



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/2019-20/1598

RLY	SWR	COACH NO	201588/C	DATE OF DISPATCH	12-Feb-20
Type	LWSCN1	Shell No.	97810	DISPATCH TO	Sr.DME/MYS
				FUR.NO.	LSCN-1474

1. Railway Board's Order No. : 2019/M(C)/142/2, DATED-16.01.2020
2. Tare Weight of Coach : 41.24 Tonnes
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature:

A 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 1099/1100

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-PENNAR 83
		Part NPP END	M/S-OMAX AUTO 21
		Complete	MCF/RBL-V4U-TECHIE 97810
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1
		M/S-MIDAS GUJRAT	LAV.2
3	Side wall	LH SIDE	MCF/RBL(CONT. V4U) 443
		RH SIDE	MCF/RBL(CONT. V4U) 443
4	End wall	PP END	M/S-RAIL TECH KXH
		NPP END	M/S-RAIL TECH KXH
5	Roof	M/S-TI	29
6	Centre Buffer Coupler	M/s-ESCORTS	PP 3836 NPP 3107

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.	7sec
		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	MAKE	APPLICATION BY MCF/ CONTRACTOR	AVERAGE	DATE OF
		OF PAINT		(SUPPLY & APPLY)	GLOSS VALUE	COMPLETION
1	Paint	P.U	AKZONOBEL	M/S-AKZONOBEL	75/95	11-Feb-20
2	Insulation			Satisfactory		

Signature
SSE/OC/MCF/RBL
वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेडिओकार, रायबरेली (नालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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RLY	S	W	R	Coach No.	2	0	1	5	8	8	/	C	-	DATE OF DISPATCH	1	2	0	2	2	0	2	0
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DISPATCH	Sr.DME/MYS	Type	L	W	S	C	N	1	Shell No.	9	7	8	1	0	FUR.NO	LSCN-1474
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	193433				193434			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL-2209				MCF/RBL-2227			
Bolster no.	MCF/RBL-3446				MCF/RBL-3368			
Axle No	19 T - 6730 RWF		19 T - 6618 RWF		19 T - 3454 RWF		19 T - 3684 RWF	
Wheel Dia	917.269	917.329	917.274	917.356	917.283	917.31	917.316	917.316
Wheel Disc No	TZ 02-19 23559-9MJ9	TZ 05-19 43177-9PF8	TZ 05-19 46104-9PF2	TZ 07-19 69782-9RM2	TZ 07-19 69265-9RL6	TZ 03-19 32694-9OF6	TZ 05-19 44489-9PI2	TZ 05-19 44488-9PI2
R.B. Nos.	12-19 44572	12-19 35908	12-19 35845	11-19 34106	12-19 36058	12-19 35179	12-19 34497	12-19 36132
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.	CMGBD-10-19-F09-757	CMRSK-05-19-08Y-914	CMGBD10-19-F09-757	CMRSK-05-19-08Y-914	CMGBD-10-19-F09-756	CMFSK05-19-084-1769	CMGBD-10-19-F09-56-72	CMFSK05-19-084-717
Compressed Ht. at Tested Load	514	472	513	472	514	471	512	470
Alignment deviation (mm)	26	6	26	6	19	4	22	4

11. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	279931,279989	279905,279874
2.	Primary outer Spring	CMFSK	10-19 1100-114(2201,1957,1967,1952)	10-19 1100-114(1935,1588,1926,1921)
3.	Primary Inner Spring	CMFSK	10-19 1101-101(7121,2032,2070,2076)	10-19 1101-101(2068,2127,2090,2051)
4.	Primary Damper	IAI	08-19 (267559,267497,267538,267586)	08-19 (267547,267483,267587,267560)
5.	Secondary Damper	IAI	11-19 (283238,283330)	11-19 (283474,283487)
6.	Lateral Damper	IAI	11-19 251182	11-19 268443
7.	Brake Cylinder	KBI	(C0611,89405,89399,C0629)K-29	(C0530,89417,89435,C0632)K-29
8.	Brake Caliper	KBI	B(7404,7328,7326,7402)-29	B(7401,7325,7327,7403)-29
9.	Brake Disc	KBI	24206721(0030,0031,0028,0035)49-19	24206708C044-47-49,2420678-0043-47-19,24203760-0040-44-19,24263760-0039-44-19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	GMT		
17.	Rubber Spring	GMT		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	EMSON /GMT		
20.	Fork make	EMSON		
21.	Control Arm Upper	KUMAR	(N-0580,N-8675,N-6682,D-504)	(N-0825,D-750,D-0551,N-0889)
22.	Control Arm Lower	KUMAR	(D-8848,D-9845,N-9992,0892)	(N-858,N-8935,D-0551,N-0889)
23.	Phonic Wheel	KNORR	K-07-19	K-09-19

