

ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	30/07/2024	ALL	1. NOTE-3, 4 & 5 DELETED. 2. NOTE-6 ADDED. 3. DRAWING UPDATED. 4. ITEM-B ADDED.	C. R. NO. 2300240014

8	DOME KEY	1	CC76052	NIL	TO BE SUPPLIED
7	FUSE AND TERMINAL PANEL	1	CC72446	NIL	LOOSE
6	PVC LINING SHEET 490X290X1	1	NIL	PVC FIRE RETARDANT	NIL
5	GROMMET (A=25,E=1.9)	6	NIL	IS: 5270-69, TAB-1	NIL
4	GROMMET (A=19,E=1.9)	8	NIL	IS: 5270-69, TAB-1	NIL
3	COUNTER SUNK HEAD SCREW M6X20	16	NIL	IS: 1365-2005, T-182, A2-70	NIL
2	FUSE CLM ROTARY SWITCH PANEL	1	CC72399	NIL	NIL
1	CUBICLE BOX COMPLETE	1	CC72447	NIL	NIL
ITEM DESCRIPTION & DIMENSIONS		QUANTITY	DETAIL DRG	MATL. & SPEC.	REMARKS
ELECTRICAL		SUPERSEDES: CC72445 ALT NIL			
WELD LENGTH		FILE Z:\CC72445a.prt (2D)			
WEIGHT					
NIL					
S. AREA					
NIL					
LENGTH/WIDTH					
NIL					
WIDTH/HEIGHT					
NIL					
HEIGHT					
NIL					

LOW VOLTAGE PANEL TO EDTS-355
FOR LHB EOG NON-AC COACHES
FOR AMRIT BHARAT RAKE

RAIL COACH FACTORY, KAPURTHALA

रेल कोच फैक्टरी कपूरथला

SCALE	SSE/ED	CHD
1:1		
DRN		
REF. DRG. NO.	NIL	
PL NO.	NIL	
DRG. NO.	CC72445	
ALT.	0	
SIZE	A1	SHEET 1/1

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- ## 6. LED TYPE INDICATORS AND PUSH BUTTONS SHALL BE AS PER ITEM-50, 51 & 54 OF BOM TO DRG. NO. CC72446.
- @ 5. PUSH BUTTON ACTUATOR-RED & GREEN, CONTACT BLOCK-2NO & LEGEND-PLATES ARE SHOWN IN BOM OF DRG. NO. CC72446.
- # 4. DC/DC CONVERTER, SCREWLESS END STOP, DIN RAIL, LEGEND-PLATE & MOUNTING HARDWARE ARE SHOWN IN BOM OF DRG. NO. CC72446.
3. ITEM-8,9 & 10 ARE TO BE SUPPLIED LOOSE AND BE FITTED ON COACH.
2. FRAMED DIMENSIONS ARE TO BE STRICTLY ADHERED TO.
1. ALL DIMENSIONS ARE IN MM.

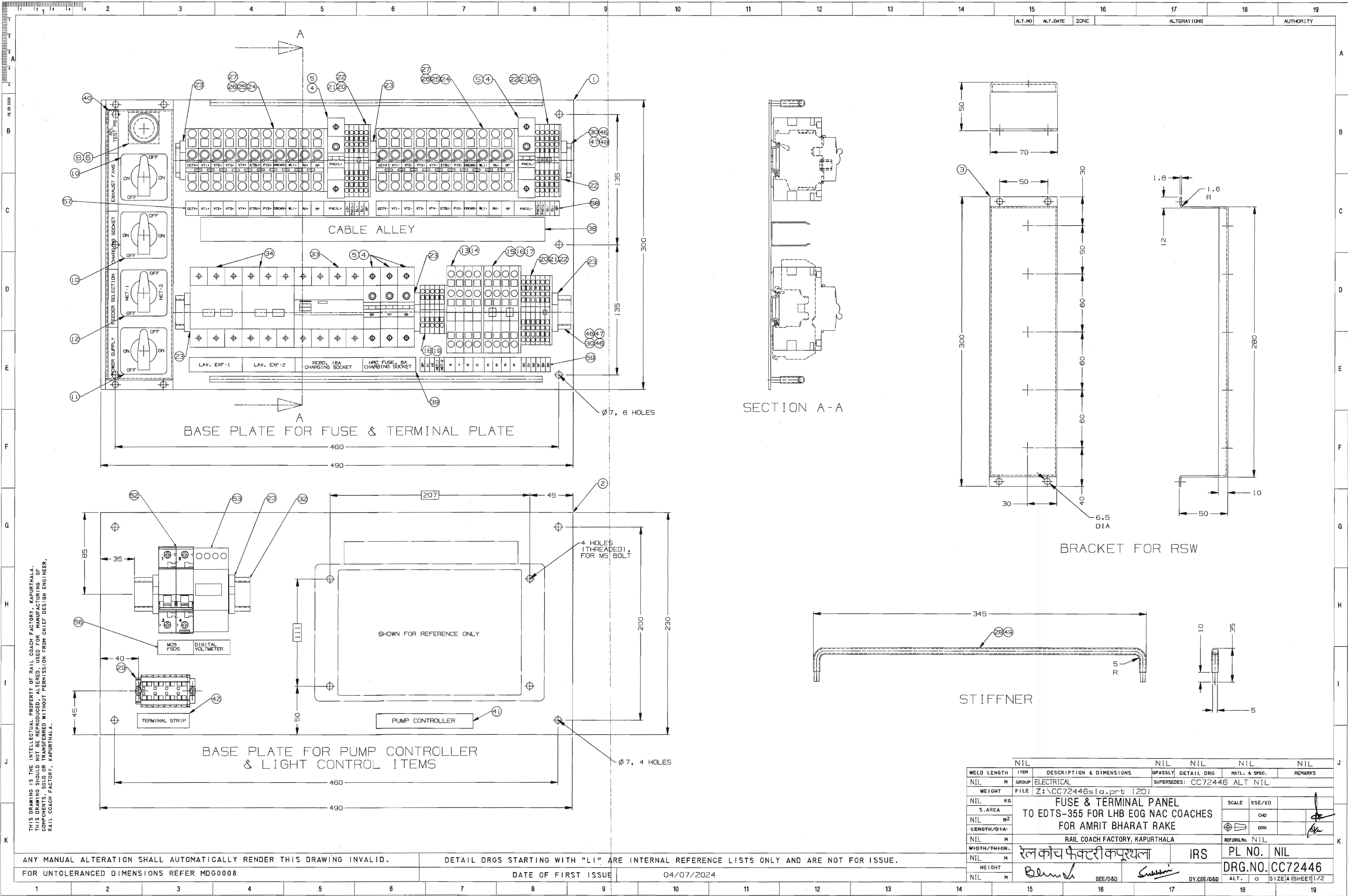
NOTE:-

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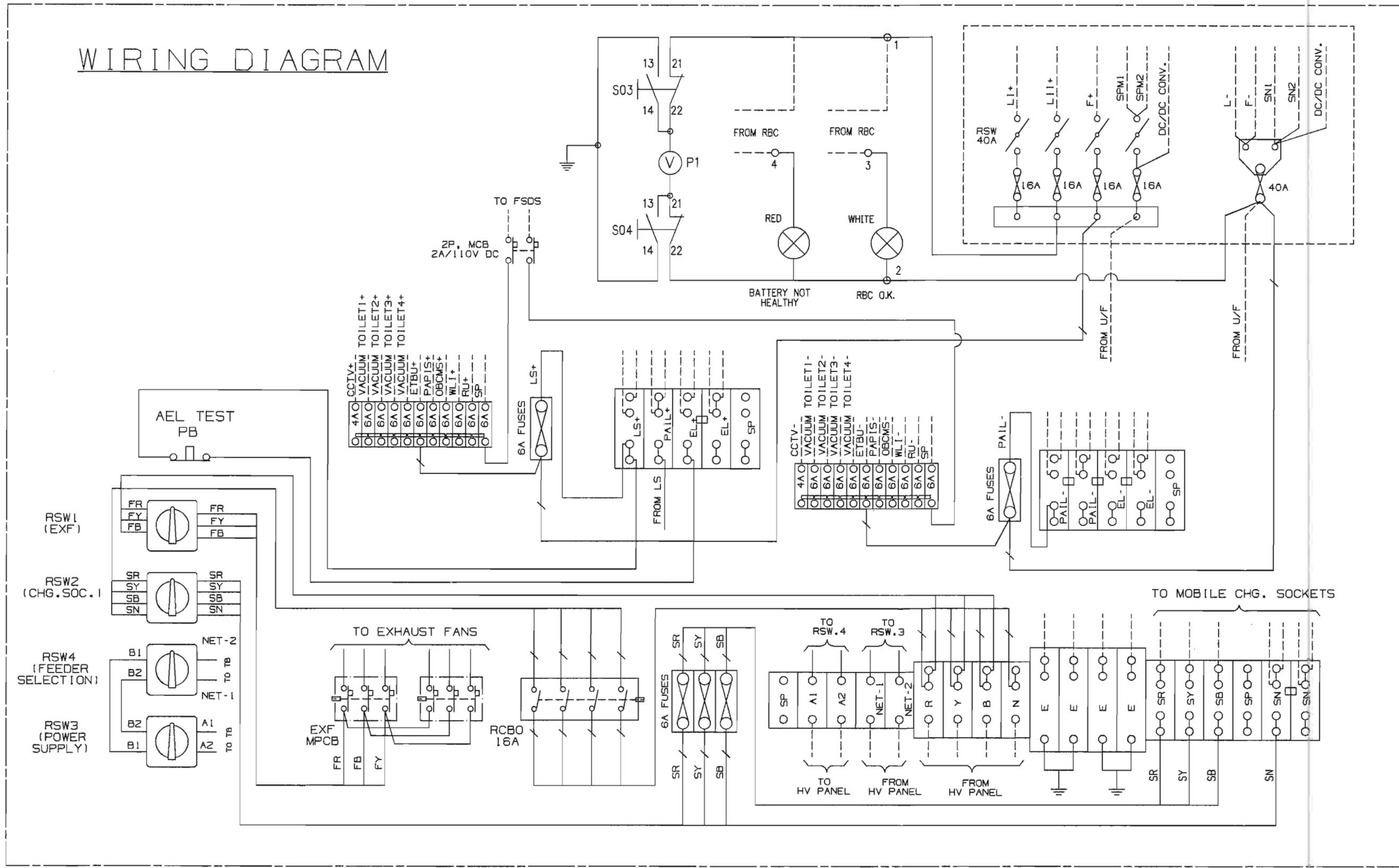
FOR UNTOLERANCED DIMENSIONS REFER MDG0008

