



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/2019-20/1380

RLY	SWR	COACH NO	199536/C	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96161	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-272

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- HF GLASS WORKS VADODARA
B	Honey comb partition frame.	M/S- HF GLASS WORKS VADODARA
C	DGFRP/GFRE paneling.	M/S- HF GLASS WORKS VADODARA
D	Lavatory with DGFRP/GFRE paneling.	M/S- HF GLASS WORKS VADODARA
E	Additional Hand hold.	M/S- HF GLASS WORKS VADODARA
F	Counter top wash basin.	M/S- HF GLASS WORKS 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-FIRE MAN DEVIKA
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 1100/1105

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame Front Part Complete	PP END M/S-KANSAL ENGG.	20
		NPP END M/S-KANSAL ENGG.	20
		M/S-KANSAL ENGG.	20
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1
		M/S-ATHANCY RBL	LAV.2
3	Side wall	LH SIDE M/S-INDIRA TRADE CHENNAI	LAV.3
		RH SIDE M/S-INDIRA TRADE CHENNAI	LAV.4
4	End wall	PP END M/s-DTL PUNE	23
		NPP END M/s-DTL PUNE	23
5	Roof	M/s-TI	76
6	Centre Buffer Coupler	M/S- ESCORTS	PP END 2262 NPP END 2285

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	74/87	02-12-2019
2	Insulation			Satisfactory		

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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/2019-20/1380

RLY	S	W	R	Coach No.	1	9	9	5	3	6	/	C	-	DATE OF DISPATCH	3	1	1	2	2	0	1	9
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DISPATCH	Sr.DME/MYS	Type	L	W	S	-	Shell No.	9	6	1	6	1	FUR.NO	DDG-272
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192592				192591			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-236				ECBT-240			
Bolster no.	AMIT-70				AMIT-68			
Axle No	19 P- 2066 RWF		19 N - 4423 RWF		19 N - 8926 RWF		19 N - 4734 RWF	
Wheel Dia	917.415	917.343	917.446	917.331	917.417	917.391	917.385	917.352
Wheel Disc No	TZ 61113-9QL1	TZ 75623-9SK9	TZ 75621-9SK2	TZ 55551-9QK1	TZ 06-19 60891-9QJ9	TZ 07-19 65517-9RS2	TZ 06-19 56054-9QI2	TZ 06-19 54285-9QI1
R.B. Nos.	11-19 41380	11-19 41189	11-19 41341	11-19 41342	11-19 41436	11-19 42489	11-19 40825	11-19 41264
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 11-19 5748	AVADH RAIL INFRA.LTD 11-19 5787	AVADH RAIL INFRA.LTD 11-19 5761	AVADH RAIL INFRA.LTD 11-19 5785

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18054,18053	18051,18050
2.	Primary outer Spring	CMFSK	10-19-1100 114(1700,1242,1634,1117)	10-19-1100 114(1341,1345,1400,1614)
3.	Primary Inner Spring	CMFSK	10-19 1101-101-(1160,1119,1179,1114)	10-19 1101-101-(1193,1269,1130,1209)
4.	Primary Damper	IAI	11-19 (281861,281849,281534,281401)	11-19 (281014,281354,281448,280951)
5.	Secondary Damper	IAI	10-19 (276856,277015)	10-19 (276994,277030)
6.	Lateral Damper	KONIC	04-19 01548	04-19 00758
7.	Brake Cylinder	ESCORT	49619,50258,50260,49617	48343,48018,48021,48454
B19-	Brake Caliper	ESCORT	28942,29177,29179,28940	27895,27761,27764,27896
9.	Brake Disc	KBI	24206706 0011-46/19,24206710 0041-47/19 24206706 0009-46/19,24206718 0074-47/19	24206706 0053-46/19,24206706 0049-46/19 24206706 0020-47/19,242067014 0022-47/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT/ARYAN		
16.	Leveling Valve	ESCORT	1906,1906	1906,1906
17.	Check Valve	ESCORT	1906	1906
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA / ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	KUMAR	11,13,11,10	SN-976,835,814,676
22.	Control Arm Lower	KUMAR/SF/RV	81,09,18,81	SF-(450,10),RVE-(180919-2,180919-1)
23.	Phonic Wheel	FAIVELY/ ESCORT	19N-283,288	ESCORT

Signature of SSE/Bogie/QC

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Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1380


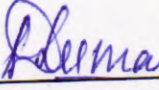
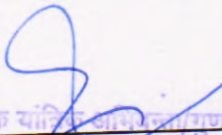
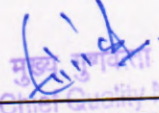
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Type	LWS	Shell No.	96161	DISPATCH TO	Sr.DME/MYS	FUR.NO.	DDG-272

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S- FAIVELY	L19104B
2	Distribution valve	M/S- FAIVELY	19105559B
3	Pull box	M/S- FAIVELY	
4	FIBA	M/S- ESCORTS	18110277,18120352
5	Foot Step	M/S SSPL MUMBAI	
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/S- HF GLASS WORKS VADODARA	
9	Lavatory inlay	M/S- HF GLASS WORKS VADODARA	
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- HF GLASS WORKS VADODARA	
15	Emergency Window	M/S- HF GLASS WORKS VADODARA	
16	Lavatory/hopper Window	M/S- HF GLASS WORKS VADODARA	
17	Roof Ceiling	M/S- HF GLASS WORKS VADODARA	
18	Door way /gang way ceiling	M/S- HF GLASS WORKS VADODARA	
19	Body Side Doors	M/S- GOLD PLUS CDG	
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD	
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD	
22	Bio Tank 1,3	M/S-CEMCON	
	Bio Tank 2,4	M/S-UNIFAB	
23	Pressurized flushing(ele.pneu.)	M/S-IMI	
24	Over head water tank (4x390L)	M/S- AMIT MOHALI-02 ,AMIT BADDI-01, FABRICATORS-01	
25	Bib cock/controlled discharge tap	M/s- JAQUAR PVT LTD ALWAR	
26	Lavatory Doors	M/S- HF GLASS WORKS VADODARA	
27	Fire Extinguisher	M/s- FIRE MAN DEVIKA	4913/4897
28	Water purified	M/S- HF GLASS WORKS VADODARA	
29	Seat & Berth	M/S- HF GLASS WORKS VADODARA	
30	Luggage Rack	M/S- HF GLASS WORKS VADODARA	
31	Light Luggage Rack	M/S- HF GLASS WORKS VADODARA	
32	RFID	N/A	

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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	
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Type	LWS	Shell No.	96161	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-272
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	

वरि०अनु० अभियंता
 गुणवत्ता विभाग
 रे०डि०का०, रायबरेली (लालगंज)

Modern Coach Factory, Raebareli

उप मुख्य गुणवत्ता प्रबन्धक/शेल्
 Dy. Chief Quality Manager/Shell
 आधुनिक रेल डिब्बा कारखाना, रायबरेली
 Modern Coach Factory, Raebareli



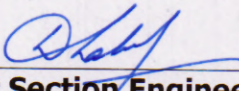
	Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
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FOR ELECTRICAL ITEMS

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	199536/C	TYPE COACH		LWS/DDG	
RAILWAY	SWR	ELECT.FIT DATE	30-12-2019	FUR.NO	DDG-272
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 : SIDWAL On Board Sr no : 19M 017 HT Panel Sr no : 19M 028	EDTS 333, Rev`01`Am-1	01
02	Emergency light system for EOG type coaches (AEL), Make : A PAUL	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

(Signature)

Senior Section Engineer
Quality control / Electrical
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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 : SIGNOTRON Sr no: 12190823	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2695	As per RDSO/PE/SPEC/TL 0158,2010, Rev` 0', TypeI.	01
13.	ZS coupling 400A/750V/03Ph/50hz. Make : S.INTERNATIONALS	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 : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
16.	Wheel Slide Protection System (WSP) Make : FAIVELEY Sr no : I 0664	M/s : FAIVELEY	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 : 12/19	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

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गुणवत्ता नियंत्रण

आ०रे०डि०का० / 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



MCI/RBL