



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/2019-20/1683

RLY	SWR	COACH NO	201660/C	DATE OF DISPATCH	24-Feb-20
Type	LWS	Shell No.	96230	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-347

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-HF VADODARA
B	Honey comb partition frame.	M/S-HF VADODARA
C	DGFRP/GFRE paneling.	M/S-HF VADODARA
D	Lavatory with DGFRP/GFRE paneling.	M/S-HF VADODARA
E	Additional Hand hold.	M/S-HF VADODARA
F	Counter top wash basin.	M/S-HF VADODARA
G	Gel coating & Anti Graffiti measures.	M/S-VIBGYOR
H	Air spring in secondary suspension (capacity-140KN).	M/s-AVADH RAIL INFRA
I	Fire Extinguishers	M/s-CHIRAG IND
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 1099/1101

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-EC 11
		Part NPP END	M/S-RAIL TECH KXH 11
		Complete	MCFRBL-AIRCON 96230
2	Lav. side wall	M/S-ATHANCY ALD	LAV.1
		M/S-ATHANCY ALD	LAV.2
		M/S-ATHANCY ALD	LAV.3
3	Side wall	LH SIDE	MCFRBL-V4U LKO 71
		RH SIDE	MCFRBL-V4U LKO 71
4	End wall	PP END	M/S-RAIL TECH KXH
		NPP END	M/S-RAIL TECH KXH
5	Roof	MCFRBL-CONT.	52
6	Centre Buffer Coupler	M/S-ESCORTS	PP END 3028 NPP END 3010

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	VIBGYOR	M/S-VIBGYOR	74/90	01-02-2020
2	Insulation			Satisfactory		

SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओ, रायबरेली (सालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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RLY	S	W	R	-	Coach No.	2	0	1	6	6	0	/	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	3	0	FUR.NO	DDG-347
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193557				193558			
Bogie Type	FIAT				FIAT			
Frame no.	VS-147				WIL-63			
Bolster no.	AMIT-291				SCI-509			
Axle No	20 V - 0939 RWF		20 V- 0580 RWF		20 V-0835 RWF		20 V- 0652 RWF	
Wheel Dia	917.398	917.506	917.34	917.333	917.305	917.439	917.324	917.492
Wheel Disc No	TZ 08-19 75853-9RP2	TZ 07-19 65527-9RN1	TZ 08-19 95080-8RN2	TZ 04-19 37716-9OE7	TZ 05-18 18369-8MW7	TZ 05-18 24076-8PR7	TZ 04-19 37494-9OJO	TZ 02-19 28890-9ML9
R.B. Nos.	12-19 36811	12-19 34333	12-19 44392	12-19 34712	12-19 34317	12-19 34738	12-19 44552	12-19 36790
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. 01-20- 7099	AVADH RAIL INFRA LTD. 01-20- 7105	AVADH RAIL INFRA LTD. 01-20-7086	AVADH RAIL INFRA LTD. 01-20-7138

11. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	266810,273242	267036,278489
2.	Primary outer Spring	CMGBD	10-19-F07-873-(721,653,633,714)	10-19-F07-873-(695,880,688,705)
3.	Primary Inner Spring	CMGBD	10-19-F02-842-(93,344,296,897)	10-19-F02-849-(583,892,217,445)
4.	Primary Damper	IAI	12-19 (286741,286261,286371,286831)	12-19 (286479,286425,286485,286352)
5.	Secondary Damper	IAI	08-19(268122,268133)	08-19(268207,268116)
6.	Lateral Damper	IAI	11-19-283531	11-19-283876
7.	Brake Cylinder	KBI	C-(1365,0996,0866,1803)-K29	C-(1826,0864,0843,1890)-K-29
8.	Brake Caliper	KBI	B-(8585,8745,8616,8523)-19	B-(8524,8615,8617,8525)-29
9.	Brake Disc	FAV	01-20-(217,218,266,265)-D133561-300	01-20-(419,422,768,767)-D133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RNG		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1912,1912	1912,1912
17.	Check Valve	ESCORT	1912	1912
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RV	201119-2,161119-2,191119-3,201119-2	201119-3,211119-1,157119-1,181119-3
22.	Control Arm Lower	RV	211119-2,131119-2,221119-2,111119-1	221119-1,251119-1,221119-3,251119-3
23.	Phonic Wheel	KONI	K 08-19	K 08-19

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	4574 52/19
2	Distribution valve	M/S- KBI	2019M9973
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	7391/29,7189/29
5	Foot Step	M/S SSPL FARIDABAD	
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI	
7	Floor board	M/S-OVPL MUMBAI	
8	PVC	M/S-HF GLASS VADODARA	
9	Lavatory inlay	M/S-HF GLASS 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-HF GLASS VADODARA	
15	Emergency Window	M/S-HF GLASS VADODARA	
16	Lavatory/hopper Window	M/S-HF GLASS VADODARA	
17	Roof Ceiling	M/S-HF GLASS VADODARA	
18	Door way /gang way ceiling	M/S-HF GLASS VADODARA	
19	Body Side Doors	M/S-HF GLASS VADODARA	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
22	Bio Tank	M/S-OMAX AUTO	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
24	Over head water tank (4x390L)	M/S-RAIL FAB KXH	
25	Bib cock/controlled discharge tap	M/s-JAQUAR LTD ALWAR	
26	Lavatory Doors	M/S-HF GLASS VADODARA	
27	Fire Extinguisher	M/s-CHIRAG IND	5395/5340
28	Water purified	M/S-HF GLASS VADODARA	
30	Seat & Berth	M/S-HF GLASS VADODARA	
31	Luggage Rack	M/S-HF GLASS VADODARA	
32	Light Luggage Rack	NIL	
33	Ventury grill	M/S-HF GLASS VADODARA	
34	RFID	NIL	

Deema
SSE/QC/MCF/RBL
वरिष्ठ निरीक्षक

गुणवत्ता विभाग
रेडिंक ०, रायबरेली (सालगंज)



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आधुनिक रेल डिब्बा कारखाना, रायबरेली

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				FUR.NO.	DDG-347

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 अभियन्ता/गुणवत्ता
गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (लातगंज)

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

उप-प्रमुख/गुणवत्ता
By Chief Quality Manager
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		201660/C		TYPE COACH		LWS/DDG
RAILWAY		SWR	ELECT.FIT DATE	22-02-2020	FUR.NO	DDG-347
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 : SSK On Board Sr no: 2019/07/178 HT Panel Sr no : 2019/07/222	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

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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 : 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: 12190096	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2927	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 SYSTEM	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 : 0119362761	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 : 11/19	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	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

वरिष्ठ अनुभाग अभियन्ता
गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

स० कार्य प्रबन्धक / विद्युत
आ०रे०डि०का० / रायबरेली
A.W.M./Electrical/MCF/RBL

