
		Modern Coach Factory Raebareli				DOC NO.: MCF/RBL/QMF 8002			
		आधुनिक रेल डिब्बा कारखाना, रायबरेली				REV NO: 01			
						DATE: 17.04.2018			
ROLLING STOCK CERTIFICATE									
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/1244									
RLY	WR	COACH NO	215531/C			DATE OF DISPATCH		11-Mar-21	
Type	LWSCN1	Shell No.	20G391	DISPATCH TO	Sr.DME/C&W/MMCT	FUR.NO.	LSCN-1862		
1. Railway Board's Order No. : 2020/M(C)/142/2, Dated-29.01.2021									
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	1105/1105		
6. TRACEABILITY OF SHELL ITEMS:									
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO						
1	Under frame	Front PP END	M/S-MTF	337					
		Part NPP END	M/S-MTF	337					
		Complete	M/S-MTF	337					
2	Lav. side wall	M/S-DTL PUNE	LAV.1	-----	LAV.2	-----			
		M/S-DTL PUNE	LAV.4	-----	LAV.3	-----			
3	Side wall	LH SIDE	M/S-ECBT	252					
		RH SIDE	M/S-ECBT	252					
4	End wall	PP END	M/S-SIPL	-----					
		NPP END	M/S-SIPL	-----					
5	Roof	MCF/RBL-CONT.	248						
6	Centre Buffer Coupler	M/S-FRONTIER	PP	227P1	NPP	144P2			
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 .	6 – 10 sec.	7 sec					
		Max. pressure in BC	3.0 ±0.15 kg/cm ² .	3.0 kg/cm ²					
		All Brake are applied	OK	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	GSI	M/S-GSI (S&A)	90/89	22-Feb-21			
2	Insulation	Satisfactory							


 वरिष्ठ अनुसंधान अभियंता
 SSE/QC/MCF/RBL
 गुणवत्ता विभाग
 मंडी रोड, रायबरेली (लालगंज)





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/2020-21/1244

RLY	-	W	R	Coach No.	2	1	5	5	3	1	/	C	-	DATE OF DISPATCH	1	1	0	3	2	0	2	1
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DISPATCH	Sr.DME/C&W/MMCT	Type	L	W	S	C	N	1	Shell No.	2	0	G	3	9	1	FUR.NO	LSCN-1862
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8. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	202577				202578			
Bogie Type	FIAT				FIAT			
Frame no.	MCF/RBL/LSS- 2824				ECBT-957			
Bolster no.	MCF/RBL/LSS- 3143				MCF/RBL/LSS- 3178			
Axle No	20 B - 5535 RWF		20 A - 7231 RWF		21 C - 3634 RWF		20 B - 5559 RWF	
Wheel Dia	917.452	917.459	917.483	917.477	917.434	917.466	917.452	917.446
Wheel Disc No	TZ 09-20 27651-OSD6	TZ 06-20 18314-OPD5	TZ 09-20 27650-OSD6	TZ 06-20 43172-OPP7	TZ 09-20 26928-OTC9	TZ 09-20 26072-OSD8	TZ 09-20 32206-0SE4	TZ 07-20 22395-0PJ0
R.B. Nos.	06-20 412567	06-20 412231	06-20 411420	06-20 412498	03-20 300211	06-20 412534	06-20 412736	06-20 411322
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.06-20 15361	RESISTROFLEX Sr.NO.06-20 15126	RESISTROFLEX Sr.NO.07-20 15512	RESISTROFLEX Sr.NO.06-20 15337

10. TRACEABILITY 90F BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	IAI	301386,301378	301429,301406
2.	Primary outer Spring	CMAFI	07-20-1100-(92,19,6,16)	07-20-1100-(11,8,52,7)
3.	Primary Inner Spring	CMAFI	07-20-1101-(151,255,47,248)	07-20-1101-(48,50,57,247)
4.	Primary Damper	IAI	01-20-(298754,299550,301106,298892)	01-20-(299894,298662,300812,299770)
5.	Secondary Damper	IAI	06-20- 326206,01-20 302418	06-20-(327112,327059)
6.	Lateral Damper	IAI	09-19 274535	11-19 283753
7.	Brake Cylinder	ESCORT	61980,60755,60756,61979	61994,62474,62473,61993
8.	Brake Caliper	ESCORT	39213,38073,38074,39212	39311,39571,39570,39310
9.	Brake Disc	HXDA	09-18(50201187,50201186,50201189,50201188	09-18(49201047,50201138,50201140,48200991
10.	Ball Joint Control Arm	PRAG		
11.	Lateral Bump Stop	BONY		
12.	Traction Centre make	RNG		
13.	Traction lever make	TAJ		
14.	Ball joint traction lever	BONY		
15.	Leveling Valve	PRAG		
16.	Check Valve	FAV	L19-480,N19-553	F20-244,C20-779
17.	Rubber Spring	FAV	M19- 137	F20-323
18.	Anti roll bar Make	SF		
19.	Roll Link make	RF+BASANT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	13,241,285,432	82,1080,217,222
22.	Control Arm Lower	SF	215,101,285,154	42,206,113,174
23.	Phonic Wheel	FAV	FT/EU/KEP- 604545	FT/EU/KEP- 604545

Signature of SSE/Bogie/QC





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/2020-21/1244

RLY	WR	COACH NO	215531/C	DATE OF DISPATCH	11-Mar-21
Type	LWSCN1	Shell No.	20G391	DISPATCH TO	Sr.DME/C&W/MMCT
				FUR.NO.	LSCN-1862


12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/s-ESCORTS	20221/01/0747
2	Distribution valve	M/s-ESCORTS	2101A747
3	Pull box	M/s-KBI	
4	FIBA	M/s-KBI	11477/29,11440/29
5	Foot Step	M/s- FABRICON KOLKATA	
6	Decoupling arrangement	M/s-PULSER KOLKATA	
7	Floor board	M/s-SHREE RAM PNL	
8	PVC	M/s-RESPONSIVE INDS DELHI	
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-SHATABDI VADODARA	
15	Emergency Window	M/S-SHATABDI VADODARA	
16	Lavatory/hopper Window	M/s-AIKON INDS.	
17	Side panel	M/s-HFGW VADODARA	
18	Roof Ceiling	M/s-A.B COMPOSITE	
19	Door way Ceiling	M/s-A.B COMPOSITE	
20	Body Side Doors	M/s-JVR LDH	
21	Vestibule Door(PPE)	M/s-KALSI LDH	
22	Vestibule Door(NPPE)	M/s-KALSI LDH	
23	Bio Tank	M/s-FLASH FORGE-02 NOS+UNIFAB-02 NOS	
24	Presurized Flushing(Elect.pneumatic)	M/s-OASIS	
25	Auxiliary Water Tank	M/s-SHIVALIK FAST MOHALI	
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 LTD	
31	Lavatory Doors	M/s-JVR LDH	
32	Seat & Berth	M/s-OVPL SILICON MUMBAI	
33	Ventury grill	NIL	
34	RFID	NIL	

वरिष्ठ अभियंता
SSE/QC/MCF/RBL
गुणवत्ता विभाग
रेडिओ, रायबरेली (लालगंज)



MCF/RBL

	Modern Coach Factory Raebareli	DOC NO.: MCF/RBL/QMF 8002
	आधुनिक रेल डिब्बा कारखाना, रायबरेली	REV NO: 01 DATE: 17.04.2018

ROLLING STOCK CERTIFICATE
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21/1244

RLY	WR	COACH NO	215531/C	DATE OF DISPATCH		11-Mar-21
Type	LWSCN1	Shell No.	20G391	DISPATCH TO	Sr.DME/C&W/MMCT	FUR.NO. LSCN-1862

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
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16. WARRANTY:

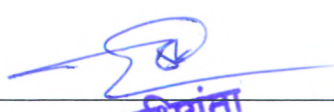
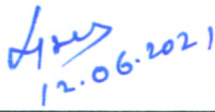

S NO	COMPONENTS	WARRANTY
1	Brake Pad, wheels, flushing valves, push gravity cocks, moldings, window glasses, mirrors, curtain clutch wire etc. (items which are consumable in nature)	NIL
2	Other coach furnishing sub assemblies(bought out items)	24 months from the date of dispatch of coach OR 30months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

NOTE:

- 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 qualityrcfrbl@gmail.com
- 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 वरिष्ठ अभियंता गुणवत्ता विभाग ने०डि०का०, रायबरेली (लालमंज)	 SME/AME/QC/MCF/RBL सहायक यंत्रण अभियंता/गुणवत्ता आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli	 Dy. COM/MCF/RBL उप मुख्य गुणवत्ता प्रबन्धक आधुनिक रेल डिब्बा कारखाना, रायबरेली Modern Coach Factory, Raebareli
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GSTIN : 03ACBPK3400D1ZM
Excise Regn. No. ACBPK3400DXM001

G. S. INDUSTRIES

APPROVED BY

**N.S.I.C.
R.D.S.O.**

**ISO 9001-2015
ISO 14001-2015**

D-146, FOCAL POINT EXTENSION, JALANDHAR-144004

PHONE : (O) 0181-5081474

(M) 99882-65025, 99884-55459

Website : www.gspaints.com

e-mail : info@gspaints.com

WARRANTY CERTIFICATE

To,
Dy.CME/FP
MODERN COACH FACTORY,
RAEBARELI, LALGANJ-229120

Dated 4/3/21

Sub:- Performance warranty certificates.

Ref: - P.O.no 31061800101167 DATED 21.08.2019

Name Of Work: - Pu Paint For Lhb Type Rajdhani Coaches.

Dear Sir,

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


SR.	SHELL NO.	FURNISHING NO.	COACH NO.	Railway NO.	DATE OF COMPLETION
277	LWSEN 206391	LSEN-1862	215531	WR	22-2-21

The warranty is applicable from date of dispatch against the below mention defects as per RDSO specification no. M&C/PCN/100/2018.

- Gloss level value of applied paint-initial 85 unit (on the date of painting) and minimum 80%, 70% and 60% of initial gloss after one year, two years and three years respectively from the date of application
- Decolonization of paint film.
- Cracking of paint film.
- Peeling of paint film.
- Blistering of the paint film.

Thanking you,
For G.S.Industries

Auth.signatory

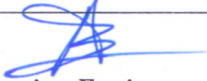
	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020

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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		215531/C
RAILWAY	WR	ELECT. FIT	09-03-2021	MCF EUR.	LSCN-1862	
		DATE		NO.		
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



Modern Coach Factory Raebareli
आधुनिकरेलडिब्बाकारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

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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: 20/06/005 HT Panel: 20/06/005	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 4356	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 : KIND/ASY/0086 Pump 1: 19060371 Pump 2: 19060372	As per spec no. EDTS186,REV-A,AM-2	01 SET
05.	Provision & Mounting of Pump controller. Make: HIND SL.no.: 20/03/070	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.: 0820899	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.- 1)	01
07.	Provision of Feeder Junction Box Make : MV ELECTROSYSTEMS	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 : INDORAIL	As per LW 71001,Alt- H	01
10.	Battery fuse box -ve Make : AECO	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: AMARA RAJA Lug Date: 06/20	As per RDSO/PE/SPEC/AC/0009-2014 (Rev-2) with inner cell connectors or Latest.	01 SET

Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli



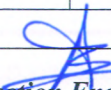


	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020


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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: SARIA	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 : ENSAVE	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: DHINGRA	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: DR AUTO	As per RDSO/PE/SPEC/TL/0091-2016, Rev-1 with RCF Annex-1 Type-D. Drg. No. LW76092.	04
17.	Fitment of LED Light fittings for PACIL. Make: AGASTYA	As per RDSO/SPEC/TL/0091-2016, Rev-1 with RCF Annex-1 Type-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


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareli





	Modern Coach Factory Raebareli आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
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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: 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, 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: DARSHAN ENTERPRISES PP: DARSHAN ENTERPRISES	EDTS101,REV-C,AM-1	01 SET
27.	Provision of Anti Skid Disk Brake System.(WSP) Make : ESCORTS Sr no : 200600-62308-0074	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 मुख्यता नियंत्रण आउटरीडिंगका / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LLJ/RBL	 सं कार्य प्रबन्धक / विद्युत आउटरीडिंगका / रायबरेली आउटरीडिंगका/MCF/RBL AWM(ELECT)/MCF/RBL SEE(P)/MCF/RBL
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