



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

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1176

RLY	N	F	R	Coach No.	1	9	7	7	0	3	/	C	DATE OF DISPATCH	3	0	-	1	1	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	5	2	FUR.NO.	LSCN-1366
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated: 21-11-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature: -1.- Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiveley) letter no. MC/LHB/Brake, Dated 27.09.2018

2.- RFID(Radio frequency identification) fitted for traceability of coach

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	1) 1097 (NPPE) 2) 1098 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S-SFPL
		NPP END	M/S-SFPL
	Complete	MCF/RBL	10/2019
2.	Lav. side wall	M/S- ATHANACY RBL	10/2019
		M/S- ATHANACY RBL	97552
		M/S- ATHANACY RBL	LAV.1 - LAV.2 -
3.	Side wall	LH SIDE	LAV.3 - LAV.4 -
		RH SIDE	MCF/RBL(CONTRACTOR V4U)
		MCF/RBL(CONTRACTOR V4U)	337/01
4.	End wall	PP END	337/02
		NPP END	M/s-DTL PUNE
		M/s-DTL PUNE	---
5.	Roof	M/s-ECBT	---
6.	Centre Buffer Coupler	M/s- FRONTIER	391
		PP END	119P2 NPP END 82P2

7. AIRBRAKE 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 . ➤ Max. pressure in BC ➤ All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm ² . OK	08 Sec. 3.0 kg/cm ² 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	M/s -AXALTA	M/S-EMPRISE	95/94	13.11.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

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गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लासगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192235				192236			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-1701				MCF/RBL-2033			
Bolster no.	APEX-26				APEX-30			
Axle No	19 L- 5643 RWF		19 P - 2346 RWF		19 P - 3114 RWF		19 L- 5423 RWF	
Wheel Dia	917.435	917.476	917.5	917.448	917.466	917.356	917.469	917.331
Wheel Disc No	TZ 07-19 69527-9RN9	TZ 08-19 75338-9RP2	TZ 07-19 69080-9RL7	TZ 07-19 66499-9RN8	TZ 09-19 72846-9SR7	TZ 08-19 65819-9RQ0	TZ 08-19 65229-9RS6	TZ 09-19 65225-9RS6
R.B. Nos.	09-19-38376	10-19-39617	08-19-28699	08-19-28092	09-19-27586	07-19-38958	07-19-27984	07-19-37647
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	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMGBD09-19- F09-757-77	CMFSK05-19-5100- 027-117	CMGBD09-19- F09-757-77	CMFSK05-19- 5100-027-68	CMGBD10-19- F09-757-75	CMFSK05-19- 5100-027-16	CMGBD10-19-F09- 757-74	CMFSK05-19-5100- 027-14
Compressed Ht. at Tested Load	514.5	470	514	471.5	516	469.5	516	471
10Alignment deviation (mm)	21	12	20	12	21	9	21	9

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16271,17042	16262,18093
2.	Primary outer Spring	CMFSK	10-19 1100-114 (2198,2168,2133,2138)	10-19 1100-114 (2159,2125,2165,2166)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (2116,2108,291,399)	10-19 1101-101 (373,386,1989,95)
4.	Primary Damper	KONIC	03-19 (06489,06419,06360,06495)	03-19 (06467,06453,06708,06372)
5.	Secondary Damper	IAI	09-19 (273033,272920)	09-19 (272928,272845)
6.	Lateral Damper	IAI	04-19 251008	04-19 250888
7.	Brake Cylinder	ESCORT	(45974,46206,46208,45972)	(45973,46209,46004,45910)
8.	Brake Caliper	ESCORT	(25794,25933,25935,25792)	(25793,25936,25704,25730)
9.	Brake Disc	KBI	24203752 0060-42/19,24203752 0061-42/19 24203755 0040-42/19,24203754 0051-42/19	24203752 0019-42/19,24203754 0020-42/19 24203754 0058-42/19,24203754 0009-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	ARYAN		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	210819-2,210819-2,210819-2,210819-3	190819-3,RVE,290819-2,210819-2
22.	Control Arm Lower	RVE	280819-3,210819-3,290819-3,210819-3	280819-2,RVE,240819-3,RVE
23.	Phonic Wheel	KBI	K-05-19	K-05-19

Signature of SSE/Bogie/QC

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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORTS LTD	2019030066
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- ESCORTS LTD	1903A066
4.	FIBA	N/A	
5.	Foot Step	M/s- SUPER SPAR K PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-SHREE RAM PNL	
8.	PVC	M/S -RESPONSIVE IND	
9.	Lavatory Inlay	M/s- SEEMA IND. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.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- FP INDS KOLKATA	
15.	Emergency Window	M/s-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI VADODARA + VEDANSH RBL	
17.	Side panel	M/s-WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDS NEW DELHI	
19.	Door way ceiling	M/s-JAAM TOOLS RBL	
20.	Body Side Door	M/S- JBM INDUSTRIES, FARIDABAD	
21.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Bio Tank	M/S- JSL LIFE STYLE LTD.	
24.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
25.	Under Slung Water Tank(2X685L)	M/S- SHIVALIK FAST. MOHALI	
26.	Under Slung Water Tank (1X685L)	M/S- SHIVALIK FAST. MOHALI	
27.	Flexible Faucet	M/s-KAPCO VALES JALANDHAR	
28.	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
29.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
30.	Lavatory Doors	M/S- JR INDS JALNDHAR	
31.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	RFID	M/s-ID TECH SOLUTION GURGAON	Sr.104741,104742

SSE/QC/MCF/RBL

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DISPATCH TO		Sr.DME/DBRG				Type	L	W	S	C	N	1	Shell No.	9	7	5	5	2	FUR.NO.		LSCN-1366

13. MODIFICATION (IF ANY)

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

16WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, 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 30 months 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 date of 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/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अनु अभियंता
गुणवत्ता विभाग
रेडि०का०, रायबरेली (लासगंज)

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

जोगिन्दर सिंह
Joginder Singh
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Rae



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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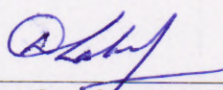
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197703/C
RAILWAY	NFR	DATE OF DESPATCH	
Sr no	Description of test	Remarks	
1.	PUMP EQUIPMENTS	OK	
2.	LIGHTS, NL, LAP 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 NON AC SCN COACHES

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H.355.19.G.318 HT Panel Sr no : H.355.19.G.347	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0050 Sr no.1 : 19100171 Sr no.2 : 19100195 Srno.CPA: sr no - 2019/11/071-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: KAVERI	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : RECORD/SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : RECORD/SALZER	EDML 086, Rev 03, ITEM-02	20
07.	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
08.	Cabin,Corridor,doorway and Gangway Lights. Make: RT VISION	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	04
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : INTRA	CC76289 & CC76443	09

Senior Section Engineer
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

11.	Battery fuse box +ve Make : ISGPL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H-19619	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2533	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0`,Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : MAA LAXMI INDUSTRIES.	As per spec No EDTS 105,Rev`e` Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : AECO	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 180370-59826-0115	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 06/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : techno	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता मुख्य यन्त्र नियंत्रण आधुनिक डिब्बा कारखाना / रायबरेली S.S.E./Elect-QC/MCF/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL