



Modern Coach Factory Raebareilly

आधुनिक रेल डिब्बा कारखाना, रायबरेली

DOC NO.: MCF/RBL/QMF 8002
REV NO: 02
DATE: 28-05-2021

ROLLING STOCK CERTIFICATE(NON AC COACH)

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-2022 /03

RLY	WCR	COACH NO	216076/C	DATE OF DISPATCH	1-Apr-21
Type	LWSCN1	Shell No.	20G221	FUR.NO.	LSCN-1876

1 Railway Board's Order No. : 2021/M (C)/142/2,Dt- 05.03.2021

2 Tare Weight & Carrying Capacity of Coach :

S.N	COACH TYPE	LWSCN1	LWS	LWSCZ	LDSL	LSLRD
i	Tare Weight	41.24	40.66	40.5	38.19	38.19
ii	Seating	80	100	102	36	37
iii	Sleeping	80	NIL	NIL	2	4
iv	Luggage	NIL	NIL	NIL	4	4

3 Special feature:

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

4 Smart feature:NIL

5 SHELL LEADING DIMENSIONS:

S.N	DESCRIPTION	DIMENSION (MM)
i	Maximum Length over body	23700
ii	Maximum Width over body	3240
iii	Maximum height from Rail Level	4039
iv	CBC height/Buffer Height from Rail level 1105 +0/-10	NPP/PP 1105/1105

6 TRACEABILITY OF SHELL ITEMS:

S.N	ITEM	MAKE/SUPPLIER	SERIAL NO
i	Under frame	Front PP END M/S-ULTRA ENGG.	5
		Part NPP END M/S-ULTRA ENGG.	5
		Complete M/S-ULTRA ENGG.	5
ii	Lav. side wall	M/S-ATHANCY ALD LAV.1	LAV.2
		M/S-ATHANCY ALD LAV.3	LAV.4
iii	Side wall	LH SIDE M/S-DTL	45
		RH SIDE M/S-DTL	45
iv	End wall	PP END M/S-SIPL	
		NPP END M/S-SIPL	
v	Roof	MCF/RBL-CONT.	47
vi	Centre Buffer Coupler	M/S-FRONTIETR	NPP/PP 71-P2/87P2
vii	Buffer	N/A	NPP/PP N/A

7 AIR BRAKE TEST REPORT:

S.N	ITEM	DESCRIPTION	SPEC. VALUE	OBSERVED
i	Full brake application	Reduce pressure of BP from 5.0 to 3.4 kg/cm ² .	6 – 10 sec.	8Sec
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²
		All Brake are applied	OK	OK
ii	Insensitivity	exhaust BP @ 0.3 kg/cm ² /min.	No brake application	OK
iii	Sensitivity	Exhaust BP @ 0.1 kg/cm ² /Sec, after 06 Sec.	Brake must apply	OK
iv	Handbrake(Parking brake)for generator car	1.Apply hand brake	1.Hand Bk. Indicator should be red	OK
		2.Release hand brake	2. Hand Bk. indicator should be green	OK

8 PAINTING DETAILS:

S.N	DESCRIPTION	TYPE OF PAINT	MAKE	APPLICATION BY MCF/ CONTRACTOR (SUPPLY & APPLY)	AVERAGE GLOSS VALUE	DATE OF COMPLETION
i	Paint	P.U	VIBGYOR	M/S-VIBGYOR(WOW)	78/96	26-Mar-21
ii	Insulation			Satisfactory		

9 COACH FURNISH DETAILS :

S.N	ACTIVITIES	FIRM	TURNKEY/WORK CONTRACT/SUPPLY&APPLY
i	Coach Furnishing	M/S-D/L	WORK CONTRACT
ii	Air Brake	M/S-SR	WORK CONTRACT
iii	Bio toilet & flushing	M/S-VEDANSH ENTERPRISES	WORK CONTRACT
vi	Epoxy in lav.	N/A	N/A

