



		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/2019-20/1682						
RLY	SWR	COACH NO	201661/C	DATE OF DISPATCH	24-Feb-20	
Type	LWS	Shell No.	96222	DISPATCH TO	Sr.DME/MYS	
				FUR.NO.	DDG-323	
1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-12-09-2019 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-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-AVADH RAIL INFRA		
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	1101/1097	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM		MAKE/SUPPLIER	SERIAL NO		
1	Under frame	Front	PP END	M/S-DTL PUNE	3	
		Part	NPP END	M/S-DTL PUNE	3	
		Complete	M/S-DTL PUNE	3		
2	Lav. side wall		M/S-MIDAS GUJRAT	LAV.1	LAV.2	
			M/S-MIDAS GUJRAT	LAV.3	LAV.4	
3	Side wall	LH SIDE	MCFRBL-CONT.V4U	87/01		
		RH SIDE	MCFRBL-CONT.V4U	87/02		
4	End wall	PP END	M/S-OMAX REWARI			
		NPP END	M/S-OMAX REWARI			
5	Roof		MCF/CONT	28		
6	Centre Buffer Coupler		M/S-SANROK ENT	PP END	15452 NPP END 15456	
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.	07sec	
		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	28-01-2020
2	Insulation	Satisfactory				

SSE/QC/MCF/RBL
वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेलवे कारखाना, 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/2019-20/1682

RLY	S	W	R	Coach No.	2	0	1	6	6	1	/	C	-	DATE OF DISPATCH	2	4	0	2	2	0	2	0
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DISPATCH	Sr.DME/MYS	Type	L	W	S	-	-	-	Shell No.	9	6	2	2	2	FUR .NO	DDG-323
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192738				192737			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-33				ECBT-265			
Bolster no.	AMIT-217				AMIT-162			
Axle No	19 P- 6524 RWF		19 S - 2073 RWF		19 R 6334 RWF		19 N- 4664 RWF	
Wheel Dia	917.312	917.24	917.33	917.325	917.367	917.293	917.374	917.385
Wheel Disc No	TZ 08-19 72191-9RS8	TZ 07-19 63219-9RN7	TZ 07-19 68055-9RM6	TZ 07-19 65257-9RP5	TZ 08-19 72195-9RS8	TZ 06-19 55583-9PG8	TZ 07-19 70308-9RN9	TZ 07-19 70307-9RN9
R.B. Nos.	11-19 41008	08-19 30181	11-19 41097	11-19 43967	11-19 40719	11-19 42506	09-19 30869	11-19 40460
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 INFRA LTD. 11-19-6007	AVADH RAIL INFRA LTD. 11-19-5989	AVADH RAIL INFRA LTD. 11-19-5969	AVADH RAIL INFRA LTD. 11-19-5988

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	283184,279795	283112,280190
2.	Primary outer Spring	CMAFI	07-19-1100(210,217,215,129)	07-19-1100(212,218,209,213)
3.	Primary Inner Spring	CMGBD	10-19-F06-842(260,36,431,942)	10-19-F06-842(13,487,3,75)
4.	Primary Damper	IAI	11-19 (282147,282288,282319,282504)	11-19 (282708,282274,282612,282717)
5.	Secondary Damper	GBSVD	09-19(2009,2079)	07-19-01184,11-19-03088
6.	Lateral Damper	KONI	04-19-00258	04-19-00606
7.	Brake Cylinder	FAV	L19(407,441),M19(033,101)	L19(318,721),M19(093,064)
8.	Brake Caliper	FAV	(M19-1552,L19-1551,M19-1786,M19-1788)B	M19(1645,1642,1655,1656)B
9.	Brake Disc	FAV	D133561-300-12-19(8790,8791,6648,6647)	D133561-300-12-19(8148,8146,8819,8818)
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	16-19B(5667,5772)	16-19B(7700,7104)
17.	Check Valve	KNORR	07-19-19430	07-19-20158
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	KUMAR	528,432,428,532	618,512,328,694
22.	Control Arm Lower	KUMAR	328,265,352,118	432,324,588,332
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC





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RLY	SWR	COACH NO	201661/C			DATE OF DISPATCH	24-Feb-20
Type	LWS	Shell No.	96222	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-323

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	4361-49/19
2	Distribution valve	M/S- KBI	2019M9708
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	7027/29,7223/29
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, GZB	
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 MATEL WORKS, KAPURTHALA	
13	Gangway bridge mounting (NPPE)	M/S-MAHAVEER MATEL WORKS, KAPURTHALA	
14	Body Side Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
15	Emergency Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
16	Lavatory/hopper Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
17	Roof Ceiling	MCF/RBL (DGFRE/GFRE)	
18	Door way /gang way ceiling	MCF/RBL (DGFRE/GFRE)	
19	Body Side Doors 1,2,3,4,5	M/S-GOLD PLUS CHANDIGARH	
	Body Side Doors 6	M/S-JVR LUDHIYANA	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM 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-AMIT ENG. MOHALI(02),RAIL FAB(02) NOS	
25	Bib cock/controlled discharge tap	M/S-EAUSSET PVT LTD GURGAON	
26	Lavatory Doors	M/S-JR INDUSTRIES JALANDHAR	
27	Fire Extinguisher	M/s-AMTEX SIRSAPUR DELHI	14578/14444
28	Water purified	NA	
29	Seat & Berth	M/S-OVPL MUMBAI	
30	Luggage Rack	M/S-LUCKY INTERPRISES GURGAON	
31	Light Luggage Rack	N/A	
32	Ventury grill	NA	
33	RFID	N/A	

Deema
SSE/QC/MCF/RBL
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गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)





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RLY	SWR	COACH NO	201661/C	DATE OF DISPATCH	
Type	LWS	Shell No.	96222	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-323
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 वरिष्ठ गुणवत्ता अभियन्ता/गुणवत्ता		SME/AME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता		Dy. CQM/MCF/RBL ज्योतिषीय प्रमुख	
गुणवत्ता विभाग रेडिओका, रायबरेली (लालगंज)		Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli		Modern Coach Factory Raebareli	





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001
REV NO: 00
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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		201661/C		TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	08-02-2020	FUR.NO	DDG-323	
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
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01.	Switch board cabinet Make : SSK On Board Sr no : 2019/07/209 HT Panel Sr no : 2019/07/183	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: ENSAVE	As per RDSO/PE/SPEC/TL/0091 -2016,REV-01, TYPE-D & Drg no. LW 76092.	04

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



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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 : ELECTRONIC EQUIPMENT COMPANY Sr no: 12190110	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2841	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 : SIDWAL	EDTS-328 REV-C	01 set
15.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119423041	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 : 12/19	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