



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/2019-20/1663

RLY	SWR	COACH NO	201636/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	20-Feb-20
Type	LWS	Shell No.	96225			FUR.NO.	DDG-337

- Railway Board's Order No. : 2019/M(C)/142/2, DATED-03-06-2019
- 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-H.F GLASS WORKS VADODRA
B	Honey comb partition frame.	M/S-H.F GLASS WORKS VADODRA
C	DGFRP/GFRE paneling.	M/S-H.F GLASS WORKS VADODRA
D	Lavatory with DGFRP/GFRE paneling.	M/S-H.F GLASS WORKS VADODRA
E	Additional Hand hold.	M/S-H.F GLASS WORKS VADODRA
F	Counter top wash basin.	M/S-H.F GLASS WORKS VADODRA
G	Gel coating & Anti Graffiti measures.	M/S-H.F GLASS WORKS VADODRA
H	Air spring in secondary suspension (capacity-140KN).	M/S-KANSAL NEROLAC
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-DEVIKA SAFTEY NDLS
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	
2	Maximum width over body	23700
3	Maximum height from Rail Level	3240
4	CBC height/Buffer height from Rail level 1105 +0/-10	4039
		NPP/PP 1105/1097

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-AMIT ENGG 71
		Part NPP END	M/S-AMIT ENGG 67
		Complete	MCF/RBL/AIRCON 96225
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 66/01
		RH SIDE	MCFRBL-CONT.V4U 66/02
4	End wall	PP END	M/S-RAIL TECH KXH
		NPP END	M/S-RAIL TECH KXH
5	Roof	MCF/CONT	
6	Centre Buffer Coupler	M/S-ESCORT LTD PP END 3082	NPP END 3070

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.	08 sec
		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	K.NEROLAC	M/S-KANSAL NEROLAC	74/87	28-01-2020
2	Insulation			Satisfactory		

Deen Dayalu
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका, रायबरेली (बालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1663

RLY	S	W	R	-	Coach No.	2	0	1	6	3	6	/	C	-	DATE OF DISPATCH	2	0	0	2	2	0	2	0
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DISPATCH Sr.DME/MYS

Type

L

W

S

Shell No.

9

6

2

2

5

FUR.NO

DDG-337

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193278				193277			
Bogie Type	FIAT				FIAT			
Frame no.	V.S-97				V.S-100			
Bolster no.	SHIVALIK-24				SHIVALIK-28			
Axle No	19 T - 3594 RWF		19 T- 3858 RWF		19 N-3347 RWF		19 T- 4289 RWF	
Wheel Dia	917.362	917.241	917.474	917.364	917.368	917.298	917.437	917.371
Wheel Disc No	TZ 05-19 43799-9PF1	TZ 07-19 65289-9RPS	TZ 05-19 26237-8MR1	TZ 06-19 60546-9QL3	TZ 05-19 45612-9OI8	TZ 05-19 51274-9PE8	TZ 07-19 67607-9RL3	TZ 07-19 67596-9RL3
R.B. Nos.	11-19 32348	11-19 32224	11-19 32990	11-19 32247	12-19 34834	12-19 32688	11-19 32689	11-19 34960
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.	AWADH RAIL INFRA LTD. SR.NO-12-19 6589	AWADH RAIL INFRA LTD. SR.NO-01-19 6606	AWADH RAIL INFRA LTD. ARL 12-19 6568	AWADH RAIL INFRA LTD. ARL 12-19 6626