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE.

DATE OF FIRST ISSUE 28/06/2024



WIRING DIAGRAM



CABLE SIZE

CABLE SIZE	SYMBOL	SPECIFICATION
1.5 SQ.MM. THIN WALLED FLEX. ELAST. CABLE WITH CU. COND. UPTO 750V.	—	
2.5 SQ.MM. THIN WALLED FLEX. ELAST. CABLE WITH CU. COND. UPTO 750V.	— / —	ELRS/SPEC/ELC/0019, LATEST

ALT. NO	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
30/07/2024	ALL	1. ITEM-7,9,31,35,36,37,43 & 44 DELETED.	C. R. NO. 2300240014	A
	ALL	2. OPA OF ITEM-6,46,47 & 48 CHANGED.		
	ALL	3. DESCRIPTION OF ITEM-32, 39 & 45 MODIFIED.		
	ALL	4. ITEM-50 TO 59 ADDED.		
	ALL	5. NOTE-6,8,11 & 12 DELETED.		
	ALL	6. NOTE-15 ADDED.		
	ALL	7. PUMP CONTROLLER, TERMINAL STRIP RELOCATED AND 2P MCB, DIGITAL VOLT METER SHOWN IN BASE PLATE.		
	ALL	8. WIRING DIAGRAM UPDATED.		

32	DIN-35 RAIL FOR 2POLE MCB, L=120MM	1	NIL	PART NO. 8001 100/000-4708	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
31	DIN-35 RAIL FOR LIGHT CONTROL ITEMS, L=170MM	1	NIL	PART NO. 8001 -100/000-4708	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
30	DIN-35 RAIL FOR RCBO & TERMINAL BLOCKS, L=110MM	2	NIL	PART NO.8001 -100/000-4708	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
29	4-CONDUCTOR TERMINAL STRIP WITH FIXING FLANGES	1	NIL	PART NO. 262-204	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
28	HEAT SHRINKABLE SLEEVE, L=375MM	2	NIL	NIL	SEE NOTE-10
27	MINIATURE GLASS FUSE LINKS SX20MM, 6A	20	NIL	SS05-6-R OF M/S EATON OR	EQUIV. OF PROTECTION/ SIEMENS/C&S/L&T
26	MINIATURE GLASS FUSE LINKS SX20MM, 4A	2	NIL	SS05-4-R OF M/S EATON OR	EQUIV. OF PROTECTION/ SIEMENS/C&S/L&T
25	ADJACENT JUMPER, GREY	20	NIL	PART NO. 282-402	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
24	FUSE TERMINAL BLOCK	22	NIL	PART NO. 2007-1611	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
23	SCREWLESS END STOP	10	NIL	PART NO. 249-116	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
22	ADJACENT JUMPER, GREY	5	NIL	PART NO. 280-402	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
21	END/INTERMEDIATE PLATE, GREY	3	NIL	PART NO. 280-314	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
20	4-CONDUCTOR THROUGH TERMINAL BLOCK(FRONT ENTRY)	16	NIL	PART NO. 280-833	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
19	END/INTERMEDIATE PLATE, GREY	1	NIL	PART NO. 280-308	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
18	2-CONDUCTOR THROUGH TERMINAL BLOCKS (FRONT ENTRY)	5	NIL	PART NO. 280-901	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
17	ADJACENT JUMPER, YELLOW GREEN	2	NIL	PART NO. 282-422	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
16	END/INTERMEDIATE PLATE, ORANGE	1	NIL	PART NO. 282-339	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
15	3-CONDUCTOR GROUND TERMINAL BLOCK (FRONT ENTRY)	4	NIL	PART NO. 282-687	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
14	END/INTERMEDIATE PLATE, GREY	1	NIL	PART NO. 282-308	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
13	3-CONDUCTOR THROUGH TERMINAL BLOCKS (FRONT ENTRY)	4	NIL	PART NO. 282-681	OF WAGO OR EQUIV. OF PHOENIX/METMULLER
12	ROTARY SWITCH 10A, 440VAC, 4 POSITION, 2 POLE, 2WAY WITH OFF FOR NET-1&2 SELECTION	1	NIL	61152 S B B13 TDYR	OF M/S SALZER OR EQUIV. APPROVED MAKE
11	ROTARY SWITCH 10A, 440VAC, 4 POSITION, 2 POLE, ON-OFF FOR POWER SUPPLY	1	NIL	61198 S B B13 TDYR	OF M/S SALZER OR EQUIV. APPROVED MAKE
10	ROTARY SWITCH 10A, 440VAC, 4 POSITION, 4 POLE, ON-OFF FOR CHARGING SOCKET & EXHAUST FAN	2	NIL	61196 S B B13 TDYR	OF M/S SALZER OR EQUIV. APPROVED MAKE
9	CONTACT-MECHANISM WITH ZNO	2	NIL	NIL	SEE NOTE-8
8	CONTACT MECHANISM WITH INC	1	NIL	NIL	SEE NOTE-7
7	PUSH BUTTON ACTUATOR, NON-ILLUMINATED, GREEN	1	NIL	NIL	SEE NOTE-6
6	PUSH BUTTON ACTUATOR, NON-ILLUMINATED, RED	1	NIL	NIL	SEE NOTE-5
5	HRC FUSE LINK 10X38MM, 6A	5	NIL	IS/IEC: 60269-2(LATEST)	SEE NOTE-4
4	MODULAR CYLINDRICAL FUSE HOLDER	5	NIL	IS/IEC: 60269-2(LATEST)	SEE NOTE-4
3	BRACKET FOR RSW 1.6X4X392	1	NIL	IS: 6911(LATEST) SS304-S2	NIL
2	BASE PLATE FOR PUMP CONTROLLER 3.15X490X230	1	NIL	IS: 6911(LATEST) SS304-S2	NIL
1	BASE PLATE FOR FUSE AND TERMINAL PLATE 3.15X490X300	1	NIL	IS: 6911(LATEST) SS304-S2	NIL

