



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/2019-20/1661

RLY	SWR	COACH NO	201634/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	20-Feb-20
Type	LWS	Shell No.	96201			FUR.NO.	DDG-332

1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-03-06-2019
2. TARE WEIGHT OF COACH : 40.66 Tonnes
3. 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-H.F GLASS WORKS VADODRA
H	Air spring in secondary suspension (capacity-140KN).	M/S-VIBGYOR
I	Fire Extinguishers	M/s-TAYAL&CO
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)	M/s-FIREMAN CHIRAG, SAFETY PLUS

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	
2	Maximum width over body	23700
3	Maximum height from Rail Level	3240
4	CBC height/Buffer height from Rail level 1105 +0/-10	4039

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END	M/S-RAIL TECH
		NPP END	M/S-RAIL TECH
		Complete	M/S-RAIL TECH
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1
		M/S-MIDAS GUJRAT	LAV.2
		M/S-MIDAS GUJRAT	LAV.3
3	Side wall	LH SIDE	MCFRBL-CONT.V4U
		RH SIDE	MCFRBL-CONT.V4U
		PP END	M/S-OMAX REWARI
4	End wall	NPP END	M/S-RAIL TECH KXH
5	Roof		MCF/CONT
6	Centre Buffer Coupler		M/S-SANROK ENT

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 <sup>2</sup> .	6 - 10 sec.	07 sec
		Max. pressure in BC	3.0 ± 0.15 kg/cm <sup>2</sup> .	3.0 kg/cm <sup>2</sup>
		All Brake are applied	OK	OK
2	Insensitivity	Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
3	Sensitivity	Exhaust BP @ 0.1 kg/cm <sup>2</sup> /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	75/86	23-01-2020
2	Insulation			Satisfactory		

*Deena*  
SSE/OC/MCF/RBL  
वरिष्ठ निरीक्षक अभियंता  
गुणवत्ता विभाग  
रेडिओका, रायबरेली (सहायक)



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/2019-20/1661

RLY	S	W	R	-	Coach No.	2	0	1	6	3	4	/	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	1	FUR.NO	DDG-332
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**9. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	192561				192562			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-329				MIPL-310			
Bolster no.	SECPL-486				SECPL-479			
Axle No	19 S - 4079 RWF		19 N- 4730 RWF		19 N-4333 RWF		19 N-3277 RWF	
Wheel Dia	917.603	917.568	917.544	917.437	917.5	917.5	917.478	917.409
Wheel Disc No	TZ 08-19 74744-9SL2	TZ 08-19 72883-9SL0	TZ 07-19 66057-9RK8	TZ 07-19 63125-9RS1	TZ 08-19 72886-9SJ6	TZ 08-19 72885-9SJ6	TZ 07-19 63083-9RS1	TZ 08-19 73738-9SJ7
R.B. Nos.	08-19 30232	09-19 36651	08-19 28746	08-19 28731	08-19 28363	08-19 29194	08-19 29780	08-19 29068
CT R B 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.	TAYAL & Co. SR.NO- 19-10 4973	TAYAL & Co. SR.NO- 19-10 4968	TAYAL & Co. SR.NO- 19-10 4994	TAYAL & Co. SR.NO- 19-10 4987

**11. TRACEABILITY OF BOGIE ITEMS :-**

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	280079,280143	280231,279700
2.	Primary outer Spring	CMFSK	10-19-1100-114-(2196,1908,2185,2140)	10-19-1100-114-(339,273,160,287)
3.	Primary Inner Spring	CMFSK	10-19-1101-101-(330,382,12,384)	10-19-1101-101-(825,814,379,390)
4.	Primary Damper	KONI	03-19 (08500,06030,06574,08406)	03-19 (04895,07721,06610,04852)
5.	Secondary Damper	IAI	09-19(276909,276969)	10-19(276897,276916)
6.	Lateral Damper	KONI	04-19-00824	04-19-01015
7.	Brake Cylinder	ESCORT	47684,47481,47482,47683	46110,45819,45820,46111
8.	Brake Caliper	ESCORT	27286,27083,27084,27285	25955,26005,26006,25956
9.	Brake Disc	KBI	24206711-47-19-0014,24206708-47-19-0063, 24206707-47-19-0074,24206706-46-19-0006	24206711-47-19-0019,24206705-46-19-0001, 24206704-46-19-0037,24206711-47-19-0012
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	SGA/GMT		
15.	Ball joint traction centre	ARYAN		
16.	Leveling Valve	ESCORT	1906,1906	1906,1906
17.	Check Valve	ESCORT	1906	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	230819-1,160919-1,160919-1,230919-1	210919-3,210819-2,230819-1,210819-2
22.	Control Arm Lower	RVE	219919-3,210919-3,160919-1,180919-1	180919-1,180919-1,190919-2,210919-3
23.	Phonic Wheel	ESCORT		

Signature of SSE/Bogie/QC





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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	4396-47/19
2	Distribution valve	M/S- KBI	2019L9588
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	7176/29,7179/29
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- MAHAVEER MATEL WORKS, KAPURTHALA	
13	Gangway bridge mounting (NPPE)	M/S- MAHAVEER MATEL WORKS, KAPURTHALA	
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	M/S-H.F GLASS WORKS VADODRA	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
22	Bio Tank	M/S- JSL LIFE STYLE LTD.	
23	Pressurized flushing(ele.pneu.)	M/S-SPAC PVT LTD	
24	Over head water tank (4x390L)	M/S-AMIT ENG. MOHALI	
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-FIREMAN CHIRAG INDS,SAFETY PLUS MUMBAI	5351/6192
28	Water purified	M/S-H.F GLASS WORKS VADODRA	
30	Seat & Berth	M/S-H.F GLASS WORKS VADODRA	
31	Luggage Rack	M/S-H.F GLASS WORKS VADODRA	
32	Light Luggage Rack	N/A	
33	RFID	N/A	

*Deema*  
SSE/QC/MCF/RBL  
वरिष्ठ अनुष्ठानिक अभियंता

गुणवत्ता विभाग  
रेडिंक, रायबरेली (लालगंज)



Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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 qualityrcfbl@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.


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

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता विभाग  
रेडि0का0, रायबरेली (हालगंज)

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

सुधीर कुमार /  
Sudhir Kumar  
चेमिस्ट रसायनशास्त्र एवं धातुविद  
Dy. Chief Chemist & Metallurgist  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory, Raebareli



	<b>Modern Coach Factory Raebareli</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>	DOC NO.: MCF/RBL/QEF/8001
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**FOR ELECTRICAL ITEMS**

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

PAGE 1 OF 3

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES						
<b>SHELL/COACH NO</b>		<b>201634/C</b>		<b>TYPE COACH</b>		<b>LWS/DDG</b>
<b>RAILWAY</b>	<b>SWR</b>	<b>ELECT.FIT DATE</b>	<b>17-02-2020</b>	<b>FUR.NO</b>	<b>DDG-332</b>	
<b>Sr no</b>	<b>Description of test</b>					<b>Remarks</b>
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]*

<b>Senior Section Engineer</b> <b>Quality control / Electrical</b> <b>Modern Coach Factory Raebareli</b>
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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 2 OF 3

01.	Switch board cabinet Make : <b>SSK</b> On Board Sr no : <b>2019/07/240</b> HT Panel Sr no : <b>2019/07/157</b>	EDTS 333, Rev`01'Am-1	<b>01</b>
02	Emergency light system for EOG type coaches (AEL), Make : <b>DR AUTO</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
03.	Provision & Mounting of PACIL Assly. Make: <b>RT VISION</b>	As per RDSO/PE/SPEC/TL/0091- 2016,REV-01, TYPE-I Drg no. LW 76098.	<b>02</b>
04.	Fitment of Switch Plate Assly (Cabin Side) Make : <b>SSK</b>	EDML 127,Rev-1& DRG NO 4248ALT-a	<b>10</b>
05.	Fitment of Switch Plate Assly (Corridor Side) Make : <b>SSK</b>	EDML 127,Rev-1 & DRG NO 4249 ALT-a	<b>10</b>
06.	Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : <b>VENTWELL</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
07.	Provision of Cabin, Corridor, doorway and Gangway Lights. Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL- 0091(REV-1) TYPE B-1	<b>28</b>
08.	Provision & Mounting of Lavatory Light Make: <b>RT VISION/DR AUTO</b>	As per RDSO/PE/SPEC/TL/0091 -2016,REV-01, TYPE-D & Drg no. LW 76092.	<b>04</b>

*(Signature)*

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



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**FOR ELECTRICAL ITEMS**

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

PAGE 3 OF 3

09.	Battery fuse box +ve Make : <b>RICHMOND</b>	LW 71001,Alt-F	<b>01</b>
10	Battery fuse box -ve Make : <b>RICHMOND</b>	LW 71002,Alt-F	<b>01</b>
11.	Regulated battery charger Make : <b>WAVES</b> Sr no: <b>W4K5A 201343</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
12.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>VTC 3089 LHB-2932</b>	As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI.	<b>01</b>
13.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>PRIME ELECT.</b>	As per spec No EDTS 105,Rev`e' Am-3 TYPE-2	<b>01 set</b>
14.	Feeder junction boxes. Make : <b>SIDWAL</b>	EDTS-328 REV-C	<b>01 set</b>
15.	Wheel set earthling equipment. Make : <b>DARSHAN ENTERPRISES</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
16.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119423054</b>	M/s : <b>KNORR</b>	<b>01 set</b>
17.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>HBL</b> Lug date : <b>12/19</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
18.	Battery box for LHB coaches. Make : <b>M/S MEENAKSHI</b>	CC 91205	<b>01</b>

<b>SSE/EL/QC</b> वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण	<b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b>

आ0रे0डि0का0 / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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

