



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/2019-20/849

RLY	C	R	-	Coach No.	1	9	6	9	9	6	/	C	DATE OF DISPATCH	1	0	-	1	0	-	1	9
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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	5	4	FUR.NO.	LSCN-1246
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated: 3-06-2019

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) 1100 (NPPE) 2) 1099 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/s-ESCORT	1676
		NPP END M/s-ESCORT	1674
	Complete	M/s-V4U CON	97454
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 M/S-TI CHENNAI	29/TI
		RH SIDE M/S-TI CHENNAI	29/TI
4.	End wall	PP END M/S-DTL PUNE	---
		NPP END M/S-DTL PUNE	---
5.	Roof	M/s-MCF/CONT.	94
6.	Centre Buffer Coupler	M/s- ESCORT	PP END 1678 NPP END 1674

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 -VIBGYOR	Supply & apply	89/88	23.09.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

२० डिसेंबर, रायबरेली (जागतिक)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	5	4	FUR.NO	LSCN-1246
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	191354				191353			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-22				MIPL-46			
Bolster no.	AMIT-681				AMIT-685			
Axle No	19 S- 0824 RWF		19 S- 0071 RWF		19 S- 0760 RWF		19 S- 0852 RWF	
Wheel Dia	917.248	917.362	917.255	917.387	917.232	917.323	917.23	917.319
Wheel Disc No	TZ 06-19 54615-9QH9	TZ 06-19 54678-9QH9	TZ 06-19 54677-9QH9	TZ 06-19 54679-9QH9	TZ 06-19 56983-9QJ1	TZ 06-19 55943-9QI2	TZ 06-19 58980-9QH7	TZ 06-19 55942-9QI2
R.B. Nos.	09-18-23176	09-18-23077	09-18-21334	09-18-21541	09-18-21818	09-18-22036	09-18-23099	09-18-22931
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.	CMAFJ09-19-5101-78	CMRSK03-18-F08-N73-08Y-157	CMAFJ09-19-5101-97	CMRSK03-18-F08-N73-08Y-1195	CMAFJ09-19-5101-60	CMGBD05-18-5100-36-154	CMAFJ09-19-5101-66	CMGBD07-17-5100-068-157
Compressed Ht. at Tested Load	516	467	515	470	515	468	516	472
Alignment deviation (mm)	15	10	15	10	7	7	6	9

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12063,12581	13722,12586
2.	Primary outer Spring	CMSTL	07-19 07A(880,1598,1769,1578)	07-19 07A(1523,1590,1256,1656)
3.	Primary Inner Spring	CMGBD	07-19 F06-911(581,1085,531,1057)	07-19 F06-911(1185,349,1101,1106)
4.	Primary Damper	KONI	03-19 (05194,04294,04239,04339)	03-19 (06061,03760,05091,02962)
5.	Secondary Damper	KONI	04-19 (00675,00689)	04-19 (01109,06325)
6.	Lateral Damper	IAI	05-19 251501	05-19 251505
7.	Brake Cylinder	KBI	B(8748,7890,7740,8867)K-29	B(8747,7889,7892,8744)K-29
8.	Brake Caliper	KBI	B(5780,5980,5822,5895) -29	B(5781,5978,5981,5778) -29
9.	Brake Disc	KBI	24173458 0028-09/19,24173458 0027-09/19 24173130 0034-09/19,24173130 0035-09/19	24185212 0009-14/19,24185210 0080-14/19 24173459 0002-09/19,24173459 0021-09/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT/BASANT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	PPI		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	010719-1,280619-2,270619-2,290619-1	290619-2,290619-1,210619-2,010719-1
22.	Control Arm Lower	RVE	RVE,270619-2,100619-2,040619-2	100619-2,280619-2,280619-2,220619-2
23.	Phonic Wheel	KNORR	K-08-19	K-08-19

Signature of SSE/Bogie/QC





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ROLLING STOCK CERTIFICATE

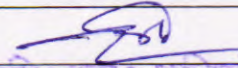
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	3623 35/19
2.	Pull box	M/S- KBI, FARIDABAD	
3.	Distribution valve	M/S- KBI, FARIDABAD	2019 H 8828
4.	FIBA	NA	NA
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 GOVINDGARH	
8.	PVC	M/S RESPONSIVE IND.DELHI	
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-MECKDOWN BHOPAL	
15.	Emergency Window	M/s-AGF INDS KOLKATA	
16.	Hopper Window	M/S- SHATABDHI SAFETY GLASS, VADODARA	
17.	Side panel	M/s- WONDER LAMINATE KOLKATA	
18.	Roof ceiling	M/s-ACME INDIA NEW 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 LTD. GURGAON	
25.	Auxiliary Water Tank	M/S RAIL FAB. KAPURTHALA	
26.	Under Slung Water Tank(2X685L)	M/S- AMIT ENG. MOHALI	
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 1,3	M/s-J.R JALANDHAR	
32.	Lavatory Doors 2,4	M/S-KALSI LDH	
33.	Seat & Berth	M/S ANANYA RAIL COACH COMPONENTS IND.	
34.	Snack Table	N/A	
35.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106641,106642


SSE/QC/MCF/RBL

मुद्रांकित विभाग
रेल डिब्बा कारखाना, रायबरेली (जालंधार)





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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	REFERENCE & PERIOD OF TRIAL
			Frequency	

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

70डि०का०, रायबरेली (लालनंज)

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

जोगिन्दर सिंह
उप मुख्य गुणवत्ता अभियंता
Dy. Chief Quality Manager
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

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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	196996/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



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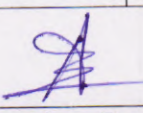
DATE:18.01.2017

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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-1406 HT Panel Sr no : AE/USBC-1405	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/09/0074 Sr no.1 : 19090105 Sr no.2 : 19090254 Srno.CPA: 2019/09/076-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: 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


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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 19313	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2169	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 : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119030848	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 : 07/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : HITECH	CC 91205	01

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

गुणवत्ता नियंत्रण
आ0रे0डि0का0 / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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