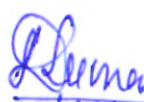


		Modern Coach Factory Raebareli				DOC NO.: MCF/RBL/QMF 8002	
		आधुनिक रेल डिब्बा कारखाना, रायबरेली				REV NO: 01	
						DATE: 17.04.2018	
ROLLING STOCK CERTIFICATE Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/536							
RLY	NFR	COACH NO	204851/C	DATE OF DISPATCH		22-Sep-20	
Type	LWSCN1	Shell No.	20G203	DISPATCH TO	SSE/C&W/KIR	FUR.NO.	LSCN-1729
1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-01.05.2020 2. Tare Weight of Coach : 41.24 Tonnes 3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL 4. Special feature: A Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiv.) letter no. MC/LHB/Brake, DT. 27.09.18							
5. SHELL LEADING DIMENSIONS:							
S NO	DESCRIPTION					DIMENSION (MM)	
1	Maximum length over body					23700	
2	Maximum width over body					3240	
3	Maximum height from Rail Level					4039	
4	CBC height/Buffer height from Rail level 1105 +0/-10					NPP / PP	1103/1097
6. TRACEABILITY OF SHELL ITEMS:							
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO				
1	Under frame	Front PP END	M/S-SFPL				
		Part NPP END	M/S-SFPL				
		Complete	MCFRBL-AIRCON	20G203			
2	Lav. side wall	M/S-ECBT CDG	LAV.1		LAV.2		
		M/S-ECBT CDG	LAV.4		LAV.3		
3	Side wall	LH SIDE	MCFRBL-CONT.AAA/RBL	16			
		RH SIDE	MCFRBL-CONT.AAA/RBL	16			
4	End wall	PP END	M/S-SIPL PALWAL				
		NPP END	M/S-OMAX REWARI				
5	Roof	MCFRBL-CONT.	98				
6	Centre Buffer Coupler	M/S FRONTIER	PP	58P1	NPP	303P1	
7. AIR BRAKE TEST REPORT:							
S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED			
1	Full brake application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ² .	6 – 10 sec.	8 sec			
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²			
		All Brake are applied	OK	OK			
2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK			
3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.	Brake must apply	OK			
8. PAINTING DETAILS:							
S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION	
1	Paint	P.U	K.NEROLAC	M/S-K.NEROLAC(S&A)	90/88	2-Sep-20	
2	Insulation	Satisfactory					


 21/11/2020
 वरिष्ठ निरीक्षक
 SSE/QC/MCF/RBL
 गुणवत्ता विभाग
 रेडिओका, रायबरेली (नालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/536

RLY	N	F	R	Coach No.	2	0	4	8	5	1	/	C	-	DATE OF DISPATCH	2	2	0	9	2	0	2	0
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	SSE/C&W/KIR	Type	L	W	S	C	N	1	Shell No.	2	0	G	2	0	3	FUR NO	LSCN - 1729
----------	-------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---	--------	-------------

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200664				200663			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS5 - 2153				MCF/RBL/LS5 - 2149			
Bolster no.	APEX- 408				APEX- 155			
Axle No	20 Y- 0050 RWF	20 Z - 4448 RWF	20 Y- 3664 RWF	20 W- 2087 RWF				
Wheel Dia	917.56	917.49	917.50	917.51	917.37	917.40	917.56	917.55
Wheel Disc No	TZ 11-19 87187-9WH3	TZ 11-19 83920-9WI9	TZ 12-19 85510-9WM2	TZ 11-19 81448-9VD2	TZ 06-19 61232-9QK2	TZ 11-19 80897-9VE2	TZ 11-19 81511-9WE2	TZ 12-19 93398-9WI9
R.B. Nos.	12-19 36239	12-19 35125	12-19 34568	12-19 35235	11-1932919	12-19 35733	12-19 35241	12-19 35122
CTRB Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	RESISTROFLEX Sr. NO- 06-20 15215	RESISTROFLEX Sr. NO- 06-20 15240	RESISTROFLEX Sr. NO- 06-20 15399	RESISTROFLEX Sr. NO- 06-20 15169

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	291020,293989	293891,294107
2.	Primary outer Spring	CMFSK	01-20 F0 7-154-(1455,1492,1414,1444)	01-20 F0 7-154-(1426,1224,1489,1435)
3.	Primary Inner Spring	CMFSK	12-19 F06-145-(1662,1041,1577,1648)	12-19 F06-145-(1046,1670,1655,1092)
4.	Primary Damper	IAI	12-19 (288659,290314,288564,289163)	12-19 (288818,289962,290752,289463)
5.	Secondary Damper	IAI	06-20 (326479,326480)	01-20 302339,06-20 326810
6.	Lateral Damper	IAI	09-19 274812	11-19 283570
7.	Brake Cylinder	FAV	G20(455,380,180,202)	G20(204,181,378,404)
8.	Brake Caliper	FAV	G20-(1524,1521,1406,1407)-B	G20-(1408,1405,1422,1428)-B
9.	Brake Disc	FAV kbi	03-20(8385,8386,8778,8777)D133561-300	fav - 03-20(8387,8388)D133561-300 kbi-24226781 0079-25/20,24226781 0078-25/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RF		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT/KNORR	06-20,06-20	06-20,06-20
17.	Check Valve	ESCORT/KNORR	06-20	06-20
18.	Anti roll bar Make	SF		
19.	Roll Link make	RF /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	H173,N0549,D0549,D3005	h157,d2647,h149,d973
22.	Control Arm Lower	SF	DH-197,N2898,N0356,D9801	H58,N2728,N3221,H145
23.	Phonic Wheel	KBI	K 01-20	K 01-20

Signature of SSE/Bogie/QC



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 01
DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/536

RLY	NFR	COACH NO	204851/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G203	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1729

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s- FAIVELEY	H20055B
2	Distribution valve	M/s- FAIVELEY	20085558B
3	Pull box	M/s- KBI	
4	FIBA	M/s- KBI	9310/29,8985/29
5	Foot Step	M/S- FABRICON KOLKATA	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S- SHREE RAM PNL	
8	PVC	M/S- RESPONSIVE INDS DELHI	
9	Lavatory inlay	M/S- SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S- KRP PUNE	
11	UIC Vestibule (NPPE)	M/S- KRP PUNE	
12	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
13	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
14	Body Side Window	M/S-BICRAN ENGG GZB	
15	Emergency Window	M/S-SHATABDI VADODARA	
16	Lavatory/hopper Window	M/S- BET INDS PUNJAB	
17	Side panel	M/S- HF VADODARA	
18	Roof Ceiling	M/S-A.B COMPOSITE	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors 2,4	M/s- SUKATA CDG	
	Body Side Doors 1,3	M/s-JVR LDH	
21	Vestibule Door(PPE)	M/s-JBM INDS FARIDABAD	
22	Vestibule Door(NPPE)	M/s-JBM INDS FARIDABAD	
23	Bio Tank	M/s- RAIL FAB KXH	
24	Presurized Flushing(Elect.pneumatic)	M/S-SPAC	
25	Auxiliary Water Tank	M/s-AMIT ENGG MOHALI	
26	Under Slung Water Tank (2X685L)	M/s- SHIVALIK FAST MOHALI	
27	Under Slung Water Tank (1x685 L)	M/s- SHIVALIK FAST MOHALI	
28	Health Faucet	M/s- KAPCO VALVES JUC	
29	Lotah Filler Tap	M/s- KAPCO VALVES JUC	
30	Controlled discharge tap	M/s-AGMECO PVT LTD	
31	Lavatory Doors	M/S-MSL MOHALI	
32	Seat & Berth	M/S-ADVANCE SILICON PALWAL	
33	Ventury grill	NIL	
34	RFID	NIL	

[Signature]
25/11/2020
SSE/QC/MCF/RBL

वार 02 नु 0 अभियंता
गुणवत्ता विभाग
रेडिंक 0, रायबरेली (लालगंज)



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 01
DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/536

RLY	NFR	COACH NO	204851/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G203	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1729

13. MODIFICATION (IF ANY) : NIL

14. DEVIATION (IF ANY) : NIL

15. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT Frequency	REFERENCE & PERIOD OF TRIAL

16. WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months from the date of supply of material whichever is earlier.

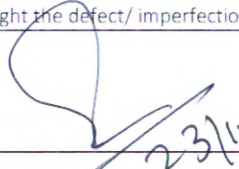
NOTE:

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
- This doesn't cover any consequential liabilities or damages/loss incurred by anybody; furthermore, it shall in no case extend to repayment, return of the coach or replacement of complete coach.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from

Application for any manufacturing /Application as per clause -4, para- V of RDSO specification no .M&C/PCN/100/2013-Given below

S.No	Time period	Gloss Retention (initial gloss >85 unit at 60°)	Colour Retention rating on 0-10 scale (initial rating of painted panels/coach or ISC/RAL shade card shall be taken as 10)	Adherence of paints (with each other and with substrate) Cross-cut tape adhesion test as per ASTM D:3359/97(or latest)
1	After 1 year	80% of initial gloss	7	5B
2	After 2 year	70% of initial gloss	6	5B
3	After 3 year	60% of initial gloss	5	4B

If any imperfection is noticed or any defect arises during the warranty -period due to improper material used or due to bad workmanship, the contractor shall be bounded to set right the defect/ imperfection on free of cost basis at the base depot of the coach.

 21/11/2020 SSE/QC/MCF/RBL	 23/11 SME/AME/QC/MCF/RBL	 Dy. QCM/MCF/RBL
---	--	--

गुणवत्ता विभाग
रेडिडका, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

समीर कुमार
उप मुख्य गुणवत्ता प्रबंधक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 1 OF 4

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.						
TYPE COACH		LWSCN		SHELL/COACH NO		204851/C
RAILWAY		NFR	ELECT. FIT DATE	21-09-2020	MCF EUR. NO.	LSCN-1729
Sr. no.	Description of tests					Remarks
1.	PUMP EQUIPMENTS					OK
2.	LIGHTS, NL,LAP CHARGING SOCKETS					OK
3.	WORKING OF ACCIDENTAL, EMERGENCY LIGHTS.					OK
4.	RAILWAY CARRIAGE FAN					OK
5.	WHEEL SLIDE PROTECTION SYSTEM (WSP)					OK
6.	WORKING OF 9 KVA TRANSFORMER					OK
7.	WORKING OF REGULATED BATTERY CHARGER/EMERGENCY BATTERY CHARGER.					OK
8.	SAFETY :					----
8.1.	FUSES AND THEIR RATING					OK
8.2.	CONTROL CIRCUIT					OK
8.3.	POWER CIRCUIT					OK

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



महोदय / महोदय



Modern Coach Factory Raebareilly
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 2 OF 4

ROLLING STOCK CERTIFICATE OF LHB/EOG NON AC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: TRINITRON On Board: 19/09/TCS/MCF/3451/355/0013 HT Panel: 19/09/TCS/MCF/3451/355/0013	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: PANTRONICS Sr no.: PAN 20018879	RDSO/PE/SPEC/TL 0158, 2010, Rev`0'.Ty I.	01
03.	Mounting of 09KVA TFR.	As per drg no 1.10113.0.76.300.001,Alt -B.	OK
04.	Provision of Pump equipment with pump box. Make: KIND Sr no : KIND/ASY/0114 Pump 1: 20070317 Pump 2: 20070318	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 20/08/0042	As per Spec. EDTS186 Rev-a Am-2, & drg no. CC71328 & LW70020	01
06.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: WAVES Sr. no.: W4K5I 201903	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : AECO	EDTS-328 REV-C,AM-4,Type- II,COR-2	01 SET
08.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	01 SET
09.	Battery fuse box +ve Make : RICHMOND	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make : RICHMOND	As per LW 71002,Alt-I	01
11.	Provision of Battery boxes/ Cradles. Make: HITECH	As per Drg. No. 110113.0.76.700.005 W/O item 5,22,23,26 & 27,Alt-C or Latest.	01
12.	Provision of batteries Type: 110 V, 120 AH VRLA SMF Battery Set. Make: AMARA RAJA Lug Date: 06/20	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareilly





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 3 OF 4

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm Sweep, 110V AC with crash worthy features. Make: CG POWER	As per Drg. No. ICF/SK-7-6-158,alt-g. RDSO/PE/SPEC/TL/0021-2005 (Rev-3) with RCF annex-1,am-1.	30
14.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1 .Type-B1.Drg. No. CC76453.	26
15.	Fitment of LED Light fittings for Night Light with berth indication Type-E (1 watt). Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1, ICF/STB-7-6-053.Type- E. Drg. No. CC76461	10
16.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	04
17.	Fitment of LED Light fittings for PACIL. Make: KAVERI	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
18.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
19.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
20.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 4 OF 4

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
21.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10
22.	Provision of Switch plate assembly along with mobile charging sockets. Make: SALZER	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
23.	Provision of Switch plate assembly along with mobile charging sockets. Make: SALZER	EDML-086, Rev-5, Am-1, Table-1, Item-3.	20
24.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3 ph, 50 Hz). Make:- 1.(NPP): MAA LAXMI INDUSTRIES 2.(PP): MAA LAXMI INDUSTRIES	As per Spec. no. RDSO/PE/SPEC/AC/0177(Rev.-0)-2013 with annexure-A, B.	01 SET
25.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
26.	Provision of Wheel Set Earthing equipment. Make:- NPP: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : FAIVELEY Sr no : 12442	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

 SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL
--	--

