

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/2020-21/1243

RLY	WR	COACH NO	215532/C	DATE OF DISPATCH	11-Mar-21
Type	LWSCN1	Shell No.	20G039	DISPATCH TO	Sr DME/C&W/MMCT
				FUR.NO.	LSCN-1853

1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-27.01.2021
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 1096/1096

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END M/S-NAV. NIRMAN	-----
	Part NPP END M/S-NAV. NIRMAN	-----	
	Complete M/S-NAV. NIRMAN	-----	
2	Lav. side wall	M/S-ATHANCY ALD LAV.1	----- LAV.2 -----
		M/S-ATHANCY ALD LAV.4	----- LAV.3 -----
3	Side wall	LH SIDE M/S-ECBT	248
	RH SIDE M/S-ECBT	248	
4	End wall	PP END M/S-OMAX	-----
	NPP END M/S-OMAX	-----	
5	Roof	MCF/RBL-CONT.	229
6	Centre Buffer Coupler	M/S-FRONTIER	PP 30P2 NPP 49P2

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	GSI	M/S-GSI(S&A)	89/87	18-Feb-21
2	Insulation			Satisfactory		

15/06/21
वरिष्ठ अनु अभियंता
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)





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/2020-21/1243

RLY	-	W	R	Coach No.	2	1	5	5	3	2	/	C	-	DATE OF DISPATCH	1	1	0	3	2	0	2	1
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	Sr.DME/C&W/MMCT	Type	L	W	S	C	N	1	Shell No.	2	0	G	0	3	9	FUR.NO	LSCN-1853
----------	-----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---	--------	-----------

8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	201468				201467			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-935				ECBT-930			
Bolster no.	MCF/RBL/L55- 2971				AMIT-930			
Axle No	20 C - 3358 RWF		21 C - 3930 RWF		21 C - 4080 RWF		21 C - 4249 RWF	
Wheel Dia	917.56	917.56	917.45	917.52	917.433	917.536	917.485	917.541
Wheel Disc No	TZ 09-20 25439-0T04	TZ 07-20 30245-0TE3	TZ 09-20 28364-05F8	TZ 09-20 25437-0TD4	TZ 09-20 27302-0TD2	TZ 09-20 31267-0SE8	TZ 09-20 32268-0TC2	TZ 09-20 32156-0SE4
R.B. Nos.	06-20 412883	06-20 414342	06-20 412131	06-20 412663	03-20 30003	03-20 409935	06-20 504831	06-20 412532
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

9. 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.07-20 15420	RESISTROFLEX Sr.NO.07-20 15432	RESISTROFLEX Sr.NO.07-20 15461	RESISTROFLEX Sr.NO.07-20 15456

10. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	ESCORT	8142,7179	8160,7954
2.	Primary outer Spring	CMAFI	05-20-1100-(8,7,9,10)	07-20-1100-(8,75,7,76)
3.	Primary Inner Spring	CMAFI	05-20-1101-(126,11,17,130)	07-20-1101-(219,84,14,83)
4.	Primary Damper	IAI	01-20-(298869,299072,298531,298378)	02-20-(310163,310635,309712,310550)
5.	Secondary Damper	IAI	06-20- (326843,326284)	06-20-(326748,326691)
6.	Lateral Damper	KONI	04-19 00177	04-19 01311
7.	Brake Cylinder	FAV	M20-260,L20-183,L20-187,N20-046	
8.	Brake Caliper	FAV	A21(010,012,011,009)B	
9.	Brake Disc	KBI	24241008 0067-47/20,24241008 0066-47/20 24241019 0044-49/20,24241019 0055-49/20	
10.	Ball Joint Control Arm	BONY		
11.	Lateral Bump Stop	BASANT		
12.	Traction Centre make	RNG		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	BONY		
15.	Leveling Valve	BONY		
16.	Check Valve	FAV	K19-1259,K19-795	C20-991,C20-787
17.	Rubber Spring	FAV	K19-336	C20-359
18.	Anti roll bar Make	RF		
19.	Roll Link make	RF+BONY		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	H23,H350,H75,H97	
22.	Control Arm Lower	SF	H32,H66H08,H46	
23.	Phonic Wheel	FAV	FT/KEP/N21	FT/KEP/N-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/2020-21/1243

RLY	WR	COACH NO	215532/C	DATE OF DISPATCH	11-Mar-21
Type	LWSCN1	Shell No.	20G039	DISPATCH TO	Sr.DME/C&W/MMCT
				FUR.NO.	LSCN-1853

