



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/2019-20/1796

RLY	SWR	COACH NO	202095/C	DATE OF DISPATCH	12-Mar-20
Type	LWS	Shell No.	96249	DISPATCH TO	Sr.DME/UBL
				FUR.NO.	DDG-366

- Railway Board's Order No. : 2019/M(C)/142/2, DATED-18-12-2019
- TARE WEIGHT OF COACH : 40.66 Tonnes
- Carrying Capacity : (a) Seating: 100 (c) Luggage: NIL
- Special feature:

S NO	DESCRIPTION	MAKE/SUPPLIER
A	Cushion transverse side luggage rack which can serve as seat during rush	M/S-LUCKY INTERPRISES GURGAON
B	Honey comb partition frame.	MCF/RBL
C	DGFRP/GFRE paneling.	MCF/RBL
D	Lavatory with DGFRP/GFRE paneling.	MCF/RBL
E	Additional Hand hold.	MCF/RBL
F	Counter top wash basin.	MCF/RBL
G	Gel coating & Anti Graffiti measures.	M/S-ADVANCE
H	Air spring in secondary suspension (capacity-140KN).	M/s-TAYAL&CO
I	Fire Extinguishers	M/s-AMTEX SIRSAPUR DELHI
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 1097/1102

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END M/S-OMAX AUTO LTD Part NPP END M/S-NE CHD Complete MCF/RBL/AIRCON	136 96249
2	Lav. side wall	M/S-ATHANACY ALD LAV.1 M/S-ATHANACY ALD LAV.3	LAV.2 LAV.4
3	Side wall	LH SIDE MCFRBL-CONT.V4U RH SIDE MCFRBL-CONT.V4U	98/01 98/02
4	End wall	PP END M/S-RAIL TECH KXH NPP END M/S-RAIL TECH KXH	
5	Roof	MCF	69
6	Centre Buffer Coupler	M/S-FRONTIER LTD PP END	124-P1 NPP END 191-P1

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> . Max. pressure in BC All Brake are applied	6 - 10 sec. 3.0 ± 0.15 kg/cm <sup>2</sup> . OK	07 sec 3.0 kg/cm <sup>2</sup> 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	72/89	05-03-2020
2	Insulation			Satisfactory		

*Deema*  
SSE/QC/MCF/RBL

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MODERN COACH FACTORY, RAEBARELI

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**ROLLING STOCK CERTIFICATE**

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RLY	S	W	R	-	Coach No.	2	0	2	0	9	5	/	C	-	DATE OF DISPATCH	1	2	0	3	2	0	2	0
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DISPATCH	Sr.DME/UBL	Type	L	W	S	-	Shell No.	9	6	2	4	9	FUR.NO	DDG-366
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**9. DETAIL OF BOGIES:**

ITEMS	NPP Side				PP Side			
Bogie No	192130				192129			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL - 1138				MCF/RBL - 1078			
Bolster no.	SCI - 330				SECPL - 325			
Axle No	19 S - 4287 RWF		19 S - 2791 RWF		19 R - 2090 RWF		19 S - 4517 RWF	
Wheel Dia	917.51	917.574	917.572	917.529	917.66	917.634	917.524	917.587
Wheel Disc No	TZ 08-19 75043-9SK0	TZ 07-19 66776-9PI7	TZ 08-19 72503-9SL4	TZ 07-19 66778-9PI7	TZ 07-19 67811-9RQ3	TZ 07-19 67795-9RQ3	TZ 07-19 64447-9RP4	TZ 07-19 67798-9RQ3
R.E. Nos.	05-18 13382	08-18 41647	07-18 41442	05-18 26774	06-18 17125	12-17 25200	05-18 13958	07-19 41655
CT R B Make	SKF		SKF		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. SR.NO- 10-19 4661	TAYAL & CO. SR.NO- 10-19 4760	TAYAL & CO. SR.NO- 10-19 4825	TAYAL & CO. SR.NO- 10-19 4632

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

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	279995,280152	280243,280264
2.	Primary outer Spring	CMFSK	09-19 1100-078-(2336,2267,1964,2080)	09-19 1100-078-(2322,2221,2645,2304)
3.	Primary Inner Spring	CMSTL	07-19 F06-N91-06A-(815,884,68,271)	07-19 F06-(N78-06A-78, N91-06A-392, N76-06A-767, N92-06A-857)
4.	Primary Damper	KNORR/KONI	07-19 (65602,65620,65599,65613)	03-19 (03672,03696,06238,01713)
5.	Secondary Damper	GB	5201-1(01216,01232)	5201-1 (1225,01229)
6.	Lateral Damper	KONI	04-19 - 02511	04-19 - 02468
7.	Brake Cylinder	KBI	B(8811,8109,8107,8896)-K-29	B(8915,7926,7944,8912)-K-29
8.	Brake Caliper	KBI	B(5943,6191,6190,5945)-29	B(5942,6193,6192,5944)-29
9.	Brake Disc	KBI	24198279-0080-35-19, 24198270-0070-35-19, 24200033-0021-36-19, 24200033-0020-36-19	24198280-0013-35-19, 24198280-0012-35-19, 24200054-0038-37-19, 24200051-0037-37-19
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	KNORR	19B-4017, 19B-4151	19B-3750, 19B-4009
17.	Check Valve	KNORR	18820	18818
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA+ ARYAN		
20.	Fork make	SARITA		
21.	Control Arm Upper	SF	75,141,805,202	83,85,74,98
22.	Control Arm Lower	SF	58,124,258,126	35,307,308,284
23.	Phonic Wheel	KBI	K-09-19, K-09-19	K-09-19, K-09-19

Signature of SSE/Bogie/QC





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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4594-52/19
2	Distribution valve	M/S- KBI	2019M9982
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	9755/29,9757/29
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-PREMIER POLYFILM LTD BULANDSAHAR	
9	Lavatory inlay	M/S-SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
12	Gangway bridge mounting (PPE)	M/s-MAHAVEER METAL WORKS KXH	
13	Gangway bridge mounting (NPPE)	M/s-MAHAVEER METAL WORKS KXH	
14	Body Side Window	M/S-EXCEL COMPOSITES P. LTD KOLKATA	
15	Emergency Window	M/S-FIBRO PLASTIC PVT LTD HOOGHLY WB	
16	Lavatory/hopper Window	M/S-SHATABDHI SAFETY GLASS, VADODARA	
17	Roof Ceiling	M/S-J.R INDUSTRIES JALANDHAR	
18	Door way /gang way ceiling	M/S-J.R INDUSTRIES JALANDHAR	
19	Body Side Doors 1,3,4,5,6	M/S-GOLD PLUS CHANDIGARH	
	Body Side Doors 2	M/S-JBM INDUSTRIES FARIDABAD	
20	Vestibule Door(PPE)	M/S-JBM INDUSTRIES FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM INDUSTRIES 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-RAIL FAB KAPURTHALA	
25	Bib cock/controlled discharge tap	M/s-AGMECO (P) LTD. UK	
26	Lavatory Doors	M/S-J.R INDUSTRIES JALANDHAR	
27	Fire Extinguisher	M/s-AMTEX SIRSA PUR DELHI	14153/14228
28	Water purified	NA	
29	Seat & Berth	M/S-OVPL MUMBAI	
30	Luggage Rack	M/S-LUCKY INTERPRISES GURGAON	
31	Light Luggage Rack	NA	
32	Ventury grill	MCF/RBL	
33	RFID	NA	

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				FUR.NO.	DDG-366

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 qualityrcfbl@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. Chief Quality

वरि०अनु० अभियंता  
गुणवत्ता विभाग  
मे०डि०का०, रायबरेली (लालगंज)

वरि० यांत्रिक अभियंता/गुणवत्ता  
Senior Mechanical Engineer/Quality  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
Modern Coach Factory Raebareli

वरि० गुणवत्ता अभियंता  
Dy. Chief Quality  
आधुनिक रेल डिब्बा कारखाना, रायबरेली  
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**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		202095/C		TYPE COACH	
RAILWAY	SWR	ELECT.FIT DATE	05-03-2020	FUR.NO	LWS/DDG
Sr no	Description of test	DDG-366			
					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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PAGE 2 OF 3

01.	Switch board cabinet Make : <b>ABROL</b> On Board Sr no: <b>2019/11/450 B</b> HT Panel Sr no : <b>2019/10/378 A</b>	EDTS 333, Rev` 01'Am-1	<b>01</b>
02	Emergency light system for EOG type coaches (AEL), Make : <b>INTEG</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
03.	Provision & Mounting of PACIL Assly. Make: <b>WAVES</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>WAVES</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>ENSAVE</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D & Drg no. LW 76092.	<b>04</b>

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Quality control / Electrical  
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09.	Battery fuse box +ve Make : <b>AECO</b>	LW 71001,Alt-F	<b>01</b>
10	Battery fuse box -ve Make : <b>AECO</b>	LW 71002,Alt-F	<b>01</b>
11.	Regulated battery charger Make : <b>PI ENGG.WORKS</b> Sr no: <b>PI-19120233</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-2798</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 set</b>
14.	Feeder junction boxes. Make : <b>MV ELECTRO</b>	EDTS-328 REV-C	<b>01 set</b>
15.	Wheel set earthling 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>0119473440</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>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>SEE/EL/QC</b>	<b>AWM(ELECT.)/MCF/RBL</b>
	<b>SEE(P)/MCF/RBL</b>

वरिष्ठ अनुभाग अभियन्ता  
गुणवत्ता नियंत्रण



सो कार्य प्रबन्धक/विद्युत

आरेखिका/रायबरेली