59	LEGEND PLATE 1X10X135 (AC CIRCUIT)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
58	LEGEND PLATE 1X10X190 (NEGATIVE CIRCUIT)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
57	LEGEND PLATE 1X10X190 (POSITIVE CIRCUIT)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
56	LEGEND PLATE 1X10X75 (MCB FSDS, DIGITAL VOLT METER)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
55	LEGEND PLATE 1X10X75 (INSULATION TEST +VE & -VE)	2	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
54	PUSH BUTTON INSULATION TEST BATTERY (NET +VE) (WHITE, RED DIA. 22.5MM)	2	NIL	CPI-10W10 OF M/S ABB	OR EQUIV. APPROVED MAKE
53	DIGITAL VOLT METER (0-110V DC) (DIN RAIL MOUNTED)	1	NIL	HAGER /SCHNEIDER	OR EQUIV. APPROVED MAKE
52	2-POLE MCB, 2A/110V DC (C-CURVE) FOR FSDS	1	NIL	SSL5202-7RC OF M/S SIEMENS	OR EQUIV. APPROVED MAKE
51	LED TYPE INDICATOR (RED)	1	NIL	3585285-6HC04 OF M/S SIEMENS	OR EQUIV. APPROVED MAKE
50	LED TYPE INDICATOR (WHITE)	1	NIL	3585285-6HG04 OF M/S SIEMENS	OR EQUIV. APPROVED MAKE
49	STIFFNER Ø 5, L=395MM	2	NIL	SS304-S2	NIL
48	PLAIN WASHER 5.5	12	NIL	IS: 2016-67, T-3, TY-B, SS304-S2	NIL
47	SPRING WASHER	12	NIL	IS: 3063-94, TY-B 65C6	NIL
46	CHEESE HEAD SCREW MSX16	12	NIL	IS: 1366-2002, T-1, A2-70	NIL
45	LEGEND PLATE 1X15X75 (RBC O.K. BATTERY NOT HEALTHY)	2	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
44	LEGEND PLATE 1X10X55 (DC/DC CONVERTER 110/24 VDC)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
43	LEGEND PLATE 1X10X150 (LIGHT CONTROL ITEMS)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
42	LEGEND PLATE 1X15X55 (TERMINAL STRIP)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
41	LEGEND PLATE 1X15X100 (PUMP CONTROLLER)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
40	LEGEND PLATE 1X15X280 (ROTARY SWITCH AND PUSH BUTTON)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
39	LEGEND PLATE 1X15X235 (MPCB, RCBO, HRC FUSE)	1	NIL	IS: 737-86, 19000-H2	BRIGHT * ANODISED
38	HALOGEN FREE POLYCARBONATE/ABS CABLE ALLEY	1	NIL	NIL	L&T/SALZER, PHOENIX, TRINITY TOUCH
37	RELAY 52-24, DC 24V (WITH BASE) REMOTE CONTROL, 24VDC (K-19 & K-20)	2	NIL	NIL	52-24V, DC24V, 6000-0100/1000-0104 OF S&S WAGO OR EQUIV.
36	DC/DC CONVERTER 110V/24V, 2.5A	1	NIL	CP-2.5E OF M/S ABB OR	EQUIV. OF PHOENIX/ POWERTECH/COSEL/WAGO
35	CONTACTOR FOR EMERGENCY LIGHT CONTROL (K-11)	1	NIL	TKC6-31Z- 6Z OF M/S ABB OR	EQUIV. OF SIEMENS/ L&T/SCHNEIDER
34	MPCB FOR EXHAUST FAN (0.63 TO 1 A RANGE)	2	NIL	MS116-L.O, HK1-11	OF M/S ABB OR EQUIV. OF SIEMENS/ABB/SCHNEIDER/ EATON
33	RCBO, 4POLE, 16A, 415V 30MA(SENSIVITY)	1	NIL	NIL	SEE NOTE-9

