		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/2019-20/1265				
RLY	SWR	COACH NO	197779/C	DATE OF DISPATCH		17-12-2019
Type	LWS	Shell No.	96114	DISPATCH TO	Sr.DME/MYS	FUR.NO. DDG-236
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- H.F.GLASS VADODARA	
B	Honey comb partition frame.				M/S- H.F.GLASS VADODARA	
C	DGFRP/GFRE paneling.				M/S- H.F.GLASS VADODARA	
D	Lavatory with DGFRP/GFRE paneling.				M/S- H.F.GLASS VADODARA	
E	Additional Hand hold.				M/S- H.F.GLASS VADODARA	
F	Counter top wash basin.				M/S-VIBGYOR	
G	Gel coating & Anti Graffiti measures.				M/s-TAYAL & CO	
H	Air spring in secondary suspension (capacity-140KN).				M/s-A-ONE SHAN & FIRE MAN	
I	Fire Extinguishers					
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	PP END	M/S- KANSAL ENGG	7	
		Part	NPP END	M/S- KANSAL ENGG	7	
		Complete	M/S- KANSAL ENGG	7		
2	Lav. side wall	M/S- R.TECH KXH	LAV.1	LAV.2		
		M/S- R.TECH KXH	LAV.3	LAV.4		
3	Side wall	LH SIDE	M/S-INDIRA TRADE	07/INDIRA		
		RH SIDE	M/S-INDIRA TRADE	07/INDIRA		
4	End wall	PP END	M/s-P.D.STEEL PANCHKULA			
		NPP END	M/s-P.D.STEEL PANCHKULA			
5	Roof	M/S-TI	42			
6	Centre Buffer Coupler	M/S- SANROK ENT.	PP END	14543	NPP END	14563
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	VIBGYOR	M/S-VIBGYOR	90/88	08-18-2019
2	Insulation			Satisfactory		

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रे०डि०का०, रायबरेली (लालमंज)



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/2019-20/1265

RLY	S	W	R	Coach No.	1	9	7	7	7	9	/	C	-	DATE OF DISPATCH	1	7	1	2	2	0	1	9
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DISPATCH	Sr.DME/MYS	Type	L	W	S	Shell No.	9	6	1	1	4	FUR .NO	DDG-236
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192402				192401			
Bogie Type	FIAT				FIAT			
Frame pp.	RBL-LS5-1269				RBL-LS5-1303			
Bolster no.	RBL-LS5-596				RBL-LS5-588			
Axle Nq	19 L- 6263 RWF		19 R - 1653 RWF		19 L - 5507 RWF		19 L - 5184 RWF	
Wheel Dia	917.441	917.461	917.437	917.421	917.524	917.523	917.548	917.532
Wheel Disc No	TZ 07-19 67589-9RL3	TZ 07-19 63960-9RQ8	TZ 08-19 74779-9RP2	TZ 08-19 74778-9RP2	TZ 08-19 73628-9SK4	TZ 08-19 72666-9SK4	TZ 07-19 66837-9RR7	TZ 08-19 74534-9RP2
R.B. Nos.	09-18-23245	09-18-21540	09-18-21966	09-18-21531	09-18-22105	09-18-22749	09-18-22002	09-18-23145
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.19-10 4747	TAYAL & CO. Sr.NO.19-10 4711	TAYAL & CO. Sr.NO.19-10 4734	TAYAL & CO. Sr.NO.19-10 4709

