

LSCN-869



# 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/2018-19/1117

RLY	N	R		Coach No.	1	9	1	2	2	7	/	C	DATE OF DISPATCH	2	9	-	0	1	-	1	9			
DISPATCH TO	Sr.DME/CHG/DLI			Type	L	W	S	C	N	1	Shell No.	8	7	4	4	5	-	2	0	1	8	-	1	9

- Railway Board's Order No. : 2018/M(C)/142/2, Dated-28-11-2018
- Tare Weight of Coach : 41.24 Tones
- Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

#### 4. 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) 1095 (NPPE) 2) 1102(PPE)

#### 5. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S Shivalic fastners pvt.ltd.mohali
		NPP END	M/S Shivalic fastners pvt.ltd.mohali
	Complete	MCF/RBL	87445
2.	Lav. side wall	M/S Rail tech pvt.ltd. KXH	LAV.1 --- LAV.2 ---
		M/S Rail tech pvt.ltd. KXH	LAV.3 --- LAV.4 ---
3.	Side wall	LH SIDE	M/S E.c.blades & tool pvt. Ltd CDG
		RH SIDE	M/S E.c.blades & tool pvt. Ltd CDG
4.	End wall	PP END	M/S Neera chandigarh
		NPP END	M/S Neera chandigarh
5.	Roof	M/S Pennar ind. Ltd. Thiruvallur Cheenai	242
6.	Centre Buffer Coupler	M/S Sanrok faridabad	PP END 10650 NPP END 10690

#### 6. 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 <sup>2</sup> . ➤ Max. pressure in BC ➤ All Brake are applied	6 - 10 sec. 3.0 ± 0.15 kg/cm <sup>2</sup> . OK	07Sec. 3.0 kg/cm <sup>2</sup> OK
2.	Insensitivity	➤ Exhaust BP @ 0.3 kg/cm <sup>2</sup> /min.	No brake application	OK
3.	Sensitivity	➤ Exhaust BP @ 0.1 kg/cm <sup>2</sup> /Sec, after 06 Sec.	Brake must apply	OK

#### 7. PAINTING DETAILS:

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE
1.	Paint	P.U	M/s -GS	Supply & apply	92/90
2.	Insulation			Satisfactory	

*[Signature]*  
SSE/QC/MCF/RBL

गुणवत्ता विभाग  
रेडिओका, रायबरेली (लालगंज)





MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

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RLY	N	R	-	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	5	-	-

## 8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	182590				182589			
Bogie Type	FIAT				FIAT			
Frame no.	VS-1609				VS-1614			
Bolster no.	VS-348				APEX-113			
Axle No	18 F - 8313 RWF		18F- 2751 RWF		18 F - 8596 RWF		18 B - 2872 RWF	
Wheel Dia	917.583	917.643	917.546	917.614	917.626	917.665	917.602	917.659
Wheel Disc No	TZ08-18 43628-8RR5	TZ07-18 39046-8RQ4	TZ08-18 45414-8RQ3	TZ08-18 45276-8RP3	TZ07-18 40870-8RB9	TZ08-18 45525-8RS8	TZ08-18 45268-8RP5	TZ08-18 45416-8RM8
R.B. Nos.	05-18 40088	05-18 38889	05-18 39844	05-18 12173	05-18 12095	05-18 28708	05-18 12079	05-18 28728
CT R B Make	SKF		SKF		SKF		SKF	

## 9. 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.	CMFSK12-18- 5101-512-126	CMGBD03-18- 5100-40-533	CMFSK12-18- 5101-512-83	CMGBD05-18- 5100-64-457	CMFSK12-18- 5101-512-134	CMGBD05-18- 5100-54-424	CMFSK12-18- 5101-512-156	CMGBD05-18- 5100-66-54
Compressed Ht. at Tested Load	514	468	514	472	153	471	513	472
Alignment deviation (mm)	12	12	11	12	10	6	10	5

