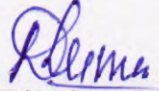
		<b>Modern Coach Factory Raebareilly</b> <b>आधुनिक रेल डिब्बा कारखाना, रायबरेली</b>		DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018		
ROLLING STOCK CERTIFICATE (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1382						
RLY	SWR	COACH NO	199543/C	DATE OF DISPATCH	31-12-2019	
Type	LWS	Shell No.	96170	DISPATCH TO	Sr.DME/MYS	
				FUR.NO.	DDG-282	
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	1105/1100	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front PP END	M/S-OMAC AUTO	1		
		Part NPP END	M/S-OMAC AUTO	1		
		Complete	M/S-OMAC AUTO	1		
2	Lav. side wall	M/S-RAIL TECH KXH	LAV.1	LAV.2		
		M/S-RAIL TECH KXH	LAV.3	LAV.4		
3	Side wall	LH SIDE	MCFRBL CONT.V4U	28		
		RH SIDE	MCFRBL CONT.V4U	28		
4	End wall	PP END	M/s-P.D.STEEL			
		NPP END	M/s-P.D.STEEL			
5	Roof	M/s-UNIVERSAL	64			
6	Centre Buffer Coupler	M/S- ESCORTS	PP END	9154	NPP END 9227	
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.	07sec		
		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	74/87	30-12-2019
2	Insulation			Satisfactory		

  
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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/2019-20/1382

RLY	S	W	R	Coach No.	1	9	9	5	4	3	/	C	-	DATE OF DISPATCH	3	1	1	2	2	0	1	9
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DISPATCH	Sr.DME/MYS	Type	L	W	S	-	Shell No.	9	6	1	7	0	FUR .NO	DDG-282
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**9. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	192578				192577			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-302				ECBT-301			
Bolster no.	AMIT-01				SECPL-400			
Axle No	19 P- 2012 RWF		19 P - 1978 RWF		19 P - 1298 RWF		19 P - 2128 RWF	
Wheel Dia	917.565	917.548	917.501	917.58	917.481	917.574	917.539	917.592
Wheel Disc No	TZ 07-19 66020-9RR0	TZ 07-19 63988-8RQ78	TZ 07-19 63869-9RR8	TZ 06-19 61130-9QL1	TZ 08-19 74085-9SJ7	TZ 07-19 65886-9RL9	TZ 07-19 68059-9RM6	TZ 07-19 65912-9RR0
R.B. Nos.	08-19 28905	08-19 28803	08-19 28241	08-19 26676	08-19 29932	08-19 29043	08-19 30106	08-19 29027
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. 11-19 5842	AVADH RAIL INDRA LTD. 11-19 -5755	AVADH RAIL INDRA LTD. 11-19 5869	AVADH RAIL INDRA LTD. 11-19 5872

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

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18660,18658	15582,18657
2.	Primary outer Spring	CMFSK	10-19-1100 114(1307,1354,1300,1223)	10-19-1100-114(1772,1794,1678,1777)
3.	Primary Inner Spring	CMFSK	10-18 1101-101(957,1071,924,1108)	10-18 1101-101(911,1077,1079,1063)
4.	Primary Damper	KONIC	03-19 (02358,5443,2362,02367)	03-19 (02093,02385,02359,02392)
5.	Secondary Damper	IAI	10-19 (277047,276852)	10-19 (277053,276953)
6.	Lateral Damper	KONIC	04-19 00856	04-19 00854
7.	Brake Cylinder	FAV	M19-056,K19-934,K19-809,L19-349	M19-110,L19-488,M19-069,L19-701
B19-	Brake Caliper	FAV	M19(1668,1666,1667,1669)B	M19(1817,1815,1814,1816)B
9.	Brake Disc	KBI	24206702 0024-46/19,24206702 0023-46/19 24206712 0006-47/19,24206712 0003-47/19	24206707 0066-46/19,24206712 0054-47/19 24206712 0007-47/19,24206712 0008-47/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	AEW/TAJ		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR/ ESCORT	19 B-6386,19B- 7570	1906,1906
17.	Check Valve	KNORR/ ESCORT	19885	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT SARITA /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	SF/RV	522,803,2,286	210819-2,210919-3,220919-2,210919-2
22.	Control Arm Lower	SF/RV	340,508,199,254	140819-1,180919-1,190919-2,210919-1
23.	Phonic Wheel	FAV/ESCORT	19 N-252	ESCORT

Signature of SSE/Bogie/QC

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**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/2019-20/1382

RLY	SWR	COACH NO	199543/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96170			FUR.NO.	DDG-282

**12. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4198 43/19
2	Distribution valve	M/S- KBI	2019K9400
3	Pull box	M/S- FAIVELY	
4	FIBA	M/S- KBI	7741/29,7778/29
5	Foot Step	M/S SSPL MUMBAI	
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/S- HF GLASS WORKS VADODARA	
9	Lavatory inlay	M/S- HF GLASS WORKS VADODARA	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
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-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
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 03,AMIT BADDI -01	
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 INDS MUMBAI	681,324
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	

*Deema*  
SSE/QC/MCF/RBL

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**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/2019-20/1382

RLY	SWR	COACH NO	199543/C	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96170	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-282

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

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**गुणवत्ता विभाग**  
**रे०डि०का०, रायबरेली (लालगंज)**





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		199543/C		TYPE COACH	
RAILWAY		SWR		LWS/DDG	
ELECT.FIT DATE		30-12-2019		FUR.NO	
DDG-282					
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







	<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 2 OF 3

01.	Switch board cabinet Make : <b>TRINITRON</b> On Board Sr no : <b>19/08/TCS/MCF/3436/355/0112</b> HT Panel Sr no : <b>19/08/TCS/MCF/3436/355/0112</b>	EDTS 333, Rev`01`Am-1	<b>01</b>
02	Emergency light system for EOG type coaches (AEL), Make : <b>A PAUL</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>

*(Signature)*

**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 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>SIGNOTRON</b> Sr no: <b>12190802</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-2653</b>	As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI.	<b>01</b>
13.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>S.INTERNATIONALS</b>	As per spec No EDTS 105,Rev`e` Am-3 TYPE-2	<b>01 set</b>
14.	Feeder junction boxes. Make : <b>MAA LAXMI INDUSTRIES</b>	EDTS-328 REV-C	<b>01 set</b>
15.	Wheel set earthing 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>0119312646</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>AMARA RAJA</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>HITECH</b>	CC 91205	<b>01</b>

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

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

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

