



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/2019-20/874

RLY	C	R	-	Coach No.	1	9	7	0	7	3	/	C	DATE OF DISPATCH	1	4	-	1	0	-	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	6	8	FUR.NO.	LSCN-1276
-------------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

- Railway Board's Order No.** : 2019/M(C)/142/2, Dated: 3-06-2019
- Tare Weight of Coach** : 41.24 Tones
- Carrying Capacity** : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL
- 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
3.-Venturi arrangement in lavatory

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) 1098 (NPPE) 2) 1099 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

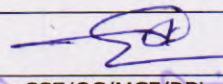
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame Front Part	PP END M/s-M.T.F.	219
		NPP END M/s-M.T.F.	219
	Complete	M/s-M.T.F.	219
2.	Lav. side wall	M/s-MIDAS GUJRAT	LAV.1 - LAV.2 -
		M/s-MIDAS GUJRAT	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U)	246/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	246/02
4.	End wall	PP END M/S-SIS	---
		NPP END M/S-SIS	---
5.	Roof	M/s-MCF/CONT	107
6.	Centre Buffer Coupler	M/S- ESCORTS	PP END 1538 NPP END 1551

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	06 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 -BERGER	Supply & apply	90/89	26.09.19
2.	Insulation			Satisfactory		


SSE/QC/MCF/RBL

गणवत्ता विभाग



MCF/RBL



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/2019-20/874

RLY	C	R	-	Coach No.	1	9	7	0	7	3	/	C	-	DATE OF DISPATCH	1	4	1	0	2	0	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	6	8	FUR .NO	LSCN-1276
----------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	197042				197041			
Bogie Type	FIAT				FIAT			
Frame no.	AML-74				AML-71			
Bolster no.	SCI-192				SCI-210			
Axle No	19 R- 2746 RWF		19 R- 6809 RWF		19 R- 0969 RWF		19 R- 2632 RWF	
Wheel Dia	917.489	917.597	917.727	917.642	917.497	917.572	917.48	917.513
Wheel Disc No	TZ 03-19 30781-9MH7	TZ 02-19 26603-9MJ2	TZ 02-19 29067-9ML3	TZ 07-19 26492-7RK4	TZ 02-19 26605-9MJ2	TZ 03-19 29817-9MH1	TZ 04-19 34120-9MH1	TZ 04-19 40685-9OE3
R.B. Nos.	05-18-29490	05-18-39909	06-18-17111	05-18-14820	05-18-29212	05-18-39908	05-18-29491	05-18-29049
CT R B Make	SKF		SKF		SKF		SKF	

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.19-08 3077	TAYAL & CO. Sr.NO.19-08 3053	TAYAL & CO. Sr.NO.19-08 3055	TAYAL & CO. Sr.NO.19-08 3058

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KNORR	16177,16175	16678,16183
2.	Primary outer Spring	CMFSK	07-19 1100-058(40,107,77,26)	07-19 1100-058(420,108,520,317)
3.	Primary Inner Spring	CMFSK	03-19 1101-064(275,85,86,475)	03-19 1101-064(498,297,284,484)
4.	Primary Damper	KONI	03-19 (00366,01057,01590,00523)	03-19 (00409,00443,00491,00464)
5.	Secondary Damper	KONI/IAI	04-19 (00737,00676)	07-19 (263449,263403)
6.	Lateral Damper	GABRIEL	11-18 856	11-18 859
7.	Brake Cylinder	KBI	B(5950,5092,5164,6005)K-29	B(5996,5165,5762,5992)K-29
8.	Brake Caliper	KBI	B(3379,3447,3508,3426) -29	B(3424,3509,3507,3423) -29
9.	Brake Disc	KBI	24195445 0045-30/19,24193639 0067-30/19 24193647 0073-28/19,24193647 0066-28/19	24193661 0068-29/19,24193661 0078-29/19 24193653 0052-29/19,24193659 0053-29/19
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR/ARYAN		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	AR		
16.	Leveling Valve	KNORR	16-19-B-5983,16-19-B-5724	16-19-B-5967,16-19-B-5986
17.	Check Valve	KNORR	07-19-19447	07-19-19464
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT,		
20.	Fork make	EMSON		
21.	Control Arm Upper	SF/CC	275,401,189,88	94,181,19E135B,206
22.	Control Arm Lower	SF/CC	119,305,208,153	108,152,CC,52
23.	Phonic Wheel	KNORR	K-07-19	K-07-19

Signature of SSE/Bogie/QC





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

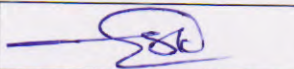
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/874

RLY	C	R	-	Coach No.	1	9	7	0	7	3	/	C	DATE OF DISPATCH	1	4	-	1	0	-	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	6	8	FUR.NO.	LSCN-1276
-------------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3682 36/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 J 8889
4.	FIBA	M/S- KBI, FARIDABAD	PP-7671/29 NPP-7549/29
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- SHRI RAM PANELS,	
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- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/S- MACEDON BHOPAL	
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 INDIA DELHI	
19.	Door way ceiling	M/S-JAMM TOOLS RBL	
20.	Body Side Door 1,3	M/S- JVR INDS ,LDH	
21.	Body Side Door 2,4	M/S- JBM INDUSTRIES, FARIDABAD	
22.	Vestibule Door(PPE)	M/S- HANSPAL, KXH	
23.	Vestibule Door(NPPE)	M/S- HANSPAL, KXH	
24.	Bio Tank with pressurized flushing	M/S- OMAX AUTO GURGAON	
25.	Auxiliary Water Tank	M/S- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. BADDI	
27.	Under Slung Water Tank (1X685L)	M/S- AMIT ENG. MOHALI	
28.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
29.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
31.	Lavatory Doors	M/S -KALSI LTD.LDH	
32.	Seat & Berth	M/S-TWPL MUMBAI	
33.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106639,106640


SSE/QC/MCF/RBL

वरिष्ठ अनुसंधान अधिकारी
गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (लालगंज)





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/2019-20/874

RLY	C	R	-	Coach No.	1	9	7	0	7	3	/	C	DATE OF DISPATCH	1	4	-	1	0	-	1	9
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	6	8	FUR.NO.	LSCN-1276
-------------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---------	-----------

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, 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 qualityrcfbl@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 यांत्रिक अभियंता/गुणवत्ता
गुणवत्ता विभाग
रेडिओ, रायबरेली (जालगंज)

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

उप मुख्या गुणवत्ता प्रबन्धक/शेल
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

REV NO: 00

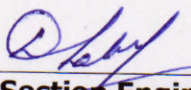
DATE: 18.01.2017

PAGE 1 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197073/C
RAILWAY	CR	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
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

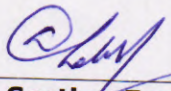
DATE:18.01.2017

PAGE 2 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : AMIT ENGG. On Board Sr no : AE/USBC-1393 HT Panel Sr no : AE/USBC-1406	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0053 Sr no.1 : 19090113 Sr no.2 : 19090244 Srno.CPA: 2019/09/084-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : VGS	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: CG POWER	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: DR AUTO	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: RT VISION	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 : DR AUTO	CC76289 & CC76443	09


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

REV NO: 00

DATE:18.01.2017

PAGE 3 OF 3

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : RADIANT	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : RADIANT	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19522	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2173	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	As per spec No EDTS 105,Rev`e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : INDORAIL	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : CHANDA & CHANDA	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119212051	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED, WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 08/19	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 अनुमाग अभियन्ता गुणवत्ता नियंत्रण आपरेटिंग/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, लखनऊ Sr. Electrical Engineer / RCF / RBL / Lucknow