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP ELECTRICAL				
WEIGHT	FILE	Z:\CC72446s2a.prt (2D)				
NIL	KG					
S. AREA						
NIL	M ²					
LENGTH/DIA						
NIL	M					
WIDTH/THICK.						
NIL	M					
HEIGHT						
NIL	M					

FUSE & TERMINAL PANEL
TO EDTS-355 FOR LHB EOG NAC COACHES
FOR AMRIT BHARAT RAKE

RAIL COACH FACTORY, KAPURTHALA

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IRS

PL NO. NIL

DRG.NO. CC72446

SEE/D&D

DY.CEE/D&D

ALT.

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S I ZE A1 SHEET 2/2

- ITEM NO. 50, 51 & 54 ARE TO BE FITTED ON UPPER COVER AT PLACE INDICATED IN DRG. NO. CC72445.
- COACH WIRING SHOWN AS DOTTED LINES IN WIRING DIAGRAM.
- ITEM NO. 45 & 55 TO BE AFFIXED AT PLACE INDICATED IN DRG. NO. CC72448.
- ITEM NO. 6 (O.I. NO.), 7 & 9 ARE TO BE FITTED AT PLACE INDICATED IN DRG. NO. CC72445.
- ITEM NO. 23 (O2 NOG.), 32, 36, 44 AND 46 TO 48 ARE TO BE FITTED AT PLACE INDICATED IN DRG. NO. CC72445.
- STIFFNER SHALL BE COVERED WITH HEAT SHRINKABLE SLEEVE OF 1.0MM (MIN.) THICKNESS THICKNESS OF RDSO/RCF APPROVED MAKE.
- RCBO TO CAT NO. 4114 19 OF LEGRAND OR DS203NC C16 A30 OF ABB OR EQUIVALENT OF SIEMENS / L&T / EATON/ SCHNEIDER SHALL BE USED. RCBO SHALL WORK ON 3Ø, 190V AC (LINE TO LINE) 110V AC (LINE TO NEUTRAL).
- CONTACT BLOCK, 2 NO TO PART NO. 35B54 00-0C OF M/S SIEMENS OR EQUIVALENT OF SCHNEIDER/L&T/ABB/TEKNIC/EATON/C&S SHALL BE USED.
- CONTACT BLOCK, NC TO PART NO. 35B54 00-0C OF M/S SIEMENS OR EQUIVALENT OF SCHNEIDER/L&T/ABB/TEKNIC/EATON/C&S SHALL BE USED.
- PUSH BUTTON ACTUATOR, GREEN TO PART NO. 35B50 00-0AEO1 OF M/S SIEMENS OR EQUIVALENT OF SCHNEIDER/L&T/ABB/TEKNIC/EATON/C&S SHALL BE USED.
- PUSH BUTTON ACTUATOR, RED TO PART NO. 35B50 00-0AEO1 OF M/S SIEMENS OR EQUIVALENT OF SCHNEIDER/L&T/ABB/TEKNIC/EATON/C&S SHALL BE USED.
- MODULAR CYLINDRICAL FUSE HOLDER & FUSE LINK SIZE 10X38MM TO PART NO. CHM1DU & C1066 OF EATON BUSSMANN OR CMS101 & FR10GG650V6 OF MERSEN OR EQUIVALENT OF ABB/SIEMENS/L&T SHALL BE USED.
- FOR NAME PLATES 3MM LETTERS TO BE ENGRAVED ON BLACK BACKGROUND SHALL BE DEEP ETCHED AND APPLIED WITH WHITE ENAMEL PAINT.
- FRAMED DIMENSIONS ARE TO BE STRICTLY ADHERED TO.
- ALL DIMENSIONS IN MM.