Signature of SSE/Bogie/QC





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				FUR.NO.	LSCN-1474

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	4320 48/19
2	Distribution valve	M/s-KBI	2019L9661
3	Pull box	M/s-KBI	
4	FIBA	NA	
5	Foot Step	M/S- SUPER SPARK PVT.LTD.FARIDABAD	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-SHREE RAM PNL	
8	PVC	M/S-RESPONSIVE INDS DELHI	
9	Lavatory inlay	M/S-SEEMA INDS BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREAST INDS.KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST INDS.KOLKATA	
12	Gangway bridge mounting (PPE)	M/s- MAHAVEER METAL WORKS, KXH	
13	Gangway bridge mounting (NPPE)	M/s- MAHAVEER METAL WORKS, KXH	
14	Body Side Window	M/S-MESIDON INDS KOLKATA	
15	Emergency Window	M/S-FP INDS KOLKATA	
16	Lavatory/hopper Window	M/S-AXSYS SOLUTION	
17	Side panel	M/S-WONDER LAMINATE KOLKATA	
18	Roof Ceiling	M/S-A.B.COMPOSITE KOLKATA	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors 2,4	M/S-JVR LDH	
	Body Side Doors 1,3	M/s- JBM FARIDABAD	
21	Vestibule Door(PPE)	M/s- JBM FARIDABAD	
22	Vestibule Door(NPPE)	M/s- JBM FARIDABAD	
23	Bio Tank	M/s-OMAX AUTOS	
24	Presurized Flushing(Elect.pneumatic)	M/s-SPAC (P) LTD	
25	Auxiliary Water Tank	M/s-AMIT ENGG. MOHALI	
26	Under Slung Water Tank (2X685L)	M/s-OASIS	
27	Under Slung Water Tank (1x685 L)	M/s-SHIVALIK FAST MOHALI	
28	Health Faucet	M/S-KAPCO VALVES JUC	
29	Lotah Filler Tap	M/S-KAPCO VALVES JUC	
30	Controlled discharge tap	M/s-AGMECO PVT LTD	
31	Lavatory Doors	M/S-KALSI LDH	
32	Seat & Berth	M/S-HINDUSTAN FIBRE VADODARA	
33	RFID	NA	

SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता

गुणवत्ता विभाग

रेलवे डिब्बा कारखाना, रायबरेली (लालगंज)





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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				FUR.NO.	LSCN-1474

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.QC/MCF/RBL

वरिष्ठ यांत्रिक अभियंता
गुणवत्ता विभाग
रेडि०का०, रायबरेली (लालगंज)

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

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



MCF/RBL



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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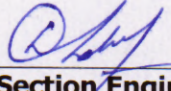
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FOR ELECTRICAL ITEMS

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		201588/C	
RAILWAY		SWR	ELECT.FIT DATE		10-02-2020	FUR.NO	SCN-1474
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

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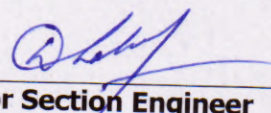
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FOR ELECTRICAL ITEMS

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

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/07/193 HT Panel Sr no : 2019/07/192	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : KIND Sr no PA: ASY/0245 Sr no.1 : 19120589 Sr no.2 : 19120590 Srno.CPA: sr no: 2020/01/114-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 : RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SSK/SALZER	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SSK/SALZER	EDML 086, Rev 03, ITEM-02	20
07.	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
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: ENSAVE	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 : RT VISION	CC76289 & CC76443	09


Senior Section Engineer
Quality control / Electrical
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ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

11.	Battery fuse box +ve Make : RICHMOND	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : RICHMOND	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5A 201341	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2884	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 : MV ELECTRO	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : KNORR Sr no : 0119412968	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: 12/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : M/S MEENAKSHI	CC 91205	01

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

गुणवत्ता नियंत्रण
आपरेटिंगका/लालगंज/रायबरेली
S.S.E./Elect-QC/M.C.F./LL/RBL

सं कार्य प्रबन्धक/विद्युत
आपरेटिंगका/रायबरेली
A.W.M./Electrical/MCF/RBL