



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/2020-21/490

RLY	WR	COACH NO	204827/C	DATE OF DISPATCH	18-Sep-20
Type	LWS	Shell No.	20F064	DISPATCH TO	SSE/C&W/INDB/WD
				FUR.NO.	DDG-542

1. Railway Board's Order No. : 2020/M(C)/142/2, DATED-11.06.2020
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 GURGAON
B	Honey comb partition frame.	M/S-MILTON AHMEDABAD
C	DGFRP/GFRE paneling.	MCFRBL
D	Lavatory with DGFRP/GFRE paneling.	MCFRBL
E	Additional Hand hold.	MCFRBL
F	Counter top wash basin.	MCFRBL
G	Gel coating & Anti Graffiti measures.	M/S-VIBGYOR
H	Air spring in secondary suspension (capacity-140KN).	M/S-RESISTOFLEX LTD
I	Fire Extinguishers	M/S-AMTEX 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 1097/1104

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front Part	PP END M/S-OMAX AUTO 63
		NPP END	M/S-OMAX AUTO 63
	Complete	M/S-OMAX AUTO	63
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1
		M/S-MIDAS GUJRAT	LAV.3
3	Side wall	LH SIDE	MCFRBL-CONT.V4U 5
		RH SIDE	MCFRBL-CONT.V4U 5
4	End wall	PP END	M/S-P.D.STEEL
		NPP END	M/S-P.D.STEEL
5	Roof	MCFRBL-CONT.	31
6	Centre Buffer Coupler	M/S-FRONTIER	PP END 42P1 NPP END 121P1

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.	07 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 (S&A)	77/90	21-Aug-20
2	Insulation			Satisfactory		

SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओका, 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/2020-21/490

RLY	W	R	-	-	Coach No.	2	0	4	8	2	7	/	C	-	DATE OF DISPATCH	1	8	0	9	2	0	2	0
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DISPATCH	SSE/C&W/INDB/WD	Type	L	W	S	Shell No.	2	0	F	0	6	4	FUR .NO	DDG-542
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200811				200812			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT - 751				ECBT-747			
Bolster no.	SHIVALIK - 249				Shivlika Fastners pvt.ltd-255			
Axle No	20 Y - 8350 RWF		20 Y- 8514 RWF		20 V- 5803 RWF		20 y - 7872 RWF	
Wheel Dia	917.62	917.51	917.60	917.52	917.59	917.51	917.62	917.56
Wheel Disc No	TZ 11-19 83591-9VC9	TZ 07-19 61870-9RP7	TZ 08-19 74915-9SK9	TZ 05-19 50061-9PK1	TZ 08-19 74912-9rl1	TZ 08-19 74913-9sk9	TZ 12-19 91647-9xg3	TZ 12-19 96418-9VF2
R.B. Nos.	01-20 403867	12-19 39333	12-19 39032	12-19 39822	12-19 38293	12-19 39839	12-19 39108	12-19 39246
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.	RESISTRO FLEX DYNAMICS PVT.LTD 03-20 14055	RESISTRO FLEX DYNAMICS PVT.LTD 03-20 14046	RESISTRO FLEX DYNAMICS PVT.LTD 03-20 13994	RESISTRO FLEX DYNAMICS PVT.LTD 03-20 14183

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294051,293927	293801,293803
2.	Primary outer Spring	CMAFJ	05-20 1100-(58,177,181,57)	05-20 1100-(237,186,253,236)
3.	Primary Inner Spring	CMAFJ	05-20 1101--(217,215,252,214)	05-20 1101--(216,250,213,218)
4.	Primary Damper	IAI	01-20 (299161,299926,299588,299574)	01-20 (300384,300334,299616,299969)
5.	Secondary Damper	IAI	01-20 (302094,302688)	01-20 (302110,302111)
6.	Lateral Damper	GB EQUIPMENT	05-20 01793	05-20 01795
7.	Brake Cylinder	KNORR	C-(9215,7923,7924,9377)K29	C-(9374,7942,7919,9375)K29
8.	Brake Caliper	KNORR	C-(4910,5119,5121,5038)-29	C-(5036,5147,5120,5037)-29
9.	Brake Disc	KBI	24229054 0079-28/20,24229054 0080-28/20 24229054 0047-28/20,24229054 0048-28/20	24229056 0001-28/20,24229056 0003-28/20 24229056 0004-28/20,24229056 0022-28/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	06-20,06-20	06-20,06-20
17.	Check Valve	ESCORT	06-20	06-20
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA+GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	KUMAR	D2555,IAI(300334,299616),KUMAR-D2591	SF-588,KUMAR-N2559,N3849,N3332
22.	Control Arm Lower	KUMAR	D377,D2249,D3465,D2210	SF-167,KUMAR-D2508,D1553,N3701
23.	Phonic Wheel	KBI	K-05-20	K-07-20

Signature of SSE/Bogie/QC





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				FUR.NO.	DDG-542

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- KBI	5900 28/20
2	Distribution valve	M/S- KBI	2020G11778
3	Pull box	M/S- KBI	
4	FIBA	M/S- KBI	8983/29,8982/29
5	Foot Step	M/S-FABRICON KOLKATA	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-GREEN PLY LKO	
8	PVC	M/S-PREMIER POLY FILM	
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-MMW KXH	
13	Gangway bridge mounting (NPPE)	M/s-MMW KXH	
14	Body Side Window	M/S-SHATABDI SAFTEY GLASS VADODARA	
15	Emergency Window	M/S-SHATABDI SAFTEY GLASS VADODARA	
16	Lavatory/hopper Window	M/S-BALAJI LTD DELHI	
17	Roof Ceiling	M/S-MILTON AHMEDABAD	
18	Door way /gang way ceiling	M/S-MILTON AHMEDABAD	
19	Body Side Doors 2,3,4,5	M/S-SVARN INFRATEL	
	Body Side Doors 1,	M/S-GOLD PLUS CDG	
	Body Side Doors 6	M/S-JVR LDH	
20	Vestibule Door(PPE)	M/S-KALSI LDH	
21	Vestibule Door(NPPE)	M/S-KALSI LDH	
22	Bio Tank	M/S-JSL LIFE STYLE	
23	Pressurized flushing(ele.pneu.)	M/S-SPAC	
24	Over head water tank (4x390L)	M/S-AMIT ENGG MOHALI	
25	Bib cock/controlled discharge tap	M/s-AGMECO	
26	Lavatory Doors	M/S-MSL CDG	
27	Fire Extinguisher	M/S-AMTEX DELHI	17348/17704
28	Water purified (02 nos)	NIL	
29	Seat & Berth	M/S-OVPL MUMBAI	
30	Luggage Rack	M/S-LUCKY GURGAON	
31	Light Luggage Rack	NIL	
32	Ventury grill	NIL	
33	RFID	NIL	

Deen Dayalu
19/11/2020
SSE/QC/MCF/RBL
वारेडि०का०, रायबरेली (बालगंज)
गुणवत्ता विभाग



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				FUR.NO.	DDG-542

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:

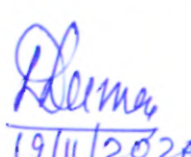
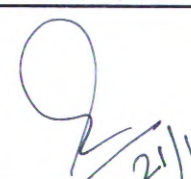

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months 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.

 19/11/2020 SSE/QC/MCF/RBL	 21/11 SME/AME/QC/MCF/RBL	 Sudhir Kumar Dy. CQM/MCF/RBL
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गुणवत्ता विभाग
70डि0का0, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality-I
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareilly



Modern Coach Factory Raebareli
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PAGE 1 OF 4

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC GS COACH
(ANTYODAYA & DEENDAYALU).

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC GS COACH.

TYPE COACH	LWS/DDG	SHELL/COACH NO	204827/C
RAILWAY	WR	ELECT. FIT DATE	16-09-2020
		MCF EUR. NO.	DDG -542
Sr. no.	Description of tests		Remarks
1.	WORKING OF COMPARTMENT LIGHTS.		OK
2.	WORKING OF MOBILE CHARGING SOCKETS		OK
3.	WORKING OF ACCIDENTAL EMERGENCY LIGHTS & PACIL		OK
4.	RAILWAY CARRIAGE FAN		OK
5.	WHEEL SLIDE PROTECTION SYSTEM (WSP)		OK
6.	WORKING OF 9 KVA TRANSFORMER		OK
7.	WORKING OF REGULATED BATTERY CHARGER/EMERGENCY BATTERY CHARGER.		OK
8.	SAFETY :		--
8.1.	FUSES AND THEIR RATING		OK
8.2.	CONTROL CIRCUIT		OK
8.3.	POWER CIRCUIT		OK

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



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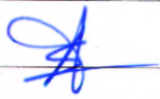
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PAGE 2 OF 4

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: NEC On Board: 2020065564 HT Panel: 2020076456	EDTS 333, Rev'01'.Am-1	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: VIMAL Sr no.: VTC 3089 LHB - 3900	RDSO/PE/SPEC/TL 0158, 2010, Rev'0',Ty I.	01
03.	Mounting of 09KVA TFR.	As per drg no 1.10113.0.76.300.001,Alt -B.	OK
04.	Provision of wire rope assembly for Transformer.	As per EDML-152, Rev.-Nil.	OK
06.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: WAVES Sr. no.: W4K5B201494	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make: RSI	EDTS-328 REV-C,AM-4,Type- II,COR-2	01 SET
08.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	01 SET
09.	Battery fuse box +ve Make: RICHMOND	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make: RICHMOND	As per LW 71002,Alt-I	01
11.	Provision of Battery boxes/ Cradles. Make: HITECH	As per Drg. No. 110113.0.76.700.005 W/O item 5,22,23,26 & 27,Alt-C or Latest.	01
12.	Provision of batteries Type: 110 V, 120 AH VRLA SMF Battery Set. Make: AMARA RAJA Lug Date: 06/20	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01


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PAGE 3 OF 4

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Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm Sweep, 110V AC with crash worthy features. Make: ELECTROWAVES	As per Drg. No. ICF/SK-7-6-158,alt-g. RDSO/PE/SPEC/TL/0021-2005 (Rev-3) with RCF annex-1, am-1.	30
14.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make: FIEM	As per RDSO/PE/SPEC/TL/0091-2016, Rev-1 with RCF Annex-1 .Type- B1. Drg. No. CC76453.	28
15.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	04
16.	Fitment of LED Light fittings for PACIL. Make: KAVERI	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
17.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
18.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
19.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK
20.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10

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21.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
22.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3 ph, 50 Hz). Make. 1.(NPP): MLI 2.(PP): MLI	As per Spec. no. RDSO/PE/SPEC/AC/0177(Rev.-0)-2013 with annexure-A, B.	1 SET
23.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
24.	Provision of Wheel Set Earthing equipment. Make. NPP: PRIME PP: PRIME	EDTS101,REV-C,AM-1	1 SET
25.	Provision of Anti Skid Disk Brake System.(WSP) Make : KNORR Sr no : 0119312552	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

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

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