



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/2019-20/1233

RLY	N	F	R	Coach No.	1	9	7	7	3	8	/	C	DATE OF DISPATCH	1	2	-	1	2	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	1	7	1	FUR.NO.	LSCNG-312
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1. Railway Board's Order No. : 2019/M(C)/142/2, Dated-21-11-2019
2. Tare Weight of Coach : 41.24 Tones
3. Carrying Capacity : (a) Seating : 80 (b) Sleeping : 80 (c) Luggage : NIL

4. Special feature: -

S NO	DESCRIPTION	MAKE/SUPPLIER
A.	Epoxy flooring in lavatory	M/s-ACME INDIA NEW DELHI
B.	Anti slip friendly Grab Bar	M/s-ACME INDIA NEW DELHI
C.	Provision of Health Faucet in lavatories	M/s-ACME INDIA NEW DELHI
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/s-ACME INDIA NEW DELHI
E.	GFRE ceiling instead of NPTC	M/s-ACME INDIA NEW DELHI
F.	DGFRP panels instead of LP panels	M/s-ACME INDIA NEW DELHI
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/s-ACME INDIA NEW DELHI
H.	Choke of 5/6 mm in DV side replace with 9 mm in both type (KBI & Faiveley) letter no. MC/LHB/Brake, Dated 27.09.2018	

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	1) 1098 (NPPE) 2) 1096 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	Front Part	PP END M/S-KANSAL ENG. 17
		Complete	NPP END M/S-KANSAL ENG. 17
2.	Lav. side wall	M/S- RAIL TECH KXH	LAV.1 - LAV.2 -
		M/S- RAIL TECH KXH	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE	M/S-ECBT(CDG) 14
		RH SIDE	M/S-ECBT(CDG) 14
4.	End wall	PP END	M/s-DTL PUNE --
		NPP END	M/s-DTL PUNE --
5.	Roof	M/s-MCF/CONT	138
6.	Centre Buffer Coupler	M/S- SANROK	PP END 14537 NPP END 14611

7. AIRBRAKE 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	09 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 OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR(SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
1.	Paint	P.U	M/s-VIBGYOR	(SUPPLY & APPLY)	89/88	22.11.19
2.	Insulation			Satisfactory		

SSE/QC/MCF/RBL

वरि०अनु० अभियंता

गुणवत्ता विभाग

रे०डि०का०, रायबरेली (लालगंजी)



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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DISPATCH	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	1	7	1	FUR.NO	LSCN-G-312
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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192355				192356			
Bogie Type	FIAT				FIAT			
Frame no.	RBL/LS5-1306				SCI-2841			
Bolster no.	SCI-368				SECPL-415			
Axle No	19 L- 5137 RWF		19 S- 9018 RWF		19 L- 5168 RWF		19 S- 5519 RWF	
Wheel Dia	917.399	917.465	917.421	917.461	917.355	917.493	917.304	917.454
Wheel Disc No	TZ 08-19 75234-9SK6	TZ 07-19 67392-9RQ7	TZ 08-19 73714-9SL1	TZ 08-19 73713-9SL1	TZ 08-19 73626-9SK4	TZ 08-19 72946-9SL0	TZ 08-19 73433-9RR6	TZ 08-19 75397-9SX9
R.B. Nos.	09-18-21521	09-18-22070	09-18-22480	09-18-22460	09-18-22186	09-18-23030	09-18-22042	09-18-23344
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 INFRA Sr.NO.07-19 4136	AVADH RAIL INFRA Sr.NO.07-19 4172	TAYAL & CO. Sr.NO.19-07 3650	TAYAL & CO. Sr.NO.19-07 2596

