



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/2019-20/1284

RLY	CR	COACH NO	199448/C	DATE OF DISPATCH		21/12/2019
Type	LWSCN1	Shell No.	97549	DISPATCH TO	SSE/STOCK/CR/PUNE	FUR.NO. LSCN-1389

1. Railway Board's Order No. : 2019/M(C)/142/2,DATED-18.12.2019
2. Tare Weight of Coach : 41.24 Tonnes
3. Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature:

A	Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiv.) letter no. MC/LHB/Brake, DT. 27.09.18
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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	NPP/ PP 1102, 1100

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame Front Part	PP END	M/S-NE
		NPP END	M/S-NE
	Complete	MCF/RBL(V4U TECHIE)	97549
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1 LAV.2
		M/S-ATHANCY RBL	LAV.4 LAV.3
3	LH SIDE	MCF/RBL(CONT V4U)	359/01
	RH SIDE	MCF/RBL(CONT V4U)	359/02
4	End wall	PP END	M/S-SIPL PALWAL
		NPP END	M/S-SIPL PALWAL
5	Roof	MCF/CON	198
6	Centre Buffer Coupler	M/s-ESCORT LTD	PP END 2283 NPP END 2314

7. AIR BRAKE 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 .	6 - 10 sec.	08sec
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²
		All Brake are applied	OK	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	BERGER	M/S-BERGER	88/88	3/12/2019
2	Insulation	Satisfactory				

Rajma
SSE/QC/MCF/RBL
वरिष्ठ अनुसंधान अभियंता
गुणवत्ता विभाग
रेडिंकॉ, रायबरेली (लालगंज)



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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RLY	C	R	-	Coach No.	1	9	9	4	4	8	/	C	-	DATE OF DISPATCH	2	1	1	2	2	0	1	9
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DISPATCH	SSE/STOCK/CR/PUNE	Type	L	W	S	C	N	1	Shell No.	9	7	5	4	9	FUR.NO	LSCN-1389
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192622				192621			
Bogie Type	FIAT				FIAT			
Frame no.	WILL-16				WILL-012			
Bolster no.	APEX-74				APEX-73			
Axle No	19 N - 4852 RWF		19 N - 8931 RWF		19 N - 4673 RWF		19 N - 4893 RWF	
Wheel Dia	917.566	917.519	917.57	917.546	917.561	917.51	917.546	917.332
Wheel Disc No	TZ 06-19 52746-9QH5	TZ 06-19 53372-9PD9	TZ 06-19 52942-9QH3	TZ 06-19 52743-9QH5	TZ 06-19 52941-9QH3	TZ 06-19 53274-9PD9	TZ 06-19 53276-9RQ8	TZ 06-19 52747-9QH5
R.B. Nos.	08-19 29168	08-19 29783	08-19 29258	08-19 29820	08-19 28351	08-19 29309	10-19 40024	08-19 29358
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.	CMFSK09-19-5101-031-142	CMFSK06-19-5100-027-318	CMFSK09-19-5101-031-122	CMFSK06-19-027-228	CMFSK09-19-5101-031-159	CMFSK06-19-5100-027-194	CMFSK09-19-5101-031-147	CMFSK06-19-5100-027
Compressed Ht. at Tested Load	512	470	512.5	471	514	472	514.5	472
10Alignment deviation (mm)	8	9	8	10	10	13	9	13

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	45,179,	95,86
2.	Primary outer Spring	CMFSK	10-19-1100-114 (346,394,342,388)	10-19-1100-114 (370,385,232,361)
3.	Primary Inner Spring	CMSTL	07-19 F06-N91-06A (1704,4093,1477,3884)	07-19 F06-N91-06A (1180,1534,3182,3818)
4.	Primary Damper	KONIC	03-19 (05716,04333,04357,05550)	03-19 (05602,04369,02959,04649)
5.	Secondary Damper	IAI	10-19 (277123,276786)	10-19 (276846,276900)
6.	Lateral Damper	IAI	05-19 251479	05-19 251498
7.	Brake Cylinder	ESCORT	(47729,47485,47486,47727)	(47736,47443,47444,47738)
8.	Brake Caliper	ESCORT	(27331,27087,27088,27329)	(27338,27045,27046,27340)
9.	Brake Disc	KBI	24206709 0060-47/19,24206709 0059-47/19 24206709 0057-47/19,24206709 0058-47/19	24206703 0020-46/19,24206703 0021-43/19 24206710 0060-47/19,24206709 0061-47/19
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	SGA		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	GMT		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	696,588,88,750	528,682,888,448
22.	Control Arm Lower	SF	589,332,128,658	318,452,658,389
23.	Phonic Wheel	KBI	K 08-19	K 08-19

Signature of SSE/Bogie/QC



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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPPP/PP)
1	Air Brake Module	M/S-KBI FARIDABAD	
2	Distribution valve	M/S-KBI FARIDABAD	4149 43/19
3	Pull box	M/S-FAV	2019K9367
4	FIBA	NA	
5	Foot Step	M/S- SUPER SPARK PVT.LTD.FARIDABAD	NA
6	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7	Floor board	M/S-A.B. COMPOSITE KOLKATA	
8	PVC	M/S-A.B. COMPOSITE KOLKATA	
9	Lavatory inlay	M/S-SEEMA INDS BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12	Gangway bridge mounting (PPE)	M/s-MAHAVEER METAL WORKS, KXH	
13	Gangway bridge mounting (NPPE)	M/s-MAHAVEER METAL WORKS, KXH	
14	Body Side Window	M/S-A.B. COMPOSITE KOLKATA	
15	Emergency Window	M/S-A.B. COMPOSITE KOLKATA	
16	Lavatory/hopper Window	M/S-A.B. COMPOSITE KOLKATA	
17	Side panel	M/S-A.B. COMPOSITE KOLKATA	
18	Roof Ceiling	M/S-A.B. COMPOSITE KOLKATA	
19	Door way Ceiling	M/S-A.B. COMPOSITE KOLKATA	
20	Body Side Doors 1	M/S- JR INDUSTRIES LUDHIYANA	
21	Body Side Doors 2,3,4	M/S- JBM INDUSTRIES, FARIDABAD	
22	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
23	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24	Bio Tank	M/S-UNIFAB,CEMCON CASTING PVT LTD	
25	Pressurised Flushing (Elect Pneumatic)	NA	
26	Auxiliary Water Tank	M/S-SHIVALIK FAST. MOHALI	
27	Under Slung Water Tank(2X685L)	M/S-AMIT ENG. BADDI	
28	Under Slung Water Tan (1x685L)	M/S-AMIT ENG. MOHALI	
29	Health Faucet	M/s-KAPCO VALES JALANDHAR	
30	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
31	Controlled discharge tap	M/s- EAUSET PVT LTD GURGAON	
32	Lavatory Doors	M/S-A.B. COMPOSITE KOLKATA	
33	Seat & Berth	M/S- HINDUSTAN FIBRE GLASS VADODARA	
34	RFID	NA	

Rama
SSE/QC/MCF/RBL

वरिष्ठ अभियंता

गुणवत्ता विभाग

रेडिंकॉ, रायबरेली (लाहौर)



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Type	LWSCN1	Shell No.	97549	DISPATCH TO	SSE/STOCK/CR/PUNE	FUR.NO.
13. MODIFICATION (IF ANY)				: NIL		
14. DEVIATION (IF ANY)				: NIL		
15. ITEM FITTED ON THE COACH ON TRIAL				: NIL		

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

16. WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain 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 30months 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 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.

वरिष्ठ QC/MCF/RBL अभियंता	वरिष्ठ यांत्रिक अभियंता/गुणवत्ता	Dy. QC/MCF/RBL सिंह
गुणवत्ता विभाग	Senior Mechanical Engineer/Quality	Joginder Singh

०६०००००, रायबरेली (लालगंज) आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory Raebareilly
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

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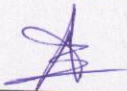
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH	LWSCN	SHELL/COACH NO	199448/C
RAILWAY	CR	ELECT.FIT DATE	18-12-2019
Sr no	Description of test	FUR.NO	SCN-1389
		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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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

01.	Switch board cabinet Make : PD STEELS On Board Sr no : PDS/1911012 HT Panel Sr no : PDS/1911025	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0070 Sr no.1 : 3307 Sr no.2 : 3619 Srno.CPA: sr no -NIL-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : INTEG ELECT.	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 : RECORD/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: 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: ENSAVE	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 LHBSN(80-BERTHER)Coaches Make : INTRA	CC76289 & CC76443	09

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





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ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NON AC SCN COACHES

11.	Battery fuse box +ve Make : SSK	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : PI ENGG.WORKS Sr no: PI-19110199	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2580	As per RDSO/PE/SPEC/TL 0158, 2010, Rev`0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT	As per spec No EDTS 105,Rev`e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : MV ELECTRO	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 : KNORR Sr no : 0119372804	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : AMARA RAJA Lug date : 09/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : NIL	CC 91205	01

SSE/EL/OC
वरिष्ठ अनुभाग अभियन्ता
गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

AWM(ELECT.)/MCF/RBL
SEE(P)/MCF/RBL
वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL

