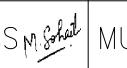
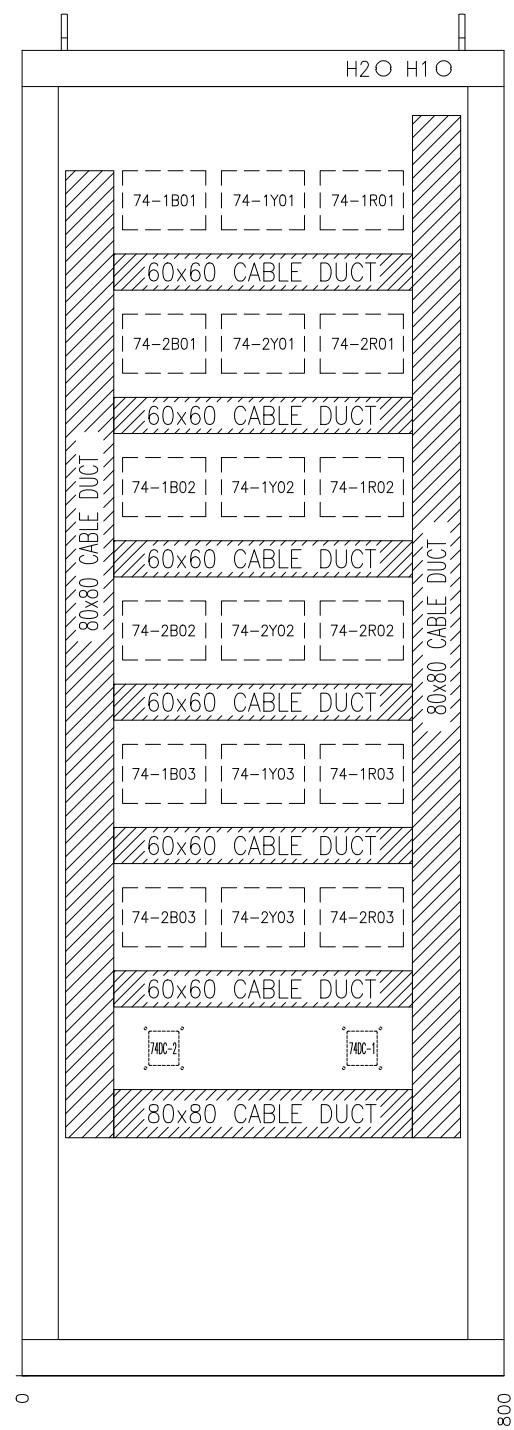
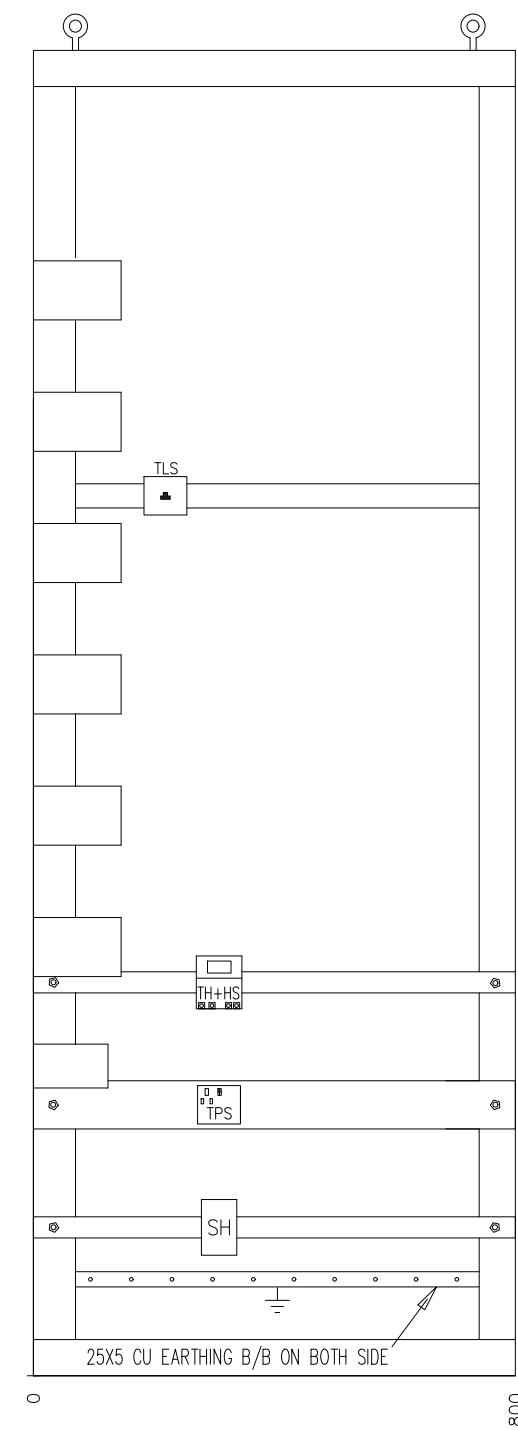
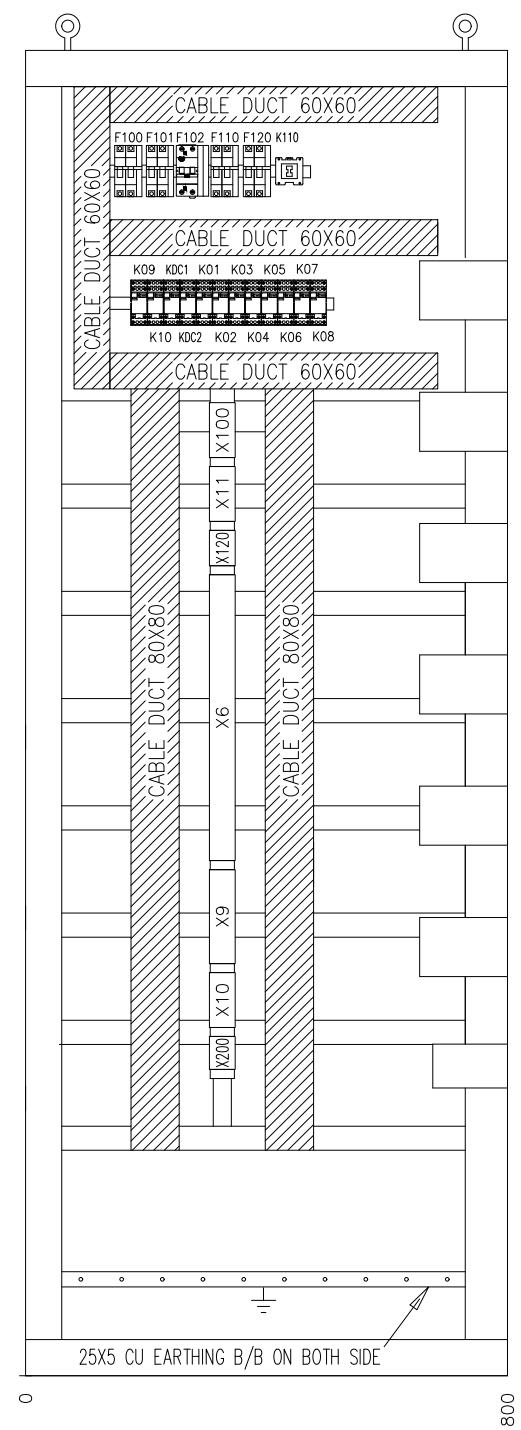
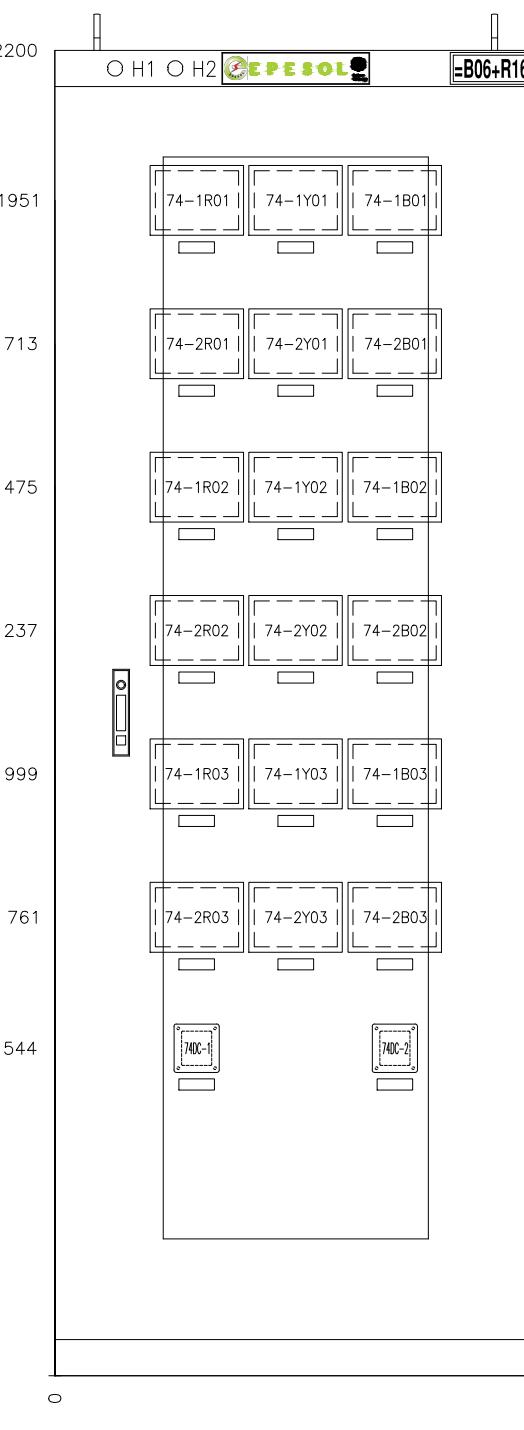


LAYOUT DIAGRAM OF 500kV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16 FOR ONE AND A HALF BREAKER SCHEME

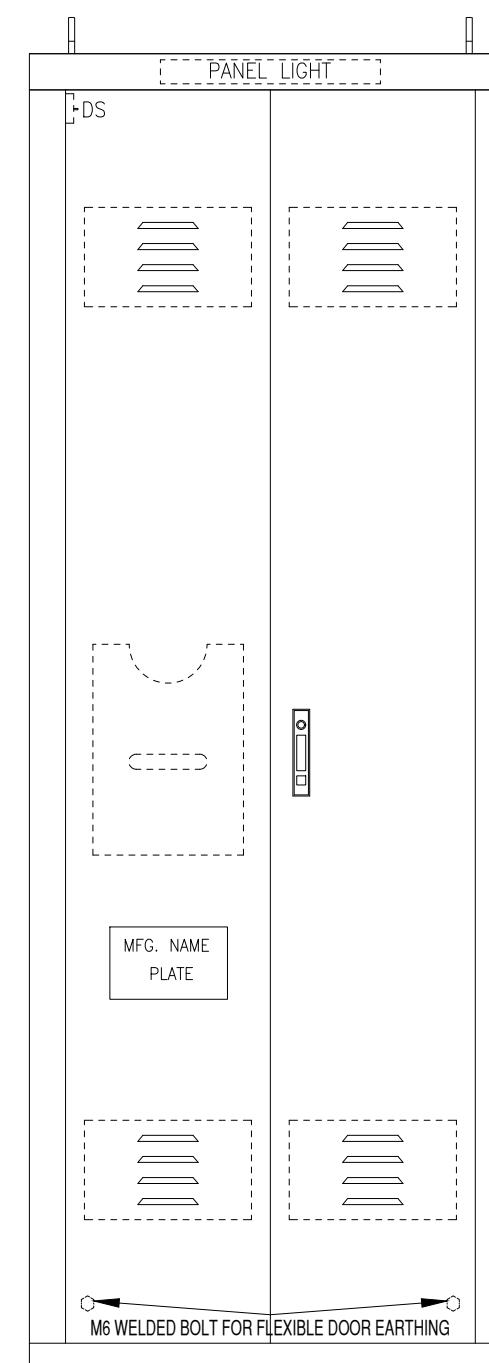
APPROVED	CHECKED	DRAWN	PROJECT:  EDUCATIONAL ORDER NTDC PO# CE/MP&M /M(P)/AM-VI/E0/9417-29 DATED 14.11.2018 FOR THE PROCUREMENT OF 220KV & 500KV RELAY& CONTROL PANELS	TITLE: COVER SHEET 500kV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	DWG# EPE/ENU-18/B61552	SHT: 01 OF 03
NAH 	MSS 	MUR 			DATE: 07.03.2019	AS BUILT



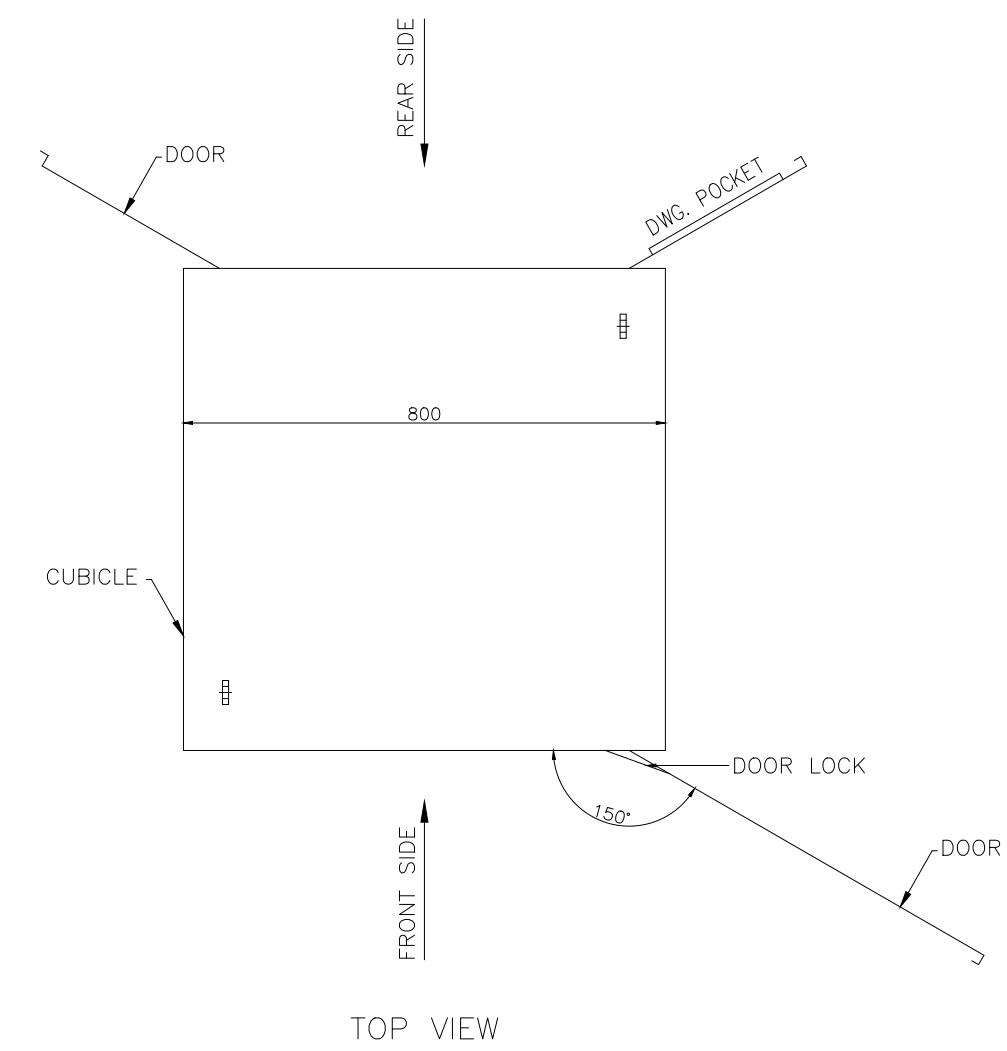
NOTES

1. RELAY PANEL: 800x800x2200 mm
2. EARTHING BUSBAR 25x5 mm²
3. FLEXIBLE EARTHING STRAP 16mm²
4. COLOUR: RAL7032
5. CLASS OF PROTECTION: IP51
6. APPLICABLE SPECS: P204:2008

APPROVED	CHECKED	DRAWN	PROJECT:  EDUCATIONAL ORDER NTDC PO# CE/MP&M /M(P)/AM-VI/EO/9417-29 DATED 14.11.2018 FOR THE PROCUREMENT OF 220KV & 500KV RELAY& CONTROL PANELS	TITLE: LAYOUT DIAGRAM 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	DWG# EPE/ENU-18/B61552	SHT: 020F 03
NAH	MSS	MUR		 EPESOL Pvt Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 07.03.2019	AS BUILT REV: 0