NOTE:

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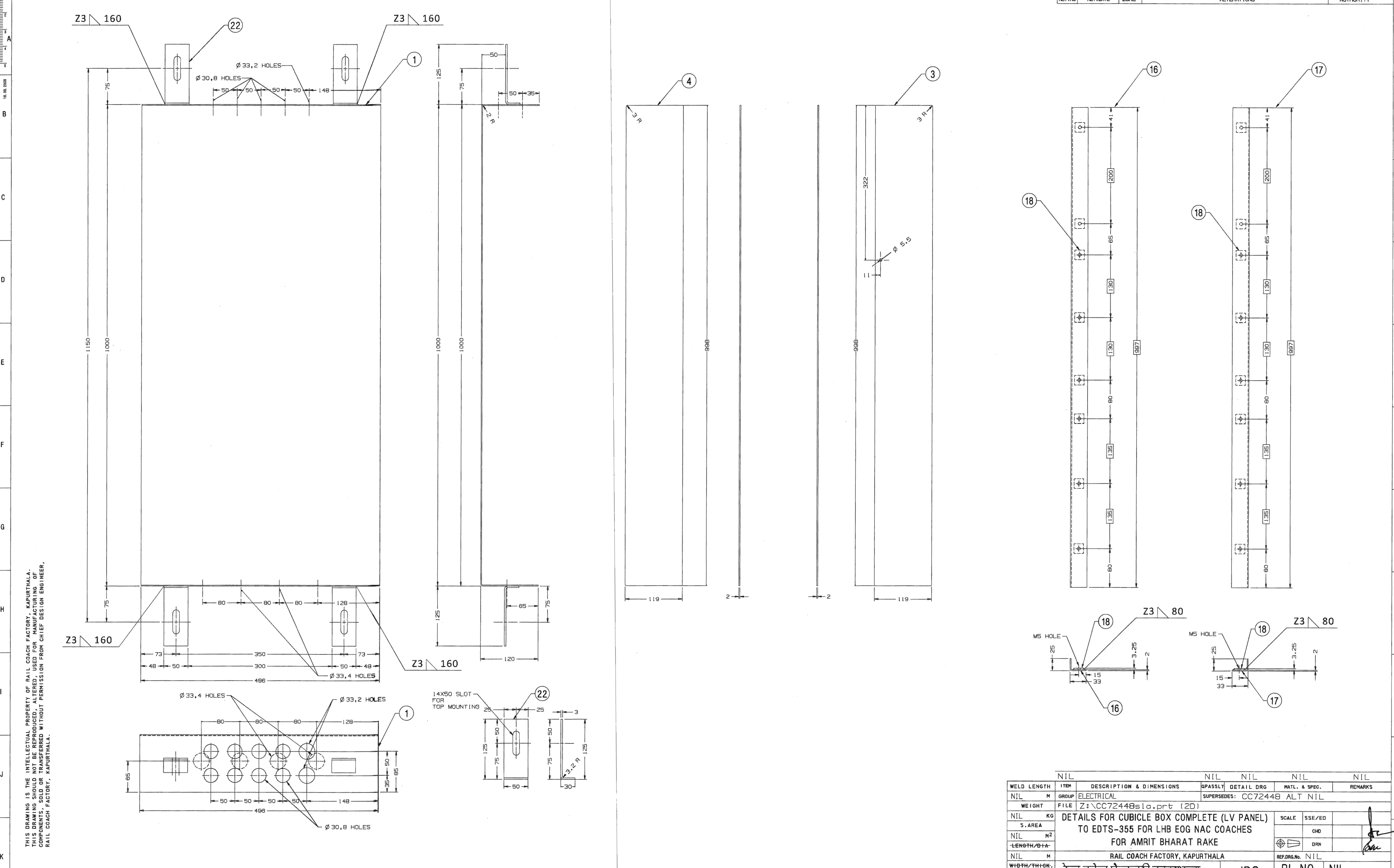
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FOR UNTOLERANCED DIMENSIONS REFER MDG0008