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	17580,17573	17570,17569
2.	Primary outer Spring	CMFSK	10-19 1100-114 (1006,1077,1086,865)	10-19 1100-114 (932,1076,832,1042)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (508,492,480,1260)	10-19 1101-101 (4256,892,838,864)
4.	Primary Damper	KONIC	03-19 (04983,04985,04998,04994)	03-19 (03719,05241,04709,04788)
5.	Secondary Damper	KONI	04-19 (00933,00887)	04-19 (00899,00306)
6.	Lateral Damper	KONI	04-19 01887	04-19 01829
7.	Brake Cylinder	KBI	B(9053,8111,7961,9049)K-29	B(9251,8101,8126,9023)K-29
8.	Brake Caliper	KBI	B(6050,6168,6169,6051) -29	B(6043,6166,614,76047) -29
9.	Brake Disc	KBI	24203749 0076-41/19,24203757 0050-42/19 24203745 0053-41/19,24203749 0077-41/19	24203750 0043-42/19,24203751 0012-42/19 24203750 0032-42/19,24203749 0056-42/19
10.	Ball Joint Control Arm	ARYAN		
11.	Lateral Bump Stop	ARYAN		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	SGA		
16.	Leveling Valve	KNORR	19B-7243,19B-7182	19B-7660,19B-7564
17.	Check Valve	KNORR	20231	20248
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/GMT		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	290819-2,280819-3,210819-2,260819-2	280819-3,240819-3,240819-3,280819-2
22.	Control Arm Lower	RVE	290819-2,280819-3,210819-2,260819-2	290819-2,290819-3,290819-2,270819-2
23.	Phonic Wheel	FAV	FT/KEP-1396	FT/KEP-1396

Signature of SSE/Bogie/QC

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





Modern Coach Factory Raebareli

आधुनिक रेल डिब्बा कारखाना, रायबरेली

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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORTS	2019050172
2.	Distribution valve	M/S- ESCORTS	1905A172
3.	Pull box	M/S -FAIVELY TRANS. TECH.INDIA LTD BADDI(HP)	
4.	FIBA	M/S- ESCORTS	PP-18110327 NPP-18100226
5.	Foot Step	M/s- SUPER SPARK PVT. LTD. FARIDABAD	
6.	Decoupling arrangement	M/S-ELASTOMER LINING WORKS, MUMBAI	
7.	Floor board	M/s-TWPL MUMBAI	
8.	PVC	M/s-ACME INDIA NEW DELHI	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST IND.KOLKATA	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST IND.KOLKATA	
12.	Gangway bridge mounting (PPE)	M/S- RAKESH IRON STORE, KXH	
13.	Gangway bridge mounting (NPPE)	M/S- RAKESH IRON STORE, KXH	
14.	Body Side Window	M/s-ACME INDIA NEW DELHI	
15.	Emergency Window	M/s-ACME INDIA NEW DELHI	
16.	Hopper Window	M/s-ACME INDIA NEW DELHI	
17.	Side panel	M/s-ACME INDIA NEW DELHI	
18.	Roof ceiling	M/s-ACME INDIA NEW DELHI	
19.	Door way ceiling	M/s-ACME INDIA NEW DELHI	
20.	Partition frame	M/S-SARITA HITECH UMB	
21.	Partition pillar	M/s-ACME INDIA NEW DELHI	
22.	Body Side Doors	M/S- JBM INDUSTRIES, FARIDABAD	
23.	Vestibule Door(PPE)	M/S- JBM INDUSTRIES, FARIDABAD	
24.	Vestibule Door(NPPE)	M/S- JBM INDUSTRIES, FARIDABAD	
25.	Water purifier	N/A	
26.	Bio Tank	M/S- RAIL FAB KXH	
27.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
28.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. BADDI	
29.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST. MOHALI	
30.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
31.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
32.	Controlled Discharge Tap	M/s- EAUSET PVT LTD GURGAON	
33.	Lavatory Doors	M/s-ACME INDIA NEW DELHI	
34.	Fire Extinguisher	M/s-ACME INDIA NEW DELHI	
35.	Seat & Berth	M/s-ACME INDIA NEW DELHI (DUREABLE LKO)	
36.	Snack Table	N/A	
37.	RFID	N/A	

SSE
SSE/QC/MCF/RBL

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गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)



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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	1	7	1	FUR.NO.	LSCNG-312
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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 & PERIOD OF TRIAL
			Frequency	

16. WARRANTY:

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, 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 & deficient/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 qualityrcfbl@gmail.com
- Painting on supply & apply contract :- supply of material and application shall be warranted for a period of three years from date of 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/QC/MCF/RBL	Dy.CQM/MCF/RBL

वरिष्ठ अनुष्ठानिक अभियंता
गुणवत्ता विभाग
रेलवे डिब्बा कारखाना, रायबरेली (लालगंज)

