



# Modern Coach Factory Raebareli

## आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO: 00

DATE:

**ROLLING STOCK CERTIFICATE**

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2016-17/ 277

Coach No.		1	6	2	7	0	/	C	-	DATE OF DISPATCH					0	6	1	2	2	0	1	6	
RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	0	9	1	-	2	0	1	6	-	1	7

1. Railway Board's Order No. : 2015/M(C)/142/1 Dated. 18.05.2016
2. Tare Weight of Coach : 41.24 Tones
3. 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/-15	1)1105 (NPPE) 2)1100 (PPE)

**5. TRACEABILITY OF SHELL ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Underframe	Front Part	PP END 67091 NPP END 67091
		Complete	M/s-MCF/RBL
2.	Side wall	M/s-MCF/RBL	RH 67091 LH 67091
3.	End wall	PP- M/s Rail Tech KXH	PP END 67091 NPP END 67091
		NPP- M/s Rail Tech KXH	
4.	Roof	M/s-DTL Ancillaries Ltd. PUNE	
5.	Centre Buffer Coupler	M/s ESCORTS	PP END 6115 NPP END 6120
6.	Buffers	N.A.	

**6. AIRBRAKE TEST REPORT:**

S NO	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
1.	Full application brake	<ul style="list-style-type: none"> <li>➤ Reduce pressure of BP from 5.0 to 3.4 kg/cm<sup>2</sup>.</li> <li>➤ Max. pressure in BC</li> <li>➤ All Brake are applied</li> </ul>	6 – 10 sec. 3.0 ±0.15 kg/cm <sup>2</sup> . OK	7 sec. 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 DAETAILS:**

S NO	DESCRIPTION	TYPE OF PAINT	MAKE	AVERAGE GLOSS VALUE
1.	Paint	P.U	GS	92/90
2.	Insulation		Satisfactory	

वरि०अनु० अभियंता  
SSE/QC/MCF/RBL  
रे०डि०का०, रायबरेली (लाखगंज)



LSCN-179

	<b>MODERN COACH FACTORY, RAEBARELI</b> आधुनिक रेल डिब्बा कारखाना, रायबरेली	DOC NO.: MCF/RBL/QMF 8002
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RLY	C	R		Type	L	W	S	C	N		Shell No.	6	7	0	9	1	-	2	0	1	6	-	1	7

**8. DETAIL OF BOGIES :**

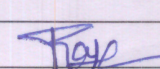
ITEMS	PP Side				NPP Side			
Bogie No	160604				160603			
Bogie Type	FIAT				FIAT			
Frame no.	VS/RBL-24				VS/RBL-21			
Bolster no.	MCF/RBL-794				RBL-782			
Axle No	S-3028 RWF		S-3761 RWF		S-368 RWF		S- 3222 RWF	
Wheel Dia	917.335	917.338	917.346	917.329	917.000	917.200	917.308	917.320
Wheel Disc No	00047-6068 06-16	00032-6108 07-16	00113-6108 07-16	00136-6108 07-16	00118-6108 07-16	00094-6108 07-16	00015-6011 06-16	00108-6014 06-16
R.B. Nos.	05-16 04316	05-16 03942	05-16 04075	05-16 04032	06-16 04605	05-16 04277	06-16 04892	05-16 04418
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

**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.	G16-5-119-31	G16-6-039-31	G16-5-116-32	G16-6-132-32	G16-6-1255-58	G16-6-108-58	G16-6-060-57	G16-6-117-57
Compressed Ht. at Tested Load	516	470	513	470	514	470	514	470
Alignment deviation (mm)	1	10	2	8	1	7	2	8

**10. TRACEABILITY OF BOGIE ITEMS:**

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Primary outer Spring	G	G 16-5	G 16-5
2.	Primary Inner Spring	G	G16-6A, G16-6, G16-6, G16-6	G16-6A, G16-6, G16-6, G16-6
3.	Primary Damper	KONI	05-2016(32521,32508,32537,32606)	05-2016(32513,32527,32500,32511)
4.	Secondary Damper	KONI	24-2016(8359,7807)	24-2016(8371,8396)
5.	Lateral Damper	KONI	22-2016 5090	22-2016 4997
6.	Brake Cylinder	KBI	4439K29,4371K29,4370K29,4440K29	4442K29,4372K29,4373K29,4441K29
7.	Brake Caliper	KBI	4016-29,4080-29,4079-29,4019-29	4021-29,4081-29,4082-29,4020-29
8.	Brake Disc	KBI	08-16(3658,3452,3221,3218) D 133561-300	08-16(3271,3279,3311,3216) D 133561-300
9.	Ball Joint Control Arm	MGN		
10.	Lateral Bump Stop	MGN		
11.	Traction Centre make	EMSON		
12.	Traction lever make	JL.12.15		
13.	Ball joint traction lever	S/BLOC		
14.	Ball joint traction centre	SGA		
15.	Secondary Rubber Pad	TECSPAK		
16.	Rubber Spring	GMT		
17.	Anti roll bar make	EMSON		
18.	Roll Link make	SARITA/SGA		
19.	Fork make	SARITA		

  
 Signature of SSE/Bogie/QC





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RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	0	9	1	-	2	0	1	6	-	1	7
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**11. TRACEABILITY OF FURNISHING ITEMS:**

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/s KBI ,Palwal Haryana	16H1780
2.	Pull box	M/s KBI ,Palwal Haryana	
3.	DV	M/s KBI ,Palwal Haryana	2016H2569
4.	PVC	M/s Premier Polyflim Ltd. DLI	
5.	UIC Vestibule (PPE)	M/s Sun crest Industries West Bengal	
6.	UIC Vestibule (NPPE)	M/s Sun crest Industries West Bengal	
7.	Foot Step	M/s Hi-tech Infra RBL	
8.	Lavatory Inlay	M/s Oasis Fabrication Jagdhari	
9.	Decoupling arrangement	M/s Kohinoor Industries, Faridabad	
10.	Body Side Window	M/s AGF Pvt. Ltd , Kolkata	
11.	Emergency Window	M/s AB Composites, Kolkata	
12.	Hopper Window	M/s Aikon Technology Pvt.Ltd. Solan (H.P)	
13.	Non-AC Area Ceiling	M/s Gandhi Safe & Allied, Jalandhar	
14.	Body Side Doors	M/s JBM ,Faridabad/Sukata, CDH	
15.	Vestibule Door(PPE)	M/s Kalsi, LDH	
16.	Vestibule Door(NPPE)	M/s Kalsi, LDH	
17.	Bio Tank	M/s Rail Fab KXH	
18.	Auxiliary Water Tank	M/s Manoj Enterprises Mohali Punjab	
19.	Under Slung Water Tank ( 2X685L)	M/s Amit Engg, Mohali Punjab	
20.	Under Slung Water Tank (1X450L)	M/s Shivalik Fasteners, Mohali Punjab	
21.	Bib Cock/Controlled Discharge Tap	M/s KPR Industries, Mohali	
22.	Lavatory Doors	N/A	
23.	Seat & Berth	M/s Oriental veneer Products Ltd Mumbai	
24.	Snack Table	M/s Gandhi Enterprises, Jalandhar	

वरिष्ठ अनुसंधान अधिकारी  
SSE/QC/MCF/RBL  
गुणवत्ता विभाग

रेडि०का०, रायबरेली (लालगंज)





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RLY	C	R	-	Type	L	W	S	C	N	Shell No.	6	7	0	9	1	-	2	0	1	6	-	1	7

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:**

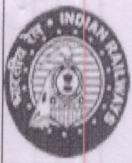
S NO	COMPONENTS	WARRANTY
1	Brake blocks, wheels, push gravity cocks, flushing valves, moldings, window glasses, mirrors, roller blinds, curtain & bulbs etc. ( items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months date of dispatch of coach or 30 months from 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

वरिष्ठ अभियंता SSE/QC/MCF/RBL गुणवत्ता विभाग रेडि०का०, रायबरेली (लालगंज)	AME/QC/MCF/RBL जी.एस. पाण्डेय G.S. Pandey सहायक यांत्रिक अभियंता/गुणवत्ता Assistant Mechanical Engineer/Quality आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	Dy.CME/FUR/MCF/RBL उप मुख्या अभियंता DY CME/FURNISHING रेल कोच फैक्ट्री / रायबरेली / लालगंज RCF / RBL / LLJ





**Govt. of India- Ministry of Railways  
(MODERN COACH FACTORY RAEBARELI)**



MCF/RBL/QEFSCN-8001

VER. 01.06.2016

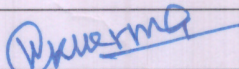
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**FOR ELECTRICAL ITEMS**

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

**ELECTRICAL TEST CERTIFICATE FOR LHB/EOG NON AC COACHES**

TYPE COACH	LWSCN	SHELL/COACH NO	16270/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**





**Govt. of India- Ministry of Railways  
(MODERN COACH FACTORY RAEBARELI)**



MCF/RBL/QEFSCN- 8001

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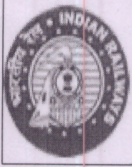
**FOR ELECTRICAL ITEMS**

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

01.	Switch board cabinet Make : <b>SSK</b> On board Sr no : <b>2016.07.057</b> HT panel Sr no : <b>2016.07.057</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>5483/07/2016</b> Sr no.1: <b>270350/07/2016</b> Sr no.2: <b>270351/07/2016</b> Srno.CPA: <b>5498/07/2016</b>	As per spec EDTS 186,Rev-a, Am- 2	<b>01</b>
03.	Emergency light system for EOG type coaches (AEL)	EDTS 151,Rev -c Am-1 & 2	<b>04</b>
04.	Lavatory light fitting assly	LW 76001,Alt nil	<b>04</b>
05.	Fitment of Passenger Alarm cum indication light (PACIL).	As per drg no. LW 76005,Alt -e 02 nos	
06.	Fitment of Switch Plate Assly(Cabin Side)	EDML 086, Rev-03.	<b>10</b>
07.	Fitment of Switch Plate Assly Corridor Side)	EDML 086, Rev 03.	<b>10</b>
08.	Fitment of Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: <b>CROMPTON GREAVES</b>	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	<b>30</b>
09.	Fitment of Fluorescent light fitting for LHB type coaches.	LW 76033,Alt`c,	<b>04</b>
10.	Fitment of Fluorescent light fitting, SINGLE with 110V AC/DC ballast.	CC 76213,Alt`d'.	<b>24</b>
11.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches	CC76289 & CC76443	<b>10</b>

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





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MCF/RBL/QEFSCN- 8001

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**FOR ELECTRICAL ITEMS**

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

12.	Fitment of Compact Fluorescent Light fitting DOUBLE with 110V AC/DC ballast.	CC 76216, Alt `c'.	<b>02</b>
13.	FL Tubes, 02 Feet ,18Watt ,colour temp 6500K	RDSO/PE/SPEC/TL 0011, Sec I, Rev I, 07 2001.	<b>24</b>
14.	Battery fuse box +ve Make : <b>NEC</b>	LW 71001,Alt-F	<b>01</b>
15.	Battery fuse box -ve Make : <b>ABROL</b>	LW 71002,Alt-F	<b>01</b>
16.	Regulated battery charger Make : <b>AAL</b> Sr no: <b>061602399</b>	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	<b>01</b>
17.	9KVA transformer Make : <b>VIMAL</b> Sr no : <b>478</b>	As per RDSO/PE/SPEC/TL 0158, 2010, Rev `0',Ty I.	<b>01</b>
18.	ZS coupling 400A/750V/03Ph/50hz. Make : <b>S INTERNATIONAL</b>	As per spec No EDTS 105,Rev `e' Am-2	<b>02 sets</b>
19.	Feeder junction boxes. Make : <b>ABROL</b>	EDTS-328 REV-C	<b>02</b>
20.	Wheel set earthing equipment. Make : <b>CHANDA &amp; CHANDA, DARSHAN</b>	EDTS101,REV-C,AM-1	<b>02</b>
21.	Wheel Slide Protection System (WSP) Make: <b>KNORR</b> Sr no : <b>0116172430</b>	M/s : <b>KNORR</b>	<b>01 set</b>
22.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : <b>HBL</b> Lug date : <b>11/2016</b>	RDSO/pe/spec/ac-0009 rev-1-2008 amdt-1	<b>01 set</b>
23.	Battery box for LHB coaches.	CC 91205	<b>01</b>

<b>SSE/EL/QC</b>	<b>Dy CEE(P)/MCF/RBL</b>

वरिष्ठ खण्ड अभियन्ता  
विद्युत उत्पादन-गुणवत्ता  
रेल कोच फैक्टरी / लालगंज / रायबरेली  
Sr. Section Engineer

उप मुख्य विद्युत अभियन्ता (उत्पादन)  
रेल कोच फैक्टरी-रायबरेली, लालगंज