



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/2020-21/389

RLY	NFR	COACH NO	204647/C	DATE OF DISPATCH	29-Aug-20
Type	LWSCN1	Shell No.	20G073	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1657

- 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 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 1105/1102

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-NE CHD NPP END M/S-NE CHD Complete MCFRBL-AIRCON	20G073
2	Lav. side wall	M/S-ATHANCY ALD M/S-ATHANCY ALD	LAV.1 LAV.2 LAV.4 LAV.3
3	Side wall	LH SIDE MCFRBL-V4U LKO RH SIDE MCFRBL-V4U LKO	27 27
4	End wall	PP END M/S-P.D.STEEL NPP END M/S-P.D.STEEL	
5	Roof	MCFRBL-CONT.	20
6	Centre Buffer Coupler	M/S-ESCORTS	PP 4040 NPP 4030

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 . Max. pressure in BC All Brake are applied	6 – 10 sec. 3.0 ±0.15 kg/cm ² . OK	9 sec 3.0 kg/cm ² 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)	74/96	28-Aug-20
2	Insulation			Satisfactory		

14/10/20
SSE/QC/MCF/RBL

वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (मालगंज)



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/2020-21/389

RLY	N	F	R	Coach No.	2	0	4	6	4	7	/	C	-	DATE OF DISPATCH	2	9	0	8	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	7	3	FUR.NO	LSCN - 1657
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	194132				194131			
Bogie Type	FIAT				FIAT			
Frame no.	ECBT-359				ECBT-361			
Bolster no.	APEX-130				APEX-128			
Axle No	20 V - 9405 RWF	20 V - 9460 RWF	20 V - 9390 RWF	20 V - 9292 RWF	20 V - 9405 RWF	20 V - 9460 RWF	20 V - 9390 RWF	20 V - 9292 RWF
Wheel Dia	917.203755	917.348	917.348	917.469	917.379	917.323	917.377	917.328
Wheel Disc No	TZ 11-19 87443-9W12	TZ 11-19 78142-9VC5	TZ 11-19 77874-9VE2	TZ 11-19 87849-9WL2	TZ 11-19 87977-WL0	TZ 11-19 86144-9W4	TZ 11-19 77893-9VE3	TZ 11-19 87926-9WL2
R.B. Nos.	12-19 39002	11-19 33379	12-19 37929	11-19 33653	12-19 39245	11-19 33067	11-19 38904	11-19 400131
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- 02-20 7746	AVADH RAIL Sr. NO- 02-20 7791	AVADH RAIL Sr. NO- 02-20 7788	AVADH RAIL Sr. NO- 02-20 7785

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	301673,301690	301666,301689
2.	Primary outer Spring	CMFSK	11-19 1100-115(797,606,723,348)	11-19 1100-115(660,639,626,677)
3.	Primary Inner Spring	CMFSK	11-19 1101-103(285,287,1155,266)	11-19 1101-103(43,186,1154,263)
4.	Primary Damper	IAI	12-19 (288385,287614,287950,287327)	12-19 (287328,287533,287293,287416)
5.	Secondary Damper	GABRIEL	12-19 (4249,4248)	12-19 (4247,4251)
6.	Lateral Damper	IAI	11-19 283825	11-19 283805
7.	Brake Cylinder	KBI	C (4576,3350,3361,4567)-K-29	C (4602,3359,3347,4604)-K-29
8.	Brake Caliper	KBI	C-(0878,1045,1046,0879)-29	C - (0880,1047,1048,0881) - 29
9.	Brake Disc	KBI	24217808 0069-08/20,24217808 0070-08/20 24217808 0068-08/20,24217808 0067-08/20	24217815 0003-09/20,24217815 0004-09/20 24217815 0006-09/20,24217815 0005-09/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RF		
13.	Traction lever make	JI		
14.	Ball joint traction lever	GMT		
15.	Ball joint traction centre	GMT		
16.	Leveling Valve	ESCORT	1910,1912	1910,1912
17.	Check Valve	ESCORT	1912	1912
18.	Anti roll bar Make	RF		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	SARITA		
21.	Control Arm Upper	KUMAR	KUMAR	D585,D2591,D2865,D2211
22.	Control Arm Lower	KUMAR	D2020,D2638,D2975,D9562	N2511,N2593,D2583,D2589
23.	Phonic Wheel	KBI	K 01-20	K 01-20

