



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/2019-20/1362

RLY	SWR	COACH NO	197860/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96157			FUR.NO.	DDG-267
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- HF GLASS WORKS VADODARA
H	Air spring in secondary suspension (capacity-140KN).	M/S-GS
I	Fire Extinguishers	M/s-AVADH RAIL INFRA
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)	M/s-SHAN IND MUMBAI
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
6.	TRACEABILITY OF SHELL ITEMS:	NPP/PP 1102/1105

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-CHENNAI RADHA	22
	Part	NPP END M/S-CHENNAI RADHA	22
	Complete	M/S-CHENNAI RADHA	22
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1 LAV.2
		M/S-ATHANCY RBL	LAV.3 LAV.4
3	Side wall	M/S-INDIRA TRADE CHENNAI	25
	LH SIDE	M/S-INDIRA TRADE CHENNAI	25
	RH SIDE	M/S-INDIRA TRADE CHENNAI	25
4	End wall	PP END M/s-SIPL PALWAL	
		NPP END M/s-SIPL PALWAL	
5	Roof	M/s-UNIVERSAL	58
6	Centre Buffer Coupler	M/S- FRONTIER	PP END 154P2 NPP END 208P2

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	VIBGYOR	M/S-VIBGYOR	75/88	29-11-2019
2	Insulation			Satisfactory		

SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लाजगंज)





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/2019-20/1362

RLY	S	W	R	Coach No.	1	9	7	8	6	0	/	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	7	FUR NO	DDG-267
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192478				192477			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-296				ECBT-306			
Bolster no.	AMIT-34				AMIT-11			
Axle No	19 N - 8798 RWF		19 N - 5004 RWF		19 S - 3670 RWF		19 P - 1845 RWF	
Wheel Dia	917.592	917.477	917.579	917.443	917.533	917.582	917.555	917.441
Wheel Disc No	TZ 07-19 63561-9RR8	TZ 07-19 63987-9RQ5	TZ 07-19 66820-9RR2	TZ 08-19 74089-9SJ7	TZ 07-19 67606-9RL3	TZ 08-19 75007-9RK9	TZ 08-19 46285-9PJ3	TZ 08-19 62717-9RL5
R.B. Nos.	11-19 40459	11-19 41069	11-19 41002	11-19 40894	11-19 40885	08-19 41035	11-19 41024	11-19 41098
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

10. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
Make & Nos.	Secondary 1	Secondary 2	Secondary 1	Secondary 2
	AVADH RAIL INDRA LTD. 11-19 5809	AVADH RAIL INDRA LTD. 11-19 5848	AVADH RAIL INDRA LTD. 11-19 5810	AVADH RAIL INDRA LTD. 11-19 5860

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17455,17441	17446,17444
2.	Primary outer Spring	CMFSK	10-19-1100-078(817,1168,128,872)	10-19-1100-078(169,220,301,161)
3.	Primary Inner Spring	CMFSK	07-19 F06-N91-06A(1730,3853,9029,1523)	07-19 F06-N91-06A(1182,3900,1521,3517)
4.	Primary Damper	KONIC	03-19 (01909,01718,03114,02233)	03-19 (02235,02227,03103,01706)
5.	Secondary Damper	IAI	10-19 (277073,276955)	10-19 (276890,277098)
6.	Lateral Damper	KONIC	04-19 02505	04-19 02479
7.	Brake Cylinder	FAV	L19(384,427,110,380)	M19-054,K19-820,K19-757,L19-433
8.	Brake Caliper	FAV	M19(1589,1580,1679,1681)B	M19(1680,1678,1587,1588)B
9.	Brake Disc	KBI	24206703 0054-46/16,24206703 0056-46/19 24206702 0080-46/19,24206705 0027-46/19	24206708 0007-46/19,24206707 0039-46/19 24206707 0057-46/19,24206707 0077-46/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN/GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR/ ESCORT	16-19 B -6601,16-19 B 6127	
17.	Check Valve	ESCORT	1906	1906,1906
18.	Anti roll bar Make	EMSON		1906
19.	Roll Link make	SARITA /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	210919-3,220919-2,210919-1,RVE	230919-1,220919-2,160919-1,230919-1
22.	Control Arm Lower	RVE	200919-1,RVE,210919-3,RVE	180919-1,200919-2,RVE,270919-3
23.	Phonic Wheel	KBI	K 08-19	K 08-19

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	
2	Distribution valve	M/S- KBI	4137 42/19
3	Pull box	M/S- FAIVELY	2019K9345
4	FIBA	M/S- ESCORTS	
5	Foot Step	M/S SSPL MUMBAI	18120328,18110310
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-KALSI LDH	
21	Vestibule Door(NPPE)	M/S-KALSI LDH	
22	Bio Tank 1,3	M/S- CEMCON	
	Bio Tank 2,4	M/S- UNIFAB	
23	Pressurized flushing(ele.pneu.)	M/S- IMI	
24	Over head water tank (4x390L)	M/S- AMITBADDI -03,FABRICATORS -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 IND MUMBAI	
28	Water purified	M/S- HF GLASS WORKS VADODARA	377/344
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

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रेडि०का०, रायबरेली (लाजगंज)





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Type	LWS	Shell No.	96157			FUR.NO.	DDG-267

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

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गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)

Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly

उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

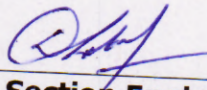
DATE: 18.01.2017

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					
SHELL/COACH NO		197860/C		TYPE COACH	
RAILWAY		SWR		ELECT.FIT DATE	
Sr no		29-12-2019		FUR.NO	
Description of test		LWS/DDG		DDG-267	
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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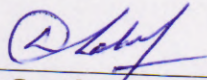
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC DD COACHES
PAGE 2 OF 3

01.	Switch board cabinet Make : SIDWAL On Board Sr no : 19M 045 HT Panel Sr no : 19M 045	EDTS 333, Rev`01`Am-1	01
02.	Emergency light system for EOG type coaches (AEL), Make : INTEG ELECT.	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 : ORIENT	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: RT VISION	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 : INDORAIL	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
11.	Regulated battery charger Make : SIGNOTRON Sr no: 1219084	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2685	As per RDSO/PE/SPEC/TL 0158,2010, Rev`0', TypeI.	01
13.	ZS coupling 400A/750V/03Ph/50hz. Make : S.INTERNATIONALS	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 earthling equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119372850	M/s : KNORR	01 set
17.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA 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 गुणवत्ता नियंत्रण आपरेटिंग/लालगंज/रायबरेली S.S.E/EL-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL