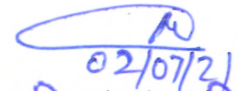
		Modern Coach Factory Raebareli आधुनिक रेल डिब्बा कारखाना, रायबरेली			DOC NO.: MCF/RBL/QMF 8002 REV NO: 01 DATE: 17.04.2018		
ROLLING STOCK CERTIFICATE (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21 /1257							
RLY	WCR	COACH NO	215572/C	DATE OF DISPATCH		15-Mar-21	
Type	LWS	Shell No.	20F194	DISPATCH TO	Sr.DME/C&W/JBP	FUR.NO.	DDG-657
1. Railway Board's Order No. 2020/M (C)/142/2, Date- 09.07.2020 2. Tare weight of coach : 40.66 Tonnes 3. Carrying Capacity : (a) Seating: 100 (c) Luggage: NIL 4. Special feature:							
S NO	ITEMS					MAKE/SUPPLIER	
A	Cushion transverse side luggage rack which can serve as seat during rush					M/S-CMT VADODARA	
B	Honey comb partition frame.					M/S-CMT VADODARA	
C	DGFRP/GFRE paneling.					M/S-CMT VADODARA	
D	Lavatory with DGFRP/GFRE paneling.					M/S-CMT VADODARA	
E	Additional Hand hold.					M/S-CMT VADODARA	
F	Counter top wash basin.					M/S-CMT VADODARA	
G	Gel coating & Anti Graffiti measures.					M/S-CMT VADODARA	
H	Air spring in secondary suspension (capacity-140KN).					M/S-RESISTO FLEX	
I	Fire Extinguishers					M/S-SAFEX	
J	Vestibule ends for inter-coach movement of passenger and the service staff (LWSCN type End wall)						
K	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	1100/1097
6. TRACEABILITY OF SHELL ITEMS:							
S NO	ITEM	MAKE/SUPPLIER	SERIAL NO				
1	Under frame	Front	PP END	M/S-NE	----		
		Part	NPP END	M/S-NE	----		
		Complete	MCF/RBL-SIS LINE	20F194			
2	Lav. side wall	PP END	M/S-DTL PUNE	LAV.1	-----	LAV.2	-----
		NPP END	M/S-DTL PUNE	LAV.3	-----	LAV.4	-----
3	Side wall	LH SIDE	MCF/RBL-V4U LKO	60			
		RH SIDE	MCF/RBL-V4U LKO	60			
4	End wall	PP END	M/S-OMAX	-----			
		NPP END	M/S-OMAX	-----			
5	Roof	M/S-INDIRA	51				
6	Centre Buffer Coupler	M/S-FRONTIETR	PP END/ NPP END	240P2/56P2			
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.	8 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	VIBGYOR	M/S-VIBGYOR	79/88	10-Mar-20	
2	Insulation	Satisfactory					


02/07/21
S.E./QC/MCF/RBL
गुणवत्ता विभाग
रेडिओका0, 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 - 1257**

RLY	W	C	R	-	Coach No.	2	1	5	5	7	2	/	C	-	DATE OF DISPATCH	1	5	0	3	2	0	2	1
-----	---	---	---	---	-----------	---	---	---	---	---	---	---	---	---	------------------	---	---	---	---	---	---	---	---

DISPATCH	Sr.DME/C&W/JBP	Type	L	W	S	-	-	-	Shell No.	2	0	F	1	9	4	FUR .NO	DDG- 657
----------	----------------	------	---	---	---	---	---	---	-----------	---	---	---	---	---	---	---------	----------

