MCF/ RBL

	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारख़ाना, 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/2019-20/1681

RLY	SWR	COACH NO	201662/C			DATE OF DISPATCH	24-Feb-20
Type	LWS	Shell No.	96103	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-288

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-TAYAL&CO
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	1099/1105

6. TRACEABILITY OF SHELL ITEMS:

S NO		ITEM		MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front Part	PP END	M/S-CHENNAI RADHA	13			
			NPP END	M/S-CHENNAI RADHA	13			
		Complete		M/S-CHENNAI RADHA	13			
2	Lav. side wall			M/S-ATHANACY RBL	LAV.1		LAV.2	
				M/S-ATHANACY RBL	LAV.3		LAV.4	
3	Side wall	LH SIDE		M/S-INDIRA TRADE	15			
		RH SIDE		M/S-INDIRA TRADE	15			
4	End wall	PP END		M/S-DTL PUNE				
		NPP END		M/S-DTL PUNE				
5	Roof			M/S-UNIVERSAL	62			
6	Centre Buffer Coupler			M/S-FRONTIER LTD	PP END	188P1	NPP END	5528

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/cm².	6 – 10 sec.	07 sec
		Max. pressure in BC	3.0 ±0.15 kg/cm².	3.0 kg/cm²
		All Brake are applied	OK	OK
2	Insensitivity	Exhaust BP @ 0.3 kg/cm²/min.	No brake application	OK
3	Sensitivity	Exhaust BP @ 0.1 kg/cm²/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	87/86	31-01-2020
2	Insulation	Satisfactory				

SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
मे०डि०का०, 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/**2019-20/1681**

RLY	S	W	R	-	Coach No.	2	0	1	6	6	2	/	C	-	DATE OF DISPATCH	2	4	0	2	2	0	2	0

DISPATCH	Sr.DME/MYS	Type	L	W	S			-	Shell No.	9	6	1	0	3	FUR .NO	DDG-288

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192880				192879			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-721				WIL-096			
Bolster no.	AMIT-29				AMIT-167			
Axle No	19 N - 5111 RWF		19 P - 3098 RWF		19 P- 2661 RWF		19 P- 1911 RWF	
Wheel Dia	917.401	917.402	917.332	917.466	917.375	917.378	917.406	917.427
Wheel Disc No	TZ 07-19 67007-9RM8	TZ 06-19 60568-9QI3	TZ 07-19 67008-9RM8	TZ 07-19 64519-MH4	TZ 06-19 68224-9RN1	TZ 06-19 61228-9QJ9	TZ 06-19 57697-9QJ0	TZ 06-19 49599-9PG6
R.B. Nos.	09-19 31142	08-19 28207	08-19 28535	09-19 31121	08-19 30647	08-19 28216	09-19 29274	09-19 40013
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.	TAYAL & CO. SR.NO- 10-19 4836	TAYAL & CO. SR.NO- 10-19 4891	TAYAL & CO. SR.NO- 10-19 4837	TAYAL & CO. SR.NO- 10-19 4846

11. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	279699,280114	279668,280066
2.	Primary outer Spring	CMGBD	11-19 F07-894(1157,1164,1154,1131)	11-19 F07-894(1145,1155,1165,1169)
3.	Primary Inner Spring	CMGBD	10-19 F06-842(94,119,641,712)	10-19 F06-842(684,187,256,655)
4.	Primary Damper	IAI	11-19 (282301,282346,282691,281987)	11-19 (282403,282430,282715,282438)
5.	Secondary Damper	IAI	11-19 (283431,283364)	11-19 (283482,283217)
6.	Lateral Damper	KONI	04-19 - 01279	04-19 - 01906
7.	Brake Cylinder	KBI	C(0970,0969)-K-29, B(9821,9824)-K-29	C(0954,0968)-K-29, B(9844,9845)-K-29
8.	Brake Caliper	KBI	B(7654,7723,7724,7657)-29	B(7653,7725,7726,7658)-29
9.	Brake Disc	FAV	11-19 (7096,6407,6408,6975)D133561-300	12-19 (7694,7695,8157,8159)D133561-300
10.	Ball Joint Control Arm	ARYAN		
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	EMSON		
16.	Leveling Valve	KNORR	13-19-B-1696, 13-19-B-1379	12-19-B-1108, 12-19-B-1105
17.	Check Valve	KNORR	03-19 17985	03-19 17553
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON/ GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	645,756,830,868	925,726,325,665
22.	Control Arm Lower	SF	188,470,565,346	468,590,404,842
23.	Phonic Wheel	--	K-09-19, K-09-19	K-10-19, K-10-19

Signature of SSE/Bogie/QC

MCF/ RBL

	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारख़ाना, 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/2019-20/1681

RLY	SWR	COACH NO	201662/C			DATE OF DISPATCH	24-Feb-20
Type	LWS	Shell No.	96103	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-288

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S-ESCORT	2019090142
2	Distribution valve	M/S-ESCORT	1909A142
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	7821/29,7812/29
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-HARE KRISHNA KXH	
13	Gangway bridge mounting (NPPE)	M/s-HARE KRISHNA KXH	
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 (GFRE)	
18	Door way /gang way ceiling	MCF/RBL (GFRE)	
19	Body Side Doors 1,3,4,5,6	M/S-GOLD PLUS CHANDIGARH	
	Body Side Doors 2	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	
25	Bib cock/controlled discharge tap	M/S-EAUSET PVT LTD GURGAON	
26	Lavatory Doors	M/S-JR INDUSTRIES JALANDHAR	
27	Fire Extinguisher	M/s-AMTEX SIRSAPUR DELHI	14448/14354
28	Water purified	NA	
29	Seat & Berth	M/S-OVPL MUMBAI	
30	Luggage Rack	M/S-LUCKY INTERPRISES GURGAON	
31	Light Luggage Rack	NA	
32	Ventury grill	NA	
33	RFID	NA	

SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

MCF/ RBL

	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारख़ाना, 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/2019-20/1681

RLY	SWR	COACH NO	201662/C			DATE OF DISPATCH	24-Feb-20
Type	LWS	Shell No.	96103	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-288

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 caseextend 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 60º)	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

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

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

जोगिन्दर सिंह
Joginder Singh
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारख़ाना, 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

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES					
SHELL/COACH NO	**201662/C**		**TYPE COACH**		**LWS/DDG**
RAILWAY	**SWR**	**ELECT.FIT DATE**	**08-02-2020**	**FUR.NO**	**DDG-288**

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

FOR ELECTRICAL ITEMS

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

01.	Switch board cabinet Make : **MV ELECTRO SYSTEMS** On Board Sr no : **19090138** HT Panel Sr no : **19090146**	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

FOR ELECTRICAL ITEMS

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

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 : **ELECTRO WAVES** Sr no: **W4K5L 191231**	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	**01**
12.	9KVA transformer Make :**VIMAL** Sr no :**VTC 3089 LHB-2743**	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 earthling equipment. Make : **PRIME ELECT.**	EDTS101,REV-C,AM-1	**02 sets**
16.	Wheel Slide Protection System (WSP) Make : **ESCORTS** Sr no : **180641-60147-0150**	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 : **HITECH**	CC 91205	**01**

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ०रे०डि०का० / लालगंज / 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