



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/2019-20/1190

RLY	N	F	R	Coach No.	1	9	7	6	9	1	/	C	DATE OF DISPATCH	0	6	-	1	2	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	2	7	7	FUR.NO.	LSCNG-260
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- Railway Board's Order No. : 2019/M(C)/142/2, Dated-21-11-2019
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL

4. Special feature: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
B.	Anti slip friendly Grab Bar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
C.	Provision of Health Faucet in lavatories	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
E.	GFRE ceiling instead of NFTC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
F.	DGFRP panels instead of LP panels	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA
H.	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	

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) 1105 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S- PENNAR IND.HYD	--
		NPP END M/S- PENNAR IND.HYD	--
	Complete	MCF/RBL	97211
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)	68/01
		RH SIDE MCF/RBL(CONTRACTOR V4U)	68/02
4.	End wall	PP END M/s-RSM MOHALI	--
		NPP END M/s-RSM MOHALI	--
5.	Roof	M/s-MCF/CONT	48
6.	Centre Buffer Coupler	M/s- FRONTIER	PP END 182P2 NPP END 10P2

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	14.07.19
2.	Insulation			Satisfactory		

Signature
SSE/OC/MCF/RBL
वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेलवे डिपार्टमेंट, रायबरेली (लातमंज)





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/2019-20/1190

RLY	N	F	R	Coach No.	1	9	7	6	9	1	/	C	-	DATE OF DISPATCH	0	6	1	2	2	0	1	9
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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	2	7	7	FUR .NO	LSCN-G-260
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side											
Bogie No	192248				192247											
Bogie Type	FIAT				FIAT											
Frame no.	RBL-2070				RBL-1720											
Bolster no.	TACPL-05				TACPL-11											
Axle No	19	R	-	7279 RWF	19	L	-	5824 RWF	19	R	-	6734 RWF	19	L	-	5232 RWF
Wheel Dia	917.421			917.498	917.509			917.482	917.429			917.555	917.431			917.537
Wheel Disc No	TZ 08-19 72470-9RB2			TZ 08-19 75306-9RM1	TZ 08-19 73518-9RP2			TZ 08-19 74387-9SK2	TZ 07-19 63235-9RM7			TZ 07-19 68705-9RSS	TZ 08-19 72472-9PR3			TZ 08-19 72471-9RR3
R.B. Nos.	09-19 38684			08-19 23378	09-19 38735			08-19 23813	09-19 38724			09-19 37372	09-19 38439			09-19 37396
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- F09-757-101	CMFSK05-19-5100- 027-462	CMGBD09- 19F09-757-79	CMFSK05-19- 5100-462	CMGBD09-19- F09-757-76	CMFSK05-19- 5100-027-472	CMGBD09-19-F09- 757-94	CMFSK05-19-5100- 027-530
Compressed Ht. at Tested Load	514	470	516	472	511.5	472	511.5	471
10Alignment deviation (mm)	15	10	16	10	24	7	27	8

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17032,17049,	17039,17072
2.	Primary outer Spring	CMFSK	10-19 1100-114 (1150,1129,787,1149)	10-19 1100-114 (1102,11,1147,7611)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (905,1846,1778,1828)	10-19 1101-101 (1731,1775,1785,1757)
4.	Primary Damper	KONIC	03-19 (04870,02165,02337,07779)	03-19 (08239,02172,06113,05001)
5.	Secondary Damper	IAI	05-19 (272725,272699)	09-19 (072853,272925)
6.	Lateral Damper	IAI	05-19 251253	05-19 251248
7.	Brake Cylinder	ESCORT	50411,50521,50271,52252	50584,50273,46039,45946
8.	Brake Caliper	ESCORT	29256,29170,29190,29250	29251,29192,25844,25766
9.	Brake Disc	KBI	24203752 0038-42/19,24203755 0048-42/19 24203755 0046-42/19,24203755 0047-42/19	24203755 0058-42/19,24203755 0055-42/19 24203755 0057-472/19,24203752 0025-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	GMT/SGA		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ ARYAN SARITA/ GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	170819-3,190819-2,090819-3,270819-3	210819-2,200819-3,190819-3,270819-2
22.	Control Arm Lower	RVE	210819-2,210819-2,280819-2,280819-2	170819-2,170819-2,210819-2,210819-2
23.	Phonic Wheel	FAV	FT/KEP-194	FT/KEP-194

Signature of SSE/Bogie/QC

वारे 0अनु 0 अभियंता
गुणवत्ता विभाग
रे 0डि 0का 0, रायबरेली (लालगंज)





Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	2	7	7	FUR.NO.	LSCNG-260
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORTS	2018120166
2.	Distribution valve	M/S- ESCORTS	1812A166
3.	Pull box	M/S- KBI, FARIDABAD	
4.	FIBA	N/A	
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-TWPL MUMBAI	
8.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-KPR PUNE	
11.	UIC Vestibule (NPPE)	M/S-KPR PUNE	
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- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15.	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16.	Hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
17.	Side panel	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
18.	Roof ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
19.	Door way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
20.	Partition frame	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
21.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
22.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(PPE)	M/S- HANSPAL TRADERS, KXH	
24.	Vestibule Door(NPPE)	M/S- HANSPAL TRADERS, KXH	
25.	Water purifier	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
26.	Bio Tank	M/S- RAIL FAB KXH	
27.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
28.	Under Slung Water Tank(2X685L)	M/s- SHIVALIK FAST. MOHALI	
29.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST. MOHALI	
30.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
31.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
32.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
33.	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
34.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
35.	Snack Table	N/A	
36.	RFID	N/A	

Sharma
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)





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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	2	7	7	FUR.NO.	LSCNG-260
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13. MODIFICATION (IF ANY) : Partition frame & Partition pillar

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 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 वरिष्ठ अभियन्ता/गुणवत्ता गुणवत्ता विभाग रेलवे डिपार्टमेंट, रायबरेली (लालगंज)	SME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.CQM/MCF/RBL जोगिन्दर सिंह उप मुख्य गुणवत्ता प्रबन्धक 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

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	197691/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	

[Signature]

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 NONAC SCN COACHES

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H355.19.G.313 HT Panel Sr no : H355.19.F.0307	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0078 Sr no.1 : 19100069 Sr no.2 : 19100010 Srno.CPA: NIL-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 : SALZER/RECORD	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SALZER/RECORD	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

(Signature)

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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PAGE 3 OF 3

FOR ELECTRICAL ITEMS

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11.	Battery fuse box +ve Make : INDORAIL	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: W4K5K-19976	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2479	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 : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 190001-60527-0074	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 : NIL	CC 91205	01

 वरिष्ठ अनुभाग अभियन्ता SSE/EL/QC गुणवत्ता नियंत्रण आधुनिक रेल डिब्बा कारखाना / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL प्रमुख विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL
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