



		<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/2019-20/1364						
RLY	SWR	COACH NO	197862/C	DATE OF DISPATCH	31-12-2019	
Type	LWS	Shell No.	96153	DISPATCH TO	Sr.DME/MYS	
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-VIBGYOR		
H	Air spring in secondary suspension (capacity-140KN).			M/s-TAYAL & CO		
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	1105/1104	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front PP END	M/S-RAIL TECH KXH	15		
		Part NPP END	M/S-RAIL TECH KXH	15		
		Complete	M/S-RAIL TECH KXH	15		
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1	LAV.2		
		M/S-ATHANCY RBL	LAV.3	LAV.4		
3	Side wall	MCFRBL-CONT.V4U	77			
		MCFRBL-CONT.V4U	77			
4	End wall	M/s-SIPL PALWAL				
		M/s-SIPL PALWAL				
5	Roof	M/s-TI	69			
6	Centre Buffer Coupler	M/S- FRONTIER	PP END	26P1	NPP END 133P2	
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.	09sec		
		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	76/89	29-11-2019
2	Insulation	Satisfactory				

*Deema*

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/2019-20/1364

RLY	S	W	R	Coach No.	1	9	7	8	6	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	-	Shell No.	9	6	1	5	3	FUR.NO	DDG-269
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**9. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	192330				192329			
Bogie Type	FIAT				FIAT			
Frame no.	RBL/LS5-1300				RBL/LS5-1106			
Bolster no.	SECPL-421				SECPL-01			
Axle No	19 R - 6791 RWF		19 S - 7597 RWF		19 S - 4877 RWF		19 S - 1959 RWF	
Wheel Dia	917.369	917.457	917.351	917.6	917.502	917.554	917.584	917.454
Wheel Disc No	TZ 07-19 70616-9RR1	TZ 07-19 66791-9PI7	TZ 07-19 67820-9RQ3	TZ 07-19 71181-9QJ4	TZ 07-19 66812-9RR7	TZ 06-19 67211-9RP1	TZ 08-19 72297-9RQ5	TZ 08-19 73536-9SL0
R.B. Nos.	09-19 22921	09-19 21627	09-19 22802	09-19 21554	09-18 22783	09-18 21669	09-18 23184	09-18 21237
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. 09-19 3789	TAYAL&CO. 09-19 3810	TAYAL&CO. 09-19 2638	TAYAL&CO. 09-19 6122

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

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17451,18412	18416,18410
2.	Primary outer Spring	CMFSK	10-19-1100-078(68,120,194,65)	10-19-1100-078(172,177,218,213)
3.	Primary Inner Spring	CMFSK	10-19 1101-101(167,296,44,43)	10-19 1101-101(054,206,237,169)
4.	Primary Damper	KONIC	03-19 (04030,03501,03455,03508)	03-19 (04023,04035,03517,03500)
5.	Secondary Damper	KONIC	04-19 (00379,00399)	04-19 (00447,00800)
6.	Lateral Damper	KONIC	04-19 01997	04-19 01963
7.	Brake Cylinder	KBI	B(9622,8721,8745,9617)K29	B(6499,8723,8723,9638)K29
8.	Brake Caliper	KBI	B(6497,6698,6696,6500)-29	B(9616,6899,6697,6498)-29
9.	Brake Disc	KBI	24203752 0020-42/19,24203752 0017-42/19 24203758 0009-42/19,24203758 0010-42/19	24203757 0022-42/19,24203757 0020-42/19 24200036 0078-36/19,24200052 0033-36/19
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	KNORR	20 B-6048,19 B-6285	20 B-6618,19 B-6122
17.	Check Valve	KNORR	28307	20304
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	290819-2,290819-2,290819-3,290819-2	280819-2,230819-2,290819-3,290819-2
22.	Control Arm Lower	RVE	290819-2,290819-2,300819-2,290819-3	270819-2,290819-3,290819-2,290819-3
23.	Phonic Wheel	KBI	K 05-19	K 05-19

Signature of SSE/Bogie/QC





**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/2019-20/1364

RLY	SWR	COACH NO	197862/C			DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96153	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-269

**12. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4074 24/19
2	Distribution valve	M/S- KBI	2019K9310
3	Pull box	M/S- FAIVELY	
4	FIBA	M/S- ESCORTS	18100198,1890101
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-ELASTOMER IND MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER IND MUMBAI	
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.)	N/A	
24	Over head water tank (4x390L)	M/S- AMITBADDI -01,AMIT MOHALI -03	
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	524/376
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	

SSE/QC/MCF/RBL

वरि०अनु० अभियंता

गुणवत्ता विभाग  
रेडि०का०, रायबरेली (लालगंज)







		<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/2019-20/1364					
RLY	SWR	COACH NO	197862/C	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96153	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-269
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	
गुणवत्ता विभाग रेडिओका, रायबरेली (लालगंज)		आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli		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

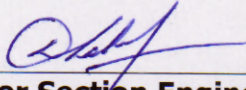
**FOR ELECTRICAL ITEMS**

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

PAGE 1 OF 3

**ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES**

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES					
SHELL/COACH NO		197862/C		TYPE COACH	
LWS/DDG					
RAILWAY		SWR		ELECT.FIT DATE	
28-12-2019		FUR.NO		DDG-269	
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

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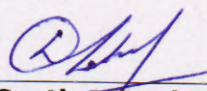
DATE: 18.01.2017

**FOR ELECTRICAL ITEMS**


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

PAGE 2 OF 3

01.	Switch board cabinet Make : <b>SIDWAL</b> On Board Sr no : <b>19M 007</b> HT Panel Sr no : <b>19M 047</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**



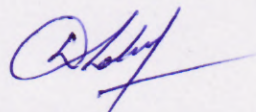
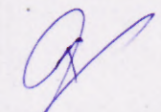
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**FOR ELECTRICAL ITEMS**

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

PAGE 3 OF 3

09.	Battery fuse box +ve Make : <b>ISGPL</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>11190655</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-2561</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>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>0119212018</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>11/19</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/QC</b> <b>वरिष्ठ अनुभाग अभियन्ता</b> <b>गुणवत्ता नियंत्रण</b> <b>आपरेटिंग/लालगंज/रायबरेली</b> <b>S.S.E./Elect-QC/M.C.F./LJ/RBL</b>	<b>AWM(ELECT.)/MCF/RBL</b> <b>SEE(P)/MCF/RBL</b> <b>वरिष्ठ विद्युत अभियन्ता</b> <b>रेल कोच फैक्टरी, रायबरेली,</b> <b>Sr. Electrical Engineer / RCF / RBL</b>