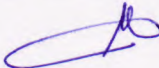


		Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली		DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018		
ROLLING STOCK CERTIFICATE Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1283						
RLY	CR	COACH NO	199447/C	DATE OF DISPATCH 21/12/2019		
Type	LWSCN1	Shell No.	97480	DISPATCH TO	SSE/STOCK/CR/PUNE FUR.NO. LSCN-1388	
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						
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	1099, 1099	
6. TRACEABILITY OF SHELL ITEMS:						
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO			
1	Under frame	Front PP END	M/S-SFPL			
		Part NPP END	M/S-SFPL			
		Complete	MCF/RBL(V4U TECHIE)	97480		
2	Lav. side wall	M/S-ATHANCY RBL	LAV.1	LAV.2		
		M/S-ATHANCY RBL	LAV.4	LAV.3		
3	Side wall	MCF/RBL(CONT V4U)	350/01			
		MCF/RBL(CONT V4U)	350/02			
4	End wall	M/S-SIPL PALWAL				
		M/S-SIPL PALWAL				
5	Roof	MCF/CON	192			
6	Centre Buffer Coupler	M/s- FRONTIER	PP END	112P1	NPP END 16P1	
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	VIBGYOR	M/S-VIBGYOR	89/88	3/12/2019
2	Insulation	Satisfactory				
 SSE/QC/MCF/RBL						

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रे०डि००७०, रायबरेली (लालमंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1283

RLY	C	R	-	Coach No.	1	9	9	4	4	7	/	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	4	8	0	FUR.NO	LSCN-1388
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192620				192619			
Bogie Type	FIAT				FIAT			
Frame no.	WIL-007				RBL -1778			
Bolster no.	RBL-3320				APEX-78			
Axle No	19 N - 4663 RWF	19 L - 5555 RWF	19 N - 4133 RWF	19 N - 5087 RWF				
Wheel Dia	917.592	917.539	917.555	917.502	917.561	917.507	917.568	917.486
Wheel Disc No	TZ 07-19 67200-9RP1	TZ 07-19 65485-9RS2	TZ 06-19 61052-9QL2	TZ 07-19 67197-9RP2	TZ 07-19 65431-9RS2	TZ 07-19 62596-9RL5	TZ 07-19 62590-9RNO	TZ 07-19 61602-9RR4
R.B. Nos.	11-19 40819	11-19 40943	08-19 28435	11-19 40941	11-19 41137	11-19 40468	11-19 41461	11-19 41054
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.	CMFSK09-19-5101-031-121	CMFSK06-19-5100-027-166-	CMFSK09-19-5101-031-151	CMFSK06-19-027-314	CMFSK09-19-5101-081-139	CMFSK06-19-5100-027-408	CMFSK09-19-5101-081-81	CMFSK06-19-5100-027-202
Compressed Ht. at Tested Load	515.5	472	515.5	469	511.5	570	511.5	472
10Alignment deviation (mm)	7	13	7	13	13	9	13	7

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	GEREP	92,60	160,68
2.	Primary outer Spring	CMFSK	10-19-1100-114 (1450,1448,1529,1480)	10-19-1100-114 (1531,1471,1537,1548)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (996,741,1009,979)	10-19 1101-101 (975,969,981,978)
4.	Primary Damper	KONIC	03-19 (04736,04366,05463,05701)	03-19 (04355,04557,05641,07943)
5.	Secondary Damper	IAI	10-19 (276961,276922)	10-19 (276788,276866)
6.	Lateral Damper	IAI	05-19 251543	05-19 250865
7.	Brake Cylinder	ESCORT	48249,50661,50663,50374	52215,50669,50749,48238
8.	Brake Caliper	ESCORT	27752,29458,29460,29241	29134,29466,29614,27714
9.	Brake Disc	KBI	24206712 0017-47/19,24006711 0016-47/19 24206732 0019-46/19,24206706 0039-46/19	24206702 0012-46/19,24206703 0004-46/19 24206703 0003-46/19,24206702 0026-46/12
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	GMT		
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/RVE,	SF-815,RVE-22019-2,SF-669,577	210919-3, 210919-2, 210919-3, 210919-1
22.	Control Arm Lower	SF/RVE,	SF-678,RVE-210919-2,SF-432,357	270919-2,270919-2,160919-2,210919-2
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC

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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/2019-20/1283

RLY	CR	COACH NO	199447/C		DATE OF DISPATCH	21/12/2019
Type	LWSCN1	Shell No.	97480	DISPATCH TO	SSE/STOCK/CR/PUNE	FUR.NO. LSCN-1388

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPPP/PP)
1	Air Brake Module	M/S-KBI FARIDABAD	4077 42/19
2	Distribution valve	M/S-KBI FARIDABAD	2019K9318
3	Pull box	M/S-FAV	
4	FIBA	NA	NA
5	Foot Step	M/S- SUPER SPARK PVT.LTD.FARIDABAD	
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-SUKATA INDS CDG	
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)	M/S-IMI	
26	Auxiliary Water Tank	M/S-SHIVALIK FAST. MOHALI	
27	Under Slung Water Tank(2X685L)	M/S-SHIVALIK FAST. MOHALI	
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	

SSE/QC/MCF/RBL

वरि०अनु० अभियंता
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रे०डि०का०, रायबरेली (लालगंज)



Modern Coach Factory Raebareilly
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
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ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2019-20/1283

RLY	CR	COACH NO	199447/C	DATE OF DISPATCH	21/12/2019
Type	LWSCN1	Shell No.	97480	DISPATCH TO	SSE/STOCK/CR/PUNE
				FUR.NO.	LSCN-1388

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:

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/Shell

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गुणवत्ता विभाग
रेडिओ, रायबरेली (लालभंज)

वरिष्ठ अभियंता अभियंता/गुणवत्ता
SME/AME/QC/MCF/RBL
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly

वरिष्ठ अभियंता अभियंता/गुणवत्ता
Dy. Chief Quality Manager/Shell
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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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		199447/C					
RAILWAY		CR		ELECT.FIT DATE		19-12-2019		FUR.NO		SCN-1388	
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
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/HOG NON AC SCN COACHES

01.	Switch board cabinet Make : PD STEELS On Board Sr no : PDS/1911003 HT Panel Sr no : PDS/1911019	EDTS 333, Rev` 01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0116 Sr no.1 : 3658 Sr no.2 : 3456 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 LHBSCN(80-BERTHER)Coaches Make : INTRA	CC76289 & CC76443	09

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





Modern Coach Factory Raebareilly
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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FOR ELECTRICAL ITEMS

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-19080093	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC-3089-LHB-2552	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 : 0119372802	M/s : KNORR	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH 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/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आरंभिक/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