## 10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	13360,13376	13378,13361
2.	Primary outer Spring	CMGBD	10-18 1100(122-92,121-78,122-433,121-33)	10-18 1100-121(279,138,18,43)
3.	Primary Inner Spring	CMRSK	02-18 06Y (300,448,154,301)	02-18 06Y- (522,167,2630,439)
4.	Primary Damper	KNORR	12-18(49084,47736,48303,48311)	12-18(48698,47869,42249,48242)
5.	Secondary Damper	GEREP	KW16-2018 301550739	KW16-2018 301550739
6.	Lateral Damper	IAI	01-19 237276	01-18 237315
7.	Brake Cylinder	KBI	A(9634,9137,9136,9629)K29	A(9635,9139,8976,9605)K29
8.	Brake Caliper	KBI	A(7791,7864,7866,7790)-29	A(7792,7867,2823,7746)-29
9.	Brake Disc	KBI	24162514 0054-41/18,24162514 0016-14/18 24162214 0043-39/18,24162277 0044-39/18	24162517 003-42/18,24162517 004-42/18 24162576 0039/18,24162278 0040-39/18
10.	Ball Joint Control Arm	AR		
11.	Lateral Bump Stop	AR		
12.	Traction Centre make	SARITA		
13.	Traction lever make	JI		
14.	Ball joint traction lever	AR		
15.	Ball joint traction centre	AR		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	PPI		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	RKFL/AR		
20.	Fork make	ASL		
21.	Control Arm Upper	RVE	301118-2,RVE,261118-1,011218-2,	301118-1,261118-1,291118-3,011218-2
22.	Control Arm Lower	RVE	191118-4,111118-3,281118-3,051218-4	291118-3,281118-4,231118-3,281118-4

Signature of SSE/Bogie/QC





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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	5	-	2	0	1	8	-	1	9

11. TRACEABILITY OF FURNISHING ITEMS:

**11. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI Faridabad. New Delhi	1894 51/18
2.	Pull box	M/s KBI Faridabad. New Delhi	
3.	Distribution valve	M/s KBI Faridabad. New Delhi	
4.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	2018M6434
5.	Decoupling arrangement	M/S- ELASTOMER MUMBAI	
6.	Floor board	M/s- EG WOOD BOARD HYDARABAD	
7.	PVC	M/s Responsive ind.mumbai	
8.	Lavatory Inlay	M/s- SEEMA INDS. BHOPAL	
9.	UIC Vestibule (PPE)	M/S- ELASTOMER MUMBAI	
10.	UIC Vestibule (NPPE)	M/S- ELASTOMER MUMBAI	
11.	Gangway bridge mounting (PPE)	M/s- COMPETENT IND JUC	
12.	Gangway bridge mounting (NPPE)	M/s- COMPETENT IND JUC	
13.	Body Side Window	M/S- AGF INDS, KOLKATA	
14.	Emergency Window	M/S- AGF INDS, KOLKATA	
15.	Hopper Window	M/S- BEI LTD PUNJAB	
16.	Side panel	M/S-SUNGLOW PUNJAB LAMINATE	
17.	Roof ceiling	M/s SYANTHITIC MODULAR KOLKATA	
18.	Door way ceiling	M/s- RAJA IND. KHANNA	
19.	Body Side Door1,3,4	M/s- JVR LDH	
20.	Body Side Door2	M/s- EEPL LDH	
21.	Vestibule Door(PPE)	M/s- KALSI LDH	
22.	Vestibule Door(NPPE)	M/s- KALSI LDH	
23.	Bio Tank	M/s- RAIL FAB KXH	
24.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
25.	Under Slung Water Tank( 2X685L)	M/s Shivalic fastners pvt.ltd. mohali	
26.	Under Slung Water Tank (1X685L)	M/s- AMIT ENG. MOHALI	
27.	Flexible Faucet	M/s- KAPCO VALVES, JALANDHAR	
28.	Lotah Filler Tap	M/s- KAPCO VALVES, JALANDHAR	
29.	Controlled Discharge Tap	M/s- AGMECO PVT. LTD. UK	
30.	Lavatory Doors	M/s- KALSI, LDH	
31.	Seat & Berth	M/S- OVPL MUMBAI	
32.	Snack Table	N/A	

*SSE*  
SSE/QC/MCF/RBL  
वरिष्ठ अधिकारी

गुणवत्ता विभाग  
रेडिओका, रायबरेली (लालगंज)





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DISPATCH TO	Sr.DME/CHG/DLI	Type	L	W	S	C	N	1	Shell No.	8	7	4	4	5	-	2	0	1	8	-	1	9

