DES:	DESCRIPTION	TYPE	MAKE
74TC-1	TRIP CIRCUIT SUPER-VISION RELAY	TS101	ELABS
74TC-2	TRIP CIRCUIT SUPER-VISION RELAY	TS101	ELABS
50/51	OC & EF RELAY	350	GE

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: TRIP CIRCUIT INDICATIONS 50/51 SPARE IOs 132KV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1405	SHT: 13 OF 18
NAH	ABA	MSC		 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 27.01.2018	FOR APPROVAL REV: 0

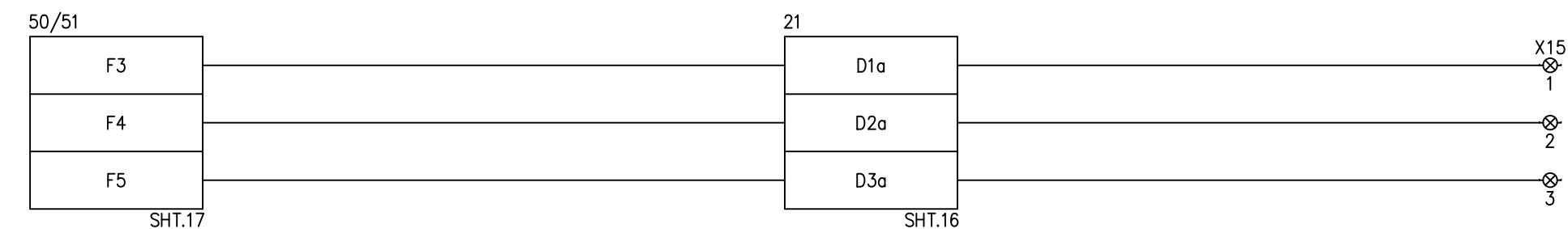
DOOR SWITCH &
CUBICLE LIGHTAC SUPPLY DISTRIBUTION
SPACE HEATER THREE
THERMOSTAT PIN SOCKETLEGEND

DES:	DESCRIPTION	TYPE	MAKE
TPS	THREE PIN SOCKET	-	LEAR
SH	SPACE HEATER	ELH220	E-LABS
TH+HS	THERMOSTAT	ELH220	E-LABS
IL	CUBICLE LIGHT	YST8	YONGSUNG
DS	DOOR SWITCH	YSP+YSMS	YONGSUNG
F3, F4	AC MCB 2P	G60	GE

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132kV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: AC SUPPLY DISTRIBUTION 132kV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1405	SHT: 14 OF 18
NAH	ABA	MSC		 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE:27.01.2018	FOR APPROVAL

