



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/2019-20/1385

RLY	SWR	COACH NO	199539/C	DATE OF DISPATCH	31-12-2019
Type	LWS	Shell No.	96158	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	DDG-276

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- KINECO LTD GOA
B	Honey comb partition frame.	M/S- KINECO LTD GOA
C	DGFRP/GFRE paneling.	M/S- KINECO LTD GOA
D	Lavatory with DGFRP/GFRE paneling.	M/S- KINECO LTD GOA
E	Additional Hand hold.	M/S- KINECO LTD GOA
F	Counter top wash basin.	M/S- KINECO LTD GOA
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 FITE
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 1105/1096

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-CHENNAI RADHA 24
		Part NPP END	M/S-CHENNAI RADHA 24
		Complete	M/S-CHENNAI RADHA 24
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1 LAV.2
		M/S-ATHANCY RBL	LAV.3 LAV.4
3	Side wall	LH SIDE	MCFRBL CONT.V4U 21
		RH SIDE	MCFRBL CONT.V4U 21
4	End wall	PP END	M/s-SIPL PALWAL
		NPP END	M/s-SIPL PALWAL
5	Roof	M/s-TI	80
6	Centre Buffer Coupler	M/S- ESCORTS	PP END 2322 NPP END 2303

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.	08sec
		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	77/87	04-12-2019
2	Insulation			Satisfactory		

R. Sharma
SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (कालगंज)



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/2019-20/1385

RLY	S	W	R	Coach No.	1	9	9	5	3	9	/	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	5	8	FUR.NO	DDG-276
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192487				192488			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-183				ECBT-251			
Bolster no.	AMIT-07				AMIT-13			
Axle No	19 L - 5562 RWF		19 S - 9291 RWF		19 P - 2836 RWF		19 S - 1818 RWF	
Wheel Dia	917.6	917.59	917.557	917.574	917.566	917.516	917.586	917.574
Wheel Disc No	TZ 08-19 75170-9RR3	TZ 07-19 67710-9RQ3	TZ 07-19 68759-9RS5	TZ 07-19 63294-9RM7	TZ 08-19 73504-9RP2	TZ 07-19 70123-9RR7	TZ 07-19 65805-9RQ0	TZ 07-19 67926-9RM6
R.B. Nos.	09-19 37849	08-19 28780	09-19 37032	08-19 28798	08-19 29868	08-19 28475	10-19 39160	08-19 30144
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 INDRA LTD 09-19 5166	AVADH RAIL INDRA LTD 09-19 5161	AVADH RAIL INDRA LTD 11-19 -5844	AVADH RAIL INDRA LTD 11-19 5880

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	kbi	15837,15847	16531,15838
2.	Primary outer Spring	CMFSK	10-19-1100 114(1117,1515,1520,1514)	10-19-1100-115(1276,1274,1258,1351)
3.	Primary Inner Spring	CMFSK	10-18 1101-101(734,804,808,744)	07-19 F06-N51-06A(1304,1702,3126,1421)
4.	Primary Damper	KONIC	03-19 (01721,06777,06741,06532)	03-19 (01983,01894,,02875,02212)
5.	Secondary Damper	IAI	10-19 (277122,276945)	10-19 (276848,276991)
6.	Lateral Damper	KONIC	04-19 01619	04-19 02311
7.	Brake Cylinder	ESCORT	45710,45485,45487,45712	47765,47854,45432,45681
B19-	Brake Caliper	ESCORT	25530,25424,25532,225426	27360,27437,25371,25501
9.	Brake Disc	KBI	24206714 0028-47/19,24206714 00038-47/19 24203703 0030-46/19,24203703 0029-46/19	24206703 0060-46/19,24206703 0062-46/19 24206706 0058-46/19,24206706 0064-46/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN/GMT		
12.	Traction Centre make	(SF)SARITA		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	ARYAN/GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1903,1906	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	RVE	RVE,160919-3,160919-2,200919-1	210919-2,210919-2,240919-2,210919-2
22.	Control Arm Lower	RVE	200919-3, RVE,160919-2,210919-2	170919-2,RVE,220919-2,240919-2
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC

वरिष्ठ अनुसंधान विभाग
महानगर विकास
रेलवे विभाग, रायबरेली (जायगंज)

		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/2019-20/1385					
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Type	LWS	Shell No.	96158	DISPATCH TO	Sr.DME/MYS
		FUR.NO.	DDG-276		
12. TRACEABILITY OF FURNISHING ITEMS:					
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)		
1	Air Brake Module	M/S- KBI	4185 44/19		
2	Distribution valve	M/S- KBI	2019K9387		
3	Pull box	M/S- FAIVELY			
4	FIBA	M/S- ESCORTS	18110294,18110289		
5	Foot Step	M/S SSPL MUMBAI			
6	Decoupling arrangement	M/S- KOHINOOR MUMBAI			
7	Floor board	M/S-OVPL MUMBAI			
8	PVC	M/S- KINECO LTD GOA			
9	Lavatory inlay	M/S- KINECO LTD GOA			
10	UIC Vestibule (PPE)	M/S-ELASTOMER MUMBAI			
11	UIC Vestibule (NPPE)	M/S-ELASTOMER 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- KINECO LTD GOA			
15	Emergency Window	M/S- KINECO LTD GOA			
16	Lavatory/hopper Window	M/S- KINECO LTD GOA			
17	Roof Ceiling	M/S- KINECO LTD GOA			
18	Door way /gang way ceiling	M/S- KINECO LTD GOA			
19	Body Side Doors 1,2,3,4,5	M/S- GOLD PLUS CDG			
	Body Side Doors 6	M/S- JVR LDH			
20	Vestibule Door(PPE)	M/S-JBM FARIDABAD			
21	Vestibule Door(NPPE)	M/S-JBM FARIDABAD			
22	Bio Tank	M/S-JSL LIFESTYLE GURGAON			
23	Pressurized flushing(ele.pneu.)	M/S-IMI			
24	Over head water tank (4x390L)	M/S- ,AMIT BADDI-02,FABRICATORS-02			
25	Bib cock/controlled discharge tap	M/s- JAQUAR PVT LTD ALWAR			
26	Lavatory Doors	M/S- KINECO LTD GOA			
27	Fire Extinguisher	M/s-FIRE FITE	121504,119104		
28	Water purified	M/S- KINECO LTD GOA(WM/UF)	388,389		
29	Seat & Berth	M/S- KINECO LTD GOA			
30	Luggage Rack	M/S- KINECO LTD GOA			
31	Light Luggage Rack	M/S- KINECO LTD GOA			
32	RFID	N/A			
 SSE/QC/MCF/RBL					

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

		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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RLY	SWR	COACH NO	199539/C	DATE OF DISPATCH 31-12-2019	
Type	LWS	Shell No.	96158	DISPATCH TO	Sr.DME/MYS
			FUR.NO.	DDG-276	
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 qualityrcfrbl@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
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		199539/C		TYPE COACH	
RAILWAY		SWR		LWS/DDG	
ELECT.FIT DATE		31-12-2019		FUR.NO	
DDG-276					
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
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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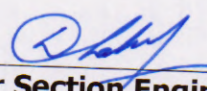
DATE: 18.01.2017

FOR ELECTRICAL ITEMS

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

PAGE 2 OF 3

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H.355.19.G.348 HT Panel Sr no : H.355.19.H.400	EDTS 333, Rev`01`Am-1	01
02	Emergency light system for EOG type coaches (AEL), Make : INTEG ELECT.	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 : ORIENT	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: RT VISION	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
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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 : SSK	LW 71001,Alt-F	01
10	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
11.	Regulated battery charger Make : SIGNOTRON Sr no: 12190829	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
12.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2566	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 : KNORR Sr no : 0119372853	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 : 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 वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आपरेटिंग/का/लालगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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