



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/2020-21/533

RLY	NFR	COACH NO	204853/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G002	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-439

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 NPTC	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 1105/1105

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	Front PP END	M/S-SICO KXH
		Part NPP END	M/S-SICO KXH
		Complete	M/S-SICO KXH
2	Lav. side wall	M/S-MIDAS GUJRAT	LAV.1
		M/S-MIDAS GUJRAT	LAV.2
3	Side wall	M/S-DTL PUNE	LAV.3
		M/S-DTL PUNE	LAV.4
4	End wall	M/S-ECBT CDG	18
		M/S-ECBT CDG	18
5	Roof	M/S-ECBT CDG	427
6	Centre Buffer Coupler	M/s-FRONTIER	PP END 14P1 NPP END 261P2

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)	90/90	4-Jun-20
2	Insulation			Satisfactory		

17/04/20
SSE/QC/MCF/RBL

वरिष्ठ अभियंता
गुणवत्ता विभाग
रेडिओका, रायबरेली (जालगाँव)





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/2020-21/533

RLY	N	F	R	Coach No.	2	0	4	8	5	3	/	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.	2	0	G	0	0	2	FUR NO	LSCN - G-439
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side							
Bogie No	201031				201032							
Bogie Type	FIAT				FIAT							
Frame no.	AML-254				AML-245							
Bolster no.	AMIT ENGG-436				AMIT ENGG-419							
Axle No	20 Z-	1516	RWF	20 Z-	1360	RWF	20 Z-	1349	RWF	20 Z-	861	RWF
Wheel Dia	917.356		917.599	917.317		917.566	917.355		917.532	917.33		917.518
Wheel Disc No	TZ 11-19 83439-9VE5		TZ 11-19 83366-9V00	TZ 12-19 88937-9VF0		TZ 11-19 87213-9VF1	TZ 06-19 52657-9QH5		TZ 11-19 83427-9VE5	TZ 12-19 91942-9WL6		TZ 11-19 76262-9VE1
R.B. Nos.	01-20 401939		01-20 403010	01-20 403474		01-20 403288	01-20 402144		01-20 401818	01-20 403086		02-20 500481
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 9982	TAYAL & CO. Sr. NO- 06-20 0066	TAYAL & CO. Sr. NO- 06-20 0059	TAYAL & CO. Sr. NO- 06-20 0033

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	294460,294577	294626,294318
2.	Primary outer Spring	CMFSK	10-19 1100-115-(1345,1371,1256,1337)	10-19 1100-115-(1315,1365,1408,1351)
3.	Primary Inner Spring	CMFSK	10-19 1101-103(1296,1306,1331,1352)	10-19 1101-103(1325,1272,1269,1276)
4.	Primary Damper	GABRIEL	01-20 (14743,14904,14986,15208)	01-20 (15100,14807,14995,15054)
5.	Secondary Damper	IAI	01-20 (296357,296209)	01-20 (296065,296106)
6.	Lateral Damper	IAI	11-19 283859	11-19 283733
7.	Brake Cylinder	KNORR	C (9098,7541,7539,9099)-K-29	C (9076,7608,7532,7066)-K-29
8.	Brake Caliper	KNORR	C-(4795,4818,4817,4798)-29	C - (4801,4819,4820,4800) - 29
9.	Brake Disc	KBI	24229061 0048-29/20,24229016 0047-29/20 24229061 0045-29/20,24229061 0043-29/20	24229061 0029-29/20,24229062 0014-29/20 24229061 0046-29/20,24229061 0034-29/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
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	KUMAR	D-3499,D3492,D3492,,D2552	D2530,D2820,D3481,D2570
22.	Control Arm Lower	KUMAR	D2222,D2503,D3902,D3810	N3890,D2505,D3838,D3458
23.	Phonic Wheel	KBI	K 07-20	K 01-20

Signature of SSE/Bogie/QC





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Rolling Stock Certificate No.: MCI/RST/C&W/KIR/2020-22/93							
RLY	NFR	COACH NO	204853/C	DATE OF DISPATCH		22-Sep-20	
Type	LWSCN1	Shell No.	20G002	DISPATCH TO	SSE/C&W/KIR	FUR.NO.	LSCNG-439

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S -KBI	5932 28/20
2	Distribution valve	M/S -KBI	2020G11828
3	Pull box	M/S -KBI	
4	FIBA	M/S -KBI	9026/29,8989/29
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-RAIL FAB KXH	
26	Pressurised Flushing (electro.pneu.)	M/S-SPAC	
27	Auxiliary Water Tank	M/S-OASIS	
28	Under Slung Water Tank (2X685L)	M/S-AMIT ENGG. MOHALI	
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)	NIL	
38	RFID	NIL	

SSE/QC/MCF/RBL

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वरि०अनु० अभियंता
गुणवत्ता विभाग
ने०डि०का०, रायबरेली (लालगंज)





Modern Coach Factory Raebareli
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RLY	NFR	COACH NO	204853/C	DATE OF DISPATCH	22-Sep-20
Type	LWSCN1	Shell No.	20G002	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCNG-439

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 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.

 15/10/20 SSE/QC/MCF/RBL वरिष्ठ अनुसंधान अभियंता गुणवत्ता विभाग रेलवे डिपार्टमेंट, रायबरेली (लालगंज)	 SME/AME/QC/MCF/RBL असिस्टेंट मैटेरियल इंजीनियर / गुणवत्ता आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	 Dy.COM/MCF/RBL डिप्टी कम्प्लायंस ऑफिसर आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli
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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		204853/C
RAILWAY		NFR	ELECT. FIT DATE	18-09-2020	MCF FUR. NO.	SCN-G-439
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





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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 355426 HT Panel: MREM 355428	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-2591	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 : 20/08/0142 Pump 1: 3591 Pump 2: 3599	As per spec no. EDTS186.REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: DR AUTO SL.no.: 20/08/0231	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.: 20070319	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

(Signature)

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REV NO: 01

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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: 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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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: 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: 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 : 0120265209	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

