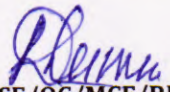
		<b>Modern Coach Factory Raebareilly</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>		DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018		
ROLLING STOCK CERTIFICATE (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1366						
RLY	SWR	COACH NO	199542/C	DATE OF DISPATCH 31-12-2019		
Type	LWS	Shell No.	96167	DISPATCH TO	Sr.DME/MYS	
				FUR.NO.	DDG-279	
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- HF GLASS WORKS VADODARA		
B	Honey comb partition frame.			M/S- HF GLASS WORKS VADODARA		
C	DGFRP/GFRE paneling.			M/S- HF GLASS WORKS VADODARA		
D	Lavatory with DGFRP/GFRE paneling.			M/S- HF GLASS WORKS VADODARA		
E	Additional Hand hold.			M/S- HF GLASS WORKS VADODARA		
F	Counter top wash basin.			M/S- HF GLASS WORKS VADODARA		
G	Gel coating & Anti Graffiti measures.			M/S-ADVANCE		
H	Air spring in secondary suspension (capacity-140KN).			M/s-AVADH RAIL INFRA		
I	Fire Extinguishers			M/s-SHAN IND MUMBAI		
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	1101/1102	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front PP END	M/S-CHENNAI RADHA	27		
		Part NPP END	M/S-CHENNAI RADHA	27		
		Complete	M/S-CHENNAI RADHA	27		
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1	LAV.2		
		M/S-ATHANCY RBL	LAV.3	LAV.4		
3	Side wall	LH SIDE	MCFRBL-CONT.V4U	25		
		RH SIDE	MCFRBL-CONT.V4U	25		
4	End wall	PP END	M/s-DTL PUNE			
		NPP END	M/s-SIPL PALWAL			
5	Roof	M/s-TI	83			
6	Centre Buffer Coupler	M/S- FRONTIER	PP END	163P1	NPP END 64P1	
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	ADVANCE	M/S-ADVANCE	73/88	24-12-2019
2	Insulation	Satisfactory				

  
SSE/QC/MCF/RBL

वरिष्ठ अभियंता  
उत्पाद विभाग  
रेलवे, 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/2019-20/1366

RLY	S	W	R	Coach No.	1	9	9	5	4	2	/	C	-	DATE OF DISPATCH	3	1	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	6	7	FUR.NO	DDG-279
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## 9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192423				192424			
Bogie Type	FIAT				FIAT			
Frame no.	AML-204				AML-203			
Bolster no.	RBL/LS5-575				RBL/LS5-991			
Axle No	19 L - 5061 RWF		19 S - 7590 RWF		19 P - 1536 RWF		19 S - 7898 RWF	
Wheel Dia	917.497	917.476	917.504	917.519	917.95	917.519	917.472	917.506
Wheel Disc No	TZ 07-19 71478-9RL8	TZ 08-19 72164-9RS8	TZ 08-19 72577-9RS1	TZ 07-19 65827-9RQ0	TZ 07-19 65697-9RL1	TZ 07-19 67891-9RM6	TZ 07-19 68464-9RN2	TZ 07-19 68465-9RN2
R.B. Nos.	08-19 28604	08-19 29507	08-19 29521	08-19 29476	08-19 28641	08-19 29601	08-19 29187	08-19 28709
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. 07-19 4120	AVADH RAIL INDRA LTD. 07-19 4160	AVADH RAIL INDRA LTD. 07-19 4179	AVADH RAIL INDRA LTD. 07-19 4170

## 11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	15931,18146	16765,15941
2.	Primary outer Spring	CMFSK	10-19-1100-114(748,770,890,1045)	10-19-1100-114(745,869,1170,1161)
3.	Primary Inner Spring	CMFSK	10-18 1101-101(572,1766,569,1805)	10-18 1101-101(832,531,1249,610)
4.	Primary Damper	KONIC	03-19 (05642,03884,06227,05672)	03-19 (04482,04822,05287,05264)
5.	Secondary Damper	IAI	09-19 (273000,272878)	09-19 (272953,273029)
6.	Lateral Damper	KONIC	04-19 05488	04-19 00871
7.	Brake Cylinder	ESCORT	47760,47638,47658,47755	47702,47829,47636,47767
B19-	Brake Caliper	ESCORT	27363,27256,27392,27320	27372,27416,27254,227362
9.	Brake Disc	KBI	24198277 0013-35/19,24198277 0025-35/19 24198277 0024-35/19,24198277 0025-35/19	24200051 0049-36/19,24200052 0010-36/19 241918277 0052-35/19,24198276 0073-35/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1906,1906	1906,1906
17.	Check Valve	ESCORT	1906	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	116,91,285,881	284,122,181,203
22.	Control Arm Lower	SF	210,185,368,482	168,215,98,73
23.	Phonic Wheel	KBI	K 01-19	K 01-19

Signature of SSE/Bogie/QC

वरि०अनु० अभियंता  
गुणवत्ता विभाग  
रेडि०का०, रायबरेली (लागूजं)







**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/2019-20/1366

RLY	SWR	COACH NO	199542/C	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96167	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-279


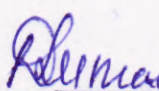
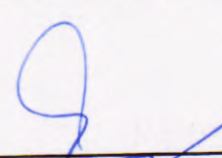

**12. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4140 42/19
2	Distribution valve	M/S- KBI	2019K9353
3	Pull box	M/S- FAIVELY	
4	FIBA	M/S- KBI	10452/29,9327/29
5	Foot Step	M/S SSPL MUMBAI	
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI	
7	Floor board	M/S-OVPL MUMBAI	
8	PVC	M/S- HF GLASS WORKS VADODARA	
9	Lavatory inlay	M/S- HF GLASS WORKS VADODARA	
10	UIC Vestibule (PPE)	M/S-ELASTOMER MUMBAI	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
12	Gangway bridge mounting (PPE)	M/S- MMW KXH	
13	Gangway bridge mounting (NPPE)	M/S- MMW KXH	
14	Body Side Window	M/S- HF GLASS WORKS VADODARA	
15	Emergency Window	M/S- HF GLASS WORKS VADODARA	
16	Lavatory/hopper Window	M/S- HF GLASS WORKS VADODARA	
17	Roof Ceiling	M/S- HF GLASS WORKS VADODARA	
18	Door way /gang way ceiling	M/S- HF GLASS WORKS VADODARA	
19	Body Side Doors	M/S- HF GLASS WORKS VADODARA	
20	Vestibule Door(PPE)	M/S-KALSI LDH	
21	Vestibule Door(NPPE)	M/S-KALSI LDH	
22	Bio Tank	M/S- JSL LIFESTYLE GURGAON	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
24	Over head water tank (4x390L)	M/S- AMIT MOHALI	
25	Bib cock/controlled discharge tap	M/s- JAQUAR PVT LTD ALWAR	
26	Lavatory Doors	M/S- HF GLASS WORKS VADODARA	
27	Fire Extinguisher	M/s-SHAN IND MUMBAI	543/514
28	Water purified	M/S- HF GLASS WORKS VADODARA	
29	Seat & Berth	M/S- HF GLASS WORKS VADODARA	
30	Luggage Rack	M/S- HF GLASS WORKS VADODARA	
31	Light Luggage Rack	M/S- HF GLASS WORKS VADODARA	
32	RFID	N/A	

*Deen*  
SSE/QC/MCF/RBL

वरि०अनु० अभियंता  
गुणवत्ता विभाग  
रे०डि०का०, रायबरेली (लालमंजरी)



		<b>Modern Coach Factory Raebarelli</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/2019-20/1366					
RLY	SWR	COACH NO	199542/C	DATE OF DISPATCH 31-12-2019	
Type	LWS	Shell No.	96167	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-279
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.CQM/MCF/RBL	

वरिष्ठ अनुसंधान विभाग  
गुणवत्ता विभाग  
रेडि०का०, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality-1  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory, Raebarelli

उप मुख्य गुणवत्ता प्रबन्धक/शेल  
Dy. CQM/MCF/RBL  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory, Raebarelli





	<b>Modern Coach Factory Raebareli</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>	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					
<b>SHELL/COACH NO</b>		<b>199542/C</b>		<b>TYPE COACH</b>	
<b>RAILWAY</b>		<b>SWR</b>	<b>ELECT.FIT DATE</b>	<b>28-12-2019</b>	<b>FUR.NO</b>
					<b>DDG-279</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

**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

REV NO: 00

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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>SIDWAL</b> On Board Sr no : <b>19M 005</b> HT Panel Sr no : <b>19M 009</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>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







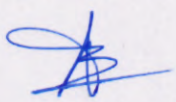

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Modern Coach Factory Raebareli  
आधुनिक रेल डिब्बा कारखाना, रायबरेली

**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES  
PAGE 3 OF 3

09.	Battery fuse box +ve Make : <b>INDORAIL</b>	LW 71001,Alt-F	<b>01</b>
10	Battery fuse box -ve Make : <b>SSK</b>	LW 71002,Alt-F	<b>01</b>
11.	Regulated battery charger Make : <b>SIGNOTRON</b> Sr no: <b>11190626</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-2651</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</b> set
14.	Feeder junction boxes. Make : <b>MV ELECTRO</b>	EDTS-328 REV-C	<b>01</b> set
15.	Wheel set earthing equipment. Make : <b>PRIME ELECT.</b>	EDTS101,REV-C,AM-1	<b>02</b> sets
16.	Wheel Slide Protection System (WSP) Make : <b>KNORR</b> Sr no : <b>0119232096</b>	M/s : <b>KNORR</b>	<b>01</b> set
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>05/19</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01</b> set
18.	Battery box for LHB coaches. Make : <b>HITECH</b>	CC 91205	<b>01</b>

			
<b>SSE/EL/QC</b> वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL		<b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b> स० कार्य प्रबन्धक / विद्युत आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL	