



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/2020-21/514

RLY	NFR	COACH NO	204856/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	97930	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-442

- Railway Board's Order No. : 2020/M(C)/142/2, DATED-01.05.2020
- Tare Weight of Coach : 41.24 Tonnes
- Carrying Capacity : (a) Seating: 80 (b) Sleeping: 80 (c) Luggage: NIL

4. Special feature:

A	Epoxy flooring in lavatory	M/s-HFGW VADODARA
B	Anti slip friendly Grab Bar	M/s-HFGW VADODARA
C	Provision of Health Faucet in lavatories	M/s-HFGW VADODARA
D	Washbasin counter Top (Corian of Duport or Montelli)	M/s-HFGW VADODARA
E	GFRE ceiling instead of NFTC	M/s-HFGW VADODARA
F	DGFRP panels instead of LP panels	M/s-HFGW VADODARA
G	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/s-HFGW VADODARA
H	Venturi arrangement in lavatory	M/s-HFGW VADODARA
I	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 1101/1104

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	MCFRBL-V4U-TECHIE 97930
2	Lav. side wall	M/S-ATHANCY ALD	LAV.1
		M/S-ATHANCY ALD	LAV.2
3	Side wall	LH SIDE	M/S-TI 5
		RH SIDE	M/S-TI 5
4	End wall	PP END	M/S-JVR
		NPP END	M/S-SIPL PALWAL
5	Roof	M/S-ECBT CDG	424
6	Centre Buffer Coupler	M/s-FRONTIER	PP END 221P1 NPP END 10P2

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.	08 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 OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
1	Paint	P.U	GSI	M/S-GSI (S&A)	89/87	10-Jun-20
2	Insulation			Satisfactory		

16/10/20

SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओआर, 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/2020-21/514

RLY	N	F	R	Coach No.	2	0	4	8	5	6	/	C	-	DATE OF DISPATCH	2	2	0	9	2	0	2	0
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DISPATCH	SSE/C&W/KIR	Type	L	W	S	C	N	1	Shell No.	9	7	9	3	0	FUR .NO	LSCN - G-442
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200970				200969			
Bogie Type	FIAT				FIAT			
Frame no.	VS-2191				MCF/RBL-2460			
Bolster no.	AMIT-191				AMIT-188			
Axle No	20 W - 9582 RWF	20 W - 9902 RWF	20 W - 9238 RWF	20 V - 0958 RWF				
Wheel Dia	917.538	917.564	917.526	917.558	917.609	917.584	917.585	917.597
Wheel Disc No	TZ 07-19 63965-9RM5	TZ 07-19 63268-9RM1	TZ 07-19 62127-9RL0	TZ 04-19 39818-90J8	TZ 06-19 61235-9QL7	TZ 03-19 30766-9MH7	TZ 04-19 39646-90G7	TZ 04-19 39647-90G3
R.B. Nos.	12-19 34732	12-19 35449	12-19 36457	12-19 35694	12-19 36150	12-19 35999	12-19 44377	12-19 36066
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.	CMFSK05-20 F05-193-75-	CMAFJ12-19- 5100-229	CMFSK05-20- F05-193-271	CMAFJ12-19 5100-243	CMFSK05-20 F05-193-311	CMAFJ12-19-5100- 231	CMFSK05-20- F05-193-237	CMAFJ12-19-5100- 254
Compressed Ht. at Tested Load	514	472	514	471	515.5	472	514.5	471
Alignment deviation (mm)	9	5	11	5	10	5	10	5

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294223,294248	294469,294840
2.	Primary outer Spring	CMAFJ	06-20 1100-(297,281,278,280)	06-20 1100-(284,268,282,252)
3.	Primary Inner Spring	CMAFJ	06-20 1101-(55,3,13,17)	06-20 1101-(22,49,35,56)
4.	Primary Damper	GABRIEL	01-20 (14306,14299,14360,14364)	01-20 (289478,289657,289441,290300)
5.	Secondary Damper	IAI	01-20 (295947,295712)	01-20 (295689,295944)
6.	Lateral Damper	KONI	03-2019 01071	03-2019 0288
7.	Brake Cylinder	FAV	A20 (361,543,382,311)	A20 (313,351,028,316)
8.	Brake Caliper	FAV	A20-(1511,1509,1386,1387)-	A20-(1367,1366,1306,1308)B
9.	Brake Disc	FAV	03-20(8665,8663,98,100)D133561-300	03-20(101,103,8931,180)D133561-300
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF		
13.	Traction lever make	JJ		
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	RF		
19.	Roll Link make	RF/GMT JUR/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	CC	20A682,20A778,20B414,20A452	20B187,20B532,20A748,20B393
22.	Control Arm Lower	CC	20A89,20B634,20A175,19M172	20A35,20B744,20A48,20A192
23.	Phonic Wheel	KBI	K 07-20	K 04-20

Signature of SSE/Bogie/QC





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RLY	NFR	COACH NO	204856/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	97930	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-442

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S -FAV	020224B
2	Distribution valve	M/S -FAV	20075730B
3	Pull box	M/S -KBI	
4	FIBA	NIL	
5	Foot Step	M/S- FABRICON KOLKATA	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-SHREE RAM PNL GOVINDGARH	
8	PVC	M/s-HFGW VADODARA	
9	Lavatory inlay	M/s-HFGW VADODARA	
10	UIC Vestibule (PPE)	M/S-ELASTOMER MUMBAI	
11	UIC Vestibule (NPPE)	M/S-ELASTOMER MUMBAI	
12	Gangway bridge mounting (PPE)	M/S-MMW KXH	
13	Gangway bridge mounting (NPPE)	M/S-MMW KXH	
14	Body Side Window(WIDDER)	M/s-HFGW VADODARA	
15	Emergency Window (WIDDER)	M/s-HFGW VADODARA	
16	Lavatory/hopper Window	M/s-HFGW VADODARA	
17	Side panel (DGFRP)	M/s-HFGW VADODARA	
18	Roof Ceiling (DGFRP)	M/s-HFGW VADODARA	
19	Door way/Gangway Ceiling	M/s-HFGW VADODARA	
20	Partition panel Honeycomb	M/s-HFGW VADODARA	
21	Partition pillar	M/s-HFGW VADODARA	
22	Body Side Doors	M/s-HFGW VADODARA	
23	Vestibule Door(PPE)	M/S-KALSI LDH	
24	Vestibule Door(NPPE)	M/S-KALSI LDH	
25	Bio Tank	M/S-RAIL FAB KXH	
26	Pressurised Flushing (electro.pneu.)	M/S-SPAC	
27	Auxiliary Water Tank	M/S-AMIT ENGG. MOHALI	
28	Under Slung Water Tank (2X685L)	M/S-OASIS	
29	Under Slung Water Tank (1x685 L)	M/S-SHIVALIK FAST MOHALI	
30	Health Faucet	M/s-KAPCO VALES JALANDHAR	
31	Lotah Filler Tap	M/s-KAPCO VALES JALANDHAR	
32	Controlled discharge tap	M/s-AGMECO PVT.	
33	Lavatory Doors	M/s-HFGW VADODARA	
34	Fire Extinguisher	M/s-HFGW VADODARA	
35	Seat & Berth	M/s-HFGW VADODARA	
36	Ventury grill	NIL	
37	Water purifier(02 NOS)	M/s-HFGW VADODARA	
38	RFID	NIL	

16/10/20
SSE/QC/MCF/RBL

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रेडि०का०, रायबरेली (लालगंज)



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ROLLING STOCK CERTIFICATE

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/514

R/LY	NFR	COACH NO	204856/C	DATE OF DISPATCH	22-Sep-20
Type	LW/SCN1	Shell No.	97930	DISPATCH TO	SSE/C&W/KIR
				FUR NO.	LSCNG-442

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:

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 30 months from the date of supply of material whichever is earlier.

NOTE:

- This warranty covers free supply of parts which wear out and fails within warranty period of normal service.
- This doesn't covers faults arising out of accident, non standard maintenance practices, abnormal use or mishandling, vandal activity, arson & theft/pilferage etc.
- 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.
- Whether a defective part is to be replaced or repaired shall be at the discretion of MCF/RBL.
- For any complain/suggestion please Mail at quality@rbl@gmail.com
- 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 D3359/97 (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 bound to set right the defect/imperfection on free of cost basis at the base depot of the coach.

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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		204856/C
RAILWAY		NFR	ELECT. FIT DATE	19-09-2020	MCF FUR. NO.	SCN-G-442
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

(Signature)

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.: MREM On Board: MREM 355418 HT Panel: MREM 355424	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: VIMAL Sr no.: VTC 3089 LHB-2547	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 : 20/08/0136 Pump 1: 3739 Pump 2: 3752	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 20/07/0139	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.: 20070318	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : RSI SWITCHGEARS LTD.	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: AMARA RAJA Lug Date: 06/20	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: ELECTROWAVES	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	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: SALZER	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): MAA LAXMI INDUSTRIES 2.(PP): MAA LAXMI INDUSTRIES	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 : 12345	As per MDTS 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS"	01 SET

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता	AWM(ELECT.)/MCF/RBL SEE(P)/MCF/RBL

गुणवत्ता नियंत्रण
आ०रे०डि०का० / लालगंज / रायबरेली
S.S.E./Elect-QC/M.C.F./LLJ/RBL

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