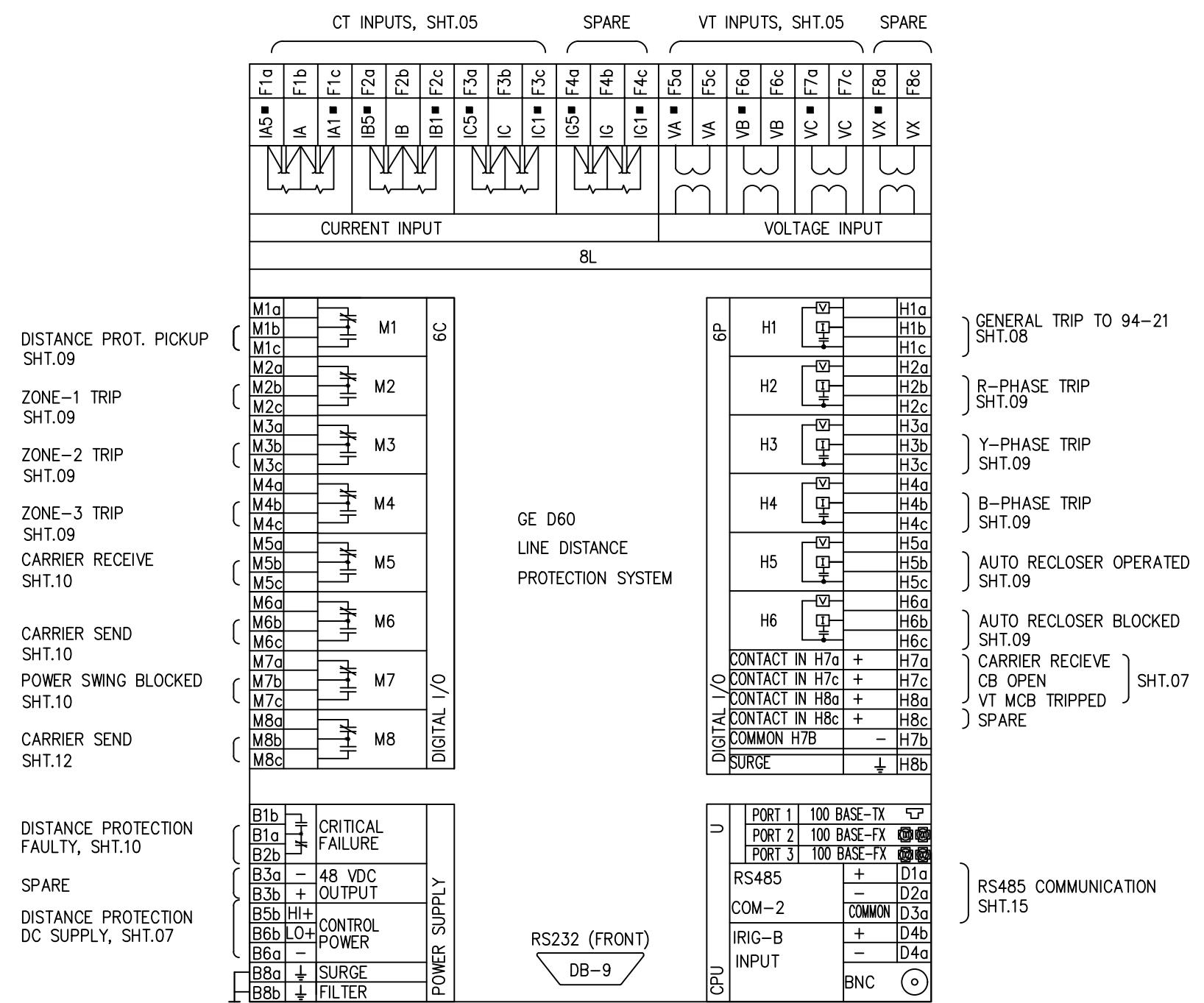
50/51 RSJ485

87T RSJ485

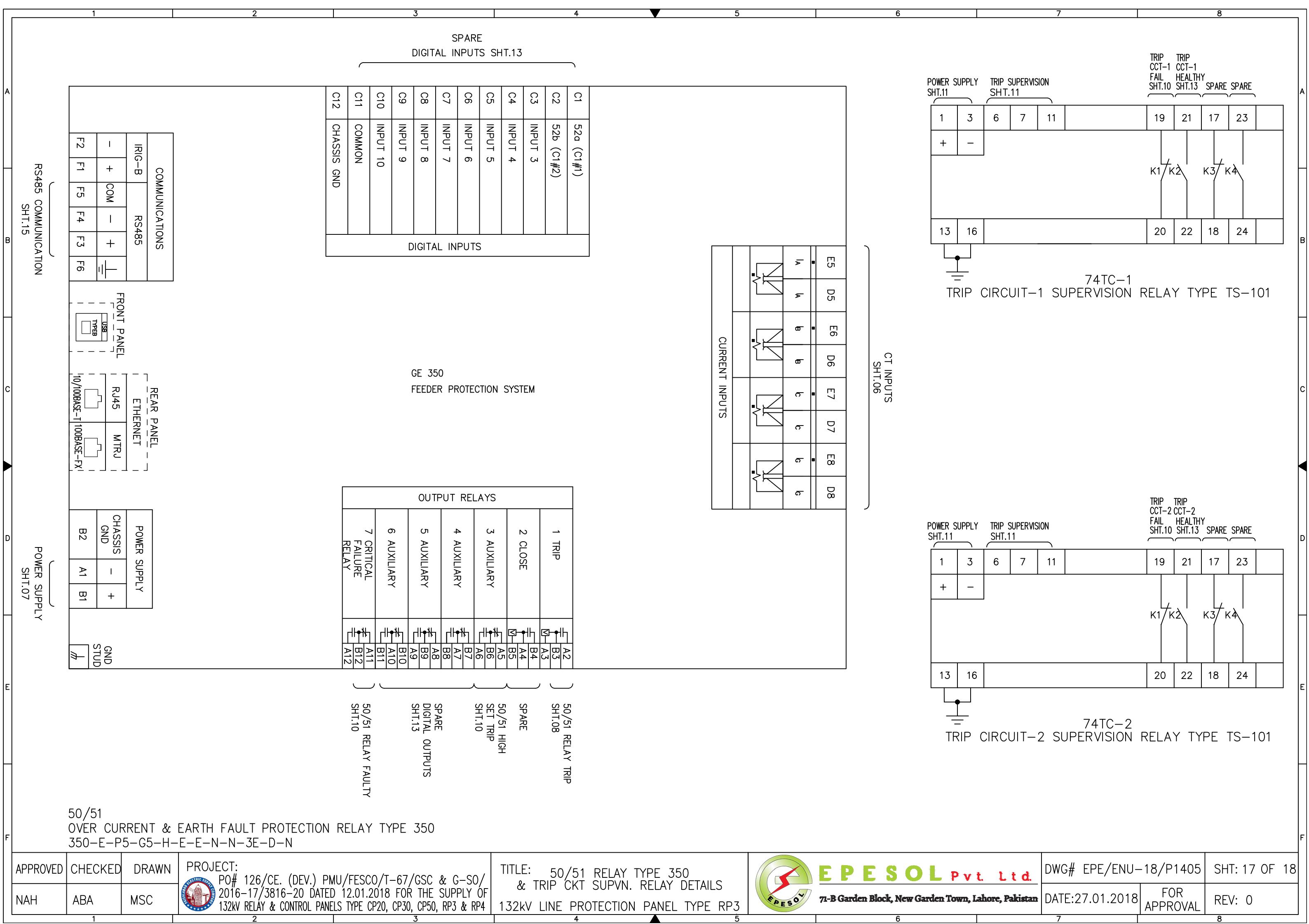
LEGEND

DES:	DESCRIPTION	TYPE	MAKE
50/51	O/C & E/F RELAY	350	GE
21	DIST. PROT. RELAY	D60	GE

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132kV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: RS485 COMMUNICATION 132kV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1405 71-B Garden Block, New Garden Town, Lahore, Pakistan	SHT: 15 OF 18
