



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	8125	BOGIE NO	195043 / 195044		DISPATCH DATE	08-MAR-19
2.	RAILWAY	CR	TYPE OF COACH	MEMUMC AS	COACH NO	198199	
3.	BOOKED TO	SSE/C&W/					
4.	Tare Weight of Coach	61					
5.	Carrying Capacity	Seating	65	Sleeping	NIL	Luggage	NIL
6.	6.1	Leading Dimensions:					
	i)	Maximum height above rail to top of roof ventilator			4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN)		
	ii)	Maximum length over Body			21337 ± 10		
	iii)	Maximum length over Buffer			22297 ± 15		
	iv)	Maximum width over Body			3245 ± 5		
	v)	Maximum width over Flasher lighth			3402 +0/-5		
	vi)	CBC/Shaku Coupler Height	Specified: 1104 +0/-10 mm (1035 +0/-5 mm for shaku coupler)		1035	1104	
	vii)	CBC/Shaku Coupler (Make)			SANROK	SANROK	
	viii)	Buffer Make			HEPL		
7.	Air Brake Testing:						
	Description				Specified		
	7.1	Emergency Application	Time for 0 to 36 Kg/cm ² of BC		Less than 05 Sec		
			Brake release time to reach 0.4 Kg/cm ²		Less than 20 Sec		
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm ² in 60 Sec		No brake application		
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm ² in 6 Sec		Brakes "ON"		
	7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"		
	7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm		
8.	Painting Details:						
			Type of Paint		Make	Average Gloss Value	
	8.1	Paint	PU PAINT		DEB PAINT	85 / 85	
	8.2	Application of PCN-123		SATISFACTORY			
	8.3	Insulation		SATISFACTORY			
9.	Traceability of Furnishing Items:						
	1	FLOOR BOARD			SRI RAM		
	2	PVC			RESPONSIVE		
	3	EP BRAK / BRAKE EQUIPMENT			KBI		
	4	UIC VESTIBULES			ELASTOMER		
	5	SEAT & BEARTH			CPF		
10.	10.1	Modification/ Trial (If any): NIL					
	10.2	Deviations (If any): NIL					



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RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

QMF 9828, VER:1.00

11.	Bogie Details:		Shell No.	Railway		Type		Coach No.		Dispatch Date	
			8125	CR		MEMUMC AS		198199		08-MAR-19	
11.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt "a"										
11.2	Wheel & Axle Details:										
	i.	Bogie No.	195043				195044				
	ii.	Frame No.	ECBT-29				KE-128				
	iii.	Bolster No.	BI-5043				BI-5044				
	iv.	Axle No.	RWF-K-6404		RWF-K-6387		RWF-J-5840		RWF-K-6285		
	v.	Wheel Diameter	954.00	954.00	953.00	953.00	954.00	954.00	953.00	953.00	
		Wheel Disc No.	28181-01743-SAIL	20845-00265-SAIL	55548-09573-SAIL	55549-09573-SAIL	12177-15111-SAIL	58166-10362-SAIL	28100-01743-SAIL	68098-11882-SAIL	
	vii.	RB Nos	P448	P443	P468	P469	Z0937	Z0543	P451	P458	
	viii.	RB Make	FAG		FAG		FAG		FAG		
	ix.	RB Type	Direct Mounted Spherical Roller Bearing								
11.3	Items traceability:										
	i.	Break Cylinder Make & No.			PEW-K8168,K8067,K5661,K5608			PEW-K5117,K5630,K5067,K6313			
	ii.	Secondary shock Absorber Make & NO.			ESCORTS-0048,0056			ESCORTS-0061,0065			
	iii.	Lateral Shock Absorber Make & NO.			IAI-233849,233960			IAI-233840,233671			
	iv.	Air Spring Make & NO.			RESISTO-5012,5046			RESISTO-4976,5030			
11.4	i.	Modification/Trail(if any):			FIBA PNEUMATIC PIPING ARRGT. PROVIDED.						
	ii.	Deviations (if any):			NIL						

MEMUMC AS - 8125



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ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
MEMU WITH AIR SPRING ICF TYPE BOGIE**

TYPE OF COACH : MEMUASP	Shell No : 8125	COACH_NO : 198199
RAILWAY CR	COUPLING TYPE : NONCBC	DATE OF FITMENT: 07-MAR-19

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.	EPTS-200	LIGHT ENGG. CORP.	LEC
Group Name ABOVE ROOF				
2	31760041-1, PANTOGRAPH FOR MEMU COACHES	MEMU/DESC-I,REV.-A (QUALITY PLAN REQ 0331,VER.-01	CONCEPT RAIL ENGINEERS.	586
3	31760041-2, SERVO MOTOR FOR PANTOGRAPH	MEMU/DESC-I,REV.-A (QUALITY PLAN REQ 0331,VER.-01	CONCEPT RAIL ENGINEERS.	501
4	31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH	COS-033-P-052/R5	INSULATORS & ELECTRICALS CO.	IEC
5	45970038-18, EARTHING SWITCH	EMP/BHEL/MEMU2	BHEL	180204A091
6	45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR	RDSO EI/2/05 AND QUALITY PLAN NO :REQ320 VER-01	LDP ASSOCIATES DELHI	CG-225753
7	47986104-1, VACCUM CIRCUIT BREAKER 25KV	CLW/ES/C-47 AND QUALITY PLAN NO : REQ 0309 VER-01.	AUTOMETER ALLIANCE LTD.	1901387
Group Name H.T.CABIN				
8	42982789-3, SMOKE SENSOR	EDTS087	AGNI INSTRUMENTS PVT LTD	GST MARKED
9	42982855-1, RESISTER BOX	BHEL CAT NO. 05750030020 REV-00	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
10	42982855-2, RESISTER BOX	BHEL CAT NO. 05750030020 REV-00	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
11	42982866-1, CONTACTOR BOX WITH GP RELAY	BHEL CAT NO. 15730030044 REV-02	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
12	42982866-2, CONTACTOR BOX WITH GP RELAY	BHEL CAT NO. 15730030044 REV-02	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
13	45211619-0, AUXILIARY COMPRESSOR WITH MOTOR	ICF/ELEC:050 DRG. NO :ICF/SK-9-O-565 ALT'F' AND QUALITY PLAN NO : Q	COIMBATORE COMPRESSOR ENGG. CO.	CEC-R18L-8215
14	45970038-19, CURRENT TRANSFORMER -1	EMP/BHEL/MEMU2	BHEL	2473097
15	45970038-20, CURRENT TRANSFORMER -2	EMP/BHEL/MEMU2	BHEL	2473098
16	45970038-21, CONSERVATOR TANK	EMP/BHEL/MEMU2	BHEL	NIL
17	45970038-22, HT BUSHING	EMP/BHEL/MEMU2	BHEL	N.N.K.ENTERPRISE S



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RAIL COACH FACTORY, KAPURTHALA
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FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF
MEMU WITH AIR SPRING ICF TYPE BOGIE

TYPE OF COACH : MEMUASP COUPLING TYPE : NONCBC COACH_NO : 198199
RAILWAY : CR DATE OF FITMENT: 07-MAR-19
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name H.T.CABIN

18	45970038-23, CHOKE	EMP/BHEL/MEMU2	BHEL	SR-2047846,DC-2047876,TC-2047906
19	45970038-24, BUCHHOLZ RELAY	EMP/BHEL/MEMU2	BHEL	P&B 278 M2
20	45970622-1, ADDITIONAL SMOOTHING REACTOR	EDTS-126	RAMYAA ELECTROGEAR	1902-26-729
21	45970622-2, ADDITIONAL SMOOTHING REACTOR	EDTS-126	RAMYAA ELECTROGEAR	1902-26-735

Group Name MLT PANEL

22	42982662-5, CENTER ZERO METER	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	INDOTECH MAKE
23	42982728-1, MLT PANEL	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	2019-02-6782
24	42982728-2, EARTH FAULT RELAY II	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	MEGAWIN-19010006025
25	42982728-3, DIODE PANEL	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	NEC
26	42982728-4, GOVERNOR CUT OUT SWITCH	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	NEC
27	42982728-6, BATTERY ISOLATING SWITCH	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	L&T DN2 250D
28	45970038-2, LIGHT CONTACTOR	EMP/BHEL/MEMU2	BHEL	NIL
29	45970038-3, FAN CONTACTOR	EMP/BHEL/MEMU2	BHEL	NIL
30	45970038-4, AUX.COMP CONTACTOR	EMP/BHEL/MEMU2	BHEL	1800248091
31	45970038-5, MAIN COMP. CONTACTOR	EMP/BHEL/MEMU2	BHEL	1800249091
32	45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY	EMP/BHEL/MEMU2	BHEL	1800255091
33	45970038-7, MT RELAY PANEL	EMP/BHEL/MEMU2	BHEL	1800258091
34	45970038-8, RESISTANCE PANEL	EMP/BHEL/MEMU2	BHEL	180299B091
35	45970038-25, KNIFE SWITCH	EMP/BHEL/MEMU2	BHEL	180299A091
36	47986104-2, RC DAMPING RESISTANCE 1	CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.	AUTOMETER ALLIANCE LTD.	1805096
37	47986104-3, RC DAMPING RESISTANCE 2	CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.	AUTOMETER ALLIANCE LTD.	1805076

Group Name DRIVING SECTION

38	31726161-1, TWIN BEAM HEAD LIGHT WITH 24V HELOGEN LAMPS.	RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.	MATSUSHI POWER TECH.	MPT
39	42982662-1, INTEGRATED DRIVER DESK PANEL	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	2019-01-006



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MEMU WITH AIR SPRING ICF TYPE BOGIE**

TYPE OF COACH : MEMUASP COUPLING TYPE : NONCBC COACH_NO : 198199
RAILWAY CR DATE OF FITMENT: 07-MAR-19
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		DRIVING SECTION		
40	42982662-2, TRACTION AMMETER	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	RISHAB MAKE
41	42982662-3, TRACTION VOLMETER	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	RISHAB MAKE
42	42982662-4, BATTERY VOLTMETER	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	RISHAB MAKE
43	42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	MAALUXMI-3639
44	42982662-7, DRIVER INDICATION PANEL	EDTS-069 REV-B.	ESS ESS KAY ENGG. CO.	2019-02-006
45	45970038-1, PANTO OPERATING VALVE	EMP/BHEL/MEMU2	BHEL	ROTEX
46	45970038-9, ISOALTING SWITCH PANEL	EMP/BHEL/MEMU2	BHEL	L & T BY NEC
47	45970038-11, MASTER CONTROLLER	EMP/BHEL/MEMU2	BHEL	1800269091
48	45970038-13, MOTOR SWITCH GROUP 1	EMP/BHEL/MEMU2	BHEL	18221AT092
49	45982752-0, RLY CARRIAGE FAN ,450MM SWEEP ,FIXED TYPE 140V, AC WITH FAN GUARD TO DRG NO ICF/SK3-7-6-026 ALT B.	RDSO/PE/SPEC/TL/0 050(2010,REV-1)	LIGHT ENGINEERING CORPORATION	CONCORDE
50	47980050-5, P.T CONTROL	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEM	590
Group Name		DRIVING END		
51	31726161-2, 24V DC TO DC CONVERTER	RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.	MITSHUSHI POWER TECH.	MPT-15838
52	31727232-0, LED BASED MARKER/TAIL LIGHT COMPLETE FOR EMU FOR LEFTAND RIGHT (TYPE-E).	ELRS/SPEC/PR/0022 (REV-1,OCT-2004)	MITSHUSHI POWER TECH.	MPT-1089
53	31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH	EM75005	NEC SW. GEARS & CONTROLS	2018-06-1148, 1175
54	45982697-0, SET OF INTERVEHICAL COUPLER	EDML003 REV-A WITH RCF ANNEXURE	MAA LUXMI INDUSTRIES	MLI
55	47980050-1, PULSE GENERATOR	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEMS	591
Group Name		NON-DRIVING END		



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ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
MEMU WITH AIR SPRING ICF TYPE BOGIE**

TYPE OF COACH : MEMUASP COUPLING TYPE : NONCBC COACH_NO : 198199
RAILWAY : CR DATE OF FITMENT: 07-MAR-19
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name NON-DRIVING END				
56	42027380-0, LIMIT SWITCH 10A,500V,1NO+1NC	LSRO M/S BOHMAN OR 3SE-2-100-0 OF M/S SIEMENS	GC CONTROL GEAR	NIL
57	45982697-0, SET OF INTERVEHICAL COUPLER	EDML003 REV-A WITH RCF ANNEXURE	MAA LUXMI INDUSTRIES	MLI
Group Name UNDER FRAME				
58	31710025-0, BATTERY BOX ARRANGMENT FOR MEMU MOTOR COACH WITH MODIFIED TROLLEY AND PACKING ARRANGEMENT TO DRG NO	DRG.NO. EMU/M-7-1- 001 ALT.`j' DULY PAINTED AS PER NOTE 6	ANKUR ENGG	SR. NO. NIL 29-11- 18
59	33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE	RDSO/PE/Spec./AC/0 009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)	AMARA RAJA BATTERIES LTD.	12/2018
60	35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR	ICF/ELEC:014 AND QUALITY PLAN NO : REQ 0313 VER-01.	NIPPON KUHLEERS	2019-02-85
61	43290007-0, AIR DRYER FOR MEMU COACHES	RDSO SPEC. NO. MP.0.01.00.09 (REV- 0.00) MARCH 2001 WITH OVER ALL DIMENSION NOT TO EXCEED 750MM(L)X315MM(W) X660MM(H)	TRIDENT PNEUMATIC PVT.LTD.	LD2/11/3615/2018
62	45970038-10, HT EARTHING LINKS	EMP/BHEL/MEMU2	BHEL	1800263271,272,27 3
63	45970038-12, TRANSITION RESISTANCE	EMP/BHEL/MEMU2	BHEL	1800261089
64	45970038-14, MOTOR SWITCH GROUP 2	EMP/BHEL/MEMU2	BHEL	18221BT082
65	45970038-15, PFDR CUM FUSE BOX	EMP/BHEL/MEMU2	BHEL	18297AT091
66	45970038-16, TAP CHANGER	EMP/BHEL/MEMU2	BHEL	180207A091
67	45970038-17, MAIN TRANSFORMER	EMP/BHEL/MEMU2	BHEL	2047822
68	45970610-0, MAIN COMPRESSOR WITH 110V DC MOTOR	RDSO SPEC. NO 70- B-M-41 AND QUALITY PLAN NO : REQ 0312 VER-01.	ELGI EQUIPMENTS PVT. LTD.	ESJSQ 50159



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FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
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TYPE OF COACH : MEMUASP **COUPLING TYPE : NONCBC** **COACH_NO : 198199**
RAILWAY CR **DATE OF FITMENT: 07-MAR-19**
S.No PL No & Item Description **Drawing No** **Make** **Item Sr.No.(if any)**

Group Name UNDER FRAME

69	45970634-0, MAIN SILICON RECTIFIER	ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311	RUTTONSHAH INTERNATIONAL RECTIFIER LTD.	1812-1866-2042
70	45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR	EDTS 088 and Quality Plan No.QEQ:0333 VER:01	FLOW WELL PUMPS & METERS	18111999