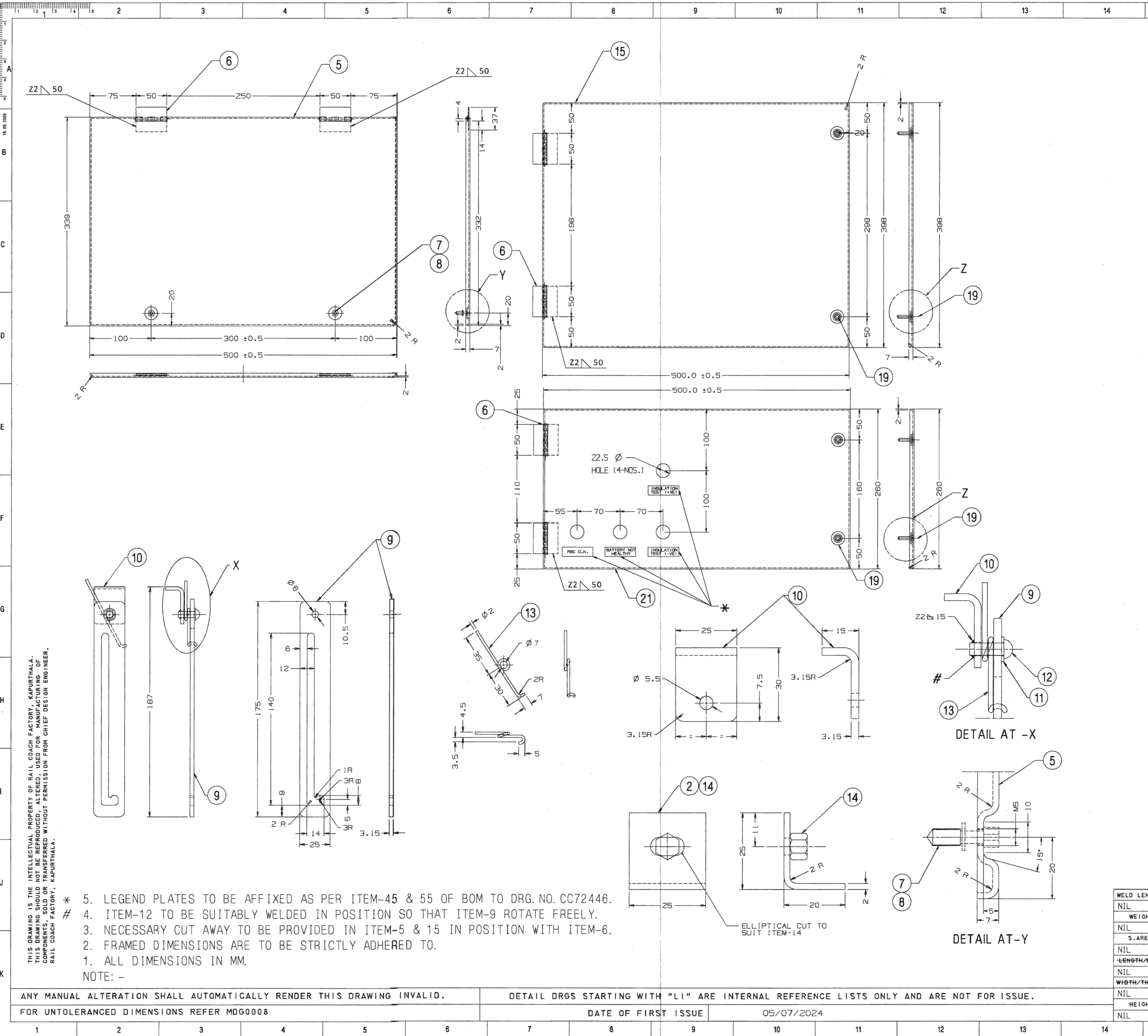
DATE OF FIRST ISSUE

04/07/2024

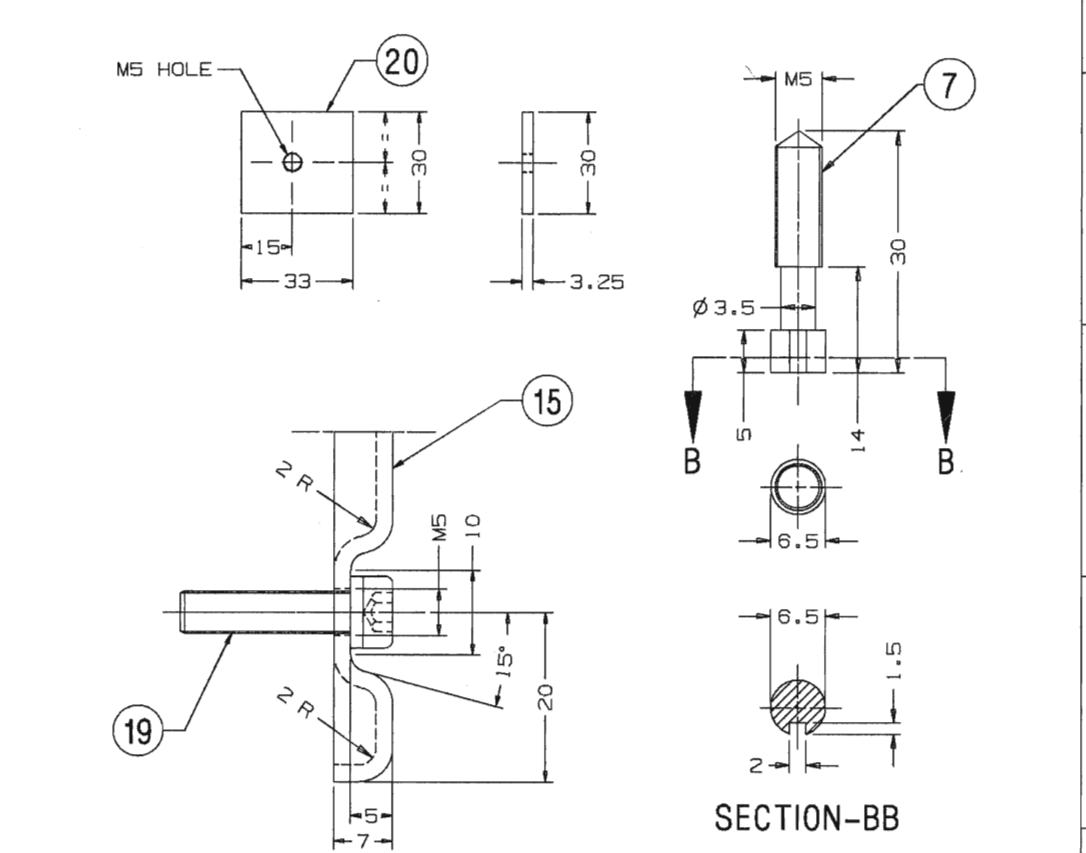
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ALT. NO.	ALT. DATE	ZONE	ALTERATIONS	AUTHORITY
0	30/07/2024	ALL	1. DIA. 22.5 HOLE (4-NOS.) SHOWN IN ITEM-21.	C. R. NO. 2300240014
		ALL	2. NOTE-5 MODIFIED.	



ITEM	DESCRIPTION & DIMENSIONS	QTY	DETAIL DRG	MATL. & SPEC.	REMARKS
22	MOUNTING ANGLE 3.25X30X149	4	NIL	IS: 6911 (LATEST) SS304-52	NIL
21	UPPER COVER	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
20	SCREWING PIECE 3.25X33X30	2	NIL	IS: 6911 (LATEST) SS304-52	NIL
19	HEXAGON SOCKET HEAD CAP SCREW M5X20	4	NIL	IS: 2269-2006, TABLE-1, A2-70	NIL
18	SCREWING PIECE 3.25X20X20	16	NIL	IS: 6911 (LATEST) SS304-52	NIL
17	MOUNTING ANGLE (R.H.S.) 2X57X996	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
16	MOUNTING ANGLE (L.H.S.) 2X57X996	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
15	LOWER COVER	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
14	ADJUSTABLE NUT M5, STAINLESS STEEL	1	NIL	NIL	NIL
13	SPRING	1	NIL	IS: 4454-2001, PT-4, Gr.-2	NIL
12	SNAP HEAD RIVET Ø5X14, GALVD.	1	NIL	IS: 2998-82, TAB.-1 & 5	IS: 1148-82, STEEL
