



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/2019-20/1180

RLY	N	F	R	Coach No.	1	9	7	6	9	4	/	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	0	6	7	FUR.NO.	LSCNG-256
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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
- 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 or 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	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA

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) 1100 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-M.TECH NPP END M/S-M.TECH	265
	Complete	MCF/SIS	-
2.	Lav. side wall	M/S- MIDAS GUJRAT M/S- MIDAS GUJRAT	138
3.	Side wall	LH SIDE MCF/RBL(CONTRACTOR V4U) RH SIDE MCF/RBL(CONTRACTOR V4U)	LAV.1 - LAV.2 - LAV.3 - LAV.4 -
4.	End wall	PP END M/s- RAIL TECH KXH NPP END M/s- RAIL TECH KXH	61/01 61/02
5.	Roof	MCF/RBL	--
6.	Centre Buffer Coupler	M/s- FRONTIER ENT.	42
		PP END 98P2 NPP END 39P2	

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	M/s-VIBGYOR	90/88	07.07.19
2.	Insulation			Satisfactory		

वरिष्ठ SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (लागू)



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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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	0	6	7	FUR.NO	LSCN-G-256
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192261							
Bogie Type	FIAT				192262			
Frame no.	RBL-2053				FIAT			
Bolster no.	RBL-2841				RBL-2051			
Axle No	19 S- 4075 RWF				RBL-2842			
Wheel Dia	917.446	917.452	19 L- 5646 RWF		19 L- 5644 RWF		19 N- 4874 RWF	
Wheel Disc No	TZ 08-19 74241-9SJ6	TZ 08-19 73593-9SK4	TZ 08-19 75233-9SL2	TZ 07-19 62682-9RL3	TZ 07-19 61761-9RH4	TZ 07-19 72466-9RR3	TZ 08-19 72466-9RR3	TZ 08-19 74724-9SK7
R.B. Nos.	10-19-38787	08-19-26633	10-19-39002	10-19-27735	09-19-38680	09-19-38643	05-19-37082	09-19-38717
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.	CMGBD10-19-F09-750-65	CMFSK05-19-5100-027-575	CMGBD10-19-750-99	CMFSK05-19-5100-027-560	CMGBD10-19-F09-750-93	CMFSK05-19-027-596	CMGBD10-19-F09-750-49	CMFSK05-19-5100-027-600
Compressed Ht. at Tested Load	516	471	516	470.5	514.5	467.5	514.5	470.5
10Alignment deviation (mm)	16	10	26	10	26	9	25	9

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	16503,16519	16509,16523
2.	Primary outer Spring	CMFSK	10-19 1100-114 (2224,1907,2227,2789)	10-19 1100-115 (2043,2230,2257,1889)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (2029,2027,2013,1960)	10-19 1101-101 (204,71314,2009,1379)
4.	Primary Damper	KONIC	03-19 (0678,608084,0662,606678)	03-19 (08102,08100,08094,06135)
5.	Secondary Damper	IAI	09-19 (272709,272981)	09-19 (272972,272818)
6.	Lateral Damper	IAI	05-19 250822	05-19 251439
7.	Brake Cylinder	ESCORT	(45927,45835,28397,28458)	(49262,49062,45679,45926)
8.	Brake Caliper	ESCORT	(25747,25640,49059,49263)	(28757,28400,25638,25746)
9.	Brake Disc	KBI	24200033 0073-36/19,24200033 0077-36/19 24200057 0055-37/19,24200058 0025-37/19	24200033 0006-36/19,24200026 0075-36/19 24198280 0066-36/19,24198288 0065-36/19
10.	Ball Joint Control Arm	GMT		
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	SGA		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	AR		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	200819-2,210819-2,290819-2,290819-2	270819-2,270819-3,210819-3,BRVE
22.	Control Arm Lower	RVE	160819-2,290819-2,290819-2,270819-2	160819-2,160819-2,200819-2,200819-2
23.	Phonic Wheel	KBI	K-08-19	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- ESCORT ENT.	
2.	Distribution valve	M/S- ESCORT ENT.	2019070048
3.	Pull box	M/S- KBI, FARIDABAD	1907A045
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s-TWPL MUMBAI	
7.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
8.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-KRP PUNE	
10.	UIC Vestibule (NPPE)	M/S-KRP PUNE	
11.	Gangway bridge mounting (PPE)	M/s-RAKESH IRON & STEEL WORKS, KXH	
12.	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON & STEEL WORKS, KXH	
13.	Body Side Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
14.	Emergency Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
15.	Hopper Window	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
16.	Side panel	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
17.	Roof ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
18.	Door way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
19.	Partition frame	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
20.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
21.	Body Side Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
22.	Vestibule Door(PPE)	M/s- JBM INDS FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- HANS PAL TRADERS KXH	
24.	Bio Tanks	M/S- HANS PAL TRADERS KXH	
25.	Auxiliary Water Tank	M/S- JSL LIFESTYLE GURGAON	
26.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. MOHALI	
27.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST. MOHALI	
28.	Health Faucet	M/s- SHIVALIK FAST. MOHALI	
29.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
30.	Controlled Discharge Tap	M/s- KAPCO VALVES JALANDHAR	
31.	Lavatory Doors	M/s- EAUSET PVT GURGAON	
32.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
33.	Snack Table	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
34.	RFID	N/A	

SSS/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	0	6	7	FUR.NO.		LSCNG-256		

13. MODIFICATION (IF ANY)

Partition frame & Partition

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 यांत्रिक अभियन्ता/गुणवत्ता	SME/QC/MCF/RBL वरिष्ठ यांत्रिक अभियन्ता/गुणवत्ता	Dy. CQM/MCF/RBL उप मुख्य गुणवत्ता प्रबंधक
गुणवत्ता विभाग रेडि0का0, रायबरेली (तालमंज)	Senior Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	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/HOG NONAC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	197694/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



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC SCN COACHES

01.	Switch board cabinet Make : HIND RECTIFIERS On Board Sr no : H.355.19.G.334 HT Panel Sr no : H.355.19.G.343	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/0007 Sr no.1 : 19100045 Sr no.2 : 19100003 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	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
Quality control / Electrical
Modern Coach Factory Raebareli



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC SCN COACHES

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: W4K5G 19256	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2447	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 : AUTO	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 : ESCORT Sr no : 190001-60527-0056	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : AMARA RAJA 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 लता नियंत्रण आरक्षण डिब्बा / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता
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रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL



MCF/RBL