वरिष्ठ यांत्रिक अभियंता/गुणवत्ता
Senior Mechanical Engineer/Quality
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareli

उप मुख्या गुणवत्ता प्रबन्धक/शेल
Dy. Chief Quality Manager/Shell
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareli



Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 00

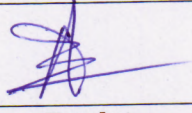
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC SCN COACHES
ELECTRICAL TEST CERTIFICATE FOR LHB/EOG/HOG NON AC COACHES

TYPE COACH		LWSCN		SHELL/COACH NO		197738/C	
RAILWAY		NFR	ELECT.FIT DATE		11-12-2019	FUR.NO	SCN-G-312
Sr no	Description of test						Remarks
1.	PUMP EQUIPMENTS						OK
2.	LIGHTS, NL,LAP CHARGING SOCKETS						OK
3.	RAILWAY CARRIAGE FAN						OK
4.	WHEEL SLIDE PROTECTION SYSTEM (WSP)						OK
5.	WORKING OF 9 KVA TRANSFORMER						OK
6.	WORKING OF REGULATED BATTERY CHARGER						OK
7.	SAFETIES :						
7.1.	FUSES AND THEIR RATING						OK
7.2	CONTROL CIRCUIT						OK
7.3	POWER CIRCUIT						OK


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



Modern Coach Factory Raebareli
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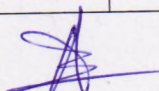
DATE:18.01.2017

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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC SCN COACHES

01.	Switch board cabinet Make : AMIT ENGG. On Board Sr no : AE/USBC-1379 HT Panel Sr no : AE/USBC-1555	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/11/056 Sr no.1 : 19100025 Sr no.2 : 19100012 Srno.CPA: 2019/11/0060-DR AUTO	As per spec EDTS 186,Rev-a, Am- 2	01
03.	Emergency light system for EOG type coaches (AEL), Make : DR AUTO	EDTS 151,Rev -c Am-1 & 2	04
04.	Passenger Alarm Cum Indication Light (PACIL) Make: RT VISION	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-I	02
05.	Fitment of Switch Plate Assly(Cabin Side) Make : SALZER/RECORD	EDML 086,Rev-03, ITEM-01	20
06.	Fitment of Switch Plate Assly Corridor Side),Make : SALZER/RECORD	EDML 086, Rev 03, ITEM-02	20
07.	Railway carriage Fan 400mm Sweep, 110V DC with crash worthy features. Make: LIGHT ENGG.	IS 6680/92,First Rev, RCF Amdt 4, Col I, Ty XI, RCF Cor I.	30
08.	Cabin,Corridor,doorway and Gangway Lights. Make: RT VISION	As per RDSO/PE/SPEC/TL-0091(REV-1) TYPE B-1	26
09.	Lavatory Light Make: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016,REV-01, TYPE-D &	04
10.	Night Light Fitting (LED BASED) Sticker For Berth Number On Night light Fitting For LHBSCN(80-BERTHER)Coaches Make : INTRA	CC76289 & CC76443	09


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF LHB/EOG/HOG NONAC SCN COACHES

11.	Battery fuse box +ve Make : INDORAIL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : ISGPL	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5H 19649	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2611	As per RDSO/PE/SPEC/TL 0158, 2010, Rev` 0',Ty I.	01
15.	ZS coupling 400A/750V/03Ph/50hz. Make : PRIME ELECT.	As per spec No EDTS 105,Rev` e' Am-3, TYPE-2	01 set
16.	Feeder junction boxes. Make : AECO	EDTS-328 REV-C	01 set
17.	Wheel set earthling equipment. Make : PRIME ELECT.	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 180641-60147-0066	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIHI MODIFIED TRAY TOSKED-644 Make : HBL Lug date : 11/19	RDSO/pe/spec/ac-0009 rev-1- 2008 amdt-1	01 set
20.	Battery box for LHB coaches. Make : ANANYA	CC 91205	01

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

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

वरिष्ठ विद्युत अभियन्ता
रेल कोच फैक्टरी, रायबरेली,
Sr. Electrical Engineer / RCF / RBL