



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/2019-20/1288

RLY	CR	COACH NO	199452/C	DATE OF DISPATCH	21/12/2019		
Type	LWSCN1	Shell No.	97295	DISPATCH TO	SSE/STOCK/CR/PUNE	FUR.NO.	LSCNG-368

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	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 & Faiv.) letter no. MC/LHB/Brake, DT. 27.09.18	

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	1105,1098

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front	PP END	M/S-EC BLADE	10	
		Part	NPP END	M/S-EC BLADE	01	
		Complete		MCF/RBL/V4U TECHIE	97295	
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1	LAV.2		
		M/S-ATHANCY RBL	LAV.3	LAV.4		
3	Side wall	LH SIDE		M/S-ECBT	56	
		RH SIDE		M/S-ECBT	56	
4	End wall	PP END		M/S-DTL PUNE		
		NPP END		M/S-DTL PUNE		
5	Roof	MCF/CONT			215	
6	Centre Buffer Coupler	M/s-FRONTIER LTD	PP END	29P2	NPP END	178P1

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.	09sec
		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	6/12/2019
2	Insulation			Satisfactory		

Delima
SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लखनऊ)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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RLY	C	R	-	Coach No.	1	9	9	4	5	2	/	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	2	9	5	FUR.NO	LSCN-G-368
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192628				192627			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL -2140				MCF/RBL -2126			
Bolster no.	APEX-82				APEX-106			
Axle No	19 N - 8929 RWF	19 L - 2365 RWF	19 S - 9673 RWF	19 S - 7667 RWF				
Wheel Dia	917.628	917.509	917.565	917.425	917.424	917.515	917.431	917.514
Wheel Disc No	TZ 07-19 61601-9RR4	TZ 07-19 67201-9RP1	TZ 06-19 51302-9PI9	TZ 06-19 51303-9PI9	TZ 07-19 70191-9RN9	TZ 07-19 68392-9RQ6	TZ 08-19 72710-9SK7	TZ 06-19 52707-9QN5
R.B. Nos.	08-19-28894	08-19-28851	10-19-39910	08-19-30249	08-19-39546	08-19-29651	08-19-39510	08-19-28972
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.	CMFSK09-19-5101-031-149	CMFSK05-19-5100-027-320	CMFSK09-19-5101-031-141	CMFSK05-19-5100-027-16	CMFSK09-19-5101-031-137	CMFSK05-19-5100-027-207	CMFSK09-19-5101-031-125	CMFSK05-19-5100-027-432
Compressed Ht. at Tested Load	513	471	511.5	471	515	472	515.5	472
10Alignment deviation (mm)	12	9	9	9	8	12	7	10

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	54,255	76,483
2.	Primary outer Spring	CMFSK	10-19-1100-114 (1407,1406,1426,1427)	10-19-1100-114 (1408,3471,1265,386)
3.	Primary Inner Spring	CMFSK	10-19-1101-101 (1010,501,762,691)	10-19-1101-101 (643,668,682,759)
4.	Primary Damper	KONIC	03-19 (04287,03044,04744,04338)	03-19 (03036,03068,00735,01040)
5.	Secondary Damper	IAI	09-19 (276861,276879)	09-19 (276945,276825)
6.	Lateral Damper	IAI	05-19 251497	05-19 251086
7.	Brake Cylinder	ESCORT	(48246,48048,45517,45747)	(45745,75516,45639,45718)
8.	Brake Caliper	ESCORT	(27749,27804,25456,25567)	(25565,25455,25478,25538)
9.	Brake Disc	KBI/FAV	24206702 0063-46/19,24206702 0058-46/19 24206712 0029-47/19,24206702 0057-46/19	10-19 (3012,3011,3021,3011)D133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT/ARYAN		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	AEW		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	ARYAN		
16.	Secondary Rubber Pad	PRAG		
17.	Rubber Spring	GMT		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	240919-2,RVE,240919-2,160919-2	170819-3,170819-3,190819-2,220819-2
22.	Control Arm Lower	RVE	270819-2,210919-2,210919-2,270819-2	270819-2,270919-2,220919-2,250919-5
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

