



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/2020-21/386

RLY	NFR	COACH NO	204636/C	DATE OF DISPATCH	29-Aug-20
Type	LWSCN1	Shell No.	20G003	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-443

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	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 1099/1100

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-PENNAR	
	Front Part	NPP END M/S-PENNAR	
	Complete	M/S-PENNAR	09
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1
		M/S-MIDAS GUJRAT	LAV.2
			LAV.3
			LAV.4
3	Side wall	LH SIDE M/S-ECBT CDG	144
		RH SIDE M/S-ECBT CDG	144
4	End wall	PP END M/S-ECBT CDG	
		NPP END M/S-SIPL PALWAL	
5	Roof	M/S-TI	90
6	Centre Buffer Coupler	M/s-FRONTIER	PP END 100P2 NPP END 244P1

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	VIBGYOR	M/S-VIBGYOR (S&A)	90/88	18-Jun-20
2	Insulation			Satisfactory		

वर्तमान में
SSE/QC/MCF/RBL

गुणवत्ता विभाग
रेडिओका, रायबरेली (जालमंज)



MCF/RBL



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/2020-21/386

RLY	N	F	R	Coach No.	2	0	4	6	3	6	/	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	0	0	3	FUR .NO	LSCN - G-443
----------	-------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---	---------	--------------

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	200790				200789			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-637				ECBT-512			
Bolster no.	AMIT ENGG-464				AMIT ENGG-457			
Axle No	20 Y- 7910 RWF	20 Y- 3419 RWF	20 V- 6128 RWF	20 V- 6145 RWF	20 Y- 7910 RWF	20 Y- 3419 RWF	20 V- 6128 RWF	20 V- 6145 RWF
Wheel Dia	917.71	917.66	917.66	917.64	917.73	917.74	917.73	917.77
Wheel Disc No	TZ 12-19 91149-9WG9	TZ 12-19 91155-9WG5	TZ 06-19 55647-9QI2	TZ 12-19 76910-9WL2	TZ 07-19 61846-9RM4	TZ 07-19 61850-9RM4	TZ 12-19 91152-9WG2	TZ 11-19 80039-9VC8
R.B. Nos.	11-19 34026	01-20 400968	01-20 400573	12-19 44796	01-20 401502	12-19 39440	01-20 400697	12-19 39395
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.	RESISTO FLEX DYNAMICS Sr. NO- 02-20 13750	RESISTO FLEX DYNAMICS Sr. NO- 02-20 14140	RESISTO FLEX DYNAMICS Sr. NO- 05-20 14204	RESISTO FLEX DYNAMICS Sr. NO- 05-20 13297

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294068,301472	294195,301414
2.	Primary outer Spring	CMAFJ	06-20 1100--(77,78,74,76)	06-20 1100--(216,218,75,221)
3.	Primary Inner Spring	CMAFJ	06-20 1101--(342,39,32,162)	06-20 1101--(173,330,31,65)
4.	Primary Damper	IAI	12-19 (290273,290983,282201,290652)	12-19 (288850,289197,290199,290492)
5.	Secondary Damper	GABRIEL	01-20 (5348,5346)	01-20 (5354,5347)
6.	Lateral Damper	GB EQUIPMENT	05-19 01642	05-20 01642
7.	Brake Cylinder	KNORR	C (8101,6757,6752,8158)-K-29	C (8171,6756,6755,8169,-)K-29
8.	Brake Caliper	KNORR	C-(4101,4138,4137,4104)-29	C-(4106,4139,4140,4103)-29
9.	Brake Disc	KBI	24229055 0048-28/20,24229055 0057-28/20 24229060 0052-29/20,24229055 0074-29/20	24210791 0013-02/20,24210791 0011-02/20 24210791 0012-02/20,24210791 0014-02/20
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	GMT		
15.	Ball joint traction centre	GMT/PPI		
16.	Leveling Valve	ESCORT	06-20,06-20	06-20,06-20
17.	Check Valve	ESCORT	06-20	06-20
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	CC	20B375,20B295,20B60,20A690	20A545,20B71,20B94,20B250
22.	Control Arm Lower	CC	20A375,20B295,20A23,20B82	20A454,20A34,20A418,20B122
23.	Phonic Wheel	KBI	K 06-20	K 06-20

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/2020-21/386

RLY	NFR	COACH NO	204636/C	DATE OF DISPATCH	29-Aug-20
Type	LWSCN1	Shell No.	20G003	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-443

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S - KBI	4708 02/20
2	Distribution valve	M/S - KBI	2019M10097
3	Pull box	M/S - KBI	
4	FIBA	M/S - KBI	9469/29,9406/29
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-SUNCREAST KOLKATA	
11	UIC Vestibule (NPPE)	M/S-SUNCREAST KOLKATA	
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-OMAX AUTO LTD	
26	Pressurised Flushing (electro.pneu.)	M/S-AIR FLOW	
27	Auxiliary Water Tank	M/S-OASIS	
28	Under Slung Water Tank (2X685L)	M/S-SHIVALIK FAST MOHALI	
29	Under Slung Water Tank (1x685 L)	M/S-AMIT ENGG. 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-A-ONE-	211/310
35	Seat & Berth	M/s-HFGW VADODARA	
36	Ventury grill	NIL	
37	Water purifier(02 NOS)	M/s-HFGW VADODARA	
38	RFID	NIL	

विकास अभियंता
SSE/QC/MCF/RBL

गुणवत्ता विभाग

रेडिओका, रायबरेली (कानपुर)



MCF/RBL



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/2020-21/386

RLY	NFR	COACH NO	204636/C	DATE OF DISPATCH	29-Aug-20
Type	LWSCN1	Shell No.	20G003	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-443

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 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 qualityrcfbl@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



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 COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC COACH.

TYPE COACH	LWSCN	SHELL/COACH NO	204636/C
RAILWAY	NFR	ELECT. FIT DATE	22-08-2020
		MCF FUR. NO.	SCN-G-443
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





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

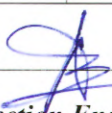
REV NO: 01

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.: AMIT ENGG. On Board: AE/USBC/1775 HT Panel: AE/USBC/1769	EDTS 355, Rev`01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: PANTRONICS Sr no.: PAN-20018813	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: GEM Sr no : 20070006 Pump 1: 20070011 Pump 2: 20070012	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: GEM SL.no.: 20070036	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.: 06201555	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: 12/19	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: VENTWELL	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

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 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: SALZER	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): 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: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make: KNORR Sr no : 0120134848	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

