



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/2019-20/1214

RLY	N	F	R	Coach No.	1	9	7	7	3	9	/	C	DATE OF DISPATCH	1	0	-	1	2	-	1	9
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DISPATCH TO	Sr.DME/DBRG	Type	L	W	S	C	N	1	Shell No.	9	7	5	3	9	FUR.NO.	LSCNG-318
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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 NDLS
B.	Anti slip friendly Grab Bar	M/S- ACME INDIA NDLS
C.	Provision of Health Faucet in lavatories	M/S- ACME INDIA NDLS
D.	Washbasin counter Top (Corian of Duport or Montelli)	M/S- ACME INDIA NDLS
E.	GFRE ceiling instead of NFTC	M/S- ACME INDIA NDLS
F.	DGFRP panels instead of LP panels	M/S- ACME INDIA NDLS
G.	Honey Comb partition frame with DGFRP sheet instead of FRP sheet	M/S- ACME INDIA NDLS
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) 1105 (NPPE) 2) 1105 (PPE)

6. TRACEABILITY OF SHELL ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Under frame	PP END M/S-NE NPP END M/S-NE	-
	Complete	MCF/RBL(CONTRACTOR V4U)	97539
2.	Lav. side wall	M/S- ATHANCY RBL	LAV.1 - LAV.2 -
		M/S- ATHANCY RBL	LAV.3 - LAV.4 -
3.	Side wall	LH SIDE M/S-ECBT CHANDIGARH RH SIDE M/S-ECBT CHANDIGARH	31/ECBT
4.	End wall	PP END M/s- SIPL PALWAL NPP END M/s- SIPL PALWAL	--
5.	Roof	MCF/CONT.	163
6.	Centre Buffer Coupler	M/s- FRONTIER LTD.	PP END 122P1 NPP END 28P1

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	08 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	M/s-VIBGYOR	89/88	23.11.19
2.	Insulation			Satisfactory		

वरीयता विभाग
रेलवे कारखाना, रायबरेली (लालगंज)





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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9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	192286				192285			
Bogie Type	FIAT				FIAT			
Frame no.	RBL-1741				RBL-1738			
Bolster no.	APEX-38				APEX-37			
Axle No	19 N - 4829 RWF	19 S - 7772 RWF	19 N - 8763 RWF	19 N - 3399 RWF				
Wheel Dia	917.44	917.57	917.553	917.521	917.39	917.562	917.402	917.516
Wheel Disc No	TZ 08-19 75280-9SK1	TZ 07-19 67768-9RQ3	TZ 08-19 73765-9SK4	TZ 06-19 51475-9PH7	TZ 08-19 72712-9SK7	TZ 06-19 51476-9PJ5	TZ 07-19 68975-9RM5	TZ 07-19 70935-9RN5
R.B. Nos.	10-19-39736	08-19-29888	10-19-39495	06-19-29728	08-19-29940	08-19-29533	08-19-29993	08-19-39558
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	
	Outer	Inner	Outer	Inner	Outer	Inner	Outer	Inner
Make & Nos.	CMFSK05-19-5101-091-41	CMFSK05-19-5100-027-525	CMFSK05-19-5101-091-19	CMFSK05-19-5100-027-525	CMFSK05-19-5101-091-59	CMFSK05-19-5100-027-515	CMFSK05-19-5101-091-59	CMFSK05-19-5100-027-531
Compressed Ht. at Tested Load	512.5	472	512.5	472	515	472	516	470
10Alignment deviation (mm)	13	7	13	7	8	10	7	10

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	KBI	18366,18363	18369,18371
2.	Primary outer Spring	CMFSK	10-19 1100-078 (50,48,95,133)	10-19 1100-078 (96,142,44,146)
3.	Primary Inner Spring	CMFSK	10-19 1101-101 (385,336,381,388)	10-19 1101-101 (390,316,343,319)
4.	Primary Damper	KONIC	03-19 (06724,07032,06749,06803)	03-19 (06402,05071,06282,06369)
5.	Secondary Damper	IAI	09-19 (272757,272688)	09-19 (273045,272792)
6.	Lateral Damper	IAI	05-19 25247	05-19 25032
7.	Brake Cylinder	ESCORT	(47396,47282,27840,47987)	(47985,47842,45869,45931)
8.	Brake Caliper	ESCORT	(27009,26880,27419,27549)	(27547,27421,25674,25751)
9.	Brake Disc	FAV	10-19-(3093,3096,3834,3833)D-133561-300	11-19-(5807,5808,5809,5806)D-133561-300
10.	Ball Joint Control Arm	GMT/ARYAN		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	SF(SARITA)		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	GMT		
16.	Secondary Rubber Pad	DUREL		
17.	Rubber Spring	DUREL		
18.	Anti roll bar Make	EMSON		
19.	Roll Link make	SARITA/ARYAN		
20.	Fork make	RNG		
21.	Control Arm Upper	RVE	170819-3,200819-3,RVE,230819-2	180819-3,210819-3,160819-3,170819-2
22.	Control Arm Lower	RVE	160819-2,270819-3,270819-2,210819-2	270819-3,270819-3,290819-2,290819-2
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

Signature of SSE/Bogie/QC

वरिष्ठ अनुसंधान अधिकारी
गुणवत्ता विभाग
रेलवे कारखाना, रायबरेली (लाहौर)





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12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO
1.	Air Brake Module	M/S- ESCORT ENT.	2019050156
2.	Distribution valve	M/S- ESCORT ENT.	1905A156
3.	Pull box	M/S- FAIVELY.	
4.	Fiba Device	NA	PP- NPP-
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 NDLS	
9.	Lavatory Inlay	M/S- SEEMA INDS. BHOPAL	
10.	UIC Vestibule (PPE)	M/S-SUNCREST PUNE	
11.	UIC Vestibule (NPPE)	M/S-SUNCREST PUNE	
12.	Gangway bridge mounting (PPE)	M/s-RAKESH IRON & STEEL WORKS, KXH	
13.	Gangway bridge mounting (NPPE)	M/s-RAKESH IRON & STEEL WORKS, KXH	
14.	Body Side Window	M/S- ACME INDIA NDLS	
15.	Emergency Window	M/S- ACME INDIA NDLS	
16.	Hopper Window	M/S- ACME INDIA NDLS	
17.	Side panel	M/S- ACME INDIA NDLS	
18.	Roof ceiling	M/S- ACME INDIA NDLS	
19.	Door way ceiling	M/S- ACME INDIA NDLS	
20.	Partition frame	M/S- ACME INDIA NDLS	
21.	Partition pillar	M/S- ACME INDIA NDLS	
22.	Body Side Doors	M/s- JBM INDS FARIDABAD	
23.	Vestibule Door(PPE)	M/s- JBM INDS FARIDABAD	
24.	Vestibule Door(NPPE)	M/s- JBM INDS FARIDABAD	
25.	Bio Tanks	M/S- JSL LIFESTYLE GURGAON.	
26.	Auxiliary Water Tank	M/s- AMIT ENG. MOHALI	
27.	Under Slung Water Tank(2X685L)	M/s- AMIT ENG. BADDI	
28.	Under Slung Water Tank (1X685L)	M/s- SHIVALIK FAST. MOHALI	
29.	Health Faucet	M/s- KAPCO VALVES JALANDHAR	
30.	Lotah Filler Tap	M/s- KAPCO VALVES JALANDHAR	
31.	Controlled Discharge Tap	M/s- EQUSET PVT LTD ALWAR	
32.	Lavatory Doors	M/S- ACME INDIA NDLS	
33.	Seat & Berth	M/S- ACME INDIA NDLS (DUREBLE LKO)	
34.	Snack Table	N/A	
35.	RFID	NA	

Ruma
SSE/QC/MCF/RBL

गुणवत्ता विभाग
70डि0का0, रायबरेली (लागंज)





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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 Frequency	REFERENCE & PERIOD OF TRIAL

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 अभियंता
गुणवत्ता विभाग
रेल डिब्बा कारखाना, रायबरेली (लालगंज)

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

जोगिन्दर सिंह
Joginder Singh
उप मुख्य गुणवत्ता प्रबन्धक
Dy. Chief Quality Manager
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory Raebareilly





Modern Coach Factory Raebareli
आधुनिक रेल डिब्बा कारखाना, रायबरेली

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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	197739/C
RAILWAY	NFR	ELECT.FIT DATE	10-12-2019
FUR.NO	SCN-G-318		
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





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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-1551 HT Panel Sr no : AE/USBC-1542	EDTS 333, Rev`01'Am-1	01
02.	Pump equipment with PLC controller & pump box Make : DR AUTO Sr no PA: 2019/08/0040 Sr no.1 : 3656 Sr no.2 : 3671 Srno.CPA: 2019/08/0091-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: ORIENT	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
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FOR ELECTRICAL ITEMS

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

11.	Battery fuse box +ve Make : ISGPL	LW 71001,Alt-F	01
12.	Battery fuse box -ve Make : SSK	LW 71002,Alt-F	01
13.	Regulated battery charger Make : WAVES Sr no: W4K5K-19970	As per RDSO/pe/spec/ac/0129, Rev.-1 (2009)	01
14.	9KVA transformer Make : VIMAL Sr no : VTC 3089 LHB-2634	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 : MV ELECTRO	EDTS-328 REV-C	01 set
17.	Wheel set earthing equipment. Make : DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	02 sets
18.	Wheel Slide Protection System (WSP) Make : ESCORT Sr no : 190001-60527-0108	M/s : ESCORT	01 set
19.	110V,120AH,VRLA SMF BATTERY SET WITH 19 MONOBLOCK (6V EACH) PRECHARGED,WIH 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

 वरिष्ठ अनुभाग अभियन्ता SSE/EL/QC गुणवत्ता नियंत्रण आपरेटिंग/लालगंज/रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 वरिष्ठ विद्युत अभियन्ता रेल कोच फैक्टरी, रायबरेली, Sr. Electrical Engineer / RCF / RBL
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