



		<b>Modern Coach Factory Raebareli</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>		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/2019-20/1672						
RLY	SWR	COACH NO	201639/C	DATE OF DISPATCH	20-Feb-20	
Type	LWS	Shell No.	96202	DISPATCH TO	Sr.DME/MYS	
				FUR.NO.	DDG-335	
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-VIBGYOR		
H	Air spring in secondary suspension (capacity-140KN).			M/s- AVADH RAIL INFRA		
I	Fire Extinguishers			M/S-CHIRAG INDS (H.R)		
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	1096/1105	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front PP END	M/S-RAIL TECH KXH	31		
		Part NPP END	M/S-RAIL TECH KXH	31		
		Complete	M/S-RAIL TECH KXH	31		
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1	LAV.2		
		M/S-MIDAS GUJRAT	LAV.3	LAV.4		
3	Side wall	LH SIDE	MCFRBL-CONT.V4U	64/01		
		RH SIDE	MCFRBL-CONT.V4U	64/01		
4	End wall	PP END	M/S-OMAX REWARI			
		NPP END	M/S-RAIL TECH KXH			
5	Roof	MCFRBL-CONT.	38			
6	Centre Buffer Coupler	M/S-SANROK	PP END	15507	NPP END 15428	
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.	08 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	74/91	27-01-2020
2	Insulation	Satisfactory				

SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता  
 गुणवत्ता विभाग  
 १० डि० का०, रायबरेली (लालगंज)







## ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1672

RLY	S	W	R	-	Coach No.	2	0	1	6	3	9	/	C	-	DATE OF DISPATCH	2	0	0	2	2	0	2	0
DISPATCH	Sr.DME/MYS				Type	L	W	S					Shell No.	9	6	2	0	2	FUR.NO	DDG-335			

## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193502				193501			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-429				MIPL-398			
Bolster no.	AMIT-275				AMIT-282			
Axle No	19 T-8787 RWF		20 V-0731 RWF		20 T-8730 RWF		19 T-3513 RWF	
Wheel Dia	917.501	917.567	917.538	917.568	917.47	917.569	917.559	917.549
Wheel Disc No	TZ 05-19 44321-9PH4	TZ 05-19 44221-8RS8	TZ 05-19 49364-9MI9	TZ 05-19 46576-9PJ0	TZ 08-19 47834-8SG1	TZ 05-19 43194-9PC7	TZ 05-19 43207-9PC7	TZ 05-19 49369-9PH5
R.B. Nos.	11-19 33642	11-19 33585	12-19 34556	11-19 42421	11-19 33553	11-19 33987	11-19 43086	11-19 42037
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.	AVADH RAIL INDRA.LTD SR.NO- 12-19 6579	AVADH RAIL INDRA.LTD SR.NO- 12-19 6578	AVADH RAIL INDRA.LTD SR.NO- 12-19 6585	AVADH RAIL INDRA.LTD SR.NO- 12-19 6609

## 11. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	279829,280305	279928,279926
2.	Primary outer Spring	CMGBD	10-19 F07-873(776,792731,757)	10-19 F07-873(758,810,621,645)
3.	Primary Inner Spring	CMGBD	10-19 F06-842(140,333,13,257)	10-19 F06-842(223,144,902,336)
4.	Primary Damper	IAI	08-19 (274236,273956,273773,274171)	08-19 (267863,267914,267229,267765)
5.	Secondary Damper	IAI	11-19(268258,283298)	11-19(268272,283523)
6.	Lateral Damper	KONI	08-19 - 268548	02-19 - 241158
7.	Brake Cylinder	KBI	C(2305,1060,1068,2306)-K-29	C(2304,0815,1064,2266)-K-29
8.	Brake Caliper	KBI	B(8854,8810,8813,8855)-29	B(8856,8949,8811,8853)-29
9.	Brake Disc	FAV	01-20 (620,619,826,825)D133561-300	01-20 (618,617,1062,1062)D133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1908,1908	1908,1908
17.	Check Valve	ESCORT	1908	1908
18.	Anti roll bar Make	RK		
19.	Roll Link make	SARITA/ GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SG/RV	196104,1926182,1928194,1928185	181019-2,191G38,171019-1,1901J06
22.	Control Arm Lower	SG/RV	1919G78,1921L14,1912L17,1930195	220819-4,1918G70,170819-2,1913L16
23.	Phonic Wheel	--	K-09-19, K-09-19	ESCORT

Signature of SSE/Bogie/QC







Modern Coach Factory Raebareilly  
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/2019-20/1672

RLY	SWR	COACH NO	201639/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	20-Feb-20
Type	LWS	Shell No.	96202			FUR.NO.	DDG-335

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	
2	Distribution valve	M/S- KBI	4604-52/19
3	Pull box	M/S- KBI	2019-M-9990
4	FIBA	M/S- KBI	
5	Foot Step	M/S-SSPL FARIDABAD	7177/29,7154/29
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-KIRAN RUBBER PRODUCT MUMBAI	
11	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT MUMBAI	
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	M/S-GOLD PLUS CHANDIGARH	
	Body Side Doors 5,6	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 AUTOS LTD	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
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-CHIRAG INDS (H.R)	
28	Water purified	M/S-H.F GLASS WORKS VADODRA	5208/1227
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	M/S-H.F GLASS WORKS VADODRA	
33	RFID	N/A	

*Deen Dayalu*

SSE/QC/MCF/RBL

वार 0 जनु 0 अभियंता

गुणवत्ता विभाग

रेडि0का0, रायबरेली (ता.जगंज)







	<b>Modern Coach Factory Raebareli</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>		DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018
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RLY	SWR	COACH NO	201639/C				
Type	LWS	Shell No.	96202	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	20-Feb-20
						FUR.NO.	DDG-335

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. COM/MCF/RBL

वरिष्ठ अभियंता  
गुणवत्ता विभाग  
रेडि०का०, रायबरेली (लालगंज)

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

जगदीश 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

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

DATE: 18.01.2017

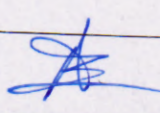
**FOR ELECTRICAL ITEMS**

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

PAGE 1 OF 3

PAGE 1 OF 3

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES						
SHELL/COACH NO		201639/C		TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	17-02-2020	FUR.NO	DDG-335	
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**





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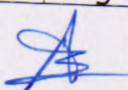
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**FOR ELECTRICAL ITEMS**

**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>2019/07/170</b> HT Panel Sr no : <b>2019/07/197</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>LIGHT ENGG.</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</b>	As per RDSO/PE/SPEC/TL/0091 -2016,REV-01, TYPE-D & Drg no. LW 76092.	<b>04</b>

  
**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>ELECTRIC EQUIPMENT COMPANY</b> Sr no: <b>12190092</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-2824</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>MV ELECTRO</b>	EDTS-328 REV-C	<b>01 set</b>
15.	Wheel set earthing equipment. Make : <b>PRIME ELECT.</b>	EDTS101,REV-C,AM-1	<b>02 sets</b>
16.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119423046</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>	<b>AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL</b>

वरिष्ठ अनुभाग अभियन्ता  
गुणवत्ता नियंत्रण  
आ0रे0डि0का0 / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./LJ/RBL

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