



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/2019-20/1662

RLY	SWR	COACH NO	201637/C			DATE OF DISPATCH	20-Feb-20
Type	LWS	Shell No.	96209	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-334

1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-03-06-2019
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 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-TAYAL & CO
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)	M/s-SAFETY PLUS, DEVIKA SAFETY NDL
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 1101/1100

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-OMAX AUTO LTD
		Part NPP END	M/S-OMAX AUTO LTD
		Complete	M/S-OMAX AUTO LTD
2	Lav. side wall	M/S-DTL PUNE	LAV.1
		M/S-DTL PUNE	LAV.2
3	Side wall	LH SIDE	MCFRBL-CONT.V4U
		RH SIDE	MCFRBL-CONT.V4U
4	End wall	PP END	M/S-OMAX REWARI
		NPP END	M/S-OMAX REWARI
5	Roof	MCF/CONT	
6	Centre Buffer Coupler	M/S-ESCORT	PP END 2793 NPP END 2865

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	74/87	24-01-2020
2	Insulation					

Satisfactory

SSE/QC/MCF/RBL

गुणवत्ता विभाग
70डि0330, रायबरेली (सहायक)



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/2019-20/1662

RLY	S	W	R	-	Coach No.	2	0	1	6	3	7	/	C	-	DATE OF DISPATCH	2	0	0	2	2	0	2	0
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DISPATCH Sr.DME/MYS

Type

L

W

S

-

Shell No.

9

6

2

0

9

FUR .NO

DDG-334

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192855				192856			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-214				ECBT-221			
Bolster no.	SECPL-646				SECPL-630			
Axle No	19 P - 1685 RWF		19 S- 1712 RWF		19 R-3528 RWF		19 R- 2174 RWF	
Wheel Dia	917.338	917.335	917.387	917.519	917.373	917.355	917.367	917.442
Wheel Disc No	TZ 07-19 70803-9RR9	TZ 06-19 58068-9QI3	TZ 07-19 64866-9RP8	TZ 07-19 64860-9RP7	TZ 07-19 64368-9RP4	TZ 07-19 65599-9RN1	TZ 07-19 64682-9RQ1	TZ 07-19 64369-9RP4
R.B. Nos.	09-19 31199	09-19 30917	09-19 30961	09-19 31012	08-19 30198	08-19 30871	08-19 30579	08-19 40700
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- 5020	TAYAL & Co. SR.NO- 4996	TAYAL & Co. SR.NO- 19-10 5062	TAYAL & Co. SR.NO- 19-10 4983

11. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	280297,279764	279799,279772
2.	Primary outer Spring	CMAFJ	07-19-1100-(367,370,366,371)	07-19-1100-(290,164,156,153)
3.	Primary Inner Spring	CMGBD	10-19-F06-842-(102,246,384,346)	10-19-F06-842-(383,24,213,425)
4.	Primary Damper	IAI	11-19 (280957,281654)	11-19 (282187,280993,281207,282772)
5.	Secondary Damper	GBSVD	09-19(276909,276969)	09-19(02072,,02068)
6.	Lateral Damper	KONI	04-19-1070	04-19-1082
7.	Brake Cylinder	KBI	(C1191,C0274,C0213,C1202)-K29	(C1195,C0065,C0061,C1180)K-29
8.	Brake Caliper	KBI	(B7885,B8117,B8118,B7886)-19	(B7483,B7911,B7212,B2884)-29
9.	Brake Disc	FAV	12-19-(8196,8195,6880,6881)-D133561-300-1	12-19-(2125,2126,2127,2128)-D133561-300-1
10.	Ball joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	(SF)SARITA		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	SARITA/ARYAN		
16.	Leveling Valve	KNORR	LV No.-(1136,1114)	B-1200,B-1620
17.	Check Valve	KNORR	EVHO-19539	05-19-17079
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF	889,987,424,288	110,215,45,27
22.	Control Arm Lower	SF	807,94,118,96	818,585,67,79
23.	Phonic Wheel	FT+KEP	442,442	442,442

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	4370-49/19
3	Pull box	M/S- KBI	2019M9729
4	FIBA	M/S- KBI	
5	Foot Step	M/S-SSPL FARIDABAD	7513/29,7502/29
6	Decoupling arrangement	M/S-KOHINOOR MUMBAI	
7	Floor board	M/S-OVPL 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-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-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- JSL LIFE STYLE LTD.	
23	Pressurized flushing(ele.pneu.)	M/S-SPAC PVT LTD	
24	Over head water tank (4x390L)	M/S-AMIT ENG. MOHALI	
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,SAFETY PLUS MUMBAI	5411/6075
28	Water purified	M/S-H.F GLASS WORKS VADODRA	
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	

Deena
SSE/QC/MCF/RBL
वरिष्ठ अनुसंधान विभाग
गुणवत्ता विभाग
70डिब्बा, रायबरेली (लालगंज)





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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. COM/MCF/RBL

वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता
गुणवत्ता विभाग
#0डि0का0, रायबरेली (लालगंज)

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

जुगिंदर सिंह
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
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DOC NO.: MCF/RBL/QEF/8001

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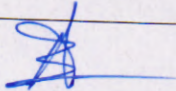
FOR ELECTRICAL ITEMS

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

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ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC GS COACHES						
SHELL/COACH NO		201637/C		TYPE COACH		LWS/DDG
RAILWAY	SWR	ELECT.FIT DATE	18-02-2020	FUR.NO	DDG-334	
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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01.	Switch board cabinet Make : MV ELECTRO SYSTEMS On Board Sr no : 19090148 HT Panel Sr no : SSK-2019/07/168	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: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D & Drg no. LW 76092.	04

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09.	Battery fuse box +ve Make : RICHMOND	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: W4K5A 201353	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2718	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 earthing equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119392877	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 : 01/20	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 आपरेटिंगका/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