



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/2020-21/400

RLY	NFR	COACH NO	204646/C	DATE OF DISPATCH	31-Aug-20
Type	LWSCN1	Shell No.	20G083	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1667

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 1095/1105

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1	Under frame	PP END M/S-SFPL NPP END M/S-SFPL Complete MCFRBL-V4U TECHIE	20G083
2	Lav. side wall	M/S-ATHANCY ALD M/S-ATHANCY ALD	LAV.1 LAV.2 LAV.3 LAV.4
3	Side wall	LH SIDE MCFRBL-CONT.V4U LKO RH SIDE MCFRBL-CONT.V4U LKO	26 26
4	End wall	PP END M/S-ECBT NPP END M/S-ECBT	
5	Roof	MCFRBL-CONT.	18
6	Centre Buffer Coupler	M/S-ESCORTS	PP 4047 NPP 4064

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	8 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	K.NEROLAC	M/S-K.NEROLAC (S&A)	90/89	10-Aug-20
2	Insulation			Satisfactory		


 SSE/QC/MCF/RBL

 वरि०अनु० अभियंता
 गुणवत्ता विभाग
 रे०डि०का०, रायबरेली (जालगंज)



MODERN COACH FACTORY, RAEBARELI

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002

REV NO.: 01

DATE: 16.05.2016

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RLY	N	F	R	Coach No.	2	0	4	6	4	6	/	C	-	DATE OF DISPATCH	3	1	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	8	3	FUR .NO	LSCN - 1667
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	194153				194154			
Bogie Type	FIAT				FIAT			
Frame no.	MIPL-509				ECBT-396			
Bolster no.	RBL/MCF-2155				APEX-75			
Axle No	20 V- 9560 RWF	20 V- 4491 RWF	20 V- 5101 RWF	20 W- 0087 RWF				
Wheel Dia	917.308	917.269	917.336	917.282	917.315	917.288	917.272	917.265
Wheel Disc No	TZ 06-19 52829-9QH3	TZ 06-19 61170-9QJ4	TZ 12-18 18887-9WR3	TZ 05-19 41364-9PJ7	TZ 02-19 29018-9ML9	TZ 05-19 47152-9PD4	TZ 12-19 76907-9WL1	TZ 12-19 76801-9VG2
R.B. Nos.	11-19 33845	12-19 44833	11-19 33814	11-19 33656	11-19 33841	12-19 44906	11-19 33870	11-19 44123
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 7650	AVADH RAIL Sr. NO- 02-20 7506	AVADH RAIL Sr. NO- 02-20 7664	AVADH RAIL Sr. NO- 02-20 7638

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	293797,294389	294372,294351
2.	Primary outer Spring	CMFSK	10-19 1100-(1972,1960,1983,1991)	10-19 1100-(0002,1950,1982,1990)
3.	Primary Inner Spring	CMFSK	10-19 1101-103(1836,1875,1830,1820)	10-19 1101-103(103,1831,1887,12618)
4.	Primary Damper	GABRIEL	01-20 (12619,12617,12616,12611)	01-20 (12612,12610,12620,12618)
5.	Secondary Damper	GABRIEL	12-19 (4637,4643)	12-19 (8638,4636)
6.	Lateral Damper	IAI	01-20 297622	01-20 297824
7.	Brake Cylinder	KBI	C (4719,3420,3402,4761)-K-29	C (4718,3428,3423,4756)-K-29
8.	Brake Caliper	KBI	C-(1014,1127,1128,0140)-29	C - (1039,1125,1126,1038) - 29
9.	Brake Disc	KBI	24217806 0047-08/20,24217806 0048-08/20 24208532 0021-52/19,24208532 0018-52/19	24208538 0048-01/20,24210783 0013-01/20 24217803 0027-07/20,24217802 0039-07/20
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.	Leveling Valve	KNORR	16-19 B-7601,16-19 B-3628	16-19 B-6213,16-19 B-7521
17.	Check Valve	KNORR	05-19 18719	05-19 20126
18.	Anti roll bar Make	EMSON/SF		
19.	Roll Link make	SARITA /GMT		
20.	Fork make	SF		
21.	Control Arm Upper	KUMAR	N-8211,D2771,D2215,D2312	D2745,N2725,D2848,D2538
22.	Control Arm Lower	KUMAR	D-2710,N-2723,N1541,D2714	D2712,N2708,D1538,N1583
23.	Phonic Wheel	KBI	K 01-20	K 01-20

Signature of SSE/Bogie/QC



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				FUR.NO.	LSCN-1667

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-KBI	5962 28/20
2	Distribution valve	M/s-KBI	2020G11862
3	Pull box	M/s-KBI	
4	FIBA	M/s-FAIVELEY	F20039/C20193
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-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-SAWALKA INDS KOLKATA	
15	Emergency Window	M/S-SAWALKA INDS 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 KOLKATA	
19	Door way Ceiling	M/S-ZAAM TOOLS RBL	
20	Body Side Doors 2,4	M/s- SVARN INFRATEL	
	Body Side Doors 1,3	M/s- JBM FARIDABAD	
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- 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-JR JUC	
32	Seat & Berth	M/S-OVPL SILICON MUMBAI(SLIDING)	
33	Ventury grill	NIL	
34	RFID	NIL	

SSE

SSE/QC/MCF/RBL

वरि०अनु० अभियंता

गुणवत्ता विभाग

रे०डि०का०, रायबरेली (लालगंज)



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Type	LWSCN1	Shell No.	20G083	DISPATCH TO	SSE/C&W/KIR
				FUR.NO.	LSCN-1667

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. QM/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)

सहायक यांत्रिक अभियंता/गुणवत्ता
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli

Dy. QM/MCF/RBL
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



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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.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC COACH.						
TYPE COACH		LWSCN		SHELL/COACH NO		204646/C
RAILWAY		NFR	ELECT. FIT DATE	29-08-2020	MCF FUR. NO.	SCN-1667
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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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.: ABROL On Board: 2019/07/250B HT Panel: 2019/07/266A	EDTS 355, Rev'01'.Am-3	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make: PANTRONICS Sr no.: PAN 20018908	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: KIND Sr no : ASY/0141 Pump 1: 20070371 Pump 2: 20070372	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: KIND SL.no.: 20070072	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: WAVES Sr. no.: W4K5G 201840	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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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: CG POWER	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	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 : 0120144925	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

