



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/2019-20/1713

RLY	SWR	COACH NO	201776/C	DATE OF DISPATCH		28-Feb-20
Type	LWS	Shell No.	96156	DISPATCH TO	Sr.DME/MYS	FUR.NO. DDG-281

- | | | | |
|----|---------------------------|---|-----------------------------------|
| 1. | Railway Board's Order No. | : | 2019/M(C)/142/2,DATED-07.02.2020 |
| 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-LUCKY INTERPRISES
B	Honey comb partition frame.	MCFRBL/LLJ
C	DGFRP/GFRE paneling.	MCFRBL/LLJ
D	Lavatory with DGFRP/GFRE paneling.	MCFRBL/LLJ
E	Additional Hand hold.	MCFRBL/LLJ
F	Counter top wash basin.	MCFRBL/LLJ
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-AMTEX SAFETY
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 1099/1100

6. TRACEABILITY OF SHELL ITEMS:

5. MAKE/IDENTITY OF STEEL PARTS							
S NO	ITEM		MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front	PP END	M/S-RAIL TECH KXH	17		
		Part	NPP END	M/S-RAIL TECH KXH	17		
		Complete		M/S-RAIL TECH KXH	17		
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-V4U LKO	80		
		RH SIDE		MCFRBL-V4U LKO	80		
4	End wall	PP END	M/S-P.D.STEEL PKL				
		NPP END	M/S-P.D.STEEL PKL				
5	Roof		MCFRBL-CONT.		19		
6	Centre Buffer Coupler		M/S-ESCORTS	PP END	2274	NPP END	2306

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 ² .	6 – 10 sec.	08sec
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²
		All Brake are applied	OK	OK
2	Insensitivity	Exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK
3	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /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	75/87	29-01-2020
2	Insulation	Satisfactory				

Sherma
SSE/QC/MCF/RBL
वार ०अनु० अभियंता
गुणवत्ता विभाग
ने०डि०अ०३, मजदारी (सातवांज)



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/2019-20/1713

RLY	S	W	R	-	Coach No.	2	0	1	6	3	7	/	C	-	DATE OF DISPATCH	2	8	0	2	2	0	2	0
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DISPATCH	Sr.DME/MYS	Type	L	W	S	-	Shell No.	9	6	1	5	6	FUR .NO	DDG-281
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192731				192732			
Bogie Type	FIAT				FIAT			
Frame no.	A.M.L.-102				ECBT-221			
Bolster no.	RBL/LS-5-748				SECPL-630			
Axle No	19 R - 1765 RWF		19 N- 4773 RWF		19 N-4280 RWF		19 S- 0958 RWF	
Wheel Dia	917.382	917.359	917.431	917.318	917.419	917.351	917.396	917.309
Wheel Disc No	TZ 05-19 45326-9PD2	TZ 06-19 56055-9QI2	TZ 04-19 36357-9MI7	TZ 06-19 56056-9QI2	TZ 07-19 64679-9RQ1	TZ 07-19 62484-9RNO	TZ 06-19 52298-9QH2	TZ 06-19 57149-9QL0
R.B. Nos.	11-19 41500	11-19 41581	09-19 31633	11-19 41127	11-19 41081	11-19 41705	11-19 40578	11-19 40925
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 PVT.L Sr.NO.11-19-5747	AVADH RAIL INDRA PVT.L Sr.NO.11-19-5978	AVADH RAIL INDRA PVT.L Sr.NO.11-19-5995	AVADH RAIL INDRA PVT.L Sr.NO.11-19-5764

11. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	267065,267096	254050,267163
2.	Primary outer Spring	CMFSK	10-19-1100-114-(1773,1573,1604,646)	10-19-1100-114-(1758,1766,1742,1329)
3.	Primary Inner Spring	CMFSK	10-19-1101-101-(667,929,139,615)	10-19-1101-101-(674,800,624,702)
4.	Primary Damper	IAI	11-19 (282901,282753,282431,282291)	11-19 (282514,282622,282234,282404)
5.	Secondary Damper	IAI	10-19(276885,276989)	10-19(277156,276948)
6.	Lateral Damper	KONI	04-19-00316	04-19-00301
7.	Brake Cylinder	ESCORT	50367,50670,52242,53181	53180,52241,51824,51164
8.	Brake Caliper	ESCORT	29234,29467,30738,31398	31397,30737,29783,29892
9.	Brake Disc	KBI	24206705-46-19-0002,24206705-46-19-0003, 24206704-46-19-0067,24206711-47-19-0019	24206702-46-19-0036,24206703-46-19-0017, 24206702-46-19-0041,24206702-46-19-0034
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	ARYAN/GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	16-19B - (1601,1602)	16-19B - (5873,5869)
17.	Check Valve	KNORR	07-19-17504	07-19-19525
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA+ARYAN		
20.	Fork make	EMSON		
21.	Control Arm Upper	RV+SG/RVE	RV-(230919-2,240919-2),SG-(910,618)	210919-3,210919-3,270919-2,160919-2
22.	Control Arm Lower	RV+SG/RVE	RV-(170919-2,170919-2),SG-(640,598)	160919-2,270919-2,240919-1,210919-3
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC





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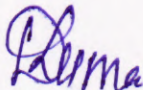
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4116 42/19
2	Distribution valve	M/S- KBI	2019K9336
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	9138/29,9335/29
5	Foot Step	M/S SSPL FARIDABAD	
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI	
7	Floor board	M/S-OVPL MUMBAI	
8	PVC	M/S-PREMIER POLU FILM	
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-MMW KXH	
13	Gangway bridge mounting (NPPE)	M/s-MMW KXH	
14	Body Side Window	M/S-EXCEL COMPOSITE KOLKATA	
15	Emergency Window	M/S-FIBRO PLASTIC LTD HOOGHLY	
16	Lavatory/hopper Window	M/S-SHATABDI VADODARA	
17	Roof Ceiling	M/S-JR JUC	
18	Door way /gang way ceiling	M/S-JR JUC	
19	Body Side Doors	M/S-GOLD PLUS CDG	
20	Vestibule Door(PPE)	M/S-KALSI LDH	
21	Vestibule Door(NPPE)	M/S-KALSI LDH	
22	Bio Tank	M/S-UNIFAB -02 NOS +CEMCON -02 NOS	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
24	Over head water tank (4x390L)	M/S-AMIT ENG. MOHALI-02NO+AMIT BADDI-02 NOS	
25	Bib cock/controlled discharge tap	M/s-EAUSER LTD	
26	Lavatory Doors	M/S-JR JUC	
27	Fire Extinguisher	M/s-AMTEX SAFTEY	14459/14516
28	Water purified	NIL	
30	Seat & Berth	M/S-OVPL MUMBAI	
31	Luggage Rack	M/S-LUCKY INTERPRISES	
32	Light Luggage Rack	NIL	
33	Ventury grill	NIL	
34	RFID	NIL	


SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (सातगांज)



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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				FUR.NO.	DDG-281

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.CQM/MCF/RBL

वरिष्ठ गुणवत्ता अभियन्ता
गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (लातगंज)

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

वरिष्ठ गुणवत्ता अभियन्ता
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

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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		201776/C		TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	20-02-2020	FUR.NO	DDG-281	
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	DOC NO.: MCF/RBL/QEF/8001
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FOR ELECTRICAL ITEMS
ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES

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01.	Switch board cabinet Make : MV ELECTRO SYSTEMS On Board Sr no : 19090140 HT Panel Sr no : 19090157	EDTS 333, Rev`01`Am-1	01
02	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
03.	Provision & Mounting of PACIL Assly. Make: KAVERI	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I Drg no. LW 76098.	02
04.	Fitment of Switch Plate Assly (Cabin Side) Make : SSK	EDML 127,Rev-1& DRG NO 4248ALT-a	10
05.	Fitment of Switch Plate Assly (Corridor Side) Make : SSK	EDML 127,Rev-1 & DRG NO 4249 ALT-a	10
06.	Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make : LIGHT ENGG.	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
07.	Provision of Cabin, Corridor, doorway and Gangway Lights. Make: DR AUTO	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	28
08.	Provision & Mounting of Lavatory Light Make: ENSAVE	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D & Drg no. LW 76092.	04

Senior Section Engineer
Quality control / Electrical
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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 : RICHMOND	LW 71001,Alt-F	01
10.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
11.	Regulated battery charger Make : SIGNOTRON Sr no: 01201000	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2916	As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI.	01
13.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	As per spec No EDTS 105,Rev`e' Am-3 TYPE-2	01 set
14.	Feeder junction boxes. Make : MV ELECTRO	EDTS-328 REV-C	01 set
15.	Wheel set earthing equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119423051	M/s : KNORR	01 set
17.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 11/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
18.	Battery box for LHB coaches. Make : HITECH	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

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

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