REAR VIEW



LIST OF APPARATUS

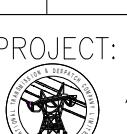
500kV TRIP CIRCUIT SUPERVISION PANEL

TYPE R16

FOR ONE AND A HALF BREAKER SCHEME

APPROVED	CHECKED	DRAWN	PROJECT: EDUCATIONAL ORDER NTDC PO# CE/MP&M /M(P)/AM-VI/E0/9417-29 DATED 14.11.2018 FOR THE PROCUREMENT OF 220KV & 500KV RELAY& CONTROL PANELS	TITLE: COVER SHEET	DWG# EPE/ENU-18/B61553	SHT: 01 OF 03
NAH 	MSS 	MUR 		500kV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 07.03.2019 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	1	74-XXXX		TRIP CIRCUIT SUPERVISION RELAY, 220 VDC, 2NO + 2NC CONTACTS		18	TS-101	E-LABS	PAKISTAN	TS101-220VDC
	2	74DC-1 TO 74DC-2		DC SUPERVISION RELAY, 220 VDC, 2 C/O CONTACTS		2	VDF-10	ARTECHE	SPAIN	VDF-10-OP2-220VDC
B	3	K01 TO K09 & KDC1, KDC2		AUXILIARY RELAY, 4 C/O CONTACTS, 220 VDC		11	PRC	GE	HUNGARY/POLAND	PRC4M40DCML
	4	K10		AUXILIARY RELAY, 4 C/O CONTACTS, 240 VAC		1	PRC	GE	HUNGARY/POLAND	PRC4M40ANL
C	5	K110		AUXILIARY CONTACTOR FOR SUPPLY CHANGOVER, 16A, 2NO-2NC, 220V DC		1	MCRC	GE	HUNGARY/POLAND	MCRC022ATWN
	6	F110, F120		DC MCB, 2 POLE, 10A, 220VDC, 10kA WITH ONE C/O CONTACT		2	EP-100	GE	HUNGARY/POLAND	EP102UCC10+CAH(1)
D	7	F100, F101		AC MCB, 2 POLE, 6A, 240VAC WITH ONE C/O CONTACT, 6kA		2	G60	GE	HUNGARY/POLAND	G62C06+CAH(1)
	8	F102		ELCB, 2-POLE, RATINGS: 16A, 30mA, 230VAC, ONE C/O CONTACT		1	DM100	GE	HUNGARY/POLAND	DM100C16/030+CAH(1)
E	9	TH+HS		THERMOSTAT AND HUMIDISTAT		1	ELH-220	E-LABS	PAKISTAN	ELH-220
	10	SH		SPACE HEATER		1	ELH-220	E-LABS	PAKISTAN	ELH-220
F	11	DS		DOOR SWITCH		1	YSP+YSMS-C	YONGSUNG	SOUTH KOREA	YSP3315GWB+YSMS-C
	12	IL		CUBICLE LIGHTING , 5W, 220 VAC		1	YST8	YONGSUNG	SOUTH KOREA	YS-T8-30-5W
G	13	TPS		240 VAC, 16A, THREE PIN SOCKET OUTLET		1		LEAR	CHINA	
	14	H1, H2		INDICATION LAMP GREEN		2	YSPL	YONGSUNG	SOUTH KOREA	YS-PL-2-AL-22-G-W
H	15	TLS		TELEPHONE SOCKET		1	-	LOCAL	PAKISTAN	-
	16	X100		TERMINAL BLOCKS FOR COMPARTMENT HEATING CIRCUIT		14	CBD-4	CABUR	ITALY	-
I	17	X11		TERMINAL BLOCK FOR SCADA		14	CBD-4	CABUR	ITALY	-
	18	X120		TERMINAL BLOCKS FOR DC SUPPLY		9	CBD-4	CABUR	ITALY	-
J	19	X6		TERMINAL BLOCKS FOR TRIP CIRCUIT SUPERVISION		73	CBD-4	CABUR	ITALY	-
	20	X9		TERMINAL BLOCKS FOR ANNUNCIATION		24	CBD-4	CABUR	ITALY	-
K	21	X10		TERMINAL BLOCK FOR EVENTS		14	CBD-4	CABUR	ITALY	-
APPROVED	CHECKED	DRAWN	 PROJECT: EDUCATIONAL ORDER NTDC PO# CE/MP&M /M(P)/AM-VI/E0/9417-29 DATED 14.11.2018 FOR THE PROCUREMENT OF 220KV & 500KV RELAY& CONTROL PANELS		TITLE: LIST OF APPARATUS 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan			DWG# EPE/ENU-18/B61553	SHT: 02 OF 03
NAH	MSS	MUR			DATE: 07.03.2019				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 22	X200	TERMINAL BLOCK	5	CBD-4	CABUR	ITALY	-	A
B								B
C								C
D								D
E								E
F								F
APPROVED	CHECKED	DRAWN	PROJECT: EDUCATIONAL ORDER NTDC PO# CE/MP&M /M(P)/AM-VI/E0/9417-29 DATED 14.11.2018 FOR THE PROCUREMENT OF 220KV & 500KV RELAY& CONTROL PANELS	TITLE: LIST OF APPARATUS 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	EPESOL Pvt. Ltd 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61553 DATE: 07.03.2019	SHT: 03 OF 03 AS BUILT	REV: 0
NAH Q.I.	MSS M.Sohail	MUR Ily						

SCHEMATIC DIAGRAMS

500kV TRIP CIRCUIT SUPERVISION PANEL

TYPE =B06+R16

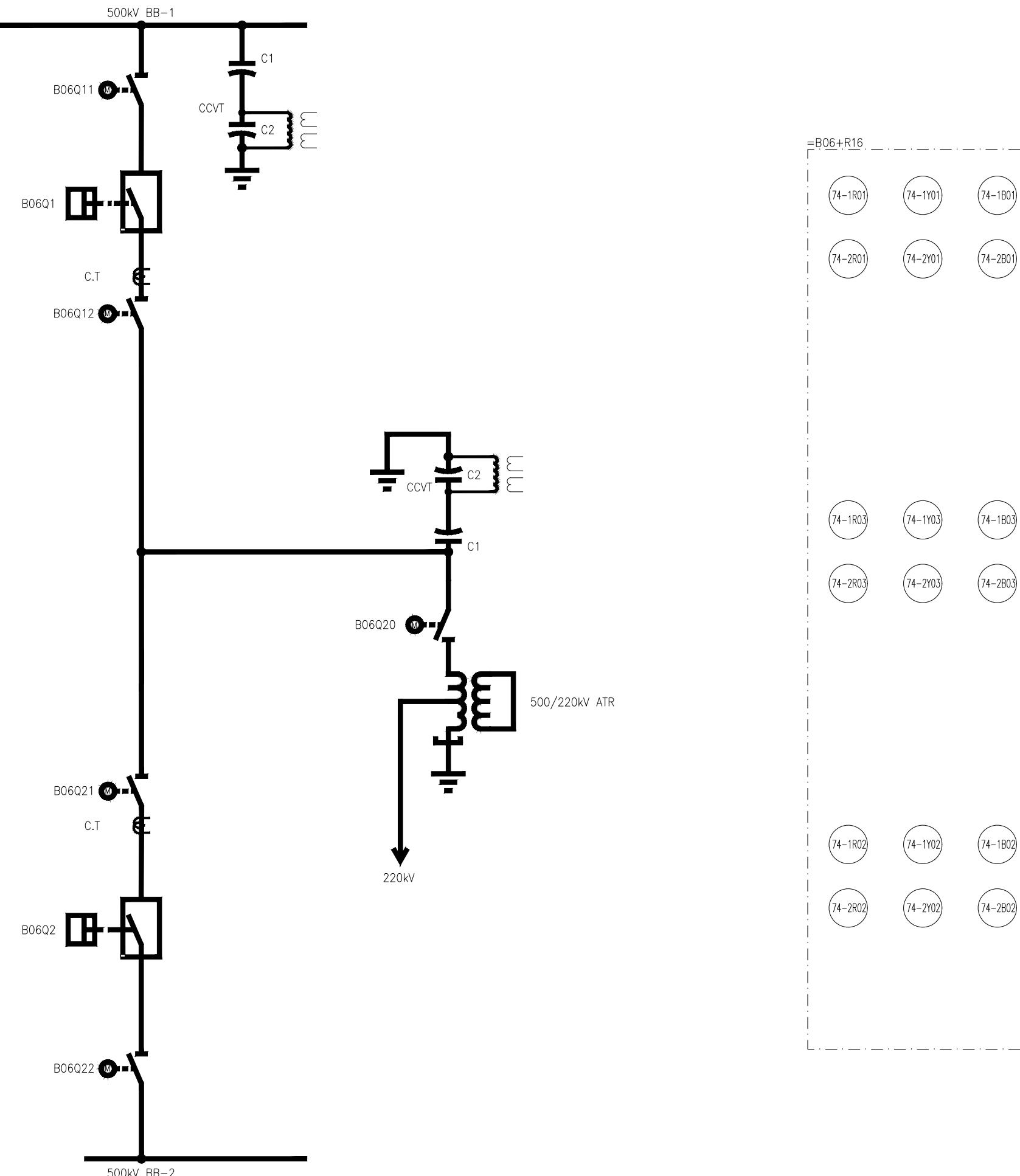
FOR ONE AND A HALF BREAKER SCHEME

APPROVED	CHECKED	DRAWN	PROJECT:	TITLE:	DWG# EPE/ENU-18/B61554		SHT: 01 OF 23
NAH <i>[Signature]</i>	MSS <i>[Signature]</i>	MUR <i>[Signature]</i>	 NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	COVER SHEET 500kV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt Ltd 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 07.03.2019	AS BUILT REV: 0

DESCRIPTION	SHEET NO
COVER SHEET	01
LIST OF CONTENTS	02
LIST OF SYMBOLS AND DESIGNATIONS	03
SINGLE LINE DIAGRAM	04
AC SUPPLY DISTRIBUTION	05
MAINTENANCE SUPPLY	06
DC SUPPLY CIRCUIT	07
B06Q1, TRIP SUPERVISION CIRCUIT 1	08
B06Q1, TRIP SUPERVISION CIRCUIT 2	09
B06Q2, TRIP SUPERVISION CIRCUIT 1	10
B06Q2, TRIP SUPERVISION CIRCUIT 2	11
B06Q3, TRIP SUPERVISION CIRCUIT 1	12
B06Q3, TRIP SUPERVISION CIRCUIT 2	13
B06Q1 TRIPPING ANNUNCIATION	14
B06Q2 TRIPPING ANNUNCIATION	15
B06Q3 TRIPPING ANNUNCIATION	16
ANNUNCIATION FUNCTION	17
ANNUNCIATION FUNCTION	18
EVENTS FUNCTION	19
SCADA FUNCTION	20
DEVICE DETAILS	21-23

LIST OF SYMBOLS AND DESIGNATIONS

	MOTORIZED HV DISCONNECTOR	74-XXXX	TRIP CIRCUIT SUPERVISION RELAY
	HV CIRCUIT BREAKER	X	TERMINAL BLOCKS
	220/132/0.4 KV AUTO TRANSFORMER	F	MINIATURE CIRCUIT BREAKER
	CAPACITOR VOLTAGE TRANSFORMER	K	AUXILIARY RELAY/CONTACTOR
	RELAY PANEL TERMINAL BLOCK		
	CONTROL PANEL TERMINAL BLOCK		
	EARTH CONNECTION		
	NORMALLY CLOSED CONTACT		
	NORMALLY OPEN CONTACT		
	CHANGE OVER CONTACT		
	MINIATURE CIRCUIT BREAKER		
	INDICATING BULB/LED/CUBICLE LIGHT		
	220V SOCKET		
	SPACE HEATER		
	COIL		
	EQUIPMENT WITHIN PANEL		
	INDEPENDENT PANEL		
	INDEPENDENT PANEL		



APPROVED	CHECKED	DRAWN	PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: SINGLE LINE DIAGRAM 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61554	SHT: 04 OF 23
NAH <i>[Signature]</i>	MSS <i>[Signature]</i>	MUR <i>[Signature]</i>				DATE: 07.03.2019	AS BUILT

AC SUPPLY DISTRIBUTION

DOOR SWITCH &
CUBICLE LIGHTSPACE HEATER
THERMOSTATTHREE
PIN SOCKETPANEL DC-1
SUPPLY
PANEL DC-2
HEALTHYPANEL AC SUPPLY
SUPERVISIONLEGEND

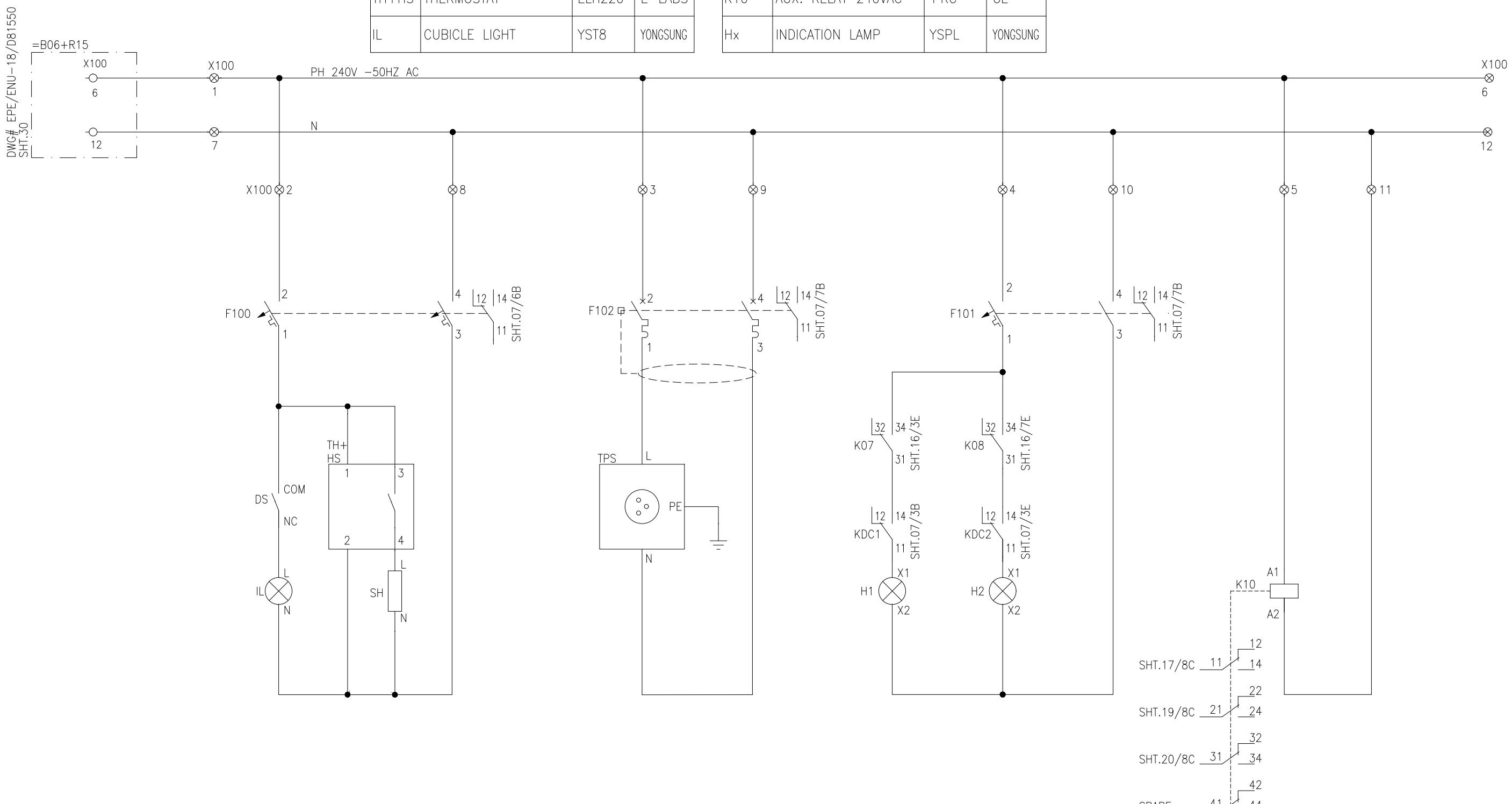
DES:	DESCRIPTION	TYPE	MAKE
TPS	THREE PIN SOCKET	220V SOCKET	LEAR
SH	SPACE HEATER	ELH220	E-LABS
TH+HS	THERMOSTAT	ELH220	E-LABS
IL	CUBICLE LIGHT	YST8	YONGSUNG

LEGEND

DS	DOOR SWITCH	YSP+YSMS-C	YONGSUNG
F100, F101	TWO POLE AC MCB	G60	GE
F102	ELCB	DM100	GE
K10	AUX. RELAY 240VAC	PRC	GE
Hx	INDICATION LAMP	YSPL	YONGSUNG

LEGEND

K07, K08	AUX. RELAY 220VDC	PRC	GE
KDC1, KDC2	AUX. RELAY 220VDC	PRC	GE



APPROVED	CHECKED	DRAWN
NAH	MSS	MUR



PROJECT:
NTDC PO# CE/MP&M/M(P)/AM-VI/E0/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE: AC SUPPLY DISTRIBUTION
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16



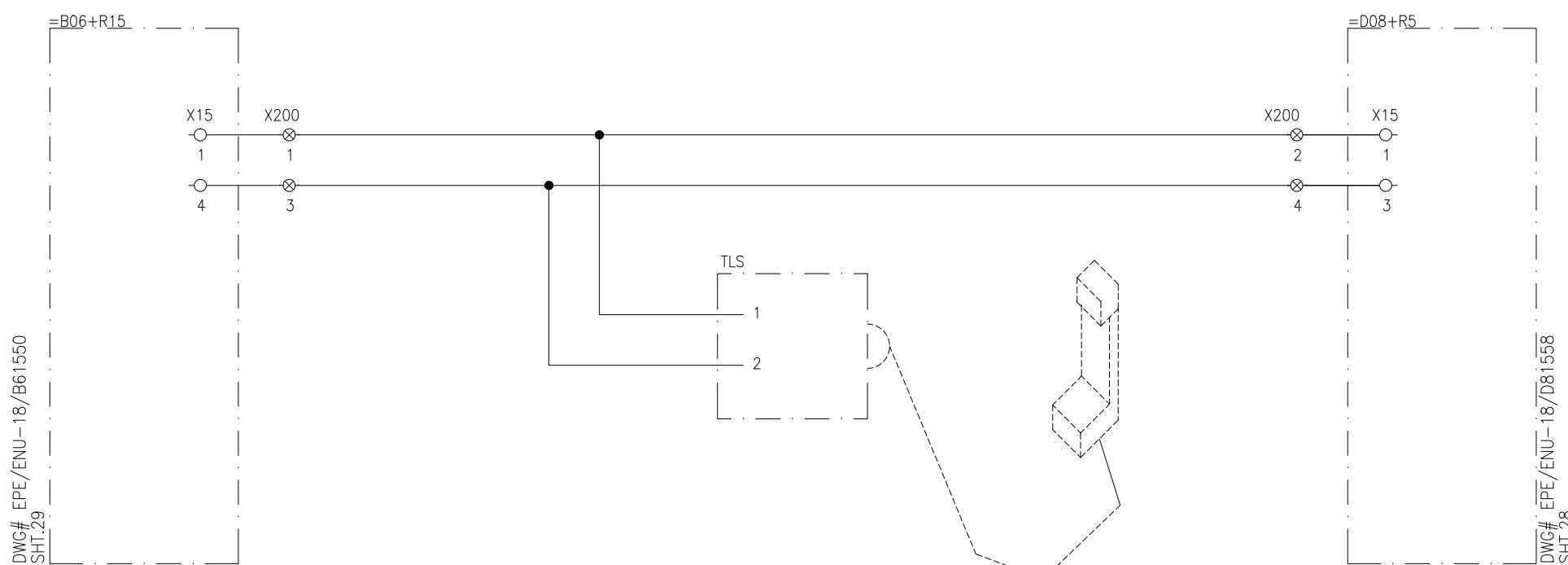
EPESOL Pvt. Ltd.
71-B Garden Block, New Garden Town, Lahore, Pakistan

