



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/2019-20/1699

RLY	SWR	COACH NO	201665/C	DISPATCH TO	Sr.DME/MYS	DATE OF DISPATCH	24-Feb-20
Type	LWS	Shell No.	96223			FUR.NO.	DDG-336

- Railway Board's Order No. : 2019/M(C)/142/2, DATED-12-09-2019
- TARE WEIGHT OF COACH : 40.66 Tonnes
- 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 WORKS VADODRA
B	Honey comb partition frame.	M/S-H.F GLASS WORKS VADODRA
C	DGFRP/GFRE paneling.	M/S-H.F GLASS WORKS VADODRA
D	Lavatory with DGFRP/GFRE paneling.	M/S-H.F GLASS WORKS VADODRA
E	Additional Hand hold.	M/S-H.F GLASS WORKS VADODRA
F	Counter top wash basin.	M/S-H.F GLASS WORKS VADODRA
G	Gel coating & Anti Graffiti measures.	M/S-H.F GLASS WORKS VADODRA
H	Air spring in secondary suspension (capacity-140KN).	M/S-VIBGYOR
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-DEVIKA SAFTEY NDLS
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 1096/1104

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-AMIT ENGG 87
		Part NPP END	M/S-AMIT ENGG 65
		Complete	MCF/RBL/AIRCON 96223
2	Lav. side wall	M/S-DTL PUNE	LAV.1
		M/S-DTL PUNE	LAV.2
3	Side wall	LH SIDE	MCFRBL-CONT.V4U 65/01
		RH SIDE	MCFRBL-CONT.V4U 65/02
4	End wall	PP END	M/S-RAIL TECH KXH
		NPP END	M/S-OMAX REWARI
5	Roof	MCF/CONT	39
6	Centre Buffer Coupler	M/S-ESCORT LTD	PP END 3037 NPP END 3050

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.	09 sec
		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	73/91	27-01-2020
2	Insulation			Satisfactory		

(Signature)

SSE/QC/MCF/RBL

वरिष्ठ निरीक्षक
गुणवत्ता विभाग
२० डि० का०, 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/2019-20/1699

RLY	S	W	R	-	Coach No.	2	0	1	6	6	5	/	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	3	FUR .NO	DDG-336
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193390				193389			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-430				MCF/RBL/LS-5-0462			
Bolster no.	AMIT-41				AMIT-38			
Axle No	20 T - 6400 RWF		20 T- 8253 RWF		19 T-6822 RWF		20 T- 8809 RWF	
Wheel Dia	917.52	917.563	917.491	917.494	917.56	917.23	917.499	917.534
Wheel Disc No	TZ 05-19 46037-9PE8	TZ 05-19 49243-9PF2	TZ 07-19 68367-9RL3	TZ 04-19 60027-9RQ6	TZ 05-19 74894-9SK9	TZ 03-19 26631-9MG3	TZ 05-19 47834-9PF5	TZ 04-19 39364-90F8
R.B. Nos.	12-19 34861	11-19 42946	12-19 45651	12-19 39883	12-19 46329	12-19 35084	11-19 43762	11-19 44204
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.	AWADH RAIL INFRA LTD. SR.NO-01-20 6896	AWADH RAIL INFRA LTD. SR.NO-01-20 6886	AWADH RAIL INFRA LTD. ARL 12-19 6628	AWADH RAIL INFRA LTD. ARL 12-19 6618

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	273410,273347	273209,273459
2.	Primary outer Spring	CMFSK/CMGBD	10-19-1100-115-(1689,1914,1997,1744)	10-19-F07-873-(494,833,747,799)
3.	Primary Inner Spring	CMFSK/CMGBD	11-19-1101-101-(1561,1585,1627,1588)	10-19-F06-842-(329,294,282,204)
4.	Primary Damper	IAI	08-19 (267971,267901,267701,267607)	08-19 (267769,267925,267726,267625)
5.	Secondary Damper	IAI	08-19(268001,268018)	08-19(268280,268226)
6.	Lateral Damper	IAI	08-19 - 274661	09-19 - 274783
7.	Brake Cylinder	KBI	(C2222,C1045,C1028,C2238)-K29	(C2221,C1042,C1165,C2259)K-29
8.	Brake Caliper	KBI	(B8805,B8795,B8808,B8715)-19	(B8806,B8795,B8947,B8813)-29
9.	Brake Disc	FAV	D133561-300-01-20-(1060,1059,158,155)	D133561-300-01-20-(1030,1028,825,827)
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	ESCORT	1908,1908	1912,1912
17.	Check Valve	ESCORT	1908	1912
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SG/IRPL	1810-G89, 1911-G48, 1915-G89, 1906-G02	1925-L10, 1912-L10, 1911-G42, 1911-G77
22.	Control Arm Lower	SG/IRPL	1918-G30, 1926-G95, 1918-G70, 1919-G79	1911-G79, 1919-X78, 1919-G95, 1919-G79
23.	Phonic Wheel	KBI	K-08-19	K-09-19

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	
2	Distribution valve	M/S- KBI	4568-52/19
3	Pull box	M/S- KBI	2019M9958
4	FIBA	M/S- KBI	
5	Foot Step	M/S-SSPL FARIDABAD	7178,7397
6	Decoupling arrangement	M/S-KOHINOOR MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/S-H.F GLASS WORKS VADODRA	
9	Lavatory inlay	M/S-H.F GLASS WORKS VADODRA	
10	UIC Vestibule (PPE)	M/S-KIRAN RUBBER PRODUCT PUNE	
11	UIC Vestibule (NPPE)	M/S-KIRAN RUBBER PRODUCT PUNE	
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-H.F GLASS WORKS VADODRA	
15	Emergency Window	M/S-H.F GLASS WORKS VADODRA	
16	Lavatory/hopper Window	M/S-H.F GLASS WORKS VADODRA	
17	Roof Ceiling	M/S-H.F GLASS WORKS VADODRA	
18	Door way /gang way ceiling	M/S-H.F GLASS WORKS VADODRA	
19	Body Side Doors	M/S-H.F GLASS WORKS VADODRA	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
22	Bio Tank	M/S-FLASH FORGE (P) LTD	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
24	Over head water tank (4x390L)	M/S-AMIT ENGG MOHALI,RAIL FAB KAPURTHALA	
25	Bib cock/controlled discharge tap	M/s-JAQUAR PVT LTD ALWAR	
26	Lavatory Doors	M/S-H.F GLASS WORKS VADODRA	
27	Fire Extinguisher	M/s-DEVIKA SAFTEY NDLS	
28	Water purified	M/S-H.F GLASS WORKS VADODRA	5383/5394
29	Seat & Berth	M/S-H.F GLASS WORKS VADODRA	
30	Luggage Rack	M/S-H.F GLASS WORKS VADODRA	
31	Light Luggage Rack	N/A	
32	Ventury grill	M/S-H.F GLASS WORKS VADODRA	
33	RFID	N/A	

Deen Dayalu
SSE/QC/MCF/RBL
वर ०३/०४/२०१९
गुणवत्ता विभाग
रे ० डि० का०, रायबरेली (नवलगंज)





Modern Coach Factory Raebareli
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						FUR.NO.	DDG-336

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 qualityrcfbl@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

वरिष्ठ यांत्रिक अभियंता
गुणवत्ता विभाग
रेडि०का०, रायबरेली (लालगंज)

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

जोगिन्दर सिंह
उप मुख्य गुणवत्ता प्रबन्धक
Dy. 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

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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		201665/C		TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	23-02-2020	FUR.NO	DDG-336	
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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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 : 2019/07/180 HT Panel Sr no : 2019/07/229	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: KAVERI	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: RT VISION	As per RDSO/PE/SPEC/TL/0091 -2016,REV-01, TYPE-D & Drg no. LW 76092.	04

Senior Section Engineer
Quality control / Electrical
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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 : ELECTRIC EQUIPMENT COMPANY Sr no: 12190060	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2867	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 : NANDRATAN	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119362699	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 : M/S MEENAKSHI	CC 91205	01

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

आपरेडिंका/लालगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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