12. MODIFICATION (IF ANY)

NIL

12. MODIFICATION (IF ANY) : NIL

13. DEVIATION (IF ANY) : NIL

14. ITEM FITTED ON THE COACH ON TRIAL : NIL

S NO	ITEM PARTICULARS	PURPOSE	REPORT Frequency	REFERENCE & PERIOD OF TRIAL

**15. 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 गुणवत्ता विभाग रेडिओका, रायबरेली (लालगंज)	AME/QC/MCF/RBL Assistant Mechanical Engineer / Quality-1 आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.COM/MCF/RBL ज्य. मुख्या गुणवत्ता अधिकारी 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

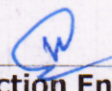
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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	191227/C
RAILWAY	NR	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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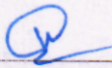
DATE:18.01.2017

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**FOR ELECTRICAL ITEMS**

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

01.	Switch board cabinet Make : <b>HIND RECTIFIERS</b> On Board Sr no : <b>H 355.18 M 0208</b> HT Panel Sr no : <b>H 355.18 M 0201</b>	EDTS 333, Rev` 01`Am-1	<b>01</b>
02.	Pump equipment with PLC controller & pump box Make : <b>KALSI</b> Sr no PA: <b>7444/8/18</b> Sr no.1 : <b>296877</b> Sr no.2 : <b>296878</b> Srno.CPA: <b>7445/08/2018-KALSI</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL), Make : <b>CONCORD</b>	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Passenger Alarm Cum Indication Light (PACIL) Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	<b>02</b>
05.	Fitment of Switch Plate Assly(Cabin Side) Make : <b>SSK/SALZER</b>	EDML 086,Rev-03, ITEM-01	<b>10</b>
06.	Fitment of Switch Plate Assly Corridor Side),Make : <b>SSK/SALZER</b>	EDML 086, Rev 03, ITEM-02	<b>10</b>
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: <b>CG POWER</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
08.	Cabin,Corridor,doorway and Gangway Lights. Make: <b>DR AUTO</b>	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	<b>26</b>
09.	Lavatory Light Make: <b>RT VISION</b>	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	<b>04</b>
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : <b>AGASTYA</b>	CC76289 & CC76443	<b>10</b>

  
**Senior Section Engineer**  
**Quality control / Electrical**  
**Modern Coach Factory Raebareli**





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11.	Battery fuse box +ve Make : <b>INTEG</b>	LW 71001,Alt-F	<b>01</b>
12.	Battery fuse box -ve Make : <b>NEC</b>	LW 71002,Alt-F	<b>01</b>
13.	Regulated battery charger Make : <b>SIGNOTRON</b> Sr no: <b>01191221</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
14.	9KVA transformer Make : <b>PANTRONICS</b> Sr no : <b>PAN-18018018</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	<b>01</b>
15.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>PP-S.I</b> <b>NPP-MLI</b>	As per spec No EDTS 105,Rev`e' Am-3, TYPE-2	<b>01</b> <b>set</b>
16.	Feeder junction boxes. Make : <b>AECO</b>	EDTS-328 REV-C	<b>01</b> <b>set</b>
17.	Wheel set earthing equipment. Make : <b>CHANDA &amp; CHANDA ENGG.</b>	EDTS101,REV-C,AM-1	<b>02</b> <b>sets</b>
18.	Wheel Slide Protection System (WSP) Make : <b>KNOOR</b> Sr no : <b>0118380303</b>	M/s : <b>KNORR</b>	<b>01 set</b>
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : <b>SOUTHERN</b> Lug date : <b>05/17</b>	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	<b>01 set</b>
20.	Battery box for LHB coaches. Make : <b>HITECH</b>	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>AWM(E)/MCF/RBL</b>
<b>वरिष्ठ अनुभाग अभियन्ता</b>	<b>SEE(P)/MCF/RBL</b>

गुणवत्ता नियंत्रण  
आ०रे०डि०का० / लालगंज / रायबरेली  
S.S.E./Elect-QC/M.C.F./RBL

स० कार्य प्रबन्धक / विद्युत  
आ०रे०डि०का० / रायबरेली  
A.W.M./Electrical/MCF/RBL