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-FAIVELEY	B21065B
2	Distribution valve	M/s-FAIVELEY	B215571B
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	12436/29,12435/29
5	Foot Step	M/s- FABRICON KOLKATA	
6	Decoupling arrangement	M/s-PULSER KOLKATA	
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-ELASTOMER MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER MUMBAI	
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-SHATABDI VADODARA	
15	Emergency Window	M/S-SHATABDI VADODARA	
16	Lavatory/hopper Window	M/s-AIKON H.P.	
17	Side panel	M/s-HFGW VADODARA	
18	Roof Ceiling	M/s-A.B COMPOSITE	
19	Door way Ceiling	M/s-A.B COMPOSITE	
20	Body Side Doors	M/s-JVR LDH	
21	Vestibule Door(PPE)	M/s-KALSI LDH	
22	Vestibule Door(NPPE)	M/s-KALSI LDH	
23	Bio Tank	M/s-FLASH FORGE -02 NOS+UNIFAB -02 NOS	
24	Presurized Flushing(Elect.pneumatic)	M/s-OASIS	
25	Auxiliary Water Tank	M/s-SHIVALIK FAST MOHALI	
26	Under Slung Water Tank (2X685L)	M/s-OASIS	
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 LTD	
31	Lavatory Doors	M/s-JVR LDH	
32	Seat & Berth	M/s-OVPL SILICON MUMBAI	
33	Ventury grill	NIL	
34	RFID	NIL	

वरिष्ठ अभियंता
SSE/OC/MCF/RBL

रेडिंकल, 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/2020-21/1243

RLY	WR	COACH NO	215532/C	DATE OF DISPATCH	11-Mar-21
Type	LWSCN1	Shell No.	20G039	DISPATCH TO	Sr.DME/C&W/MMCT
				FUR.NO.	LSCN-1853

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:

1. This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
2. This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & deficient/pilferage etc.
3. 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.
4. Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
5. For any complain/ suggestion please Mail at qualityrcfrbl@gmail.com
6. 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 tane 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.

 15/06/21 वरिष्ठ अभियंता SSE/QC/MCF/RBL गुणवत्ता विभाग	 16/6 SME/AME/QC/MCF/RBL	 24 उप मुख्य गुणवत्ता प्रबंधक Dy. QC/MCF/RBL
--	--------------------------------	---

रेडिओ, रायबरेली (तालगंज)

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

Modern Coach Factory, Raebareli





GSTIN : 03ACBPK3400D1ZM
Excise Regn. No. ACBPK3400DXM001

G. S. INDUSTRIES

APPROVED BY

**N.S.I.C.
R.D.S.O.**

**ISO 9001-2015
ISO 14001-2015**

D-146, FOCAL POINT EXTENSION, JALANDHAR-144004

PHONE : (O) 0181-5081474
(M) 99882-65025, 99884-55459
Website : www.gspaints.com
e-mail : info@gspaints.com

WARRANTY CERTIFICATE

To,
Dy.CME/FP
MODERN COACH FACTORY,
RAEBARELI, LALGANJ-229120

Dated -19/02/2021

Sub:- Performance warranty certificates.

Ref: - P.O.no 31061800101167 DATED 21.08.2019

Name Of Work: - Pu Paint For Lhb Type Rajdhani Coaches.

Dear Sir,

With reference to above, we do here by confirm the warranty for three years from the date of application of the delivered below mention coaches vide your above referred purchase order after application & due inspection at your end.


SR.	SHELL NO.	FURNISHING NO.	COACH NO.	Railway NO.	DATE OF COMPLETION
268-	LWSCN 20G039	LSCN-1053	215532	WP	18/02/2021

The warranty is applicable from date of dispatch against the below mention defects as per RDSO specification no. M&C/PCN/100/2018.

- Gloss level value of applied paint-initial 85 unit (on the date of painting) and minimum 80%, 70% and 60% of initial gloss after one year, two years and three years respectively from the date of application
- Decolonization of paint film.
- Cracking of paint film.
- Peeling of paint film.
- Blistering of the paint film.

Thanking you,
For G.S.Industries

Auth. signatory


	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, 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.					
TYPE COACH	LWSCN	SHELL/COACH NO		215532/C	
RAILWAY	WR	ELECT. FIT DATE	10-03-2021	MCF EUR. NO.	LSCN-1853
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



Modern Coach Factory Raebareli
आधुनिकरेलडिब्बाकारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020


PAGE 2 OF 4

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: SSK On Board: 20/06/027 HT Panel: 20/06/038	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: VIMAL Sr no.: VTC 3089 LHB 4475	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/0052 Pump 1: 19060303 Pump 2: 19060304	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: HIND SL.no.: 20/03/072	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: SIGNOTRON Sr. no.: 082011745	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : MV ELECTRO SYSTEMS	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 : INDORAIL	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make : AECO	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 Raebareli





	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, 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: VIDISHA	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 : ENSAVE	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: DHINGRA	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: DR AUTO	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: AGASTYA	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


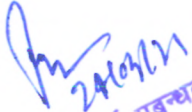

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli

	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, 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: SALZER	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, 3ph, 50 Hz). Make:- 1.(NPP): PRIME ELECT. 2.(PP): PRIME ELECT.	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: DARSHAN ENTERPRISES PP: DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : FAIVELEY Sr no : 13054	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS" or "JWL-DAKO-CZ"	01 SET

	
SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आपरेटिंग/लालगंज/रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT)/MCF/RBL SEE(P)/MCF/RBL