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18145,18154	18296,18288
2.	Primary outer Spring	CMFSK	10-19-1100-078(256,258,266,109)	10-19-1100-078(106,134,92,262)
3.	Primary Inner Spring	CMFSK	10-19-1101-101(295,1,267,280)	10-19-1101-101(259,214,278,18)
4.	Primary Damper	KONI	03-19 (01123,01610,02270,02294)	03-19 (02245,06891,02331,06929)
5.	Secondary Damper	KONI	04-19(00565,00556)	04-19(00518,00544)
6.	Lateral Damper	KONI	04-19 01959	04-19 01999
7.	Brake Cylinder	KBI	B(9742,8189,8691,9643)K-29	B(9740,8784,8750,9741)K-29
8.	Brake Caliper	KBI	B(6617,6755,6658,6599) -29	B(6616,6753,6754,6618) -29
9.	Brake Disc	KBI	24203757 0052-42/19,24203757 0054-42/19 24203756 0060-42/19,24203757 0053-42/19	24203750 0047-41/19,24203750 0048-41/19 24203751 0009-41/19,24203751 0010-41/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	ARYAN/GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	KNORR	16-19 B-7220,16-19 B-7212	16-19 B-7684,16-19 B-7346
17.	Check Valve	KNORR	07-19-20415	07-19-20197
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	070819-2,290819-2,300719-2,290819-2	260819-2,290819-3,290819-2,280819-2
22.	Control Arm Lower	RVE	290819-2,290819-2,160819-2,300819-2	290819-2,280819-2,280819-2,170819-2
23.	Phonic Wheel	FAV	FT/KEP-390	FT/KEP-194

NOTE:-

Signature of SSE/Bogie/QC

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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/2019-20/1265

RLY	SWR	COACH NO	197779/C	DATE OF DISPATCH	17-12-2019
Type	LWS	Shell No.	96114	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-236

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI, FARIDABAD	3808-38/19
2	Distribution valve	M/S- KBI, FARIDABAD	2019J9012
3	Pull box	M/S- KBI, FARIDABAD	
4	FIBA	M/S- KBI, FARIDABAD	10428/29, 10354/29
5	Foot Step	M/S SSPL MUMBAI	
6	Decoupling arrangement	M/S- KOHINOOR KR, MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
9	Lavatory inlay	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
10	UIC Vestibule (PPE)	M/S-KRP MUMBAI	
11	UIC Vestibule (NPPE)	M/S-KRP 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- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16	Lavatory/hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
17	Roof Ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
18	Door way /gang way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
19	Body Side Doors 1,2,5,6	M/S- JBM INDUSTRIES, FARIDABAD	
20	Body Side Doors 3,4	M/S-SUKATA CHANDIGARH	
21	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23	Bio Tank	M/S- JSL LIFESTYLE LTD GURGAON	
24	Pressurized flushing	NA	
25	Over head water tank (4x390L)	M/S- AMIT ENG.BADDI	
26	Bib cock/controlled discharge tap	M/s- JAQUAR PVT.LTD.ALWAR	
27	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
28	Fire Extinguisher	M/s-A-ONE SHAN MUMBAI & FIRE MAN NDLS	342,1029
29	Water purified	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
30	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
31	Luggage Rack	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32	Light Luggage Rack	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
33	RFID	N/A	

Deena
SSE/QC/MCF/RBL

वरिष्ठ अनुसंधान अधिकारी
गुणवत्ता नियंत्रण
रेलवे डिब्बा कारखाना, रायबरेली (लालगंजी)



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1265

RLV	SWR	COACH NO	197779/C	DATE OF DISPATCH	17-12-2019
Type	LWS	Shell No.	96114	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-236

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 qualityrcfrbl@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

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

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

उप मुख्या अभियंता/प्रबन्धक/शेड
By Chief Engineer/Manager/Shop
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

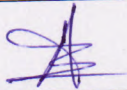
REV NO: 00

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		197779/C		TYPE COACH		LWS/DDG
RAILWAY		SWR	ELECT.FIT DATE	16-12-2019	FUR.NO	DDG-236
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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DOC NO.: MCF/RBL/QEF/8001

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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 : HIND RECTIFIERS On Board Sr no : H.355.19.H.405 HT Panel Sr no : H.355.19.G.353	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: DR AUTO	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: RT VISION	As per RDSO/PE/SPEC/TL- 0091(REV-1) TYPE B-1	28
08.	Provision & Mounting of Lavatory Light Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091 -2016,REV-01, TYPE-D & Drg no. LW 76092.	04

Senior Section Engineer
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Modern Coach Factory Raebareilly
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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 : ISGPL	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
11.	Regulated battery charger Make : WAVES Sr no: W4K5K 19962	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2608	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 : 0119362724	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 : 09/19	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	AWM(ELECT.)/MCF/RBL
वरिष्ठ अनुभाग अभियन्ता	SEE(P)/MCF/RBL

गुणवत्ता निबंधन
आ००२०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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