



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/2020-21/366

RLY	NFR	COACH NO	204595/C	DATE OF DISPATCH	26-Aug-20
Type	LWSCN1	Shell No.	97158	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1565

1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-01.05.2020
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 1099/1104

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-SFPL 02/19
		Part NPP END	M/S-SFPL 02/19
		Complete	MCFRBL-V4U TECHIE 97158
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1 LAV.2
		M/S-MIDAS GUJRAT	LAV.4 LAV.3
3	Side wall	LH SIDE	MCFRBL-V4U LKO 185
		RH SIDE	MCFRBL-V4U LKO 185
4	End wall	PP END	M/S-SIPL PALWAL
		NPP END	M/S-SIPL PALWAL
5	Roof	M/S-ECBT	293
6	Centre Buffer Coupler	M/S-FRONTIER	PP 95 NPP 145

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.	7 sec
		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	MAKE	APPLICATION BY MCF/ CONTRACTOR	AVERAGE	DATE OF
		OF PAINT		(SUPPLY & APPLY)	GLOSS VALUE	COMPLETION
1	Paint	P.U	VIBGYOR	M/S-VIBGYOR (S&A)	88/86	18-Mar-20
2	Insulation			Satisfactory		


SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)



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/2020-21/366

RLY	N	F	R	Coach No.	2	0	4	5	9	5	/	C	-	DATE OF DISPATCH	2	6	0	8	2	0	2	0
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DISPATCH	SSE/C&W/KIR	Type	L	W	S	C	N	1	Shell No.	9	7	1	5	8	-	FUR .NO	LSCN - 1565
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200161				200162			
Bogie Type	FIAT				FIAT			
Frame no.	RBL/LS5-891				RBL/LS5-937			
Bolster no.	AMIT-56				AMIT-44			
Axle No	20 Y - 5853 RWF	20 Y - 3472 RWF	20 Y - 3359 RWF	20 Y - 1812 RWF				
Wheel Dia	917.475	917.434	917.438	917.354	917.439	917.352	917.454	917.373
Wheel Disc No	DP19-697 60734	DP19-697 60816	DP19-697 33490	DP19-697 23582	DP19-268 23603	DP19-268 23527	DP19-268 33843	DP19-697 38428
R.B. Nos.	12-19 38442	12-19 39236	11-19 33808	12-19 38418	11-19 33842	12-19 36720	11-19 33843	12-19 38428
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.	CMGBD10-19 F09-205	CMFSK11-19 5112-080-0317	CMGBD10-19 F09-750-0167	CMFSK11-19 5112-080-454	CMFSK12-19 F08-8158-716	CMAFJ13-19-5100-17	CMFSK12-19 F08-158-8716	CMAFJ12-19-5100-41
Compressed Ht. at Tested Load	515	472	515	471	516	470	516	471
Alignment deviation (mm)	26	10	25	8	7	8	7	6

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294843,294960	294997,294578
2.	Primary outer Spring	CMAFJ	07-19 1100-(238,245,243,181)	07-19 1100-(184,179,182,239)
3.	Primary Inner Spring	CMSTL	07-19 F06-N93-06A-(2428,1052,1490,928)	07-19 F06-N92-(999,1149,2071,4057)
4.	Primary Damper	IAI	01-20 (300250,300933,300117,301123)	01-20 (300935,300694,300437,299345)
5.	Secondary Damper	IAI	01-20 (4706,4699)	01-20 (302331,302757)
6.	Lateral Damper	KONI	03-2019 02072	03-19 02038
7.	Brake Cylinder	KBI	C (4869,3438,3439,4853)-K-29	C (4521,3292,3449,4873,-)K-29
8.	Brake Caliper	KBI	C-(1148,1157,1160,1150)-29	C-(0802,0892,1159,1146)-29
9.	Brake Disc	KBI	24226784 0048-01/02,24226784 0049-01/02 24226785 0004-26/20,24226785 0005-25/20	24226779 0055-25/20,24226779 0054-25/20 24226779 0047-25/20,24226779 0077-25/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF/SARITA		
13.	Traction lever make	JJ		
14.	Ball joint traction lever	ARYAN		
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	EMSON /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	KUMAR	080120-1,140120-1,080120-5,180220-5	080120-1,190120-1,IRPL-(2008C21,2008C19)
22.	Control Arm Lower	KUMAR	080120-1,231119-3,090120-2,090120-3	090120-1,090120-2,090120-2,231119-3
23.	Phonic Wheel	KBI	K 05-20	K 05-20

Signature of SSE/Bogie/QC



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				FUR.NO.	LSCN-1565

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	5568 22/20
2	Distribution valve	M/s-KBI	2020E11316
3	Pull box	M/s-KBI	
4	FIBA	NIL	
5	Foot Step	M/S- SUPER SPARK LTD FARIDABAD	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-SHREE RAM PNL	
8	PVC	M/S-RESPONSIVE INDS	
9	Lavatory inlay	M/S-SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST 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-RCF KXH	
15	Emergency Window	M/S-F.P. KOLKATA	
16	Lavatory/hopper Window	M/S-BET INDS PUNJAB	
17	Side panel	M/S-HF VADODARA	
18	Roof Ceiling	M/S-A.B.COMPOSITE KOLKATA	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors	M/s- SVARN INFRATEL	
21	Vestibule Door(PPE)	M/s- KALSI LDH	
22	Vestibule Door(NPPE)	M/s- KALSI LDH	
23	Bio Tank	M/s-OMAX AUTOLTLD	
24	Presurized Flushing(Elect.pneumatic)	M/S-AIR FLOW	
25	Auxiliary Water Tank	M/s- OASIS	
26	Under Slung Water Tank (2X685L)	M/s- SHIVALIK FAST MOHALI	
27	Under Slung Water Tank (1x685 L)	M/s- AMIT ENG.MOHALI	
28	Health Faucet	M/s- KAPCO VALVES JUC	
29	Lotah Filler Tap	M/s- KAPCO VALVES JUC	
30	Controlled discharge tap	M/s-AGMECO PVT LTD	
31	Lavatory Doors	M/S-JVR INDS LDH	
32	Seat & Berth	M/S-OVPL SILICON MUMBAI(SLIDING)	
33	Ventury grill	NIL	
34	RFID	NIL	


SSE/QC/MCF/RBL

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रे०डि०का०, रायबरेली (जालगंज)



Modern Coach Factory Raebareli
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				FUR.NO.	LSCN-1565

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 Frequency	REFERENCE & 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. COM/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)

सहायक यंत्रिक अभियंता/गुणवत्ता
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

सुधीर कुमार
उप मुख्य अभियंता
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

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC COACH.						
TYPE COACH		LWSCN		SHELL/COACH NO		204595/C
RAILWAY		NFR	ELECT. FIT DATE	26-08-2020	MCF FUR. NO.	SCN-1565
Sr. no.	Description of tests					Remarks
1.	PUMP EQUIPMENTS					OK
2.	LIGHTS, N.L.LAP CHARGING SOCKETS					OK
3.	WORKING OF ACCIDENTAL, EMERGENCY LIGHTS.					OK
4.	RAILWAY CARRIAGE FAN					OK
5.	WHEEL SLIDE PROTECTION SYSTEM (WSP)					OK
6.	WORKING OF 9 KVA TRANSFORMER					OK
7.	WORKING OF REGULATED BATTERY CHARGER/EMERGENCY BATTERY CHARGER.					OK
8.	SAFETY :					--
8.1.	FUSES AND THEIR RATING					OK
8.2.	CONTROL CIRCUIT					OK
8.3.	POWER CIRCUIT					OK

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: AMIT ENGG. On Board: AE/USBC/1836 HT Panel: AE/USBC/1802	EDTS 355, Rev'01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: PANTRONICS Sr no.: PAN 20018841	RDSO/PE/SPEC/TL 0158, 2010, Rev'0'.Ty I.	01
03.	Mounting of 09KVA TFR.	As per drg no 1.10113.0.76.300.001.Alt -B.	OK
04.	Provision of Pump equipment with pump box. Make: KIND Sr no : ASY/0076 Pump 1: 20070241 Pump 2: 20070242	As per spec no. EDTS186.REV-A.AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: KIND SL.no.: 20050107	As per Spec. EDTS186 Rev-a Am-2, & drg no. CC71328 & LW70020	01
06.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: SIGNOTRON Sr. no.: 06201495	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.-1)	01
07.	Provision of Feeder Junction Box Make : RSI	EDTS-328 REV-C.AM-4.Type-II.COR-2	01 SET
08.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302.Alt-nil	01 SET
09.	Battery fuse box +ve Make : RICHMOND	As per LW 71001.Alt- H	01
10.	Battery fuse box -ve Make : RICHMOND	As per LW 71002.Alt-I	01
11.	Provision of Battery boxes/ Cradles. Make: HITECH	As per Drg. No. 110113.0.76.700.005 W/O item 5,22,23,26 & 27.Alt-C or Latest.	01
12.	Provision of batteries Type: 110 V, 120 AH VRLA SMF Battery Set. Make: HBL Lug Date:06/19	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET

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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm Sweep, 110V AC with crash worthy features. Make: CG POWER	As per Drg. No. ICF/SK-7-6-158.alt-g. RDSO/PE/SPEC/TL/0021-2005 (Rev-3) with RCF annex-1.am-1.	30
14.	Fitment of LED Light fittings for Cabin, Doorway and Gangway area. 9 watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016.Rev-1 with RCF Annex-1 .Type-31. Drg. No. CC76453.	26
15.	Fitment of LED Light fittings for Night Light with berth indication Type-E (1 watt). Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016.Rev-1 with RCF Annex-1, CF/STB-7-6-053.Type- E. Drg. No. CC76461	10
16.	Fitment of LED Light fittings for Lavatory Lights. 9 Watt. Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016.Rev-1 with RCF Annex-1Type-D. Drg. No. LW76092.	04
17.	Fitment of LED Light fittings for PACIL. Make: KAVERI	As per RDSO/SPEC/TL/0091-2016.Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
18.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
19.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
20.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK

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ROLLING STOCK CERTIFICATE OF LFB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
21.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10
22.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
23.	Provision of Switch plate assembly along with mobile charging sockets. Make: SALZER	EDML-086, Rev-5, Am-1, Table-1, Item-3.	20
24.	Provision of High Capacity Inter – Vehicular Coupler Unit (ZS Coupling) (500 A, 750 V, 3 ph, 50 Hz). Make: 1.(NPP): PRIME ELECT. 2.(PP): PRIME ELECT.	As per Spec. no. RDSO/PE/SPEC/AC/0177(Rev.-0)-2013 with annexure-A, B.	01 SET
25.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
26.	Provision of Wheel Set Earthing equipment. Make:- NPP: DARSHAN ENTERPRISES PP: DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make: KNORR Sr no : 0120144933	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

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