



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 (DEEN DAYALU)
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1670

RLY	SWR	COACH NO	201642/C	DATE OF DISPATCH	20-Feb-20
Type	LWS	Shell No.	96204	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-339

- Railway Board's Order No. : 2019/M(C)/142/2, DATED-03-06-2019
- TARE WEIGHT OF COACH : 40.66 Tonnes
- Carrying Capacity : (a) Seating: 100 (c) Luggage: NIL

4. Special feature:

S NO	DESCRIPTION	MAKE/SUPPLIER
A	Cushion transverse side luggage rack which can serve as seat during rush	M/S-H.F GLASS WORKS VADODRA
B	Honey comb partition frame.	M/S-H.F GLASS WORKS VADODRA
C	DGFRP/GFRE paneling.	M/S-H.F GLASS WORKS VADODRA
D	Lavatory with DGFRP/GFRE paneling.	M/S-H.F GLASS WORKS VADODRA
E	Additional Hand hold.	M/S-H.F GLASS WORKS VADODRA
F	Counter top wash basin.	M/S-H.F GLASS WORKS VADODRA
G	Gel coating & Anti Graffiti measures.	M/S-VIBGYOR
H	Air spring in secondary suspension (capacity-140KN).	M/s-AVADH RAIL INFRA
I	Fire Extinguishers	M/s-DEVIKA SAFTEY NDLS
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)	
K	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 1105/1098

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END M/S-DTL	1
		Part NPP END M/S-DTL	1
		Complete M/S-DTL	1
2	Lav. side wall	M/S-INDIRA CHENNAI LAV.1	LAV.2
		M/S-INDIRA CHENNAI LAV.3	LAV.4
3	Side wall	LH SIDE M/S-INDIRA CHENNAI	27/01
		RH SIDE M/S-INDIRA CHENNAI	27/02
4	End wall	PP END M/S-RAIL TECH KXH	
		NPP END M/S-RAIL TECH KXH	
5	Roof	MCF/CONT	42
6	Centre Buffer Coupler	M/S-ESCORT LTD PP END	3051 NPP END 3021

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.	08 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	VIBGYOR	M/S-VIBGYOR	74/87	28-01-2020
2	Insulation			Satisfactory		

Deena
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (लाजगंज)



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/2019-20/1670

RLY	S	W	R	-	Coach No.	2	0	1	6	4	2	/	C	-	DATE OF DISPATCH	2	0	0	2	2	0	2	0
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DISPATCH	Sr.DME/MYS	Type	L	W	S	-	Shell No.	9	6	2	0	4	FUR.NO	DDG-339
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193295				193296			
Bogie Type	FIAT				FIAT			
Frame no.	V.S-114				MIPL-414			
Bolster no.	AMIT-235				AMIT-289			
Axle No	20 V - 0727 RWF		20 V- 0708 RWF		19 T -8331 RWF		20 V- 0665 RWF	
Wheel Dia	917.543	917.595	917.518	917.63	917.598	917.569	917.595	917.577
Wheel Disc No	DP-17 32344-345	DP-17 32345-345	DP-19 23456-267	DP-19 23460-267	DP-19 32363-345	DP-19 23041-345	DP-19 32311-267	DP-19 32334-267
R.B. Nos.	11-19 00237	11-19 00224	11-19 00234	11-19 00193	11-19 00277	11-19 00347	11-19 00373	11-19 00178
CT R B Make	SFK		SFK		SFK		SFK	

10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	AWADH RAIL INFRA LTD. SR.NO-01-20 6888	AWADH RAIL INFRA LTD. SR.NO-01-20 6900	AWADH RAIL INFRA LTD. ARL 12-20 6882	AWADH RAIL INFRA LTD. ARL 01-20 6890

11. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	280219,282964	279623,280292
2.	Primary outer Spring	CMGBD	10-19-F07-873-(930,832,753,950)	10-19-F07-873-(919,738,821,888)
3.	Primary Inner Spring	CMGBD	10-19-F06-842-(818,895,865,398)	10-19-F06-842-(346,3,260,215)
4.	Primary Damper	IAI	08-19 (267892,267620,267782,267682)	08-19 (267393,267960,267967,267679)
5.	Secondary Damper	GBSVD	209-19(02333,02326)	09-19(02297,02306)
6.	Lateral Damper	IAI	08-19 - 283819	08-19 - 283881
7.	Brake Cylinder	KBI	(C2047,C1055,C1058,C2049)-K29	(C2034,C1062,C1056,C2036)K-29
8.	Brake Caliper	KBI	(B8689,B8803,B8805,B8667)-19	(B8688,B8804,B8802,B8686)-29
9.	Brake Disc	KBI	24206720-48-19-0025, 24206719-4-19-0038, 24206719-48-19-0037, 24206719-48-19-0036	24206693-45-19-0031, 24206693-45-19-0030, 24206697-45-19-0020, 24206693-45-19-0029
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1910,1910	1910,1910
17.	Check Valve	ESCORT	1909	1909
18.	Anti roll bar Make	RK		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SG	1928-L94,1911-G42,1913-G48,1910-L09	1928-L94,1910-L09,1926-L83,1928-L87
22.	Control Arm Lower	SG	1919-G77,19-KL14,1912-L14,1913-L18	1930-L99,1919-L78,1918-G70,1918-L19
23.	Phonic Wheel	KBI	K-09-19	K-09-19

Signature of SSE/Bogie/QC





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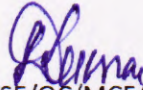
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4301-47/19
2	Distribution valve	M/S- KBI	2019L9585
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	7130/29,7157/29
5	Foot Step	M/S-SSPL FARIDABAD	
6	Decoupling arrangement	M/S-KOHINOOR MUMBAI	
7	Floor board	M/S-OVPL MUMBAI	
8	PVC	M/S-H.F GLASS WORKS VADODRA	
9	Lavatory inlay	M/S-H.F GLASS WORKS VADODRA	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
12	Gangway bridge mounting (PPE)	M/s-RAKESH IRON STORE KXH	
13	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON STORE KXH	
14	Body Side Window	M/S-H.F GLASS WORKS VADODRA	
15	Emergency Window	M/S-H.F GLASS WORKS VADODRA	
16	Lavatory/hopper Window	M/S-H.F GLASS WORKS VADODRA	
17	Roof Ceiling	M/S-H.F GLASS WORKS VADODRA	
18	Door way /gang way ceiling	M/S-H.F GLASS WORKS VADODRA	
19	Body Side Doors 1,2,3,4,5	M/S-GOLD PLUS CHANDIGARH	
	Body Side Door 6	M/S-SUKATA CHANDIGARH	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
22	Bio Tank	M/S-OMAX AUTO LTD	
23	Pressurized flushing(ele.pneu.)	M/S-SPAC PVT LTD	
24	Over head water tank (4x390L)	M/S-RAIL FAB KAPURTHALA	
25	Bib cock/controlled discharge tap	M/s-JAQUAR PVT LTD ALWAR	
26	Lavatory Doors	M/S-H.F GLASS WORKS VADODRA	
27	Fire Extinguisher	M/s-DEVIKA SAFTEY NDLS	1285/5335
28	Water purified	M/S-H.F GLASS WORKS VADODRA	
29	Seat & Berth	M/S-H.F GLASS WORKS VADODRA	
30	Luggage Rack	M/S-H.F GLASS WORKS VADODRA	
31	Light Luggage Rack	N/A	
32	Ventury grill	NA	
33	RFID	N/A	


SSE/QC/MCF/RBL
वरिष्ठ अनुष्ठानिक अभियंता

गुणवत्ता विभाग
रेडिंकॉ, रायबरेली (लालगंज)



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आधुनिक रेल डिब्बा कारखाना, रायबरेली

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				FUR.NO.	DDG-339

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 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.

SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy. QM/MCF/RBL

वरिष्ठ यांत्रिक अभियन्ता
गुणवत्ता विभाग
रेडिओका, रायबरेली (सातगंज)

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

जोगिंदर सिंह
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES

PAGE 1 OF 3

PAGE 1 OF 3

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES					
SHELL/COACH NO		201642/C		TYPE COACH	
RAILWAY		SWR		LWS/DDG	
ELECT.FIT DATE		17-02-2020		FUR.NO	
DDG-339					
Sr no	Description of test				Remarks
2.	LIGHTS, CHARGING SOCKETS				OK
3.	RAILWAY CARRIAGE FAN				OK
4.	WHEEL SLIDE PROTECTION SYSTEM (WSP)				OK
5.	WORKING OF 9 KVA TRANSFORMER				OK
6.	WORKING OF REGULATED BATTERY CHARGER				OK
7.	SAFETIES :				
7.1.	FUSES AND THEIR RATING				OK
7.2	CONTROL CIRCUIT				OK
7.3	POWER CIRCUIT				OK

[Signature]

**Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli**



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES

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01.	Switch board cabinet Make : MV ELECTRO SYSTEMS On Board Sr no : 19090150 HT Panel Sr no : 19090142	EDTS 333, Rev` 01'Am-1	01
02	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
03.	Provision & Mounting of PACIL Assly. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I Drg no. LW 76098.	02
04.	Fitment of Switch Plate Assly (Cabin Side) Make : SSK	EDML 127,Rev-1& DRG NO 4248ALT-a	10
05.	Fitment of Switch Plate Assly (Corridor Side) Make : SSK	EDML 127,Rev-1 & DRG NO 4249 ALT-a	10
06.	Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : LIGHT ENGG.	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
07.	Provision of Cabin, Corridor, doorway and Gangway Lights. Make: DR AUTO	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	28
08.	Provision & Mounting of Lavatory Light Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D & Drg no. LW 76092.	04

Senior Section Engineer
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ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES

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09.	Battery fuse box +ve Make : RICHMOND	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : RICHMOND	LW 71002,Alt-F	01
11.	Regulated battery charger Make : ELECT. EQUIPMENT COMPANY Sr no: 12190119	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2909	As per RDSO/PE/SPEC/TL 0158,2010, Rev `0`, TypeI.	01
13.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	As per spec No EDTS 105,Rev `e` Am-3 TYPE-2	01 set
14.	Feeder junction boxes. Make : SIDWAL	EDTS-328 REV-C	01 set
15.	Wheel set earthing equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119423084	M/s : KNORR	01 set
17.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HLB Lug date : 12/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
18.	Battery box for LHB coaches. Make : M/S MEENAKSHI	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आपरेटिंग/लालगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL