



Modern Coach Factory Raebareli

DOC NO.: MCF/RBL/QMF 8002

आधुनिक रेल डिब्बा कारखाना, रायबरेली

REV NO: 01

DATE: 17.04.2018

ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/435

RLY	NFR	COACH NO	204691/C	DATE OF DISPATCH	5-Sep-20
Type	LWSCN1	Shell No.	20G096	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1665

1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-11.06.2020
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 1105/1097

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	MCFRBL-V4U TECHIE	20G096
2	Lav. side wall	M/S-ATHANCY ALD	LAV.1
		M/S-ATHANCY ALD	LAV.4
3	Side wall	LH SIDE	MCFRBL-CONT. V4U
		RH SIDE	MCFRBL-CONT. V4U
4	End wall	PP END	M/S-JVR LDH
		NPP END	M/S-JVR LDH
5	Roof	MCFRBL-CONT.	49
6	Centre Buffer Coupler	M/S-ESCORTS	PP 4072 NPP 9173

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.	8 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 WOW (S&A)	75/96	27-Aug-20
2	Insulation			Satisfactory		

SSE/QC/MCF/RBL

परि० अनु० अभियंता
गुणवत्ता विभाग
रेल डि० कार०, रायबरेली (जालमंड)



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/2020-21/435

RLY	N	F	R	Coach No.	2	0	4	6	9	1	/	C	-	DATE OF DISPATCH	0	5	0	9	2	0	2	0
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DISPATCH	SSE/C&W/KIR	Type	L	W	S	C	N	1	Shell No.	2	0	G	0	9	6	FUR NO	LSCN - 1665
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side							
Bogie No	201059				201060							
Bogie Type	FIAT				FIAT							
Frame no.	MIPL-627				mipl-630							
Bolster no.	MCF/RBL-1451				MCF/RBL-2320							
Axle No	20 W–	9432	RWF	20 Z –	1249	RWF	20 V–	5901	RWF	20 Y–	1501	RWF
Wheel Dia	917.43	917.64	917.40	917.56	917.383	917.55	917.39	917.51				
Wheel Disc No	TZ 04-19 40561-90D6	TZ 06-19 61023-9QL1	TZ 11-19 86373-9WK7	TZ 11-19 86375-9WK7	TZ 11-19 80895-9VF2	TZ 11-19 85617-9WF0	TZ 11-19 81360-9VD2	TZ 12-19 93359-9WI9				
R.B. Nos.	11-19 32329	12-19 44539	12-19 44545	12-19 35506	12-19 35133	12-19 45298	12-19 36119	12-19 45423				
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
Make & Nos.	TAYAL & CO. Sr. NO- 06-20 9971	TAYAL & CO. Sr. NO- 06-20 9966	TAYAL & CO. Sr. NO- 06-20 9952	TAYAL & CO. Sr. NO- 06-20 1949

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294335,294944	294912,294901
2.	Primary outer Spring	CMFSK	10-19 1100-114(1122,925,1155,901)	10-19 1100-114(836,1131,904,842)
3.	Primary Inner Spring	CMFSK	10-19 1100-101(1437,1177,1164,1156)	10-19 1100-101(1214,1185,912,1172)
4.	Primary Damper	GABRIEL	01-20 (300037,300427,296062,300041)	01-20 (290038,300142,300270,299237)
5.	Secondary Damper	IAI	01-20 (302179,302114)	01-20 (302494,302696)
6.	Lateral Damper	IAI	11-19 283787	11-19 283550
7.	Brake Cylinder	KNORR	C (9872,8300,8306,9696)-K-29	C (9871,8304,8302,9881)-K-29
8.	Brake Caliper	KNORR	C-(5432,5412,5413,5436)-29	C - (5433,5424,5411,5434) - 29
9.	Brake Disc	KBI	24229053 00067-27/20,24229052 0064-27/20 24229053 0060-28/20,24229053 0069-28/20	24229051 0077-27/20,24229053 0001-27/20 24229048 0042-27/20,24229049 0024-27/20
10.	Bali 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	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT/KNORR	06-20,06-20	21-20 C- 5569,20-20 C -5490
17.	Check Valve	ESCORT/KNORR	06-20	07-2020 21792
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	CC /KUMAR	CC-20G197,20G273, KUMAR -D2506,D2547	KUMAR -D-3468,D8487,D3490,D3481
22.	Control Arm Lower	CC /KUMAR	CC-19L709,20G40,, KUMAR -D2505,D2282	KUMAR -D3457,D3804,D3473,D3459
23.	Phonic Wheel	KBI	K 06-20	K 05-20

Signature of SSE/Bogie/QC



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Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/435

RLY	NFR	COACH NO	204691/C	DATE OF DISPATCH	5-Sep-20
Type	LWSCN1	Shell No.	20G096	FUR.NO.	LSCN-1665

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	5950 28/20
2	Distribution valve	M/s-KBI	2020G11856
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	8975/29,9166/29
5	Foot Step	M/S- FABRICON KOLKATA	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-HF VADODARA	
8	PVC	M/S-HF VADODARA	
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-HF VADODARA	
15	Emergency Window	M/S-HF VADODARA	
16	Lavatory/hopper Window	M/S-HF VADODARA	
17	Side panel	M/S-HF VADODARA	
18	Roof Ceiling	M/S-HF VADODARA	
19	Door way Ceiling	M/S-HF VADODARA	
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-JSL LIFESTYLE LTD	
24	Presurized Flushing(Elect.pneumatic)	M/S-AIR FLOW	
25	Auxiliary Water Tank	M/s- OASIS	
26	Under Slung Water Tank (2X685L)	M/s- OASIS	
27	Under Slung Water Tank (1x685 L)	M/s- AMIT ENGG. 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-HF VADODARA	
32	Seat & Berth	M/S-ADVANCE SILICON PALWAL (SLIDING)	
33	Ventury grill	NIL	
34	RFID	NIL	

Primal Kumar
SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (जालगंज)



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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RLY	NFR	COACH NO	204691/C	DATE OF DISPATCH	5-Sep-20
Type	LWSCN1	Shell No.	20G096	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1665

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.

<i>Painmal kumar</i>	<i>[Signature]</i>	<i>[Signature]</i>
SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अनुसंधान अभियंता
गुणवत्ता विभाग
रेडिओका, रायबरेली (जालगांज)

सहायक इंजीनियर (गुणवत्ता-1)
Assistant Mechanical Engineer / Quality-1
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

[Signature]
Sudhir Kumar
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
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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.

TYPE COACH	LWSCN	SHELL/COACH NO	204691/C
RAILWAY	NFR	ELECT. FIT DATE	02-09-2020
MCF FUR. NO.	SCN-1665		
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: 20070242 Pump 2: 20070243	As per spec no. EDTS186,REV-A.AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: KIND SL.no.: 20070137	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:07/19	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET

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MCF/RBL



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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: SARIA IND.	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-B1. 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, ICF/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 LHB/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): S.INTERNATIONALS 2.(PP): S.INTERNATIONALS	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 : 0120245180	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