SSE/OC/MCF/RBL
वरिष्ठ निरीक्षक
गुणवत्ता विभाग
रेडिओका, रायबरेली (लालगंज)





		Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली		DOC NO.: MCF/RBL/QMF 8002 REV NO: 02 DATE: 28.05.2021	
ROLLING STOCK CERTIFICATE(NON AC COACH)					
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-2022 /03					
RLY	WCR	COACH NO	216076/C	DATE OF DISPATCH	1-Apr-21
Type	LWSCN1	Shell No.	20G221	DISPATCH TO	Sr.DME/C&W/JBP
10	MODIFICATION (IF ANY)		: NIL		
11	DEVIATION (IF ANY)		: NIL		
12	ITEM FITTED ON THE COACH ON TRIAL		: NIL		
S.N	ITEM PARTICULARS		PURPOSE	REPORT	REFERENCE &
				Frequency	PERIOD OF TRIAL
i					
13.A	TRACEABILITY OF FURNISHING ITEMS:(common items for all coach)				
S.N	ITEM		MAKE/SUPPLIER	SERIAL NO(NPP/PP)	
i	Air Brake Module		M/S-FAIVELEY	B21119B	
ii	Distribution valve		M/S-FAIVELEY	B215628B	
iii	Pull box		M/S-FAIVELEY		
iv	FIBA		M/S-KBI	11437/29,11587/29	
vi	Foot Step		M/S-FABRICON INDS KOLKATA		
v	Decoupling arrangement		M/S-PULSAR INDS KOLKATA		
vii	Floor board		M/S-SHREE RAM PNL		
viii	PVC		M/S-RESPONSIVE		
ix	Lavatory inlay		M/S-SEEMA BHOPAL		
x	UIC Vestibule (PPE)		M/S-SUNCREST KOLKATA		
xi	UIC Vestibule (NPPE)		M/S-SUNCREST KOLKATA		
xii	Gangway bridge mounting (PPE)		M/s- MAHAVEER METAL WORKS, KXH		
xiii	Gangway bridge mounting (NPPE)		M/s- MAHAVEER METAL WORKS, KXH		
xiv	Body Side Window		M/S-SHATABDI INDS VADODARA		
xv	Emergency Window		M/S-SHATABDI INDS VADODARA		
xvi	Lavatory/hopper Window		M/S-BEI INDS PUNJAB		
xvii	Roof Ceiling		M/S-A.B.COMPOSITE		
xviii	Door way /gang way ceiling		M/S-A.B.COMPOSITE		
xix	Side Wall panel		M/S-HFGW VADODARA		
xx	Body Side Doors		M/s-SUKATA LDH (3)+SVARN(2,4)+JBM(1)		
xxi	Vestibule Door(PPE)		M/s-JBM FARIDABAD		
xxii	Vestibule Door(NPPE)		M/s-JBM FARIDABAD		
xxiii	Bio Tank		M/s-OMAX AUTO-02 NOS+JSL LIFE-02 NOS		
xxiv	Pressurized flushing (ele. Pneu.)		M/S-SPAC		
xxv	Auxiliary Water Tank		M/S-SHIVALIK FAST MOHALI		
xxvi	Under Slung Water Tank (2X685L)		M/S-OASIS		
xxvii	Under Slung Water Tank (1X685L)		M/S-SHIVALIK FAST MOHALI		
xxviii	Health Faucet		M/S-KAPCO VALVES JUC		
xxix	Lotah Filler Tap		M/S-KAPCO VALVES JUC		
xxx	Controlled discharge tap		M/S-AGMECO UK		
xxxi	Lavatory Modules		NIL		
xxxii	Lavatory Doors		M/S-JVR LDH		
xxxiii	Fire Extinguisher		NIL	NIL	
xxxiv	Seat & Berth		M/S-ADVANCE SILICON		
xxxv	Venturi grill		NIL		
13.B	TRACEABILITY OF FURNISHING ITEMS:(items for variant wise) NIL				

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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 (NON AC COACH)

Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2021-22/03

RLY	W	C	R	Coach No.	2	1	6	0	7	6	/	C	-	DATE OF DISPATCH	0	1	0	4	2	0	2	1
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DISPATCH	Sr.DME/C&W/JBP	Type	L	W	S	C	N	1	Shell No.	2	0	G	2	2	1	FUR.NO	LSCN-1876
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8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	201472				201471			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LS-5 - 2988				AML- 331			
Bolster no.	AMIT -604				MCF/RBL/LS-5 - 3223			
Axle No	21 C - 4032 RWF		21 C- 4414 RWF		21 C - 4235 RWF		21 C - 3845 RWF	
Wheel Dia	917.413	917.491	917.432	917.482	917.502	917.584	917.507	917.59
Wheel Disc No	TZ 09-20 34292-OTE1	TZ 09-20 34027-0SE1	TZ 09-20 25731-0SD3	TZ 09-20 30924-0TD6	TZ 09-20 27299-0TD2	TZ 09-20 33018-0TE1	TZ 09-20 30685-0TC4	TZ 09-20 31264-0SF1
R.B. Nos.	09-20 426699	09-20 301451	09-20 426288	09-20 42777	06-20 411711	03-20 300011	06-20 411586	03-20 300182
CT R B Make	TIMKEN		TIMKEN		TIMKEN		TIMKEN	

9. SECONDARY SUSPENSION LOAD DEFLECTION VALUES :-

DESCRIPTION	Bogie NPP side		Bogie PP side	
	Secondary 1	Secondary 2	Secondary 1	Secondary 2
Make & Nos.	RESISTROFLEX Sr.NO.08-20 16211	RESISTROFLEX Sr.NO.08-20 15400	RESISTROFLEX Sr.NO.06-20 15358	RESISTROFLEX Sr.NO.06-20 15209

10. TRACEABILITY 9OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	293653,278415	337677,293669
2.	Primary outer Spring	CMAFI	08-20-1100-(129,200,126,173)	08-20-1100-(49,53,78,54)
3.	Primary Inner Spring	CMAFI	08-20-1101 (35,197,71,70)	08-20-1101 (229,243,241,239)
4.	Primary Damper	IAI	01-20-(301157,299485,300648,300697)	01-20-(300707,300123,300590,299943)
5.	Secondary Damper	GABRIEL/IAI	07-20-(2933,2947)	01-20-(295678,295621)
6.	Lateral Damper	KONI	04-19 01696	04-19 02192
7.	Brake Cylinder	FAV	F20-(280,455,461,1260)	G20(027,030,),F20-(394,5214,)
8.	Brake Caliper	FAV	G20-(1952,1950,1949,1951)-B	H20-(080,77,78,79)-B
9.	Brake Disc	KBI	24247038 0067-02/21,24247038 0066-02/21 24241016 0004-48/20,24241016 0026-48/20	24241020 008049/20,24241020 0079-49/20 24241021 0021-49/20,24241021 002349/20
10.	Ball Joint Control Arm	GMT		
11.	Lateral Bump Stop	BONY		
12.	Traction Centre make	RNG		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	ARYAN		
15.	Ball joint traction centre	BONY		
16.	Leveling Valve	FAV	H20-205,G20-649	G20-523,ESCORT-20-10 10849
17.	Check Valve	FAV	H20-314	F20-093
18.	Anti roll bar Make	SARITA/RF		
19.	Roll Link make	EMSON/BASANT RF/BONY		
20.	Fork make	RNG		
21.	Control Arm Upper	KUMAR/SF	N5278,D5232,N5225,N5218	H222,H271,H250,H118
22.	Control Arm Lower	KUMAR/SF	N5258,N0667,D5283,D0280	H23,H131,H82,H218
23.	Phonic Wheel	KBI	09-20	09-20

Signature of SSE/Bogie/QC

SME/AME/QC/MCF/RBL

Dy.CQM/MCF/RBL

सहायक यंत्रिक इंजीनियर
Asst. Mechanical Engineer
आ. र. डि. का. रायबरेली
MCF, RBL

उप मुख्य यंत्रणालय प्रबन्धक
Dy. Chief Engineer
आधुनिक रेल डिब्बा कारखाना, रायबरेली
Modern Coach Factory, Raebareilly



Vibgyor Paints & Chemicals Pondicherry

Office : Sri Balaji Apartments, 87/47, Harrington Road,
Shenoy Nagar, Chennai - 600 030.

Web : www.vibgyorpaintspondicherry.com

WARRANTY CERTIFICATE

ISO : 9001 : 2015
ISO : 14001 : 2015
Certified Company

To,

DY.CME/FUR/PAINT
MODERN COACH FACTORY
RAEBARELI, LALGANJ- 229120

Date:- 27-03-2021

SUBJECT: -PERFORMANCE WARRANTY CERTIFICATE
REF: PO NO: 31061800101633 dated 01.10.2019

NAME OF WORK: SUPPLY AND APPLY OF PU BASED WET ON WET APPLICABLE EXTERIOR PAINTING SYSTEM FOR LHB COACHES AS PER SCOPE OF WORK AND MMDTS-18034 REV-02 WITH AMENDMENT NO MP/RBL/BB DT 28/05/2019 (EPOXY ELASTIFIED PAINT INSIDE THE COACH NOT TO BE CARRIED OUT PAINTING CYCLE TIME WILL BE 30 HRS AS MENTION IN MMDTS-18034 REV-02)

Dear Sir,

With reference to above, we do hereby confirm the warranty for six years from the date of application of the delivered below mention coaches vide your above referred purchase order after application & date inspection at your end.

SL.NO	SHELL NO	FURNISHING NO	COACH NO	RAILWAY NO	DATE OF COMPLETION
138	LWSCAN 2061221	LSCAN-1876			26-03-2021 26-03-2021

The warranty is applicable from date of despatch against the below mention defects as per RDSO Specification no. MMDTS 18034 REV-02

Gloss should be above 70 at 60 degree during the initial period and entire life of 6 years

Decolourization of paint film.
Cracking of paint film
Peeling of paint film
Blistering of the paint film



Thanking You

For Vibgyor paints & chemicals Pondicherry



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 SCN COACH.

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC SCN COACH.

TYPE COACH	LWSCN	SHELL/COACH NO	216076/C
RAILWAY	WCR	ELECT. FIT DATE	31-03-2021
			MCF EUR. NO.
			LSCN-1876
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.: HIND On Board: H355.20E.0745 HT Panel: H355.20E.0783	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 4689	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: HIND Sr no : 20/10/577 Pump 1: 20/10/1193 Pump 2: 20/10/1194	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: HIND SL.no.: C- 20/10/654	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: SIGNOTRON Sr. no.: 08201742	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : INDORAIL	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 : RSI	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make : RSI	As per LW 71002,Alt-I	01
11.	Provision of Battery boxes/ Cradles. Make: PRADEEP TRANSCORE	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: 02/21	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: 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 : 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: AGASTYA	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: ENSAVE	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: ELECTROWAVES	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: SALZER	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: RECORD	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, 3ph, 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 : FAIVELEY Sr no : 13099	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS" or "JWL-DAKO-CZ"	01 SET

 वरिष्ठ अनुभाग अभियन्ता SSE/EL/QC नियंत्रण आ०रे०डि०का० / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 AWM(ELECT.)MCF/RBL स० कार्य प्रबन्धक / विद्युत SEE(P)/MCF/RBL आ०रे०डि०का० / रायबरेली A.W.M./Electrical/MCF/RBL
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