



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/2019-20/854

RLY	C	R	-	Coach No.	1	9	7	0	0	2	/	C	DATE OF DISPATCH	1	0	-	1	0	-	1	9
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DISPATCH TO	SSE/STOCK/CTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	1	4	FUR.NO.	LSCNG-313
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated-03-06-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL
4. Special feature: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/S-ACME INDIA NDLS
B.	Anti slip friendly Grab Bar	M/S-ACME INDIA NDLS
C.	Provision of Health Faucet in lavatories	M/S-ACME INDIA NDLS
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S-ACME INDIA NDLS
E.	GFRE ceiling instead of NFTC	M/S-ACME INDIA NDLS
F.	DGFRP panels instead of LP panels	M/S-ACME INDIA NDLS
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S-ACME INDIA NDLS
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-ACME INDIA NDLS
I	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) 1097 (NPPE) 2) 1104 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S- MTF	530
	Complete	NPP END M/S- MTF	503
2.	Lav. side wall	MCF/RBL(CONTRACTOR V4U)	97444
		M/S- ATHANACY RBL	LAV.1 - LAV.2 -
		M/S- ATHANACY RBL	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE M/S-KANSAL (MOHALI)	06/ KANSAL
		RH SIDE M/S-KANSAL (MOHALI)	06/ KANSAL
4.	End wall	PP END M/s- AMIT ENG. MOHALI	--
		NPP END M/s- AMIT ENG. MOHALI	--
5.	Roof	MCF/CON	91
6.	Centre Buffer Coupler	M/s- FRONTIER	PP END 60P1 NPP END 06P1

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	07 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	M/s-BERGER	91/89	06.09.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

वरिष्ठ निरीक्षक
गुणवत्ता विभाग
रेलवे, रायबरेली (लालगंज)



MCF/RBL



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	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	1	4	FUR.NO	LSCN-G-313
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	196052				196051			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-784				ECBT-782			
Bolster no.	VS-608				VS-604			
Axle No	19 P-1333 RWF		19 P-6321 RWF		19 P-9908 RWF		19 P-9904 RWF	
Wheel Dia	917.626	917.573	917.669	917.622	917.631	917.598	917.636	917.576
Wheel Disc No	TZ 05-19 43291-9MI8	TZ 03-19 29234-9MI6	TZ 06-19 54007-9QI8	TZ 05-19 43771-9PG1	TZ 05-19 43293-9PI8	TZ 02-19 23693-9MG4	TZ 06-19 52269-9QH2	TZ 06-19 52270-9QH2
R.B. Nos.	05-18-27674	05-18-40581	05-18-29386	05-18-29283	04-18-25972	05-18-39702	05-18-11493	06-18-17026
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	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMFSK06-19-5101-551-155	DN-16M-1471	CMFSK06-19-5101-551-187	DN-16M-1434	CMFSK06-19-5101-551-234	DN-16M-1542	CMFSK06-19-5101-551-232	DN-16M-1434
Compressed Ht. at Tested Load	511.5	472	512	469	514	472	516	472
Alignment deviation (mm)	9	14	7	14	10	15	8	12

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	12790,12375	12371,12392
2.	Primary outer Spring	CMFSK	07-19 1100-058(396,179,298,384)	07-19 1100-058(382,199,173,393)
3.	Primary Inner Spring	CMFSK	03-19 1101-064(624,225,621,43)	03-19 1101-064(266,269,140,78)
4.	Primary Damper	KONI	03-19 (01404,00199,00897,01155)	03-19 (00990,00192,01042,08277)
5.	Secondary Damper	IAI	07-19 (263433,263527)	07-19 (263642,263366)
6.	Lateral Damper	KONI	03-19 00824	03-19 00418
7.	Brake Cylinder	KBI	B(5949,5079,5040,5960)K-29	B(5951,5070,5066,5958)K-29
8.	Brake Caliper	KBI	B(3380,3416,3590,3387)-29	B(3376,3415,3417,3375)-29
9.	Brake Disc	KBI	24193639 0068-27/19,24193639 0057-27/19 24193642 0027-27/19,24193639 0070-27/19	24193644 0003-27/19,24193642 0039-27/19 24193642 0034-27/19,24193639 0078-27/19
10.	Ball Joint Control Arm	BASANT/AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	SARITA		
14.	Ball joint traction lever	BASANT/AR		
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/AR		
20.	Fork make	EMSON		
21.	Control Arm Upper	RVE	140619-3,100619-3,080619-4,100619-2	080619-2,080619-4,010719-1,010619-3
22.	Control Arm Lower	RVE	010619-2,310519-3,RVE,010619-2	RVE,RVE,170519-3,230619-2
23.	Phonic Wheel	KNORR	K-07-19	K-07-19

Signature of SSE/Bogie/QC





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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	1	4	FUR.NO.	LSCNG-313
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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- KBI, FARIDABAD	
2.	Distribution valve	M/S- KBI, FARIDABAD	3485-33/19
3.	Pull box	M/S- KBI, FARIDABAD	2019 H 8649
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
5.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
6.	Floor board	M/s-SHREE RAM PNL	
7.	PVC	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
8.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
10.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
11.	Gangway bridge mounting (PPE)	M/s-RAKESH IRON KXH	
12.	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON 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- (DGFRE)HINDUSTAN FIBRE GLASS WORKS,	
17.	Roof ceiling	M/S- (GFRE)HINDUSTAN FIBRE GLASS WORKS,	
18.	Door way ceiling	M/S- HINDUSTAN FIBRE GLASS WORKS,	
19.	Partition frame	M/S-SARITA INDS UMB	
20.	Partition pillar	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
21.	Body Side Doors	M/s- JVR INDS, LUDHIYANA	
22.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Bio Tank (Pressurized flashing)	M/S- JSL LIFE STYLE LTD. BAHADURGARH	
25.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
26.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. MOHALI	
27.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
28.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
29.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
30.	Controlled Discharge Tap	M/s- AGMECO PVT LTD U.K	
31.	Lavatory Doors	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
32.	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS WORKS,VADODARA	
33.	Snack Table	N/A	
34.	RFID	M/s-TECH SOLUTION GURGAON	Sr.106605,106606

रिपोर्ट अभियंता
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिंकॉ, रायबरेली (लालगंज)





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DISPATCH TO	SSE/STOCK/CSTM	Type	L	W	S	C	N	1	Shell No.	9	7	4	1	4	FUR.NO.	LSCNG-313
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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 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 मुख्यता विभाग #0डि0का0, रायबरेली (लालगंज)	SME/QC/MCF/RBL सिस्टम एंजिनियर/गुणवत्ता आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareli	Dy.QM/MCF/RBL जोगिंदर 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

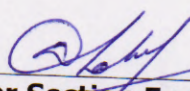
SCN-G-313

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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	197002/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
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DOC NO.: MCF/RBL/QEF/8001

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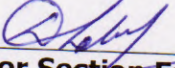
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : SSK On Board Sr no : 2019/09/395 HT Panel Sr no : 2019/09/392	EDTS 333, Rev`01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0060 Sr no.1 : 19080334 Sr no.2 : 19080365 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 : SSK/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



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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : AECO	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 19188	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2129	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 : NEC	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 : 0119181797	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 : ANANYA	CC 91205	01

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आ0रे0डि0का0 / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F.LJ/RBL	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, लखनऊ Sr. Electrical Engineer / RCF / RBL / Lucknow