



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/2019-20/1267						
RLY	SWR	COACH NO	197789/C	DATE OF DISPATCH	17/12/2019	
Type	LWS	Shell No.	96133	DISPATCH TO	Sr.DME/MYS	
				FUR.NO.	DDG-242	
1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-21.11.2019						
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 VADODARA	
B	Honey comb partition frame.				M/S- H.F.GLASS VADODARA	
C	DGFRP/GFRE paneling.				M/S- H.F.GLASS VADODARA	
D	Lavatory with DGFRP/GFRE paneling.				M/S- H.F.GLASS VADODARA	
E	Additional Hand hold.				M/S- H.F.GLASS VADODARA	
F	Counter top wash basin.				M/S- H.F.GLASS VADODARA	
G	Gel coating & Anti Graffiti measures.				M/S-VIBGYOR	
H	Air spring in secondary suspension (capacity-140KN).				M/s-TAYAL & CO	
I	Fire Extinguishers				M/s-FIRE MAN 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, 1101	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM	MAKE	SUPPLIER	SERIAL NO		
1	Under frame	Front	PP END	M/S-OMAX AUTO	8	
		Part	NPP END	M/S-OMAX AUTO	8	
		Complete	M/S-OMAX AUTO	8		
2	Lav. side wall	M/S- ATHANACY RBL	LAV.1	LAV.2		
		M/S- ATHANACY RBL	LAV.3	LAV.4		
3	Side wall	LH SIDE	M/S-INDIRA CHENNAI	10		
		RH SIDE	M/S-INDIRA CHENNAI	10		
4	End wall	PP END	M/s-DTL PUNE			
		NPP END	M/s-DTL PUNE			
5	Roof	M/S-TI	58			
6	Centre Buffer Coupler	M/S- FRONTIER LTD	PP END	53 P2	NPP END 126 P2	
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.	08sec		
		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	79/89	13/11/2019
2	Insulation			Satisfactory		

Painted  
Kumar  
SSE/QC/MCF/RBL  
वरि०अनु० अभियंता  
गुणवत्ता विभाग  
रे०डि०का०, 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/2019-20/1267

RLY	S	W	R	Coach No.	1	9	7	7	8	9	/	C	-	DATE OF DISPATCH	1	7	1	2	2	0	1	9
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DISPATCH	Sr.DME/MYS	Type	L	W	S	C	Z	-	Shell No.	9	6	1	3	3	FUR:NO	DDG-242
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## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192368				192367			
Bogie Type	FIAT				FIAT			
Frame no.	RBL-LS5-1308				MCF/RBL-LS5-803			
Bolster no.	SECPL-202				SECPL-173			
Axle No	19 L - 5518 RWF		19 L - 5488 RWF		19 L - 5842 RWF		19 S - 5431 RWF	
Wheel Dia	917.529	917.492	917.515	917.499	917.499	917.502	917.495	917.486
Wheel Disc No	TZ 07-19 74025-9RQ8	TZ 07-19 64023-9RQ8	TZ 07-19 64027-9RQ8	TZ 07-19 65227-9RS1	TZ 08-19 73035-9SJ7	TZ 07-19 71147-9QI4	TZ 07-19 68050-9RN4	TZ 07-19 65230-9RP5
R.B. Nos.	09-18-21368	09-18-21999	09-18-21595	09-18-22815	09-18-22358	09-18-21861	09-18-23107	09-18-23343
CT R B Make	TIMKEN		TIMKEN		SKF		SKF	

## 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. 19-07 2501	TAYAL & CO. 19-07-2517	TAYAL & CO. 19-07-2818	TAYAL & CO. 19-07-2529

## 11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	14587,14602	14604,14599
2.	Primary outer Spring	CMFSK	10-19-1100-114(1164,761,1138,763)	10-19-1100-114(792,785,791,796)
3.	Primary Inner Spring	CMFSK	10-19 1101-101(1831,1834,1851,1740)	10-19 1101-101(1733,1765,1799,1803)
4.	Primary Damper	KONI	03-19 (00493,03777,03695,04608)	03-19 (05263,06257,01030,05429)
5.	Secondary Damper	GB	07-19 (01376,01383)	07-19 (01385,01387)
6.	Lateral Damper	KONI	04-19 02171	04-19 01762
7.	Brake Cylinder	FAV	K19(517,437,442,516)	K19(480,470,468,595)
B19-	Brake Caliper	FAV	L19(656,654,655,657)B	L19(680,678,679,681)B
9.	Brake Disc	KBI	24200060 0034-38/19,24200060 0035-38/19 24200053 0055-37/19,24200054 0023-37/19	24200054 0004-37/19,24200053 0050-37/19 24200054 0003-37/19,24200052 0076-37/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	ARYAN		
16.	Leveling Valve	KNORR	19B-7372,19B-7549	19B-7279,19B-7637
17.	Check Valve	KNORR	20403	20156
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	280819-3,240819-1,270819-2,280819-3	230819-3,230819-2,230010-2,RVE
22.	Control Arm Lower	RVE	RVE,280819-3,RVE,240819-1	RVE,280819-1,280819-1,RVE
23.	Phonic Wheel	KBI	05-19	05-19