Signature of SSE/Bogie/QC





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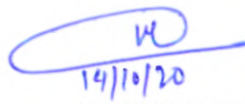
ROLLING STOCK CERTIFICATE

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RLY	NFR	COACH NO	204647/C	DATE OF DISPATCH	29-Aug-20
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				FUR.NO.	LSCN-1657

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	4883 04/20
2	Distribution valve	M/s-KBI	2020A10336
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	10460/29,9530/29
5	Foot Step	M/S- SUPER SPARK FARIDABAD	
6	Decoupling arrangement	M/S-ELASTOMER MUMBAI	
7	Floor board	M/S-SHREE RAM PNL	
8	PVC	M/S-RESPONSIVE INDS	
9	Lavatory inlay	M/S-SEEMA BHOPAL	
10	UIC Vestibule (PPE)	M/S-SUNCREAST KOLKATA	
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-HF VADODARA	
15	Emergency Window	M/S-HF VADODARA	
16	Lavatory/hopper Window	M/S-BET INDS PUNJAB	
17	Side panel	M/S-HF VADODARA	
18	Roof Ceiling	M/S-A.B.COMPOSITE KOLKATA	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
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-SPAC	
25	Auxiliary Water Tank	M/s- OASIS	
26	Under Slung Water Tank (2X685L)	M/s- SHIVALIK FAST MOHALI	
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-JR JUC	
32	Seat & Berth	M/S-OVPL SILICON MUMBAI (SLIDING)	
33	Ventury grill	NIL	
34	RFID	NIL	


14/10/20

SSE/QC/MCF/RBL

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गुणवत्ता विभाग
रेल डिब्बा कारखाना रायबरेली (लालगाँव)



MCF/RBL



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Type	LWSCN1	Shell No.	20G073	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1657

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:

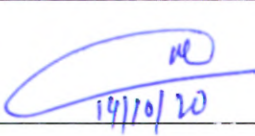
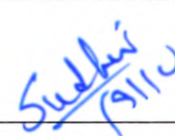
S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months 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.

 14/10/20	 15/10	 19/10
SSE/QC/MCF/RBL	SME/AME/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अनुसंधान अभियंता
गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (लालगंज)

Assistant Mechanical Engineer / Quality-1
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

सहायक क्वालिटी कंट्रोल मैनजर
उप मुख्य गुणवत्ता विभाग
Dy. Chief Engineer
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



MCF/RBL



Modern Coach Factory Raebareli
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DOC NO.: MCF/RBL/QEF/8001

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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		204647/C					
RAILWAY		NFR		ELECT. FIT DATE		28-08-2020		MCF FUR. NO.		SCN-1657	
Sr. no.	Description of tests									Remarks	
1.	PUMP EQUIPMENTS									OK	
2.	LIGHTS, NLLAP 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.: SSK On Board: 2019/06/099 HT Panel: 2019/05/059	EDTS 355, Rev'01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø A.C. Make: PANTRONICS Sr no.: PAN 20018830	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 : 20/08/0036 Pump 1: 3629 Pump 2: 3669	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller Make: KIND SL.no.: 20070122	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: ELECTRONIC Sr. no.: 07200096	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : AUTO IND.	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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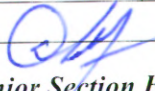
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ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC SCN COACHES

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
13.	Fitment of Railway carriage Fan 400mm. Sweep, 110V AC with crash worthy features. Make: 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


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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	ED ML-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: 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 : 0120144937	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
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स० कार्य प्रबन्धक / विद्युत
आ०रे०डि०का० / रायबरेली
A.W.M./Electrical/MCF/RBL

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