NAH	ABA	MSC			DATE: 27.01.2018 FOR APPROVAL	REV: 0

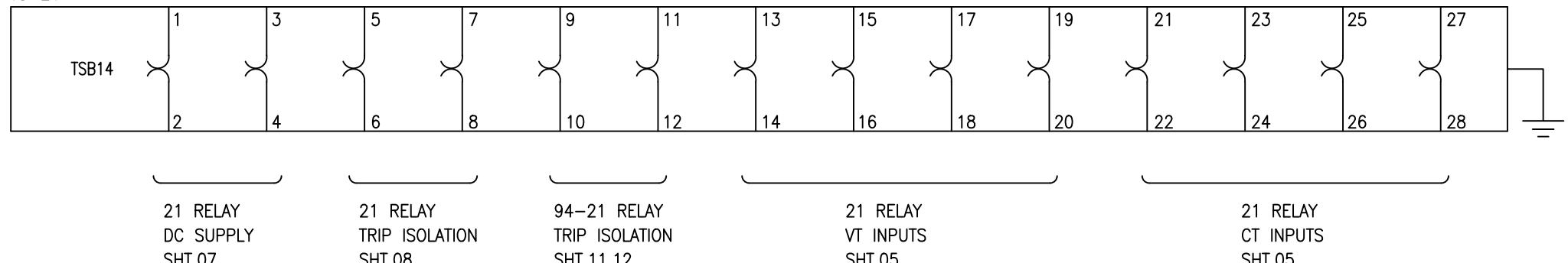


APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: DISTANCE RELAY TYPE D60 DETAILS 132KV LINE PROTECTION PANEL TYPE RP3	EPE SOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/P1405	SHT: 16 OF 18
NAH	ABA	MSC				DATE: 27.01.2018	FOR APPROVAL



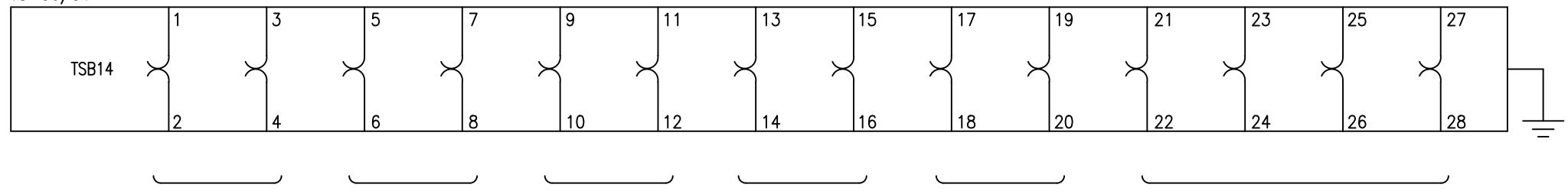
TS-21
TEST BLOCK TYPE TSB14-111111222AAAB

TS-21



TS-50/51
TEST BLOCK TYPE 1111111111AAAB

TS-50/51



LEGEND

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

APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/ 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF 132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP4	TITLE: TEST BLOCK TYPE TSB14 DETAILS 132KV LINE PROTECTION PANEL TYPE RP3	DWG# EPE/ENU-18/P1405 71-B Garden Block, New Garden Town, Lahore, Pakistan	SHT: 18 OF 18
NAH	ABA	MSC			DATE:27.01.2018	FOR APPROVAL



TITLE: / OF M TERMINAL DETAIL 132LV LINE PROTECTION PANEL TYPE PRZ

PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
 132KV RELAY & CONTROL PANELS TYPE CR20, CR30, CR50, PR3 & PR5
 E.S.C.O. ELECTRIC SUPPLY CORPORATION

DWG# EPE/ENU-18/P1406	SHT: 01 OF 14
DATE:27.01.2018	FOR APPROVAL
	REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE: TERMINAL DETAIL
132kV LINE PROTECTION PANEL TYPE PP3



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

DWC II - FDF / ENH 1.0 / D1400 - OUT - 2025-11

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE: TERMINAL DETAIL
132kV LINE PROTECTION PANEL TYPE PP3



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

DWC II - FDF / ENH 1.0 / D1400 - OUT - 24.05.14

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE:		TERMINAL DETAIL						
/	DF	M	132kV	LINE PROTECTION PANEL	TYPE	PR3		



E P E S O L Pvt. Ltd.

DWC II - FDF / ENH 1.0 / D1400 - OUT - 25.05.14

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE: TERMINAL DETAIL
132KV LINE PROTECTION PANEL TYPE PP3



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

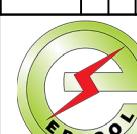
DWC II - FDF / ENH 1.0 / D1400 - OUT - 2025-11

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CR20, CR30, CR50, PR3 & PR50


TITLE: /
F TERMINAL DETAIL
M 132KV LINE PROTECTION PANEL TYPE PR3



E P E S O L Pvt. Ltd.

DWC II - FDF / ENH 1.0 / D1400 - OUT - 07.05.14

DATE:27.01.2018 FOR REV: 0

LEGEND:



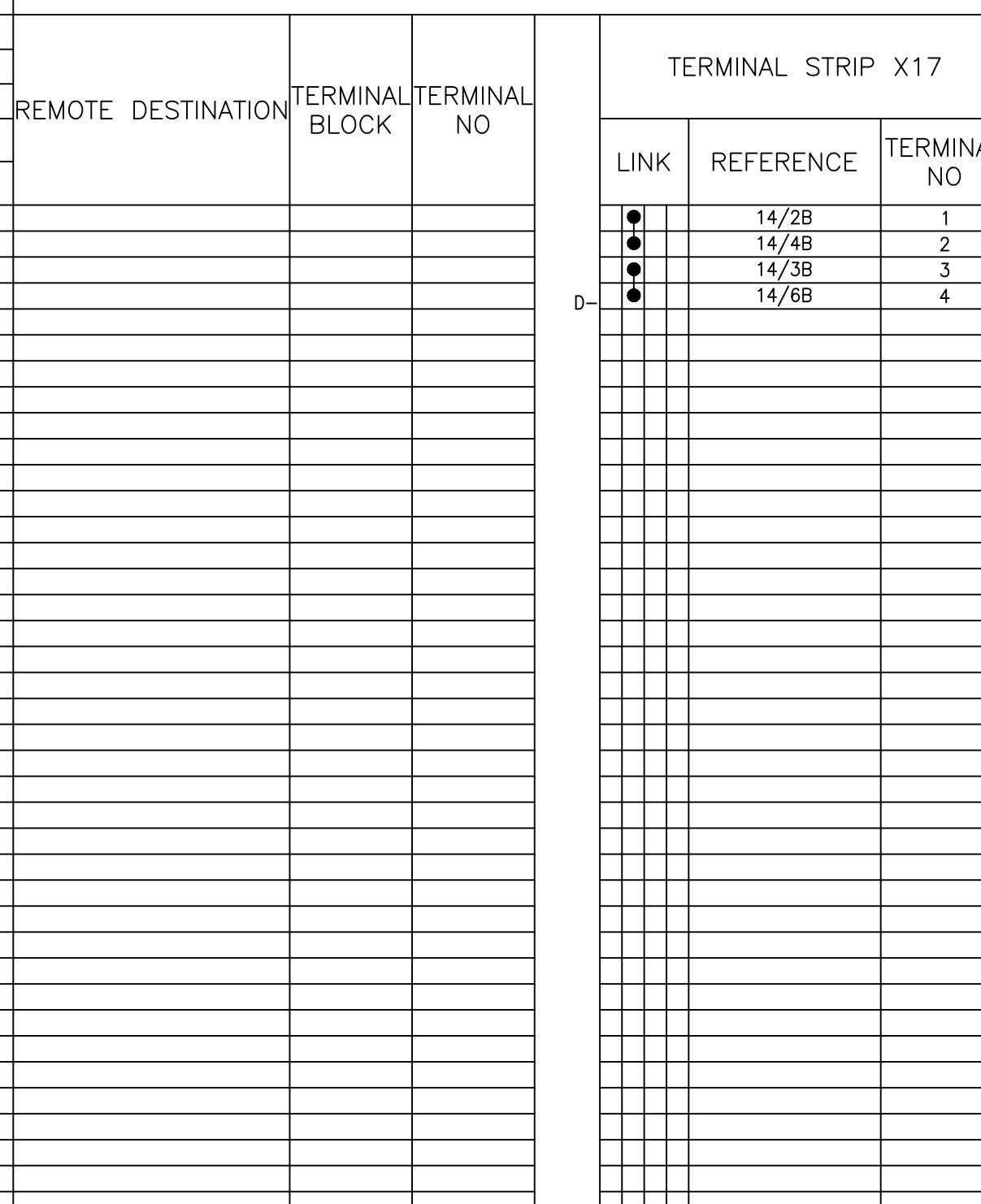
TEMPORARY SHORTENING LINK



PERMANENT LINK

D-

END COVER



F	APPROVED	CHECKED	DRAWN	PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO 2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY 132kV RELAY & CONTROL PANELS TYPE CR20, CR30, CR50, PR3 & PR50
	NAH	ABA	MSC	



E P E S O L Pvt. Ltd
Z-1-B Garden Block, New Garden Town, Lahore, Pakistan

BMS II - EPE /ENH 1.0 /PA100 OUT - 22.05.14

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE:		TERMINAL DETAIL						
/	DF	M	132kV	LINE PROTECTION PANEL	TYPE	PP3		



E P E S O L Pvt. Ltd.

DWC II - FDF / ENH 1.0 / D1400 - OUT - 20.05.14

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP5


TITLE: /
DF
4 TERMINAL DETAIL
132KV LINE PROTECTION PANEL TYPE RP3



E P E S O L P v t . L t d .

DWO II - EPE /ENL 18 /D1406 SUT 100E 14

DATE:27.01.2018 FOR REV: 0

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

BMS II - EPE /ENH 1.0 /PA100 OUT 11.05.14

DWG# EPE/ENU-18/P1406 SHI: 11 OF 14

DATE:27.01.2018 FOR REV: 0

F

Page 1

PROJECT:
PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO/
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, RP3 & RP5

TITLE: /
DF
4 TERMINAL DETAIL
132kV LINE PROTECTION PANEL TYPE RP3



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE: TERMINAL DETAIL
132KV LINE PROTECTION PANEL TYPE PP3



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

DWC II - FDF / ENH 1.0 / D1400 - OUT - 10.05.14

DATE:27.01.2018 FOR REV: 0



PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
132KV RELAY & CONTROL PANELS TYPE CP20, CP30, CP50, PR3 & PR5


TITLE: TERMINAL DETAIL
132KV LINE PROTECTION PANEL TYPE PP3



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

DWC II - FDF / ENH 1.0 / D1400 - OUT - 17.05.14

DATE:27.01.2018 FOR REV: 0



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

DWO II_EBE /ENH_12 /D1406 SUT_140E_14

DATE:27.01.2018 FOR REV: 0

45

APPROVED CHECKED DRAWN

PROJECT: PO# 126/CE. (DEV.) PMU/FESCO/T-67/GSC & G-SO,
2016-17/3816-20 DATED 12.01.2018 FOR THE SUPPLY OF
120V RELAY & CONTROL PANELS TYPE CP20, CP20, CP50, PR3 & PR5

TITLE: TERMINAL DETAIL
1320V LINE PROTECTION PANEL TYPE RP3