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- ESCORTS	2019070031
2	Distribution valve	M/S- ESCORTS	1907A031
3	Pull box	M/S-FAV	
4	FIBA	N/A	
5	Foot Step	M/S- SUPER SPARK PVT.LTD.FARIDABAD	
6	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7	Floor board	M/S-TWPL MUMBAI	
8	PVC	M/s-ACME INDIA NDLS	
9	Lavatory inlay	M/s-ACME INDIA NDLS	
10	UIC Vestibule (PPE)	M/S-KRP PUNE	
11	UIC Vestibule (NPPE)	M/S-KRP PUNE	
12	Gangway bridge mounting (PPE)	M/s-RAKESH IRON & STEEL KXH	
13	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON & STEEL KXH	
14	Body Side Window	M/s-ACME INDIA NDLS	
15	Emergency Window	M/s-ACME INDIA NDLS	
16	Lavatory/hopper Window	M/s-ACME INDIA NDLS	
17	Side panel	M/s-ACME INDIA NDLS	
18	Roof Ceiling	M/s-ACME INDIA NDLS	
19	Door way Ceiling	M/s-ACME INDIA NDLS	
20	Partition panel (FRAME)	M/s-ACME INDIA NDLS	
21	Partition pillar	M/s-ACME INDIA NDLS	
22	Body Side Doors	M/s-JVR LUDHIYANA	
23	Vestibule Door(PPE)	M/S-JBM INDUSTRIES, FARIDABAD	
24	Vestibule Door(NPPE)	M/S-JBM INDUSTRIES, FARIDABAD	
25	Bio Tank	M/S-UNIFAB,CEMCON CASTING PVT LTD	
26	Pressurised flushing (Elect Pneumatic)	NA	
27	Auxiliary Water Tank	M/S-SHIVALIK FAST MOHALI	
28	Under Slung Water Tank (2X685L)	M/S-AMIT ENGG BADDI	
29	Under Slung Water Tank (1x650 L)	M/S-AMIT ENGG MOHALI	
30	Health Faucet	M/s-KAPCO VALES JALANDHAR	
31	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
32	Controlled discharge tap	M/s- EAUSET PVT LTD GURGAON	
33	Lavatory Doors	M/s-ACME INDIA NDLS	
34	Fire Extinguisher	M/s-ACME INDIA NDLS	
35	Seat & Berth	M/s-ACME INDIA NDLS	
36	Water purifier	NA	
37	RFID	NA	

SSE/QC/MCF/RBL

रि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)



Modern Coach Factory Raebareli
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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	REFERENCE &
			Frequency	PERIOD OF TRIAL

16. WARRANTY:

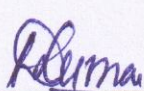


SNO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months from the date of supply of material whichever is earlier.

NOTE:

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
6. 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.

		
SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy. Chief Quality Manager

वरिष्ठ गुणवत्ता अभियंता
गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (लालगंज)

वरिष्ठ गुणवत्ता अभियंता (गुणवत्ता)
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

जोगिन्दर सिंह
Dy. Chief Quality Manager
उप मुख्य गुणवत्ता प्रबन्धक
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



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आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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	199452/C		
RAILWAY	CR	ELECT.FIT DATE	19-12-2019	FUR.NO	SCN-G-368
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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FOR ELECTRICAL ITEMS

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

01.	Switch board cabinet Make : PD STEELS On Board Sr no : PDS/1911021 HT Panel Sr no : PDS/1911014	EDTS 333, Rev` 01`Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0095 Sr no.1 : 3515 Sr no.2 : 3417 Srno.CPA: 2019/08/029-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 : SALZER/RECORD	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SALZER/RECORD	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: C G 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: 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 LHBCN(80-BERTHER)Coaches Make : INTRA	CC76289 & CC76443	09

Senior Section Engineer
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FOR ELECTRICAL ITEMS

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

11.	Battery fuse box +ve Make : SSK	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no : W4K5J 19787	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2550	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 : AECO	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 : ESCORT Sr no : 190001-60527-0136	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 11/19	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/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

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

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL