



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/2019-20/1381

RLY	SWR	COACH NO	199540/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96134			FUR.NO.	DDG-277

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-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-FIRE FITE 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	NPP/PP 1096/1099

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-OMAX AUTO 11
		Part NPP END	M/S-OMAX AUTO 11
		Complete	M/S-OMAX AUTO 11
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1 LAV.2
3	Side wall	M/S-ATHANCY RBL	LAV.3 LAV.4
		MCFRBL CONT.V4U	23
4	End wall	PP END	M/s-SIPL PALWAL 23
		NPP END	M/s-SIPL PALWAL
5	Roof	M/s-TI	84
6	Centre Buffer Coupler	M/S- ESCORTS	PP END 2258 NPP END 2286

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.	09sec
		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	NEROLAC	M/S-K.NEROLAC	74/87	06-12-2019
2	Insulation			Satisfactory		

Deema

SSE/QC/MCF/RBL

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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/2019-20/1381

RLY	S	W	R	Coach No.	1	9	9	5	4	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	3	4	FUR .NO	DDG-277
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192574				192573			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1329				MCF/RBL-1328			
Bolster no.	SECPL-216				SECPL-206			
Axle No	19 R- 1927 RWF		19 N- 8629 RWF		19 L- 5552 RWF		19 N- 4611 RWF	
Wheel Dia	917.555	917.612	917.54	917.547	917.568	917.649	917.539	917.683
Wheel Disc No	TZ 07-19 65772-9RL9	TZ 07-19 66824-9RR7	TZ 07-19 62702-9RL5	TZ 06-19 46282-9PJ3	TZ 08-19 74090-9SK5	TZ 07-19 66819-9RR7	TZ 07-19 66017-9RR0	TZ 07-19 62701-9RL5
R.B. Nos.	09-19 28816	08-19 29190	08-19 28994	08-19 29198	08-19 29203	08-19 28778	08-19 28782	08-19 28775
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 LTD. 11-19 5845	AVADH RAIL INDRA LTD. 11-19 -5858	AVADH RAIL INDRA LTD. 11-19 5876	AVADH RAIL INDRA LTD. 11-19 5873

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16535,15845	15841,15836
2.	Primary outer Spring	CMFSK	10-19-1100 114(1684,1262,17,267)	10-19-1100-114(1991,1262,1736,267)
3.	Primary Inner Spring	CMFSK	10-18 1101-101(1088,1172,1086,961)	10-18 1101-101(952,1172,1155,1086)
4.	Primary Damper	KONIC	03-19 (06441,07722,02399,06202)	03-19 (04138,04969,04137,04123)
5.	Secondary Damper	IAI	10-19 (276959,277038)	10-19 (277010,276853)
6.	Lateral Damper	KONIC	04-19 01541	04-19 00882
7.	Brake Cylinder	ESCORT	45620,45644,45646,45526	45785,45632,45444,45787
8.	Brake Caliper	ESCORT	25490,25483,25485,25497	25605,25471,2583,25607,
9.	Brake Disc	KBI	24206706 0041-16/19,24206705 0049-46/19 24206707 0040-47/19,24206705 0047-46/19	24206706 0032-46/19,24206706 0031-46/19 24206706 0030-46/19,24206706 0030-46/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	AEW/TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1906,1906	1906,1906
17.	Check Valve	ESCORT	1906	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RV	230919-1,210819-3,230919-3,230919-3	220919-2,210819-3,220919-2,230919-2
22.	Control Arm Lower	RV	180919-1,190919-2,180919-1,180919-3	180919-2,210819-3,190819-2,190919-2
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC

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Type	LWS	Shell No.	96134			FUR.NO.	DDG-277

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- ESCORTS	
2	Distribution valve	M/S- ESCORTS	201980069
3	Pull box	M/S- KBI	1908A069
4	FIBA	M/S- KBI	
5	Foot Step	M/S SSPL MUMBAI	7558/29,7684/29
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-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- 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 LIFE STYLE GURGRAM	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
24	Over head water tank (4x390L)	M/S- AMIT MOHALI	
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-FIRE FITE MUMBAI	
28	Water purified	M/S- HF GLASS WORKS VADODARA	127104,127104
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	

R. Deema
SSE/QC/MCF/RBL

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Type	LWS	Shell No.	96134	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	31-12-2019
						FUR.NO.	DDG-277

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

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रे०डि०का०, रायबरेली (लालगंज)

Modern Coach Factory, Raebareli

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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		199540/C	TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	30-12-2019	FUR.NO	DDG-277
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



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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 : MV ELECTRO SYSTEMS On Board Sr no : 19070082 HT Panel Sr no : 19070086	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: 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 : IMT CABLES	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: RT VISION	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

(Signature)

**Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli**





Modern Coach Factory Raebareli
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FOR ELECTRICAL ITEMS

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PAGE 3 OF 3

09.	Battery fuse box +ve Make : SSK	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
11.	Regulated battery charger Make : PI ENGG.WORKS Sr no: PI-19110191	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2653	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 earthing equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : ESCORTS Sr no : 180370-59826-0099	M/s : ESCORTS	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 : 12/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
18.	Battery box for LHB coaches. Make : TECHNO	CC 91205	01

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

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

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