Signature of SSE/Bogie/QC

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गुणवत्ता विभाग  
रे०डि०का०, रायबरेली (लालगंज)



# Modern Coach Factory Raebareilly आधुनिक रेल डिब्बा कारखाना, रायबरेली

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

ROLLING STOCK CERTIFICATE (DEEN DAYALU)

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Type	LWS	Shell No.	96133	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-242

## 12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S-FAIVELEY	19101B
2	Distribution valve	M/S-FAIVELEY	19105615B
3	Pull box	M/S- KBI, FARIDABAD	
4	FIBA	M/S- ESCORT	18110320/18120349
5	Foot Step	M/S SSPL FARIDABAD	
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
9	Lavatory inlay	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
10	UIC Vestibule (PPE)	M/S-ELASTOMER LINING WORKS, MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER LINING WORKS, MUMBAI	
12	Gangway bridge mounting (PPE)	M/S- RIS KXH	
13	Gangway bridge mounting (NPPE)	M/S- RIS KXH	
14	Body Side Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16	Lavatory/hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
17	Roof Ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
18	Door way /gang way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
19	Body Side Doors	M/s- GOLD PLUS CHANDIGARH	
20	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
21	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22	Bio Tank	M/S- JSL LIFE STYLE LTD. GURGAON	
23	Pressurised flushing (Elect pneumatic)	NIL	
24	Over head water tank (4x390L)	M/S- AMIT ENG.BADDI(3NO)AMIT ENG.MOHALI (1NO)	
25	Bib cock/controlled discharge tap	M/s- JAQUAR PVT.LTD.ALWAR	
26	Lavatory Doors (DGFRP)	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
27	Fire Extinguisher	M/s- FIRE MAN NDLS	945,1047
28	Water purified	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
29	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
30	Luggage Rack	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
31	Light Luggage Rack	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32	RFID	N/A	

*Primal Kumar*

SSE/QC/MCF/RBL

वरि०अनु० अभियंता  
गुणवत्ता विभाग  
रे०डि०का०, रायबरेली (लालगंज)





# Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली

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Type	LWS	Shell No.	96133	DISPATCH TO	Sr.DME/MYS	FUR.NO. DDG-242

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.

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

चरि 0 अनु 0 अभियंता  
गुणवत्ता विभाग  
रेडिओका 0, रायबरेली (लालगंज)

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

उप मुख्य गुणवत्ता प्रबन्धक/शेड  
Dy. Chief Quality Manager/Shell  
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: 00

DATE: 18.01.2017

**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					
SHELL/COACH NO		197789/C		TYPE COACH	
RAILWAY		SWR		ELECT.FIT DATE	
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	

**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

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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>HIND RECTIFIERS</b> On Board Sr no : <b>H.355.19.H.402</b> HT Panel Sr no : <b>NIL</b>	EDTS 333, Rev`01'Am-1	<b>01</b>
02	Emergency light system for EOG type coaches (AEL), Make : <b>INTEG ELECT.</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
03.	Provision & Mounting of PACIL Assly. Make: <b>KAVERI</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>ORIENT</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>RT VISION</b>	As per RDSO/PE/SPEC/TL- 0091(REV-1) TYPE B-1	<b>28</b>
08.	Provision & Mounting of Lavatory Light Make: <b>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>SSK</b>	LW 71001,Alt-F	<b>01</b>
10	Battery fuse box -ve Make : <b>ISGPL</b>	LW 71002,Alt-F	<b>01</b>
11.	Regulated battery charger Make : <b>WAVES</b> Sr no: <b>W4K5G 19253</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-2602</b>	As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI.	<b>01</b>
13.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>MAA LAXMI INDUSTRIES</b>	As per spec No EDTS 105,Rev`e` Am-3 TYPE-2	<b>01</b> <b>set</b>
14.	Feeder junction boxes. Make : <b>SYSTEMS</b>	EDTS-328 REV-C	<b>01</b> <b>set</b>
15.	Wheel set earthing equipment. Make : <b>PRIME ELECT.</b>	EDTS101,REV-C,AM-1	<b>02</b> <b>sets</b>
16.	Wheel Slide Protection System (WSP) Make : <b>FAIVELEY</b> Sr no : <b>I 0663</b>	M/s : <b>FAIVELEY</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>AMARA RAJA</b> Lug date : <b>09/19</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
18.	Battery box for LHB coaches. Make : <b>ANANYA</b>	CC 91205	<b>01</b>

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

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

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

