



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/2020-21/464

RLY	NFR	COACH NO	204742/C	DATE OF DISPATCH	9-Sep-20
Type	LWSCN1	Shell No.	20G182	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1690

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 1105/1101

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-NE CHD	
	Front Part	NPP END M/S-NE CHD	
	Complete	MCFRBL-AIRCON	20G182
2	Lav. side wall	M/S-DTL PUNE	LAV.1
		M/S-DTL PUNE	LAV.2
			LAV.3
			LAV.4
3	Side wall	LH SIDE MCFRBL-CONT.V4U	1
		RH SIDE MCFRBL-CONT.V4U	1
4	End wall	PP END M/S-ECBT	
		NPP END M/S-ECBT	
5	Roof	MCFRBL-CONT.	55
6	Centre Buffer Coupler	M/S-FRONTIER	PP 150P1 NPP 09P2

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.	6 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	ADVANCE	M/S-ADVANCE (S&A)	88/88	21-Aug-20
2	Insulation			Satisfactory		


 SSE/QC/MCF/RBL

वरिष्ठ अनुष्ठान अभियंता
गुणवत्ता विभाग
रेलवे कारखाना, 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/2020-21/464

RLY	N	F	R	Coach No.	2	0	4	7	4	2	/	C	-	DATE OF DISPATCH	0	9	0	9	2	0	2	0
-----	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	SSE/C&W/KIR	Type	L	W	S	C	N	1	Shell No.	2	0	G	1	8	2	FUR.NO	LSCN - 1690
----------	-------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---	--------	-------------

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	201143				201144			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-880				VS-230			
Bolster no.	RBL/MCF-2387				RBL/MCF-2376			
Axle No	20 W - 9728 RWF	19 T - 6386 RWF	20 W - 2299 RWF	20 Y - 7950 RWF				
Wheel Dia	917.838	917.411	917.772	917.523	917.405	917.316	917.591	917.465
Wheel Disc No	TZ 12-19 94165-9WL4	TZ 11-19 79170-9WE9	TZ 12-19 91298-9WL8	TZ 12-19 76879-9XG5	TZ 11-19 87010-9WG4	TZ 11-19 87011-9WG4	TZ 12-19 76838-9WJ7	TZ 12-19 90859-9WI4
R.B. Nos.	12-19 35135	12-19 36118	12-19 36299	11-19 32083	12-19 35429	11-19 32063	11-19 42150	12-19 35283
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.	AVADH RAIL Sr. NO- 07-20 9952	AVADH RAIL Sr. NO- 07-20 9959	AVADH RAIL Sr. NO- 07-20 9926	AVADH RAIL Sr. NO- 07-20 9886

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294237,294003	293835,294430
2.	Primary outer Spring	CMAFI/CMFSK	03-20 1100-(293,85,277,260)	10-19 1100-114(803,1124,879,1160)
3.	Primary Inner Spring	CMAFI/CMFSK	03-20 1101-(478,480,361,379)	10-19 1101-101(728,698,700,882)
4.	Primary Damper	IAI	01-20 (309884,309913,309921,309789)	02-20 (309987,309914,310342,310090)
5.	Secondary Damper	IAI	01-20 (295764,295823)	01-20 (302210,302219)
6.	Lateral Damper	IAI	01-20 298026	01-20 298352
7.	Brake Cylinder	FAV	A20 (214,445,4448,216)-	A20 (315,580,430,362)-
8.	Brake Caliper	FAV	A20-(1444,1441,1442,1443)-B	A20-(1300,1514,1513,1299)-B
9.	Brake Disc	FAV	03-20(8765,8766,2202,2199)D133561-300	03-20(8321,8321,85,82)D133561-300
10.	Ball Joint Control Arm	PRAG		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	RNG		
13.	Traction lever make	JI		
14.	Ball joint traction lever	BASANT/GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT/KNORR	06-20/06-20	23-20 C-559,22-20 C 5436
17.	Check Valve	ESCORT/KNORR	06-20	02-2020 24635
18.	Anti roll bar Make	RF		
19.	Roll Link make	RF/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	KUMAR	N2984,KUMAR,D2749,N2842	N2992,KUMAR,D2741,N2207
22.	Control Arm Lower	KUMAR	D2592,N2724,N2905,D3485	D2831,D2543,N2725,N2592
23.	Phonic Wheel	KBI	K 07-20	K 07-20

Signature of SSE/Bogie/QC





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/2020-21/464

RLY	NFR	COACH NO	204742/C	DATE OF DISPATCH	9-Sep-20
Type	LWSCN1	Shell No.	20G182	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1690

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-FAIVELEY	G20234B
2	Distribution valve	M/s-FAIVELEY	20075740B
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	9134/29,9198/29
5	Foot Step	M/S- FABRICON KOLKATA	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-SHREE RAM PNL	
8	PVC	M/S-RESPONSIVE INDS DELHI	
9	Lavatory inlay	M/S-SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S-ELASTOMER MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER MUMBAI	
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	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors 1,3	M/s- SUKATA INDS HARIYANA	
	Body Side Doors 2,4	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-RAIL FAB KXH	
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-SHIVALIK FAST 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-MSL INDS PUNJAB	
32	Seat & Berth	M/S-ADVANCE SILICON PALWAL(SLIDING)	
33	Ventury grill	NIL	
34	RFID	NIL	


SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लातगंज)



Modern Coach Factory Raebareilly
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/2020-21/464

RLY	NFR	COACH NO	204742/C	DATE OF DISPATCH	9-Sep-20
Type	LWSCN1	Shell No.	20G182	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1690

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.CQM/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेलवे डिपार्टमेंट, रायबरेली (लालमंज)

सहायक अभियंता (गुणवत्ता)
Assistant Mechanical Engineer / Quality-I
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareilly

Sudhir Kumar
Dy. CQM/MCF/RBL
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareilly



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 1 OF 4

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.						
TYPE COACH		LWSCN		SHELL/COACH NO		204742/C
RAILWAY		NFR	ELECT. FIT DATE	05-09-2020	MCF FUR. NO.	SCN-1690
Sr. no.	Description of tests					Remarks
1.	PUMP EQUIPMENTS					OK
2.	LIGHTS, NL,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



MCF/RBL



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 2 OF 4

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.: MREM On Board: MREM 355400 HT Panel: MREM 355415	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: PANTRONICS Sr no.: PAN 20018774	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: DR AUTO Sr no : 20/08/0004 Pump 1: 3558 Pump 2: 3608	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 2020/01/0367	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: PI Sr. no.: 20070339	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : MV ELECTROSYSTEMS	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

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: 01

DATE: 29.06.2020

PAGE 3 OF 4

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: FIEM IND.	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

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





Modern Coach Factory Raebareilly
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 4 OF 4

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: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : FAIVELEY Sr no : 12391	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

SSE/EL/QC	AWM(ELECT.)/MCF/RBL
वरिष्ठ अनुभाग अभियन्ता	SEE(P)/MCF/RBL
गुणवत्ता नियंत्रण	सं. कार्य प्रबन्धक / विद्युत
आरंभ/डि०का० / लालगंज / रायबरेली	आरंभ/डि०का० / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL	A.W.M./Electrical/MCF/RBL