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	283064,283025	279956,283069
2.	Primary outer Spring	CMFSK	10-19-1100-114-(478,28,21,1)	10-19-1100-114-(1388,1360,1852,1789)
3.	Primary Inner Spring	CMFSK	10-19-1101-101-(378,2174,3157,2075)	10-19-1101-101-(1354,1261,1154,1374)
4.	Primary Damper	IAI	09-19(274088,274014,273914,273737)	09-19 (273776,273816,274035,273810)
5.	Secondary Damper	IAI	11-19(283452,283342)	09-19(274533,283502)
6.	Lateral Damper	IAI	11-19 - 274604	09-19 - 274722
7.	Brake Cylinder	KBI	(C2313,C1151,C1189,C2316)-K29	(C2314,C1203,C1175,C2315)-K-29
8.	Brake Caliper	KBI	(B8867,B8967,B8968,B8868)-19	(B8865,B8965,B8966,B8866)-29
9.	Brake Disc	KBI	24206718-48-19-(0075,0074), 24206719-48-19-(0022,0015)	24206719-48-19-0046, 24206720-48-19-0042 24206720-48-19-0076, 24206720-48-19-0077
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT/ARYAN		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	SJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	19B-(7058,7438)	19B-(7325,7520)
17.	Check Valve	KNORR	20132	20263
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	KUMAR	H-528,H533,H-558,H-2954	D-9972,D-02816,N-6067,D-0528
22.	Control Arm Lower	KUMAR/ (RV+ KUMAR)	H-0510,D-8941,D-9940,D-9031	(220819-3,140819-4),(D-1559,D8652)
23.	Phonic Wheel	KBI	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	
2	Distribution valve	M/S- KBI	4355-49/19
3	Pull box	M/S- KBI	2019M9712
4	FIBA	M/S- KBI	
5	Foot Step	M/S-SSPL FARIDABAD	7195/29,7174/29
6	Decoupling arrangement	M/S-KOHINOOR MUMBAI	
7	Floor board	M/S-OVPL MUMBAI	
8	PVC	M/S-H.F GLASS WORKS VADODRA	
9	Lavatory inlay	M/S-H.F GLASS WORKS VADODRA	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
12	Gangway bridge mounting (PPE)	M/s-RAKESH IRON STORE KXH	
13	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON STORE KXH	
14	Body Side Window	M/S-H.F GLASS WORKS VADODRA	
15	Emergency Window	M/S-H.F GLASS WORKS VADODRA	
16	Lavatory/hopper Window	M/S-H.F GLASS WORKS VADODRA	
17	Roof Ceiling	M/S-H.F GLASS WORKS VADODRA	
18	Door way /gang way ceiling	M/S-H.F GLASS WORKS VADODRA	
19	Body Side Doors	M/S-H.F GLASS WORKS VADODRA	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
22	Bio Tank	M/S- JSL LIFE STYLE 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-JAQUAR PVT LTD ALWAR	
26	Lavatory Doors	M/S-H.F GLASS WORKS VADODRA	
27	Fire Extinguisher	M/s-DEVIKA SAFTEY NDLS	
28	Water purified	M/S-H.F GLASS WORKS VADODRA	5295/5357
29	Seat & Berth	M/S-H.F GLASS WORKS VADODRA	
30	Luggage Rack	M/S-H.F GLASS WORKS VADODRA	
31	Light Luggage Rack	N/A	
32	Ventury grill	M/S-H.F GLASS WORKS VADODRA	
33	RFID	N/A	

Deena
SSE/QC/MCF/RBL
वरि०अनु० अभियंता

गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)



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आधुनिक रेल डिब्बा कारखाना, रायबरेली

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Type	LWS	Shell No.	96225	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	20-Feb-20
						FUR.NO.	DDG-337

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.CQM/MCF/RBL

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
रेडि०का०, रायबरेली (लाल गज)

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
Senior Mechanical Engineer/Quality
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

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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		201636/C		TYPE COACH	
RAILWAY	SWR	ELECT.FIT DATE	17-02-2020	FUR.NO	LWS/DDG
Sr no	Description of test	DDG-337			
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
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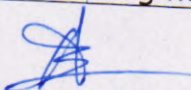
DATE: 18.01.2017

FOR ELECTRICAL ITEMS

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

PAGE 2 OF 3

01.	Switch board cabinet Make : MV ELECTRO SYSTEMS On Board Sr no : 19090149 HT Panel Sr no : 19090149	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: RT VISION	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: 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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PAGE 3 OF 3

09.	Battery fuse box +ve Make : RICHMOND	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : RICHMOND	LW 71002,Alt-F	01
11.	Regulated battery charger Make : ELECTRIC EQUIPMENT COMPANY Sr no: 12190107	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2908	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 : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119232146	M/s : KNORR	01 set
17.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 12/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
18.	Battery box for LHB coaches. Make : M/S MEENAKSHI	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आपरेटिंग/लागंज/रायबरेली S.S.E./Elect-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