DWG# EPE/ENU-18/B61554 SHT: 05 OF 23
DATE: 07.03.2019 AS BUILT REV: 0

TELEPHONE SOCKET

LEGEND

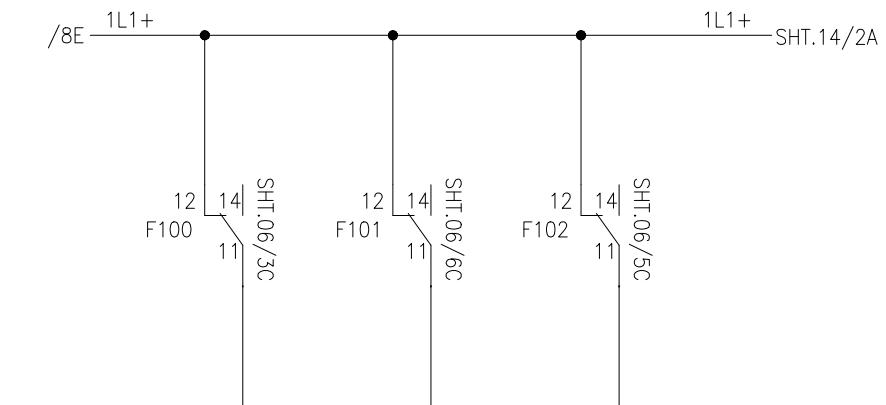
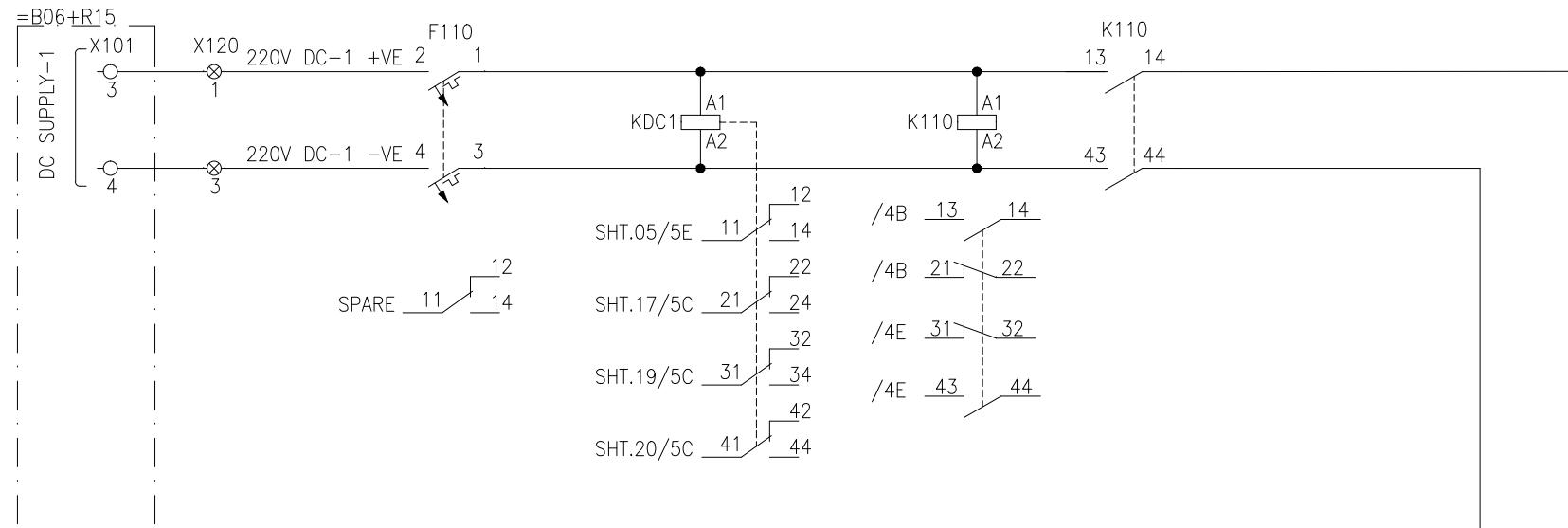
DES:	DESCRIPTION	TYPE	MAKE
TLS	TELEPHONE SOCKET	LOCAL	LOCAL



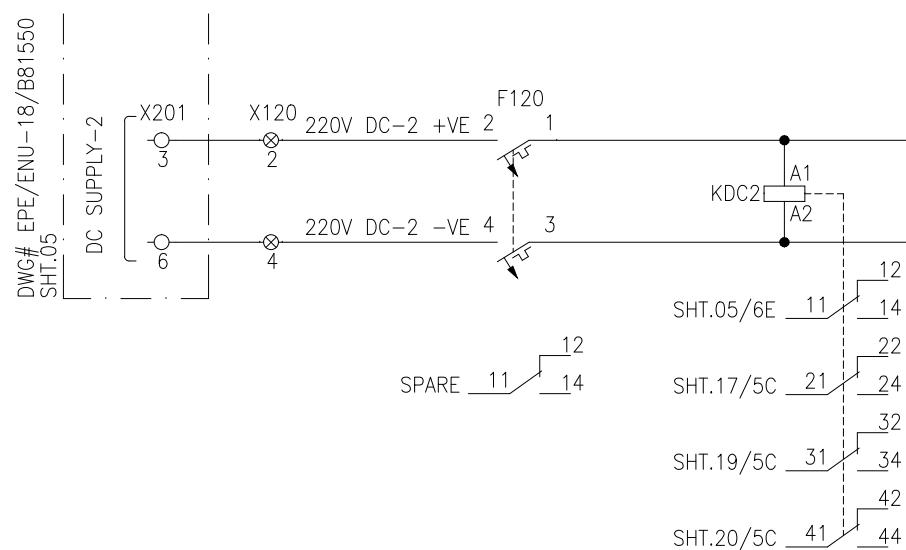
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NAH	MSS	MUR	 NTDC PO# CE/MP&M/M(P)/AM-VI/EO/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	MAINTENANCE SUPPLY 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 07.03.2019	AS BUILT

DC SUPPLY SUPERVISION

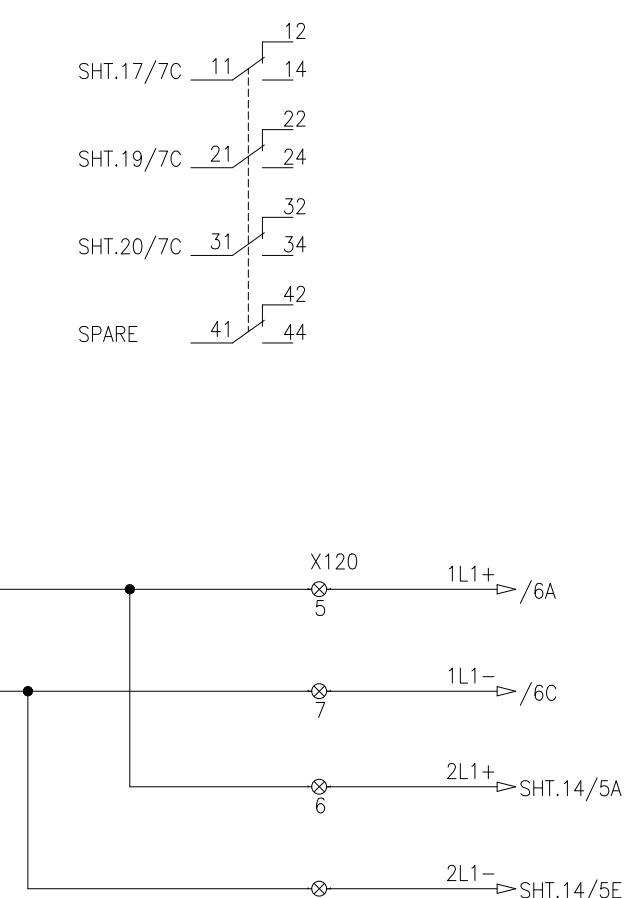
INCOMING SUPPLY A

AC SUPPLY
TRIP

DWG# EPE/ENU-18/B81550



LEGEND			
DES:	DESCRIPTION	TYPE	MAKE
F110, F120	DC MCB, 2P, 10A	EP-100	GE
F100, F101	AC MCB, 2P	G60	GE
K110	AUX. RELAY WITH AUX. CO	MCRC	GE
K09, KDCx	AUX. RELAY 220VDC	PRC	GE



APPROVED	CHECKED	DRAWN
NAH	MSS	MUR



PROJECT:

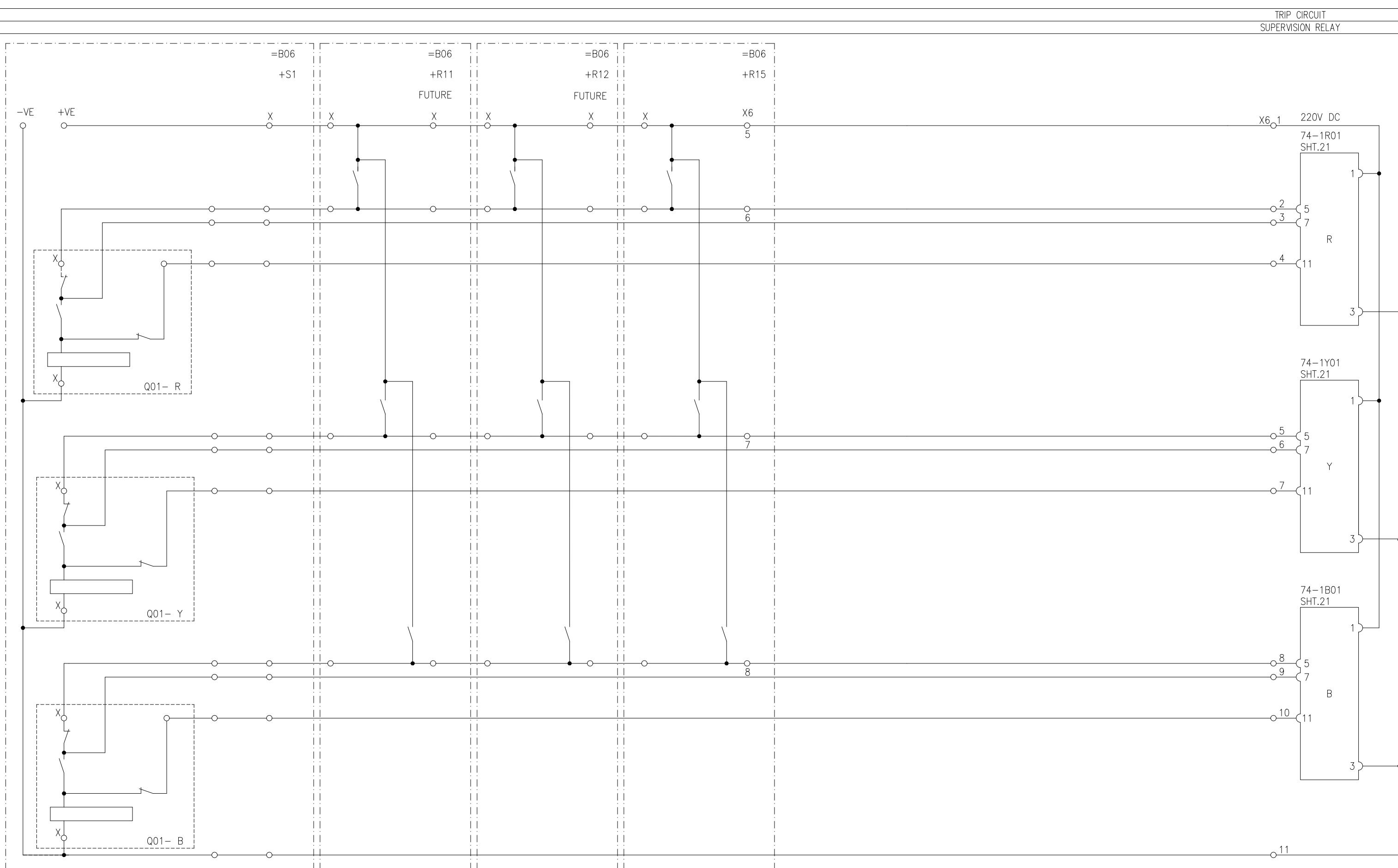
NTDC PO# CE/MP&M/M(P)/AM-VI/E0/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE: DC SUPPLY CIRCUIT
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16



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/B61554 SHT: 07 OF 23
DATE: 07.03.2019 AS BUILT REV: 0

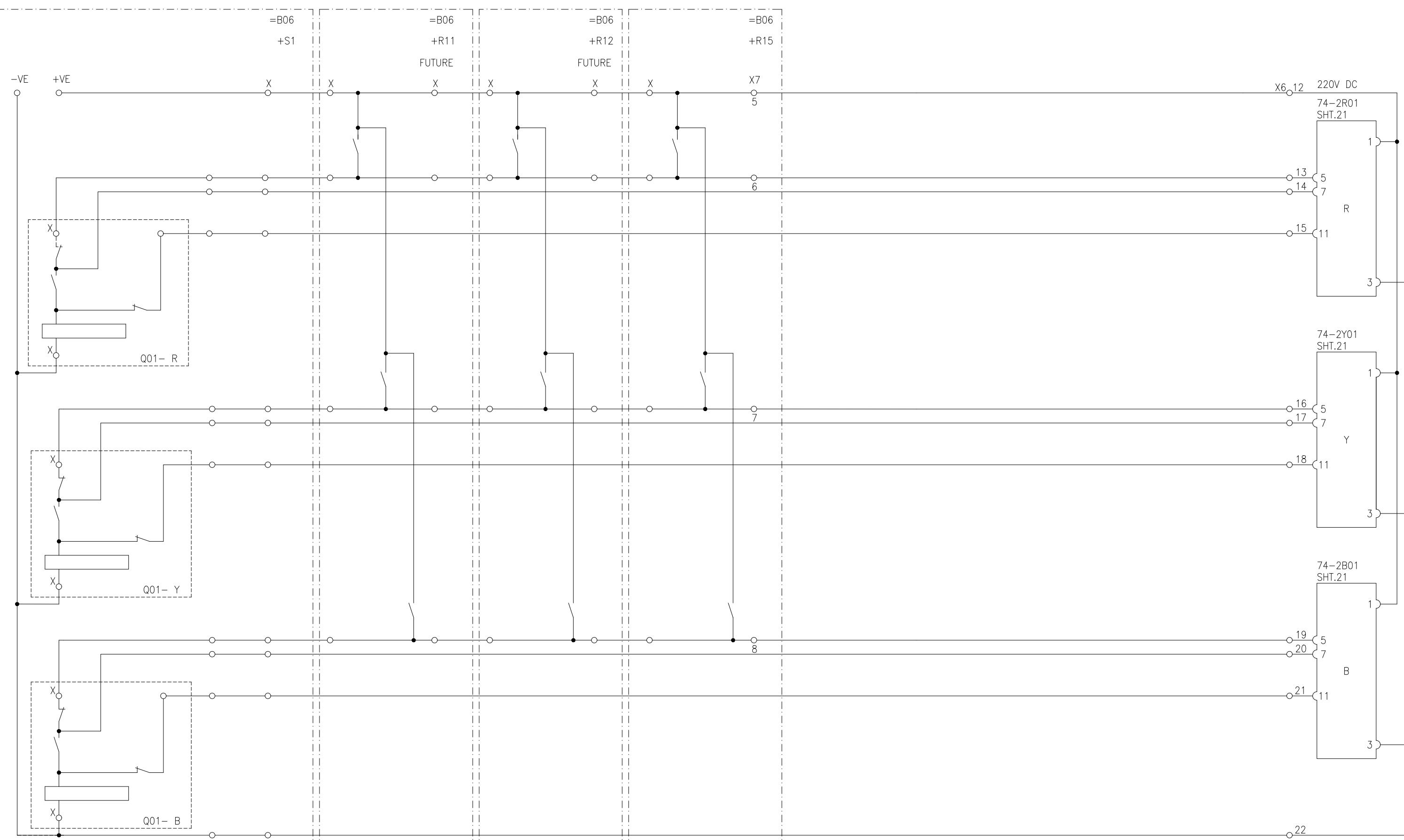


DWG# EPE/ENU-18/B61550, SHT.17



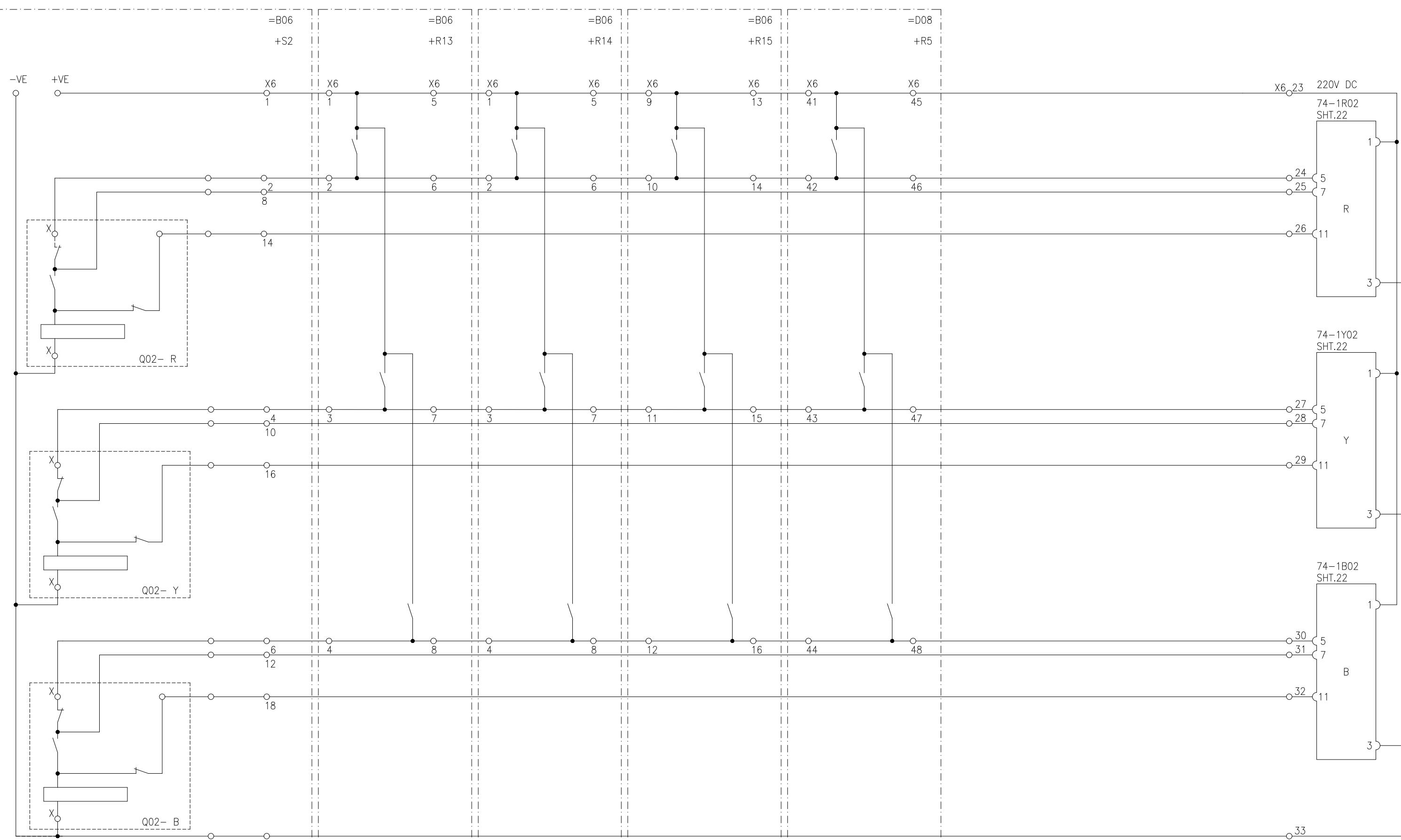
E P E S O L Pvt. Ltd.

APPROVED	CHECKED	DRAWN	PROJECT:  NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: B06Q1, TRIP SUPERVISION CIRCUIT 1 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61554	SHT: 08 OF 23
NAH	MSS	MUR				DATE: 07.03.2019	AS BUILT

TRIP CIRCUIT
SUPERVISION RELAY

DWG# EPE/ENU-18/B61550, SHT.17

APPROVED	CHECKED	DRAWN	PROJECT:	TITLE:	E P E S O L P v t . L t d .	DWG# EPE/ENU-18/B61554	SHT: 09 OF 23
NAH	MSS	MUR	NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	B06Q1, TRIP SUPERVISION CIRCUIT 2 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 07.03.2019	AS BUILT

TRIP CIRCUIT
SUPERVISION RELAY

DWG# EPE/ENU-18/B61586, SHT.18

DWG# EPE/ENU-18/B61542, SHT.XX DWG# EPE/ENU-18/B61546, SHT.XX DWG# EPE/ENU-18/B61550, SHT.XX DWG# EPE/ENU-18/D81558, SHT.19

APPROVED CHECKED DRAWN

PROJECT:



NTDC PO# CE/MP&M/M(P)/AM-VI/EO/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE:

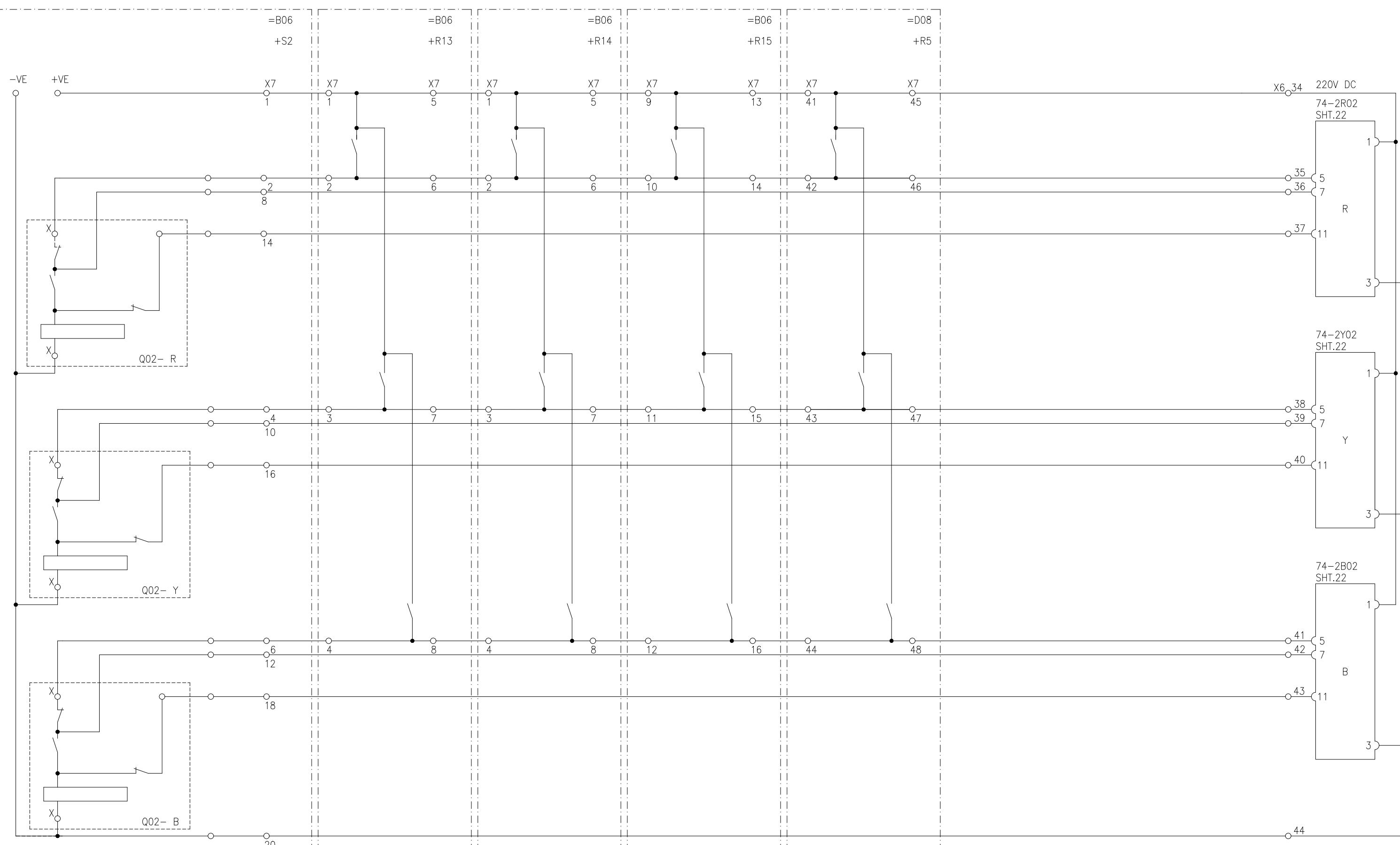
B06Q2, TRIP SUPERVISION CIRCUIT 1
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16

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

DWG# EPE/ENU-18/B61554 SHT: 10 OF 23

DATE: 07.03.2019 AS BUILT REV: 0

1 2 3 4 5 6 7 8

TRIP CIRCUIT
SUPERVISION RELAY

DWG# EPE/ENU-18/B61586, SHT.19

DWG# EPE/ENU-18/B61542, SHT.XX DWG# EPE/ENU-18/B61546, SHT.XX DWG# EPE/ENU-18/B61550, SHT.XX DWG# EPE/ENU-18/D81558, SHT.19

APPROVED CHECKED DRAWN

PROJECT:

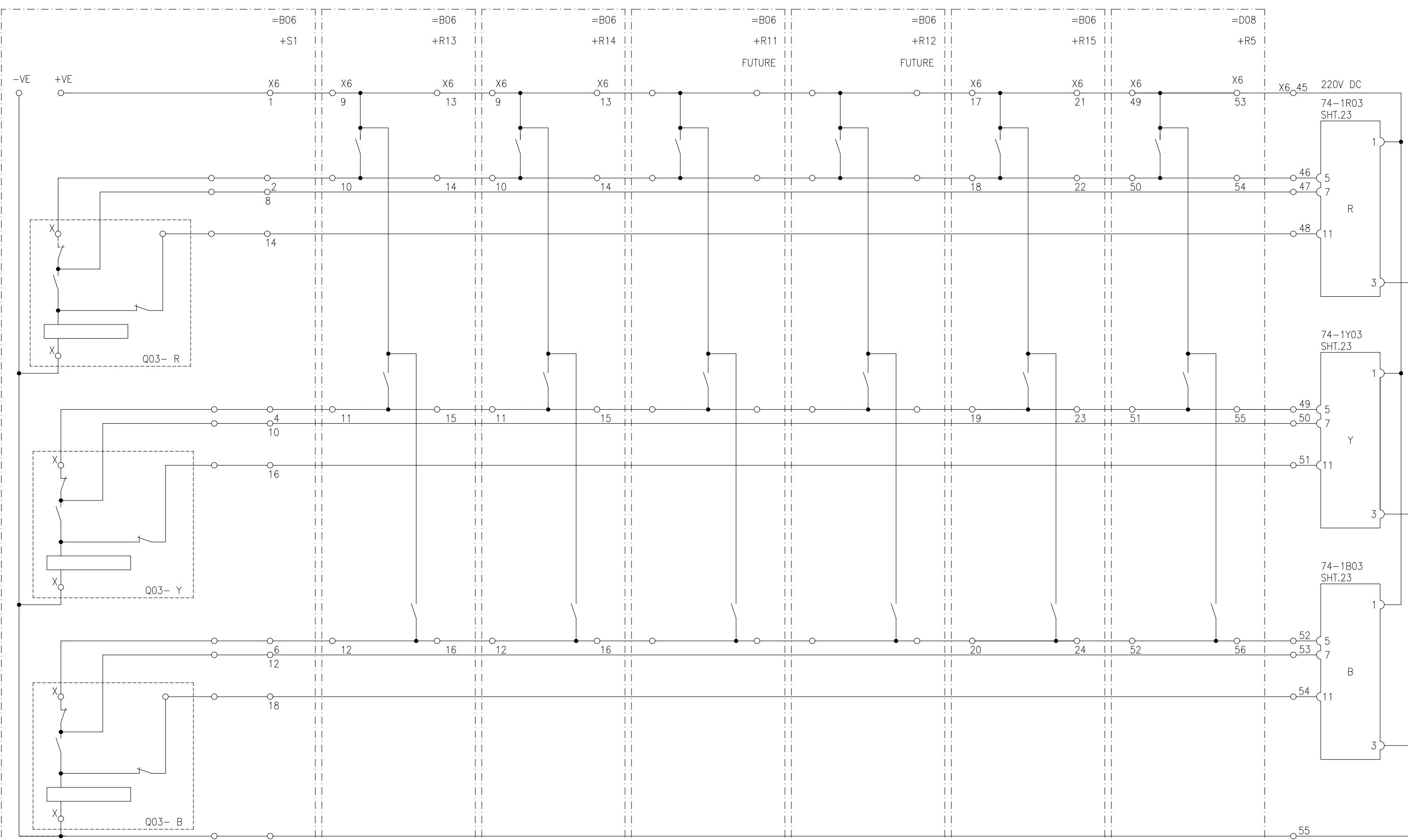
NTDC PO# CE/MP&M/M(P)/AM-VI/EO/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE:

B06Q2, TRIP SUPERVISION CIRCUIT 2
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16E P E S O L P v t . L t d .
71-B Garden Block, New Garden Town, Lahore, Pakistan

DWG# EPE/ENU-18/B61554 SHT: 11 OF 23

DATE: 07.03.2019 AS BUILT REV: 0

TRIP CIRCUIT
SUPERVISION RELAY

DWG# EPE/ENU-18/B61582, SHT.14

DWG# EPE/ENU-18/B61542, SHT.XX DWG# EPE/ENU-18/B61546, SHT.XX

DWG# EPE/ENU-18/B61550, SHT.XX DWG# EPE/ENU-18/B61558, SHT.20

APPROVED CHECKED DRAWN

PROJECT:



NTDC PO# CE/MP&M/M(P)/AM-VI/EO/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE:

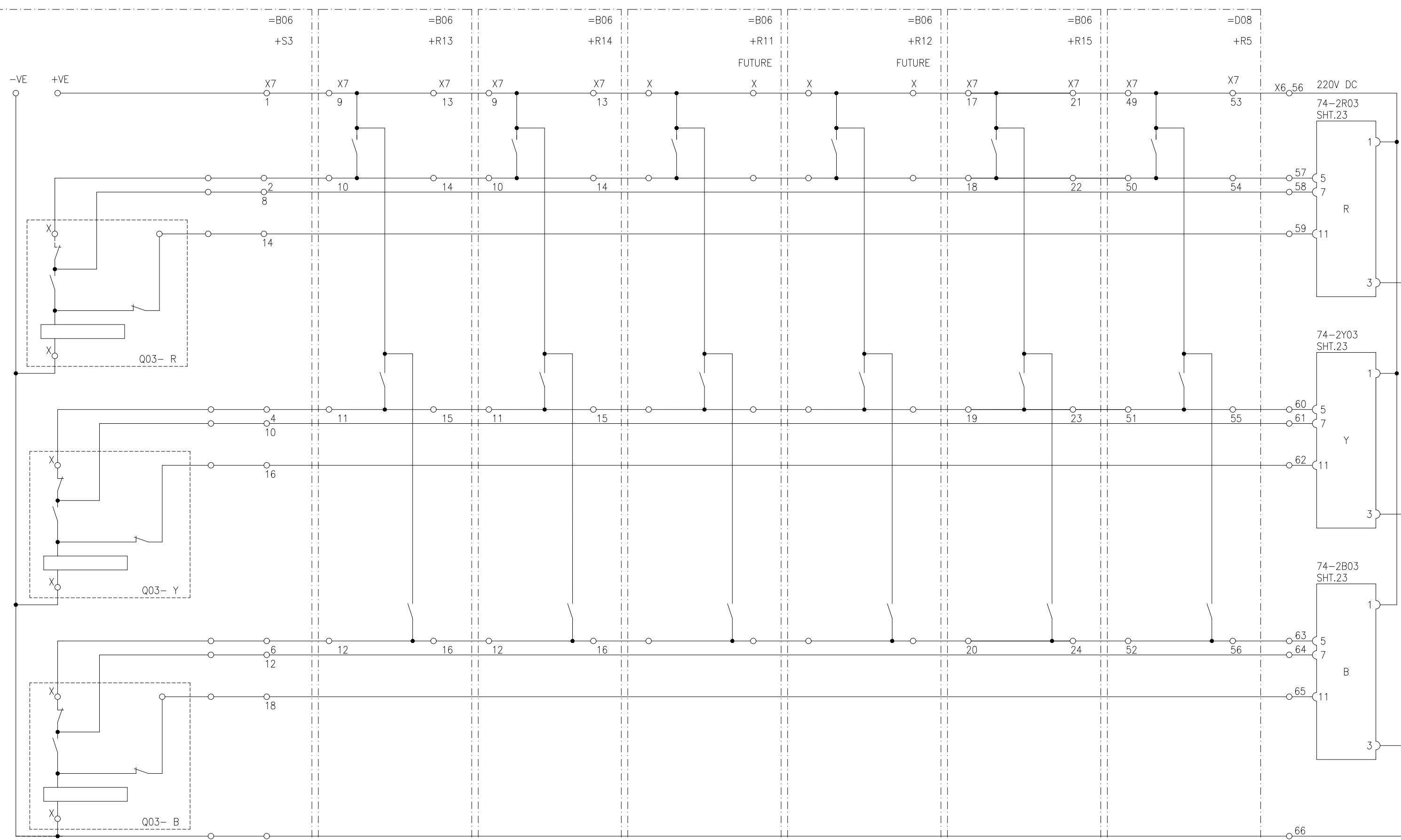
B06Q1, TRIP SUPERVISION CIRCUIT 1
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16



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

DWG# EPE/ENU-18/B61554 SHT: 12 OF 23

DATE: 07.03.2019 AS BUILT REV: 0

TRIP CIRCUIT
SUPERVISION RELAY

DWG# EPE/ENU-18/B61582, SHT.15

DWG# EPE/ENU-18/B61542, SHT.XX DWG# EPE/ENU-18/B61546, SHT.XX

DWG# EPE/ENU-18/B61550, SHT.XX DWG# EPE/ENU-18/B61558, SHT.20

APPROVED CHECKED DRAWN

PROJECT:



NTDC PO# CE/MP&M/M(P)/AM-VI/EO/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE:

B06Q3, TRIP SUPERVISION CIRCUIT 2
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16



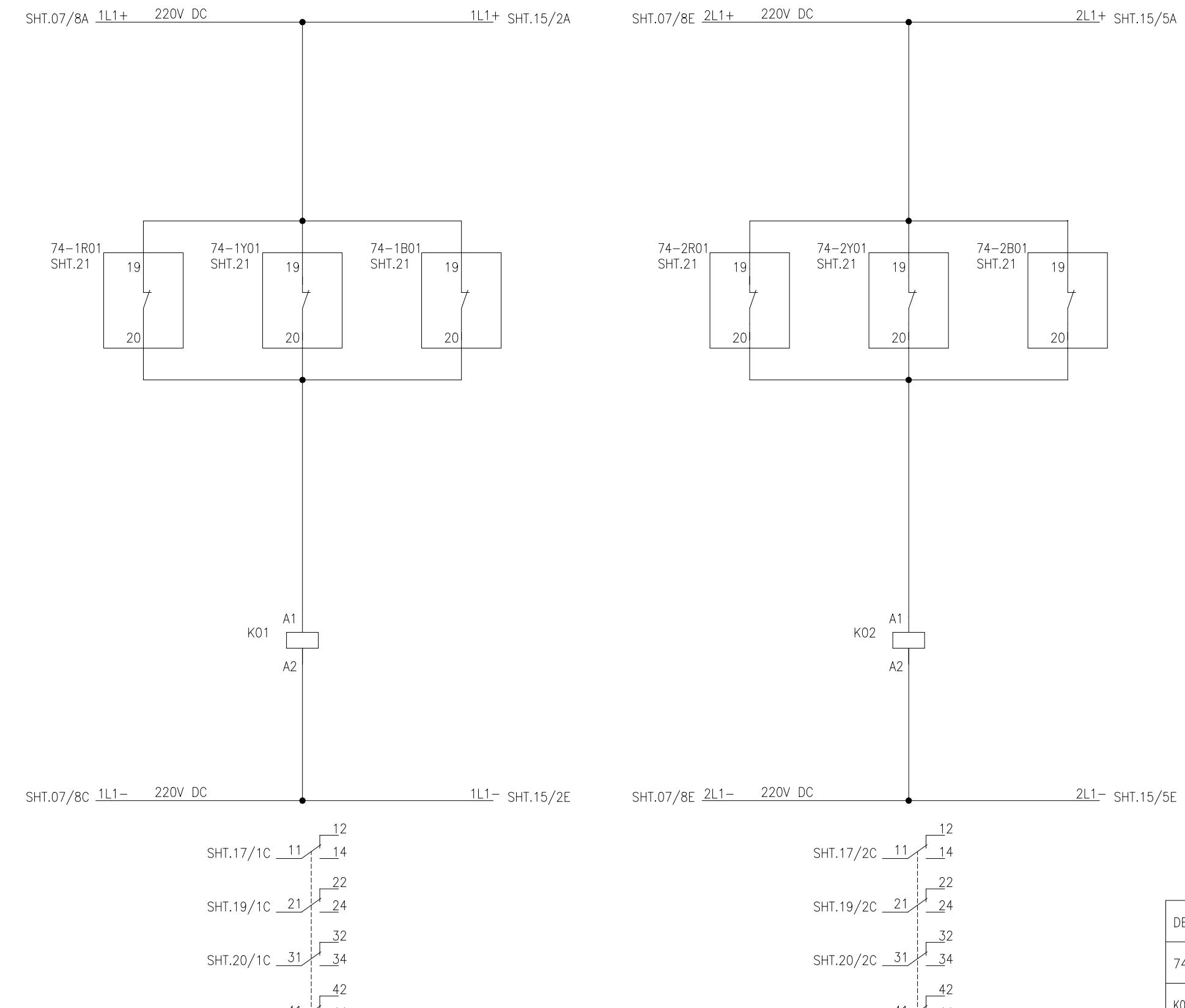
EPESOL Pvt. Ltd.
71-B Garden Block, New Garden Town, Lahore, Pakistan

DWG# EPE/ENU-18/B61554 SHT: 13 OF 23

DATE: 07.03.2019 AS BUILT REV: 0

B06Q1 CB TRIP CIRCUIT 1
FAILURE

B06Q1 CB TRIP CIRCUIT 2
FAILURE



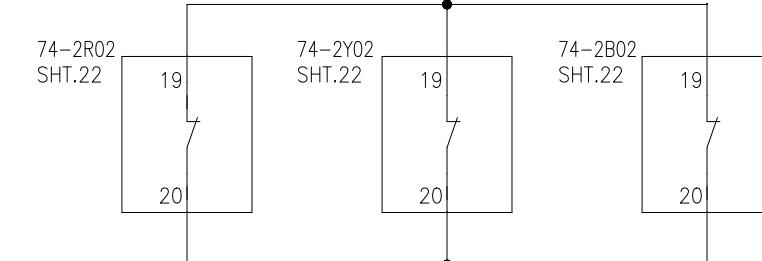
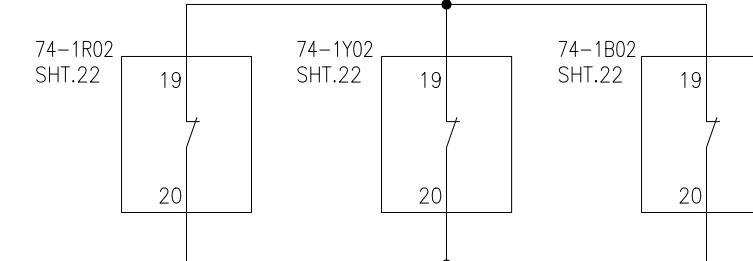
LEGEND

DES:	DESCRIPTION	TYPE	MAKE
74-XX	TRIP CIR. SUP. RELAY	TS-101	ELABS
K01, K02	AUX. RELAY	PRC	GE

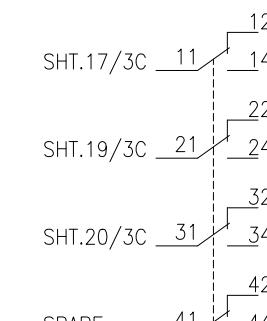
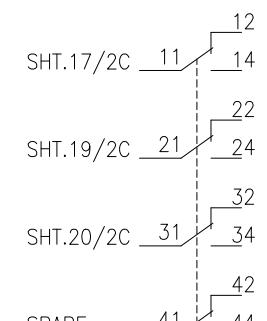
B06Q2 CB TRIP CIRCUIT 1
FAILURE

B06Q2 CB TRIP CIRCUIT 2
FAILURE

SHT.14/4A 1L1+ 220V DC 1L1+ SHT.16/1A SHT.14/7A 2L1+ 220V DC 2L1+ SHT.16/5A



SHT.14/4E 1L1- 220V DC 1L1- SHT.16/1E SHT.14/7E 2L1- 220V DC 2L1- SHT.16/5E



LEGEND

DES:	DESCRIPTION	TYPE	MAKE
74-XX	TRIP CIR. SUP. RELAY	TS-101	ELABS
K03, K04	AUX. RELAY	PRC	GE

APPROVED	CHECKED	DRAWN
NAH	MSS	MUR



PROJECT:

NTDC PO# CE/MP&M/M(P)/AM-VI/E0/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE:
B06Q2 TRIPPING ANNUNCIATION
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16

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

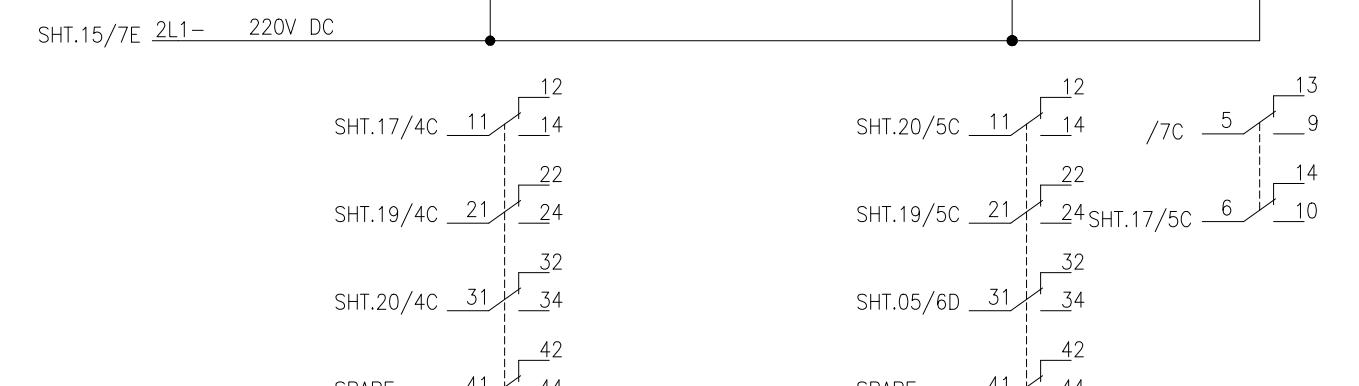
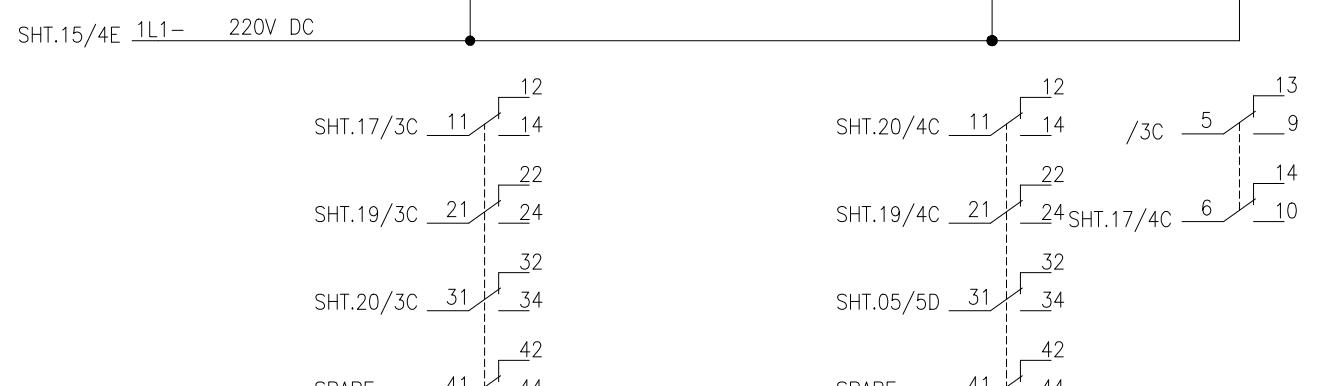
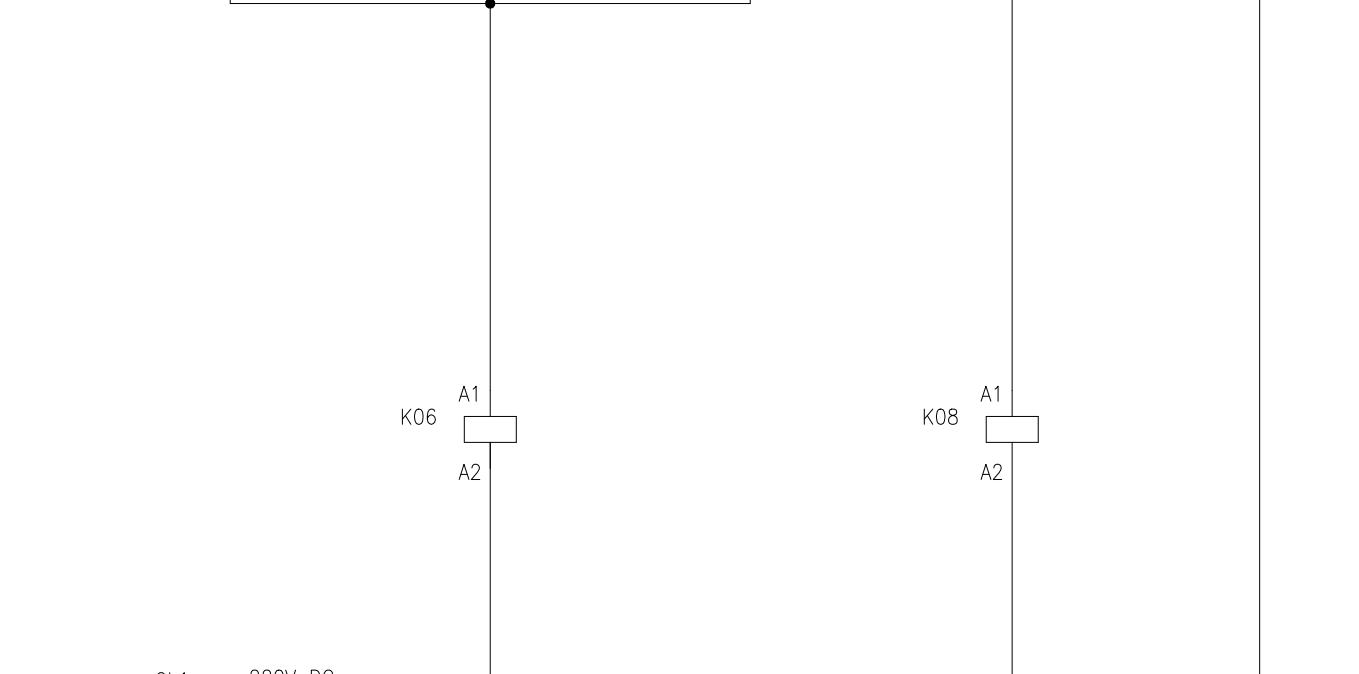
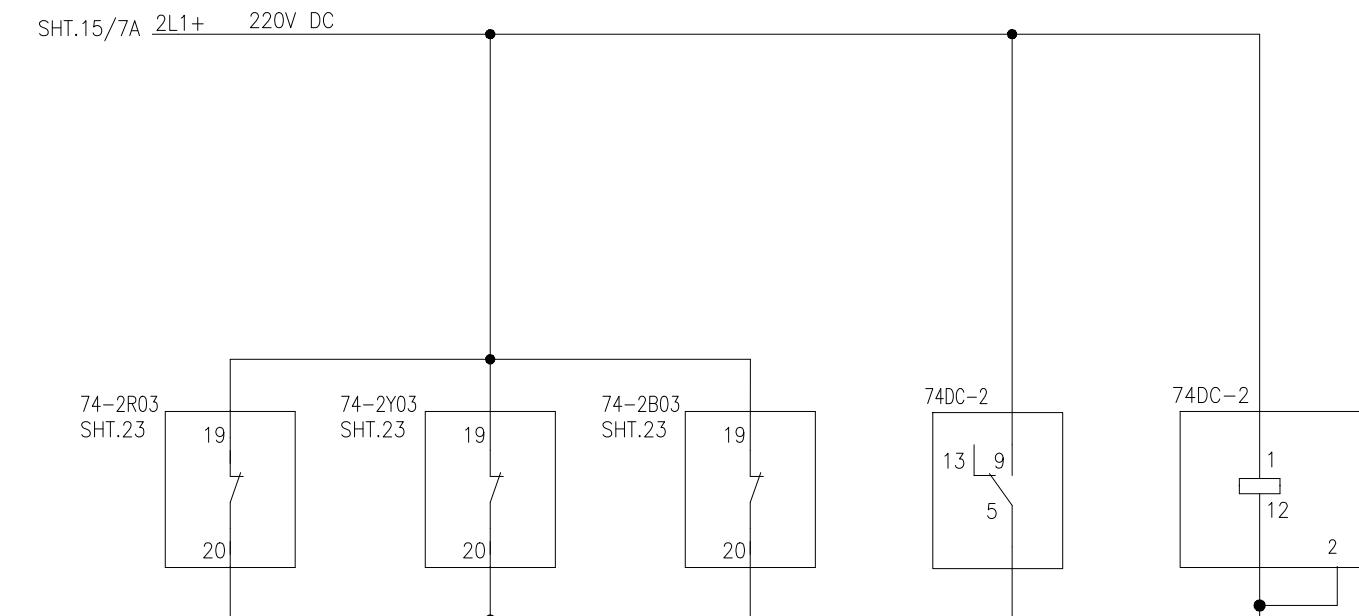
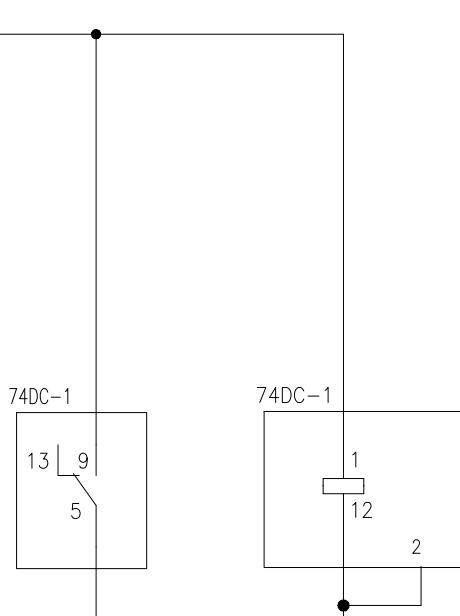
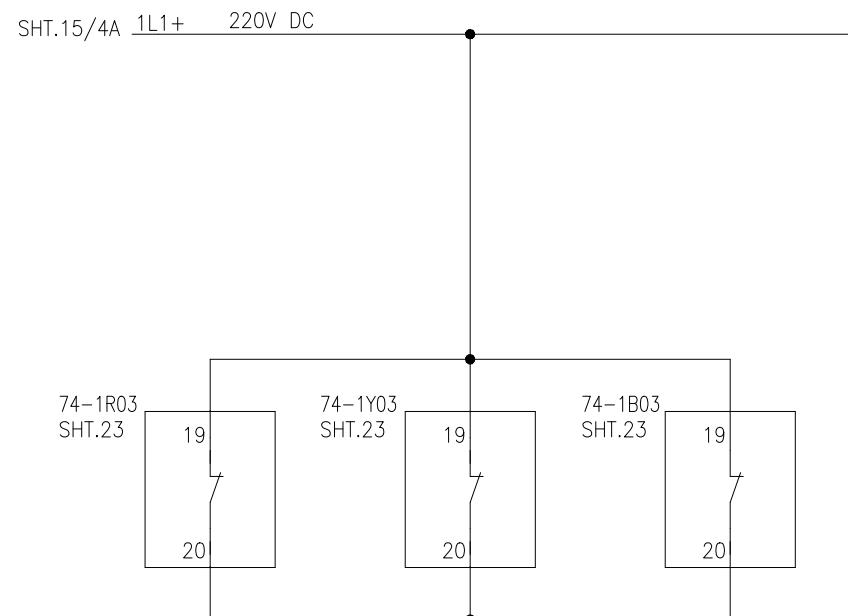
DWG# EPE/ENU-18/B61554 SHT: 15 OF 23
DATE: 07.03.2019 AS BUILT REV: 0

B06Q3 CB TRIP CIRCUIT 1
FAILURE

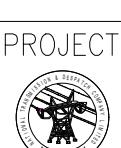
DC LOOP-1
SUPERVISION RELAY

B06Q3 CB TRIP CIRCUIT 2
FAILURE

DC LOOP-2
SUPERVISION RELAY



APPROVED	CHECKED	DRAWN
NAH	MSS	MUR



PROJECT:

NTDC PO# CE/MP&M/M(P)/AM-VI/E0/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

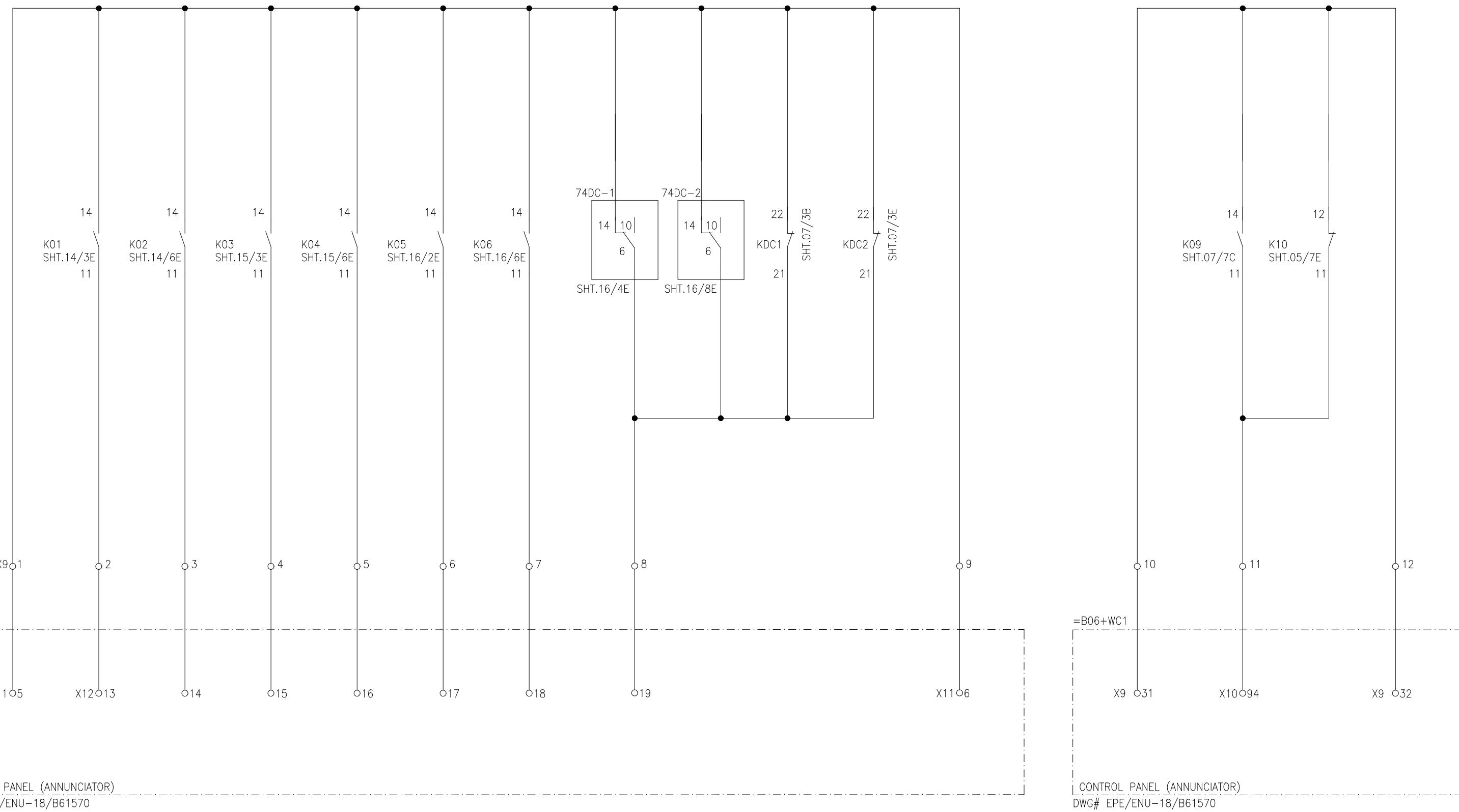
TITLE:
B06Q3 TRIPPING ANNUNCIATION
500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16



DWG# EPE/ENU-18/B61554 SHT: 16 OF 23
DATE: 07.03.2019 AS BUILT REV: 0

D08Q1 CB TCS I	D08Q1 CB TCS II	D08Q2 CB TCS I	D08Q2 CB TCS II	D08Q3 CB TCS I	D08Q3 CB TCS II	DC SUPPLY
FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAILURE

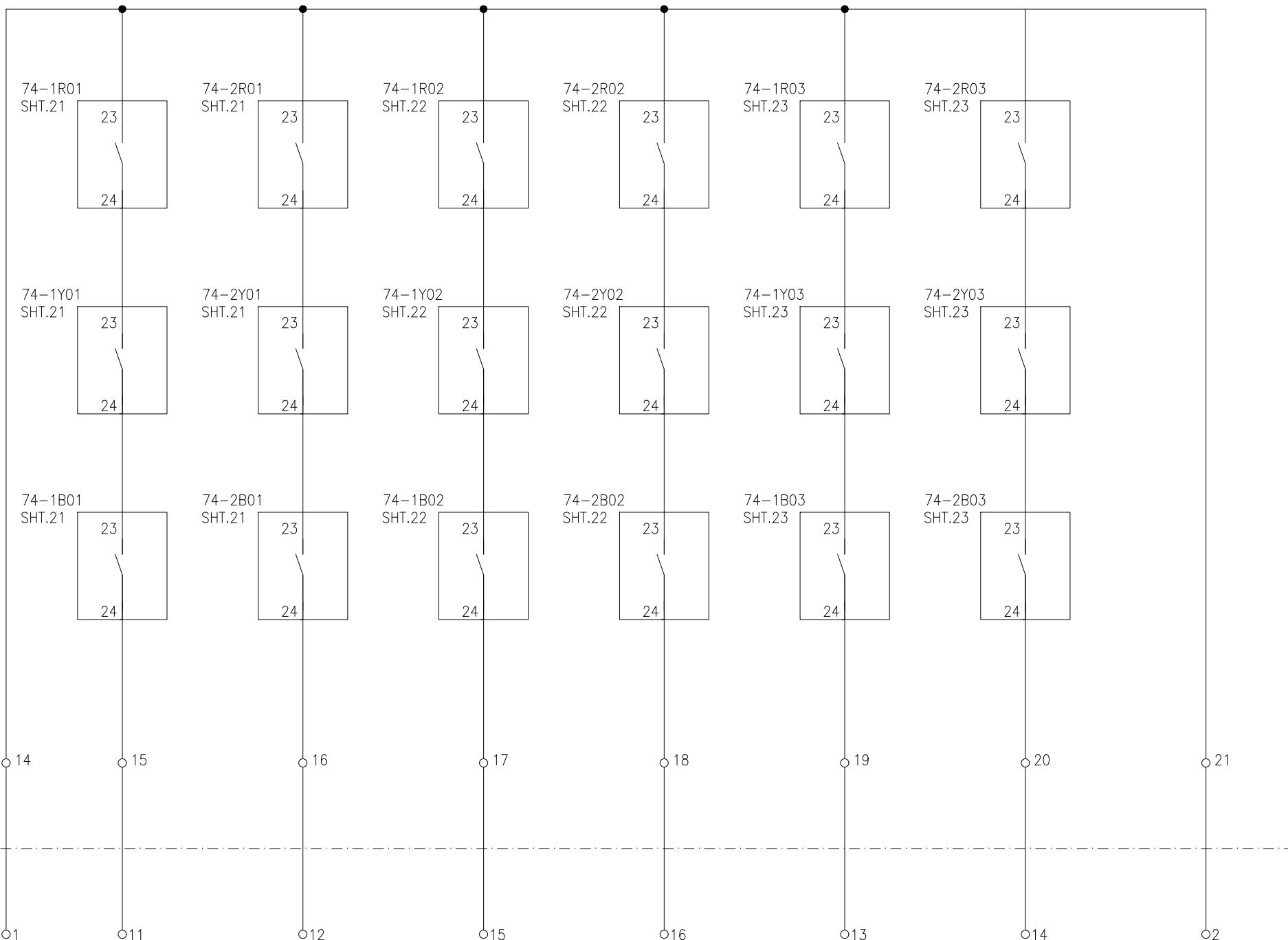
AC SUPPLY
TRIP/FAIL



APPROVED	CHECKED	DRAWN	PROJECT:	TITLE:	DWG# EPE/ENU-18/B61554		SHT: 17 OF 23
NAH [Signature]	MSS [Signature]	MUR [Signature]	NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	ANNUICATION FUNCTION 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan		

B06Q1 CB TCS I B06Q1 CB TCS II B06Q2 CB TCS I B06Q2 CB TCS II B06Q3 CB TCS I B06Q3 CB TCS II

HEALTHY HEALTHY HEALTHY HEALTHY HEALTHY HEALTHY

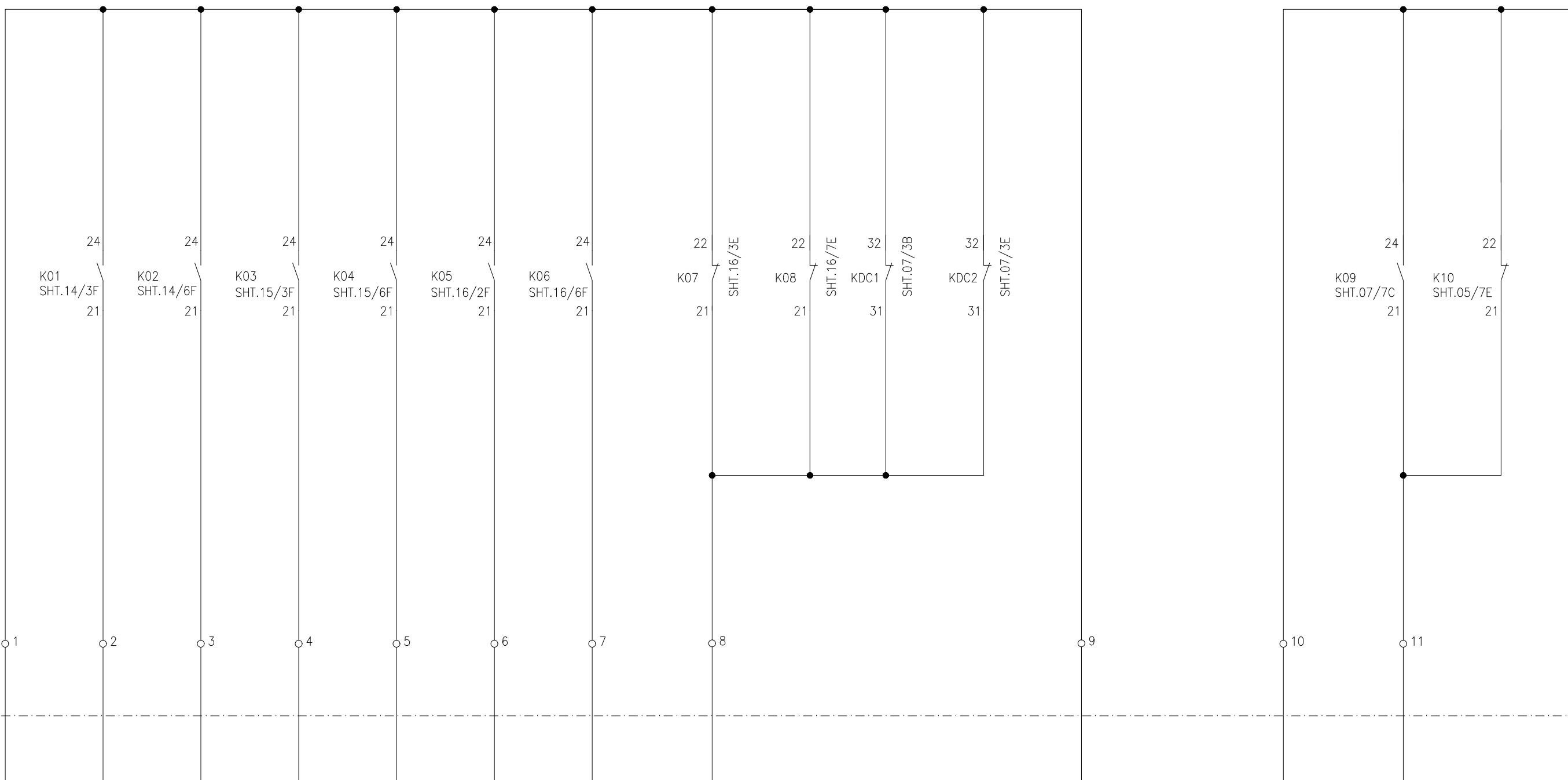


CONTROL PANEL (INDICATIONS)
DWG# EPE/ENU-18/B81570
SHT.06

APPROVED	CHECKED	DRAWN	PROJECT:	TITLE:			DWG# EPE/ENU-18/B61554	SHT: 18 OF 23
NAH	MSS	MUR	NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	ANNUNCIATION FUNCTION 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	EPESOL Pvt Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan			

D08Q1 CB TCS I	D08Q1 CB TCS II	D08Q2 CB TCS I	D08Q2 CB TCS II	D08Q3 CB TCS I	D08Q3 CB TCS II	DC SUPPLY
FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAILURE

AC SUPPLY
TRIP/FAIL

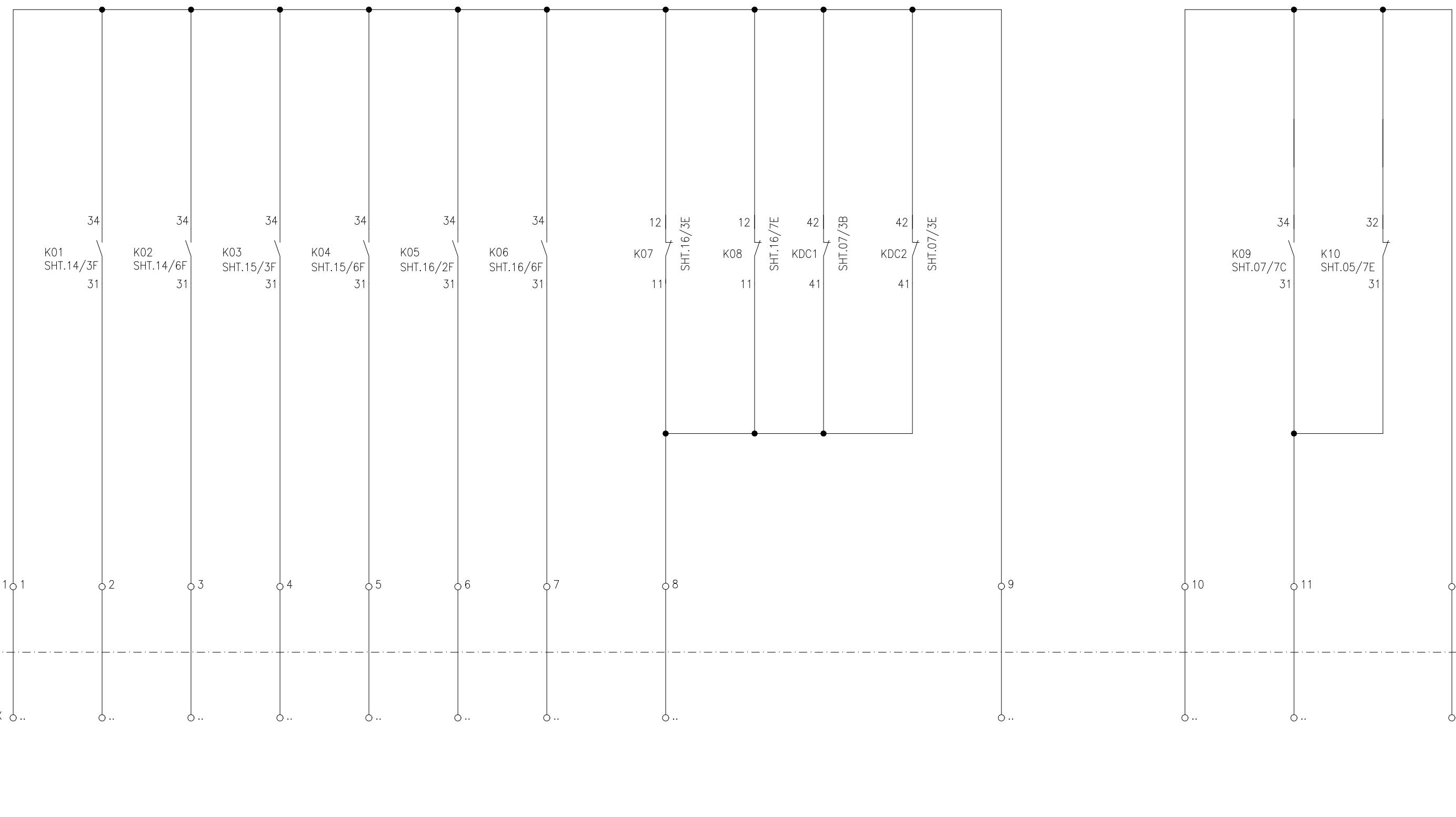


EVENT RECORDER PANEL

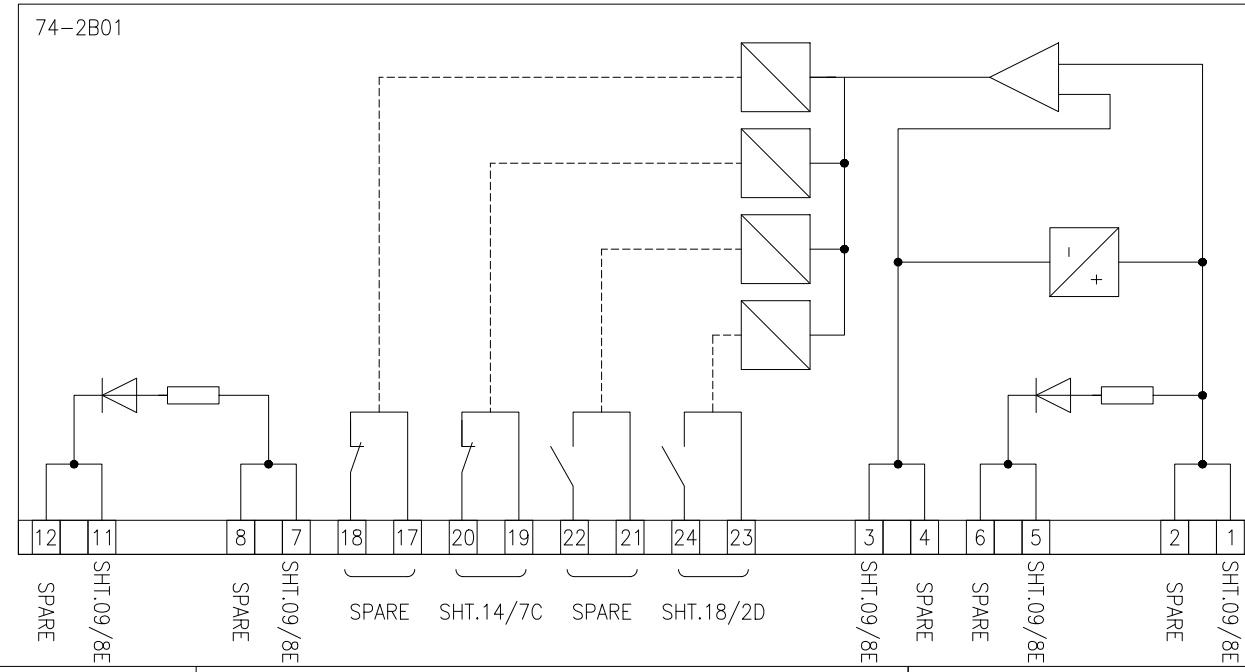
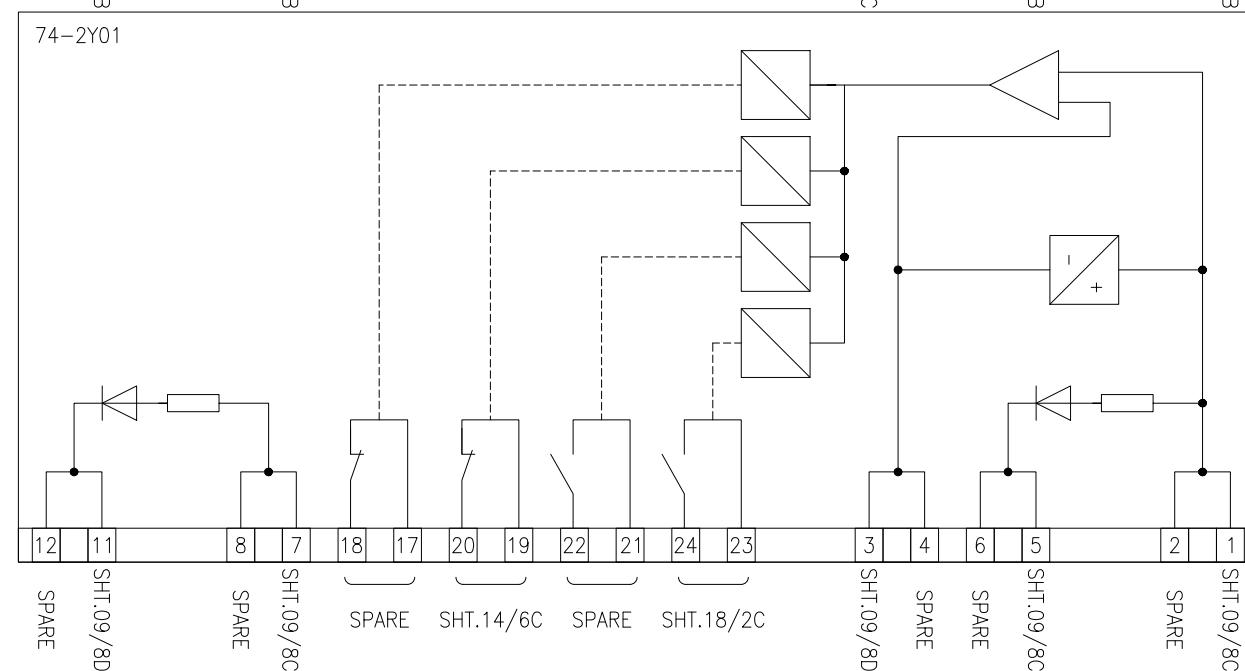
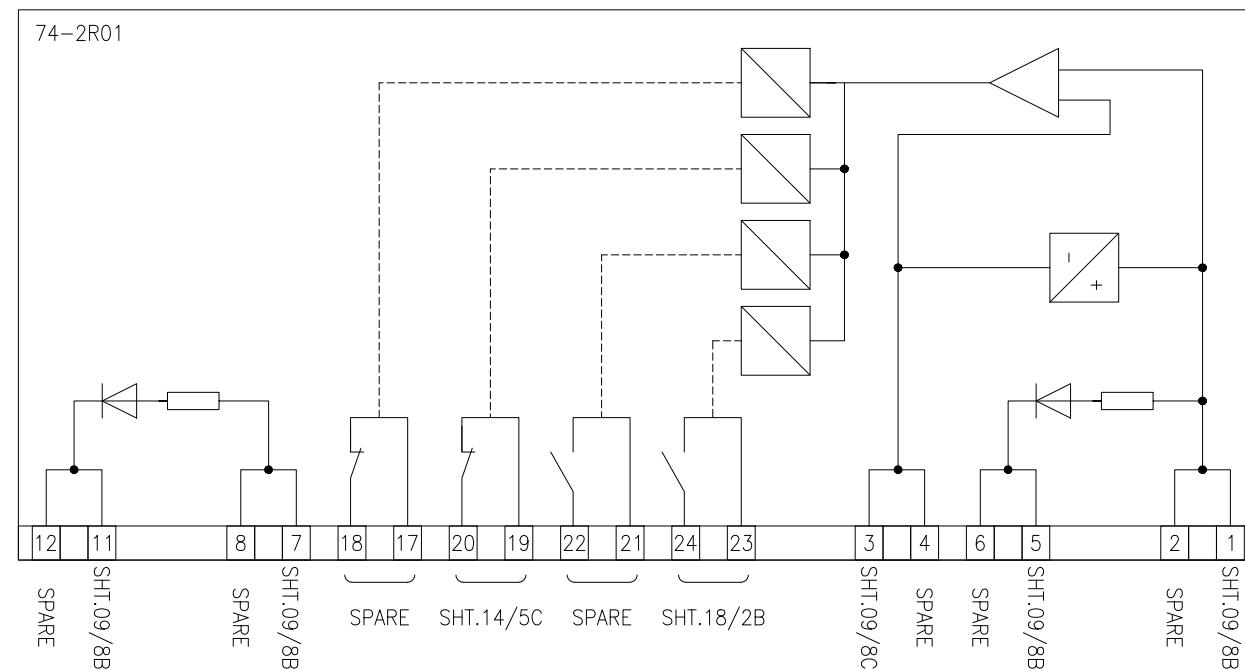
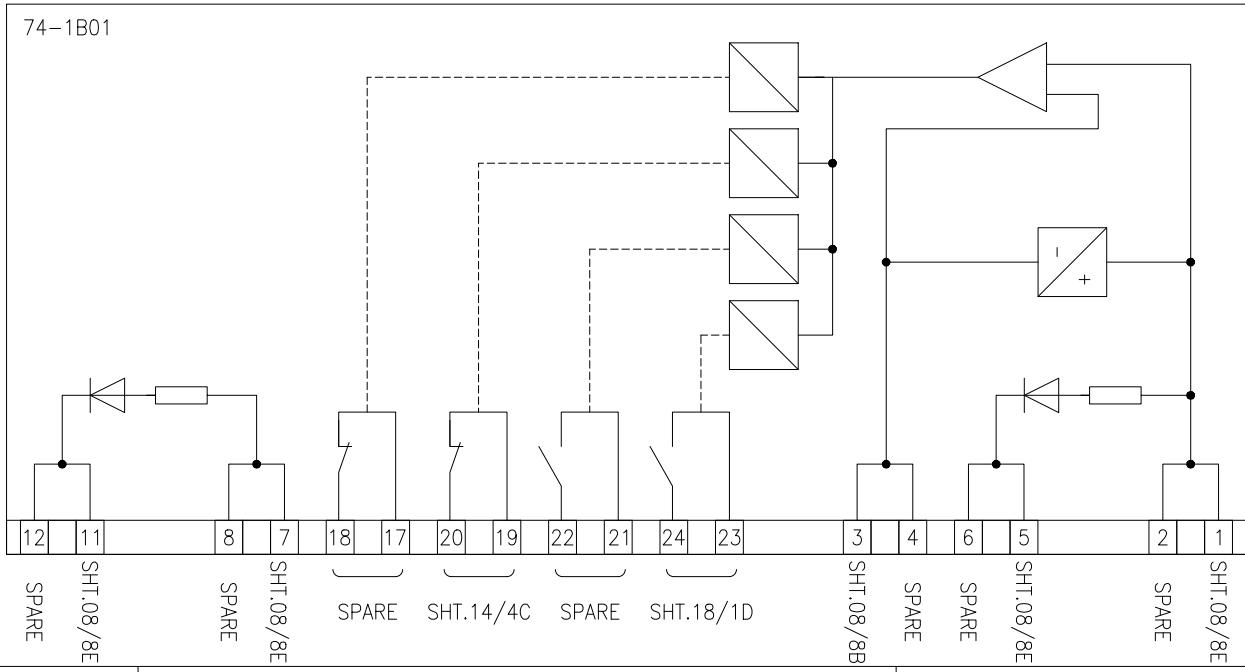
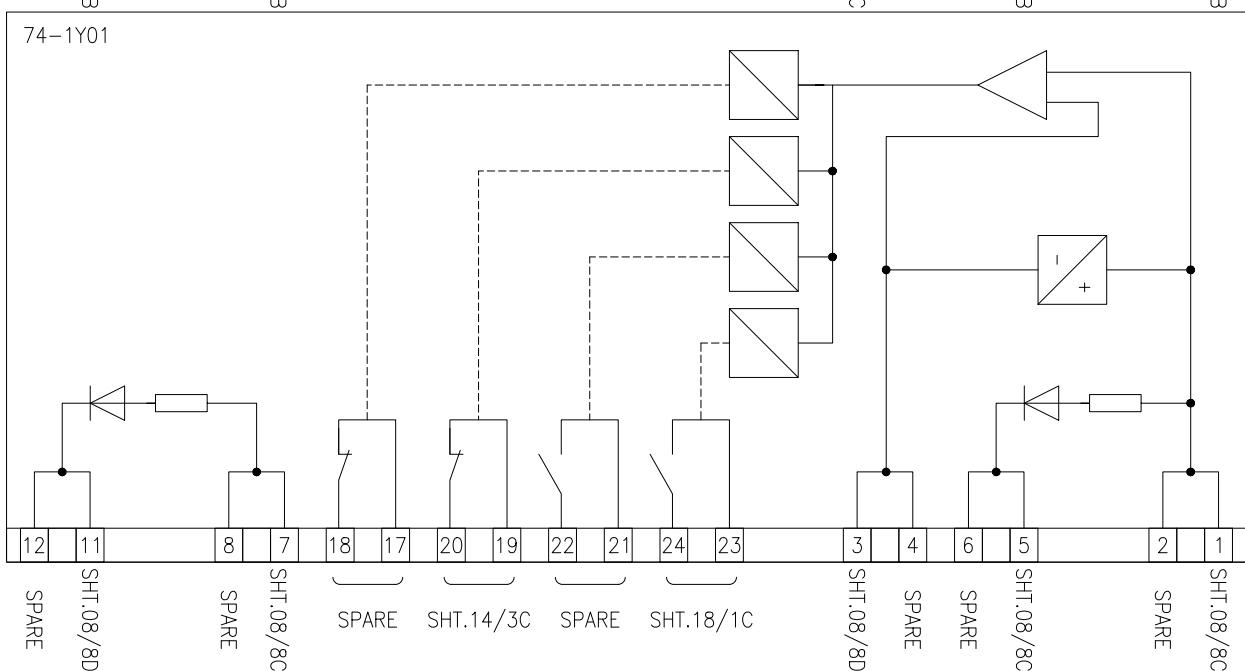
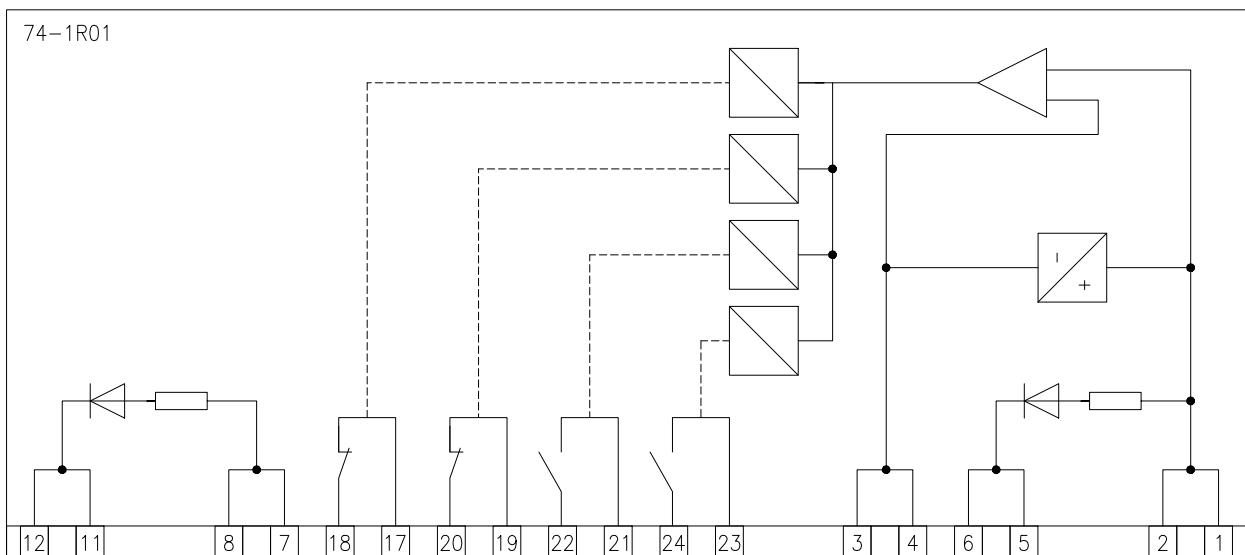
APPROVED	CHECKED	DRAWN	PROJECT:	TITLE:	EPE SOL Pvt Ltd.	DWG# EPE/ENU-18/B61554	SHT: 19 OF 23
NAH	MSS	MUR	NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	EVENTS FUNCTION 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 71-B Garden Block, New Garden Town, Lahore, Pakistan	DATE: 07.03.2019	AS BUILT

D08Q1 CB TCS I	D08Q1 CB TCS II	D08Q2 CB TCS I	D08Q2 CB TCS II	D08Q3 CB TCS I	D08Q3 CB TCS II	DC SUPPLY
FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAULTY ALARM	FAILURE

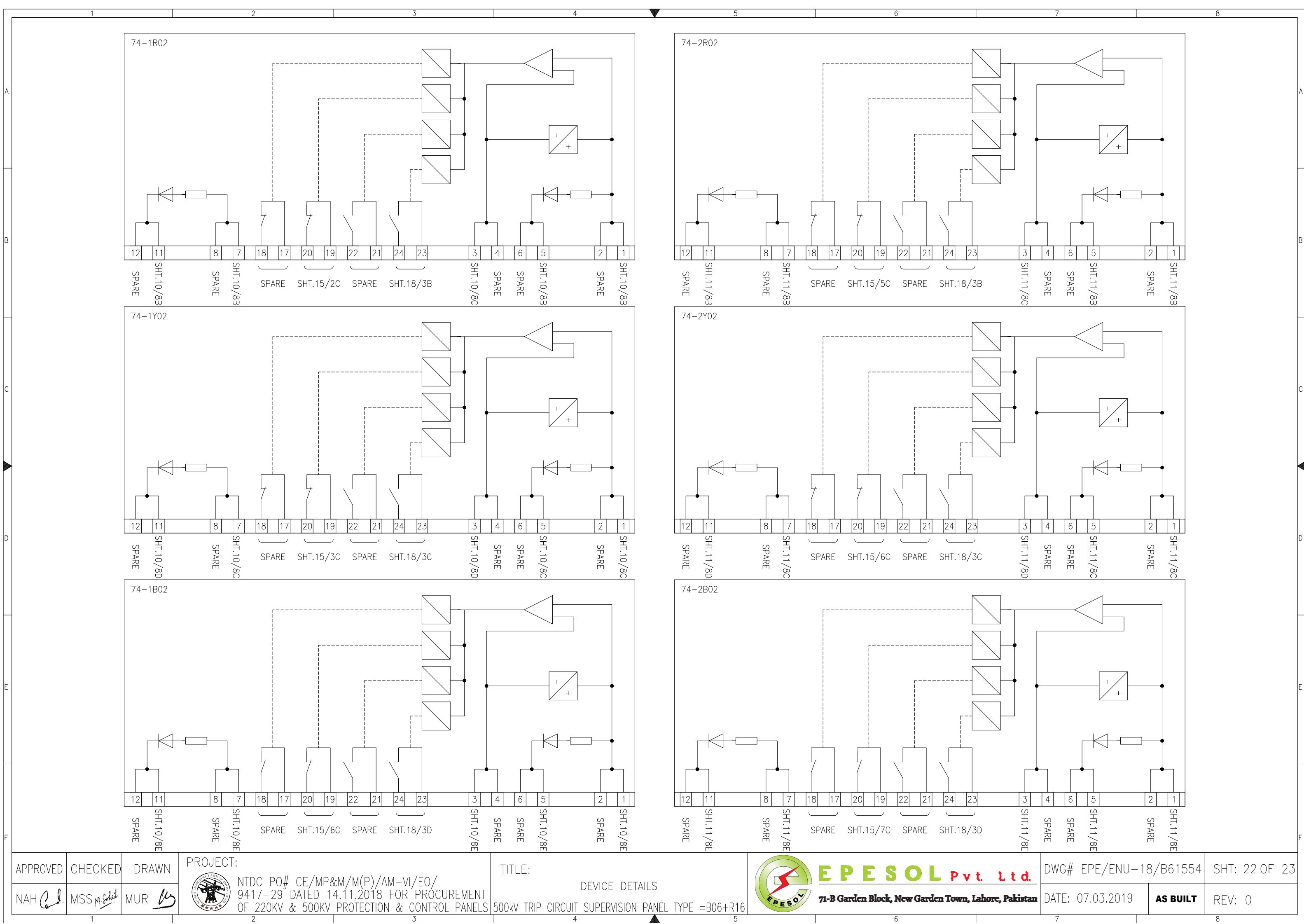
AC SUPPLY
TRIP/FAIL

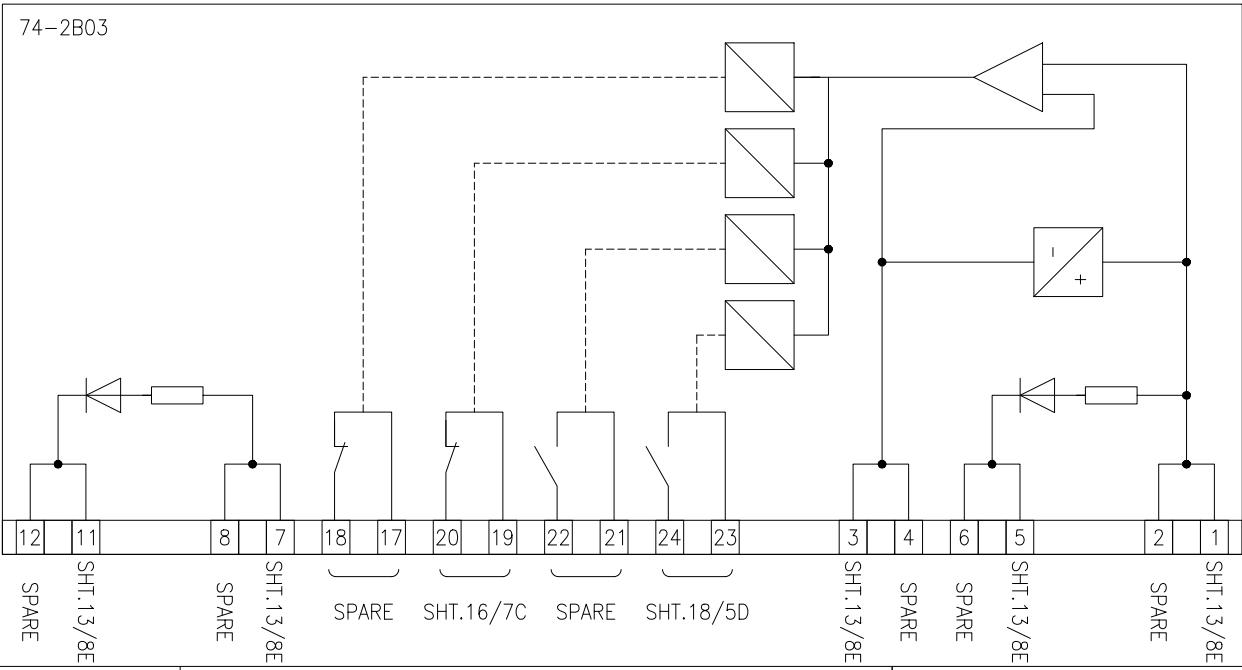
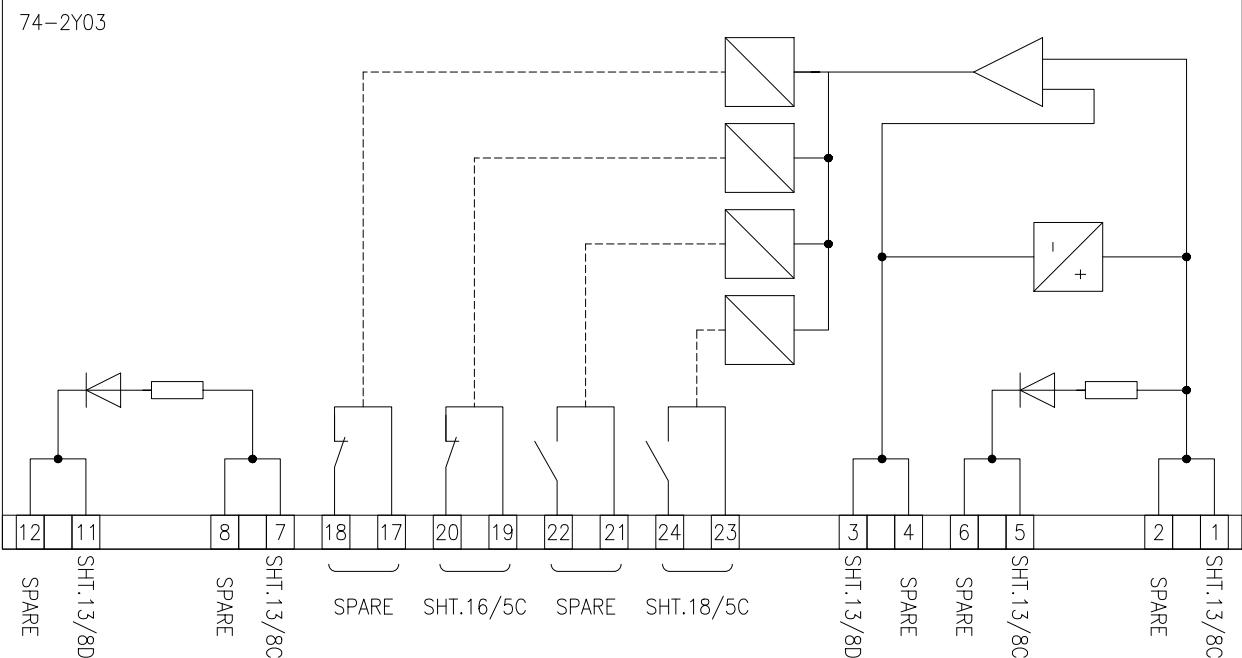
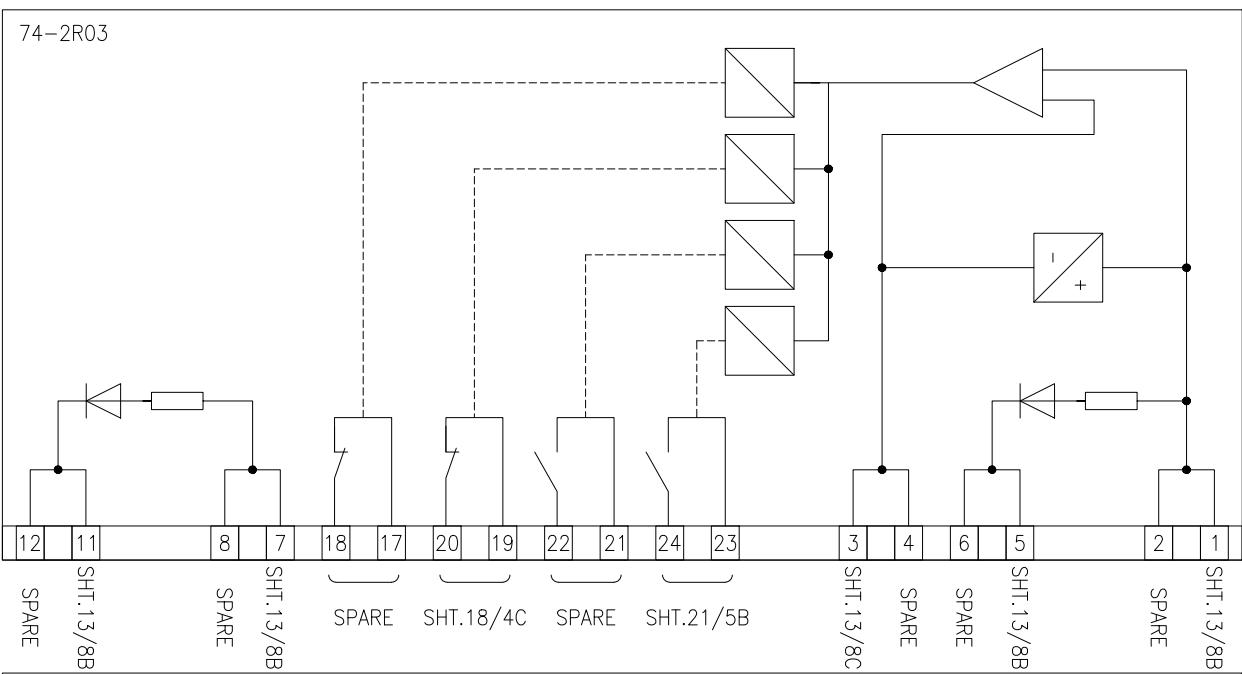
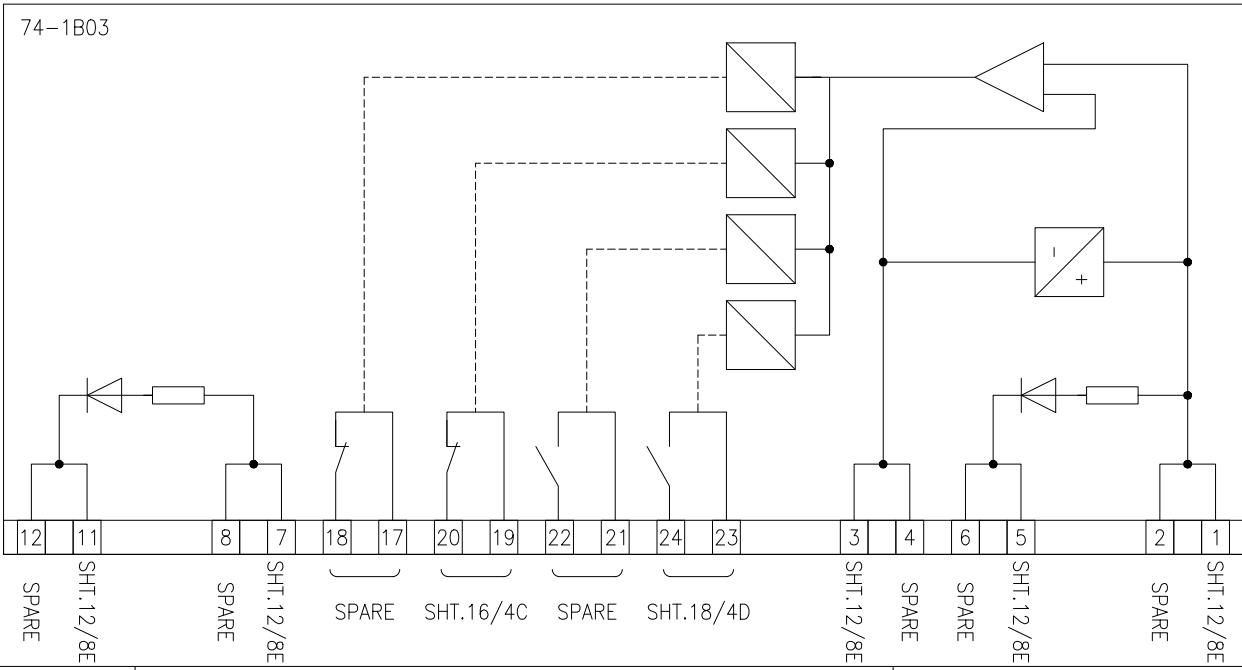
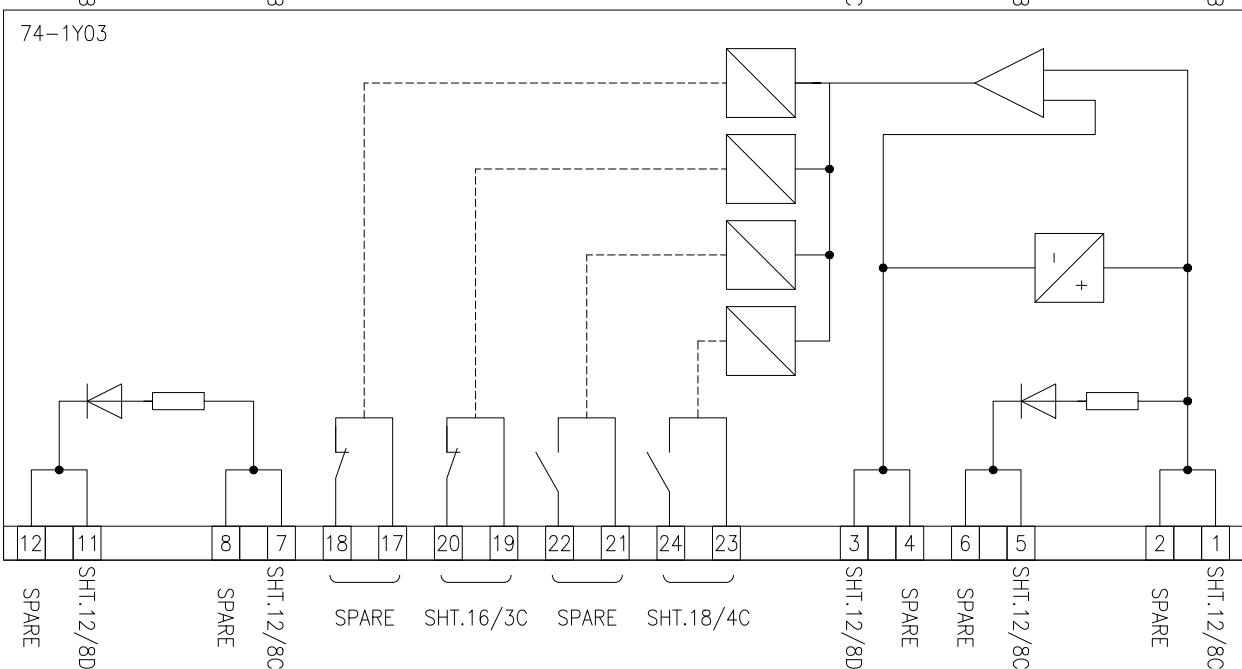
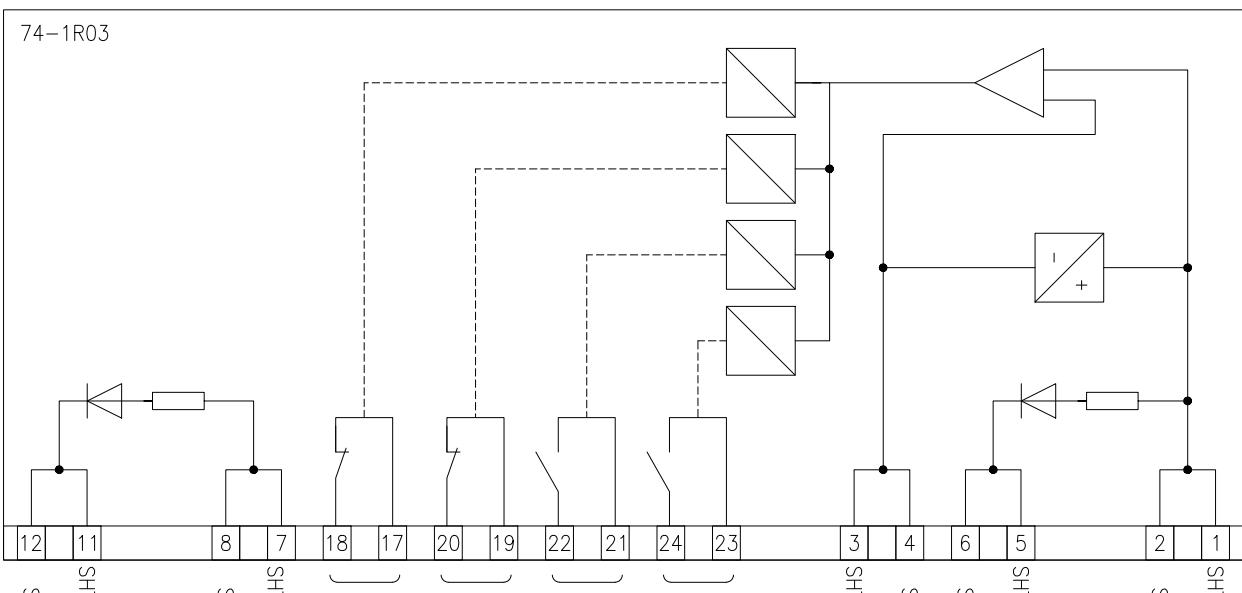


APPROVED	CHECKED	DRAWN	PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/E0/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: SCADA FUNCTION 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	EPE SOL Pvt Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61554	SHT: 20 OF 23
NAH [Signature]	MSS [Signature]	MUR [Signature]				DATE: 07.03.2019	AS BUILT



APPROVED	CHECKED	DRAWN	PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/EO/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: DEVICE DETAILS 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61554	SHT: 21 OF 23
NAH 	MSS 	MUR 				DATE: 07.03.2019	AS BUILT





APPROVED	CHECKED	DRAWN	PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/EO/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: DEVICE DETAILS 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61554	SHT: 23 OF 23
NAH 	MSS 	MUR 				DATE: 07.03.2019	AS BUILT

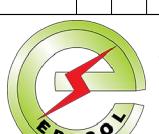
SCHEME DWG. REF: EPE/ENU-18/B61554

APPROVED	CHECKED	DRAWN	P
NAH <i>O</i>	MSS <i>n. Schat</i>	MUR	<i>W</i>



PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/EO/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 25.000 KVA 500KV PROTECTION & CONTROL PANEL

TITLE: TERMINAL DETAIL
C ECOHV TRIP CIRCUIT SUPERVISION PANEL TYPE: P26 / P46



E P E S O L Pvt. Ltd.

DWG# EPE/ENU-18/B61555 SHT: 01 OF 08
DATE: 07.03.2019 AS BUILT REV: 0



PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/EO/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF SECURITY & PROTECTION & CONTROL PANEL

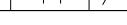
TITLE:			
		TERMINAL DETAIL	
C_EEOLV TRIP CIRCUIT SUPERVISION PANEL TYPE		P26+P16	



E P E S O L Pvt. Ltd.

DWG# EPE/ENU-18/B61555	SHT: 02 OF 08
DATE: 07.03.2019	AS BUILT
	REV: 0

Sr.	CABLE DESIGNATION	CORE CROSS SECTION	DESTINATION	LEGEND:				
A	1					TEMPORARY SHORTENING LINK		
B	2					PERMANENT LINK		
C	3					END COVER		
D	4							
E	5							
F	6							
G	7							
H	8							
I	9							
J	10							
K	11							
L	12							
M	1	2	3	4	5	6	7	8
N	9	10	11	12				
O								
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APPROVED	CHECKED	DRAWN	PROJECT:  NTDC PO# CE/MP&M/M(P)/AM-VI/EO/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: TERMINAL DETAIL 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61555	SHT: 04 OF 08
NAH	MSS M	MUR				DATE: 07.03.2019	AS BUILT

APPROVED	CHECKED	DRAWN	PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/EO/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: TERMINAL DETAIL 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61555	SHT: 05 OF 08
NAH Q.	MSS M. Sohail	MUR <i>LG</i>				DATE: 07.03.2019	AS BUILT REV: 0

LEGEND:



TEMPORARY SHORTENING LINK

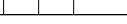


PERMANENT LINK



END COVER

SCHEME DWG. REF: EPE/ENU-18/B61554

APPROVED	CHECKED	DRAWN	PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/EO/ 9417-29 DATED 14.11.2018 FOR PROCUREMENT OF 220KV & 500KV PROTECTION & CONTROL PANELS	TITLE: TERMINAL DETAIL 500KV TRIP CIRCUIT SUPERVISION PANEL TYPE =B06+R16	 EPESOL Pvt. Ltd. 71-B Garden Block, New Garden Town, Lahore, Pakistan	DWG# EPE/ENU-18/B61555	SHT: 07 OF 08
NAH Q.	MSS M. Sohail	MUR <i>LG</i>				DATE: 07.03.2019	AS BUILT

Sr.	CABLE DESIGNATION	CORE CROSS SECTION		DESTINATION		LEGEND:	TEMPORARY SHORTENING LINK PERMANENT LINK END COVER	REMOTE DESTINATION	TERMINAL BLOCK	TERMINAL NO	TERMINAL STRIP X200				
A	1					D-					REFERENCE				
B	2										SHT	/	REF		
C	3										06	/	2B	1	
D	4										06	/	5B	2	
E	5										06	/	2B	3	
F	6										06	/	5B	4	
G	7													5	
H	8														
I	9														
J	10														
K	11														
L	12														
M	1	2	3	4	5	6	7	8	9	10	11	12			

SCHEME DWG. REF: EPE/ENU-18/B61554

APPROVED	CHECKED	DRAWN	P
NAH <i>[initials]</i>	MSSM <i>[initials]</i>	MUR <i>[initials]</i>	



PROJECT: NTDC PO# CE/MP&M/M(P)/AM-VI/E0/
9417-29 DATED 14.11.2018 FOR PROCUREMENT
OF 220KV & 500KV PROTECTION & CONTROL PANELS

TITLE:			
TERMINAL DETAIL		C_E001V TRIP CIRCUIT SUPERVISION PANEL TYPE P06+P16	



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

DWG# EPE/ENU-18/B61555	SHT: 08 OF 08
DATE: 07.03.2019	AS BUILT
	REV: 0