9. DETAIL OF BOGIES:

ITEMS	NPP Side				PP Side			
Bogie No	202821				202822			
Bogie Type	LWS				LWS			
Frame no.	ECBT-0934				ECBT-948			
Bolster no.	MCF/RBL/LS-5 - 3209				MCF/RBL/LS-5 - 3204			
Axle No	20B - 9103 RWF		21 C - 3456 RWF		20 C - 3307 RWF		21 B - 3478 RWF	
Wheel Dia	917.531	917.523	917.454	917.462	917.444	917.459	917.408	917.394
Wheel Disc No	TZ 09-20 32816-OSD7	TZ 09-20 32814-OSD7	TZ 07-20 24454-OPR4	TZ 09-20 27776-OTE9	TZ 09-20 34715-OTC2	TZ 09-20 34717-OTE7	TZ 09-20 26030-OSD8	TZ 09-20 26033-OSD8
R.B. Nos.	06-20 412826	03-20 409378	08-20 412060	03-20 409400	03-20 300218	03-20 409113	06-20 505148	03-20 409135
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.	RESISTROFLEX 06-20 10569	RESISTROFLEX 06-20 15313	RESISTROFLEX 06-20 15181	RESISTROFLEX 06-20 15290

11. TRACEABILITY OF BOGIE ITEMS :-

S. NO	ITEM	MAKE/ SUPPLIER	SERIAL NO.	
			NPP SIDE	PP SIDE
1.	Yaw Damper	ESCORT	7148,7219	7719,7622
2.	Primary outer Spring	CMAFI	07-20 1100-(168,395,135,378)	07-20 1100-(385,387,392,394)
3.	Primary Inner Spring	CMAFI	07-20 1101-(155,274,153,263)	07-20 1101-(176,261,156,64)
4.	Primary Damper	IAI	01-20 (298377,298948,299470,299771)	01-20 (321190,301215,300365,299555)
5.	Secondary Damper	IAI	06-20 (326936,327281)	06-20 (327179,326806)
6.	Lateral Damper	KONI	04-19 00663	04-19 00308
7.	Brake Cylinder	ESCORT	62015,62432,62393,61883	61884,62394,62283,62823
8.	Brake Caliper	ESCORT	39380,39153,39058,39180	39181,39095,39029,39384
9.	Brake Disc	AVADH	09-18(50201155,48200986,49201050,48201032)	09-18(49201051,40200794,50201162,50201165)
10.	Ball Joint Control Arm	PRAG		
11.	Lateral Bump Stop	GMT		
12.	Traction Centre make	RNG		
13.	Traction lever make	JI/TAJ		
14.	Ball joint traction lever	BASANT/BONY		
15.	Ball joint traction centre	PRAG		
16.	Leveling Valve	FAV	C20-1010,E20-326	F20-232,F20-215
17.	Check Valve	FAV	E20-342	F20- 277
18.	Anti roll bar Make	RF		
19.	Roll Link make	RF/BONY RF/BASANT		
20.	Fork make	RNG		
21.	Control Arm Upper	SF	395,158,159,110	59,10,437,218
22.	Control Arm Lower	SF	81,129,153,54	714,33,120,126
23.	Phonic Wheel	ESCORT	ESCORT	ESCORT

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


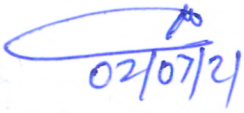
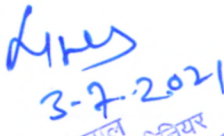

ROLLING STOCK CERTIFICATE (DEEN DAYALU)
Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21

RLY	WCR	COACH NO	215572/C	DATE OF DISPATCH	15-Mar-21
Type	LWS	Shell No.	20F194	DISPATCH TO	Sr.DME/C&W/JBP
				FUR.NO.	DDG-657

12. TRACEABILITY OF FURNISHING ITEMS:

S NO	ITEM	MAKE/SUPPLIER	SERIAL NO(NPP/PP)
1	Air Brake Module	M/S-ESCORTS	2021020848
2	Distribution valve	M/S-ESCORTS	2102A848
3	Pull box	M/S-KBI	
4	FIBA	M/S-KBI	12229/29,12085/29
5	Foot Step	M/S-FABRICON INDS KOLKATA	
6	Decoupling arrangement	M/S-PULSAR INDS KOLKATA	
7	Floor board	M/S-SHREE RAM PNL	
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-CMT VADODARA	
15	Emergency Window	M/S-CMT VADODARA	
16	Lavatory/hopper Window	M/S-CMT VADODARA	
17	Roof Ceiling ACP	M/S-CMT VADODARA	
18	Door way /gang way ceiling ACP	M/S-CMT VADODARA	
19	Body Side Doors	M/S-JVR LDH	
20	Vestibule Door(PPE)	M/s-KALSI LDH	
21	Vestibule Door(NPPE)	M/s-KALSI LDH	
22	Bio Tank	M/s-FLASH FORGE -02 NOS+JSL LIFE -02 NOS	
23	Pressurized flushing(ele.pneu.)	M/S-OASIS	
24	Over head water tank (4x390L)	M/S-FABRECATORS	
25	Bib cock/controlled discharge tap	M/S-JAQUAR ALWAR	
26	Lavatory Doors	M/S-CMT VADODARA	
27	Fire Extinguisher	M/S-SAFEX	044333/044334
28	Water purified (02 nos)	M/S-CMT VADODARA	
29	Seat & Berth	M/S-CMT VADODARA	
30	Luggage Rack	M/S-CMT VADODARA	
31	Light Luggage Rack	NIL	
32	Ventury grill	M/S-CMT VADODARA	
33	RFID	NIL	

02/07/21
SSE/QC/MCF/RBL
वरि०अनु० अभियंता
गुणवत्ता विभाग
रे०डि०का०, रायबरेली (लालगंज)

		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 (DEEN DAYALU) Rolling Stock Certificate No.: MCF/RBL/QC/RSC/2020-21						
RLY	WCR	COACH NO	215572/C	DATE OF DISPATCH		15-Mar-21
Type	LWS	Shell No.	20F194	DISPATCH TO	Sr.DME/C&W/JBP	FUR.NO. DDG-657
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/10U/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.CQM/MCF/RBL		

वरिष्ठ अनु० अभियंता
गुणवत्ता विभाग
रेडि० का०, रायबरेली (लालगंज)

सहायक अभियंता इन्जीनियर
Asst. Mechanical Engineer
आ. रे. डि. का. रायबरेली
MCF, RBL

सुधीर कुमार
Dy. Chief Quality Manager
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

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

1257

WARRANTY CERTIFICATE

To,

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

Date:- 11/03/2021

SUBJECT: -PERFORMANCE WARRANTY CERTIFICATE

REF: PO NO: 06190055100701 dated 20.05.2020

NAME OF WORK: SUPPLY AND APPLY OF EXTERIOR PAINT OF LHB TYPE SEEN DAYALU 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 & date inspection at your end.

SL.NO	SHELL NO	FURNISHING NO	COACH NO	RAILWAY NO	DATE OF COMPLETION
28	LWSDG 20F 194	DDG 657	215572	WCR	25/02/2021 10/03/2021

The warranty is applicable from date of despatch against the below mention defects as per RDSO Specification no. M&C/PCN/100/2013.

Gloss level value of applied paint initial 85unit (on the date of painting) and minimum 80% 70% 860N of initial gloss after one year, two years, 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 Vibgyor paints & chemicals Pondicherry
Authorized Signatory

Factory : S-51, Phase III, Sipcot Industrial Complex, Nellikuppam, Ranipet - 632 405.
Ph : +91-4172-241478, Fax : +91-4172-242478, E-mail : vpcedyr@yahoo.in, ramuvibgyor@yahoo.in

We have Solutions for Ecofriendly Industrial Coatings



Modern Coach Factory Raebareli
आधुनिकरेलडिब्बाकारखाना, रायबरेली

DOC NO.: MCF/RBL/QEF/8001

REV NO: 01

DATE: 29.06.2020

PAGE 1 OF 4

FOR ELECTRICAL ITEMS


ROLLING STOCK CERTIFICATE OF LHB EOG NON AC GS COACH
(ANTYODAYA & DEENDAYALU).

ELECTRICAL TEST CERTIFICATE FOR LHB EOG NON AC GS COACH.

TYPE COACH	LWS/DDG	SHELL/COACH NO	215572/C
RAILWAY	WCR	ELECT. FIT DATE	12-03-2021
		MCF FUR. NO.	DDG - 657
Sr. no.	Description of tests		Remarks
1.	WORKING OF COMPARTMENT LIGHTS.		OK
2.	WORKING OF MOBILE CHARGING SOCKETS		OK
3.	WORKING OF ACCIDENTAL EMERGENCY LIGHTS& PACIL		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

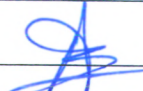


	Modern Coach Factory Raebareilly आधुनिकरेलडिब्बाकारखाना, रायबरेली	DOC NO.: MCF/RBL/QEF/8001
		REV NO: 01
		DATE: 29.06.2020

PAGE 2 OF 4


ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
01.	Fitment of Switch board cabinet.(set of panel) Make/Sr.no.: SSK On Board: 20/06/016 HT Panel: NUMBER PLATE MISSING	EDTS 333, Rev`01`.Am-1	01 SET
02.	Provision of 9 KVA 750/415/190V, 03Ø AC. Make : VIMAL Sr no.: VTC 3089 LHB 4485	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 wire rope assembly for Transformer.	As per EDML-152, Rev.-Nil.	OK
05.	4.5 Kw Under slung type Constant Voltage Regulated Battery charger cum Emergency battery charger Make: IC Sr. no.: 08/20/0008	As per spec no. RDSO/PE/SPEC/AC/0183-2015(REV.-1)	01
06.	Provision of Feeder Junction Box Make : MV ELECTROSYSTEMS	EDTS-328 REV-C,AM-4,Type-II,COR-2	01 SET
07.	Provision of IVC dummy Socket assembly.	As per Drg. No. LW71302,Alt-nil	01 SET
08.	Battery fuse box +ve Make : RSI	As per LW 71001,Alt- H	01
09.	Battery fuse box -ve Make : AECO	As per LW 71002,Alt-I	01
10.	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
11.	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


Senior Section Engineer
Quality control / Electrical
Modern Coach Factory Raebareilly





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

PAGE 3 OF 4

ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
12.	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
13.	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.	28
14.	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
15.	Fitment of LED Light fittings for PACIL. Make: AGASTYA	As per RDSO/SPEC/TL/0091-2016,Rev-1 with RCF Annex-1Type-I. Drg. No. LW76098.	02
16.	Fitment of Accidental Emergency Light (AEL) Make: INTEG	As per RDSO/SPEC/AC/0180-2016,Rev-0 ,Type-II.	04
17.	Provision of Cable binder	Drg. No. CC76120,Item - 1,2,3.100mm,200mm,300mm respectively.	OK
18.	Provision of Cable Jacket System.	EDTS-138,Cor-2,Item-5,7,8,9,11.	OK
19.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-1.	10

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

PAGE 4 OF 4

**ROLLING STOCK CERTIFICATE OF LHB/EOG NONAC GS COACHES
(ANTYODAYA & DEENDAYALU).**

Sr. no.	Description	Drg./Spec no.	Quantity per Coach
20.	Provision of Switch plate assembly along with mobile charging sockets. Make: SSK	EDML-086, Rev-6, Am-1, Table-1, Item-2.	10
21.	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.	1 SET
22.	Mounting of Inter Vehicle coupler	As per drg no.1.10113.0.74.000.001,Alt-B	OK
23.	Provision of Wheel Set Earthing equipment. Make:- NPP: PRIME ELECT. PP: PRIME ELECT.	EDTS101,REV-C,AM-1	1 SET
24.	Provision of Anti Skid Disk Brake System.(WSP) Make : ESCORTS Sr no : 200600-62308-0103	As per MDTs 077,Rev.-2 M/s"FAIVELEY" or "Knorr Bremse", or "ESCORTS" or" JWl-DAKO-CZ"	01 SET

SSE/EL/QC वरिष्ठ अनुभाग अभियन्ता गुणवत्ता नियंत्रण आधुनिकरेलडिब्बाकारखाना / लालगंज / रायबरेली S.S.E./Elect-QC/M.C.F./LJ/RBL	AWM(ELECT)/MCF/RBL SEE(P)/MCF/RBL