11	PLAIN WASHER 5.5	1	NIL	IS: 2018-87, T-3, TY-B, SS304-52	NIL
10	ANGLE 3.15X25X39	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
9	FLAT 3.15X25X175	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
8	CIRCLIP	2	NIL	IS: 3075-86, TY.-C, FIG-1	NIL
7	CAPTIVE SCREW M5	2	NIL	IS: 1367-2002, SS304-52	NIL
6	STAINLESS STEEL BUTT HINGE, 50MM	6	NIL	IS: 12617-2013, TAB-3, FIG-1	NIL
5	MIDDLE COVER	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
4	SIDE COVER (L.H.S.) 2X119X998	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
3	SIDE COVER (R.H.S.) 2X119X998	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
2	ANGLE 2X42X25	1	NIL	IS: 6911 (LATEST) SS304-52	NIL
1	CHANNEL 2X496X1233	1	NIL	IS: 6911 (LATEST) SS304-52	NIL

WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	QTY	DETAIL DRG	MATL. & SPEC.	REMARKS
NIL	M	GROUP	ELECTRICAL	FILE	Z:\CC72448s2a.prt (2D)	
WEIGHT	KG	S. AREA	NIL	NIL	NIL	
LENGTH/Ø	M	WIDTH/THICK.	NIL	NIL	NIL	
HEIGHT	M	NIL	NIL	NIL	NIL	

DETAILS FOR CUBICLE BOX COMPLETE (LV PANEL) TO EDTS-355 FOR LHB EOG NAC COACHES FOR AMRIT BHARAT RAKE	SCALE	SSE/ED	CHD	DRN
RAIL COACH FACTORY, KAPURTHALA	REF. DRG. NO.	NIL	PL NO.	NIL
DRG. NO. CC72448	SIZE	A	SHEET	2/2