Group Name COMPARTMENT

71	42980963-3, SPEAKERS	EDTS 292	PUNJAB RADIOS PVT. LTD.	AHUJA
72	45982752-0, RLY CARRIAGE FAN ,450MM SWEEP ,FIXED TYPE 140V, AC WITH FAN GUARD TO DRG NO ICF/SK3-7-6-026 ALT B.	RDSO/PE/SPEC/TL/0 050(2010,REV-1)	LIGHT ENGINEERING CORPORATION	CONCORDE

Group Name MLT SECTION

73	31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER	ICF/ELECT/067 REV-A, CS-1.	RAMYAA ELECTRO GEAR	1705-24-1026
74	42980963-1, PUBLIC ADDRESSING SYSTEM	EDTS 292	PUNJAB RADIOS PVT. LTD.	AHUJA 4386851
75	42980963-2, SPEAKERS	EDTS 292	PUNJAB RADIOS PVT. LTD.	AHUJA
76	42982728-5, FLASHER UNIT	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	MITSUSHI-MPT-19691
77	42982789-1, SMOKE DETECTOR UNIT	EDTS087	AGNI INSTRUMENTS PVT LTD	AG-500539
78	42982789-2, SMOKE SENSOR	EDTS087	AGNI INSTRUMENTS PVT LTD	GST MARKED
79	47980050-3, RECORDING CUM INDICATION UNIT	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEM	591
80	47980050-4, S.C.B CONTROL	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEM	590

Group Name BOGIE DRIVING END

81	45981930-0, MOTOR CONNECTION BOX FOR EMU'S	DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01	INDIAN TELEPHONE & ELETRIC CO.	ITECO
82	47030003-1, TRACTION MOTOR/BOGIE 01	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL	4919463/195044
83	47030003-2, TRACTION MOTOR/BOGIE 01	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL	4919497/195044
84	47980050-2, PULSE GENERATOR JUNCTION BOX	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVAN SYSTEMS	LAXVEN SYSTEM



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FOR ELECTRICAL ITEMS				
ROLLING STOCK CERTIFICATE OF MEMU WITH AIR SPRING ICF TYPE BOGIE				
TYPE OF COACH : MEMUASP		COUPLING TYPE : NONCBC		COACH_NO : 198199
RAILWAY CR		DATE OF FITMENT: 07-MAR-19		
S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name BOGIE NON-DRIVING END				
85	45981930-0, MOTOR CONNECTION BOX FOR EMU'S	DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01	INDIAN TELEPHONE & ELETRIC CO.	ITECO
86	47030003-3, TRACTION MOTOR/BOGIE 02	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL	4919507/195043
87	47030003-4, TRACTION MOTOR/BOGIE 02	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL	4919449/195043
SSE/EL/QC			AME/WM QC/DY CQM I	



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	8126	BOGIE NO	195045 / 195046	DISPATCH DATE	08-MAR-19
2.	RAILWAY	CR	TYPE OF COACH	MEMUMC AS	COACH NO	198200
3.	BOOKED TO	SSE/C&W/CST/M				
4.	Tare Weight of Coach	61				
5.	Carrying Capacity	Seating	65	Sleeping	NIL	Luggage
6.	6.1	Leading Dimensions:				
	i)	Maximum height above rail to top of roof ventilator			4100 ± 5 (for NAC) 4250 +0/-5 (for WGACCN)	
	ii)	Maximum length over Body			21337 ± 10	
	iii)	Maximum length over Buffer			22297 ± 15	
	iv)	Maximum width over Body			3245 ± 5	
	v)	Maximum width over Flasher lighth			3402 +0/-5	
	vi)	CBC/Shaku Coupler Height	Specified: 1104 +0/-10 mm (1035 +0/-5 mm for shaku coupler)		1035	1104
	vii)	CBC/Shaku Coupler (Make)			ESCORTS	ESCORTS
	viii)	Buffer Make			HEPL	
7.	Air Brake Testing:					
	Description				Specified	
	7.1	Emergency Application	Time for 0 to 36 Kg/cm ² of BC		Less than 05 Sec	
			Brake release time to reach 0.4 Kg/cm ²		Less than 20 Sec	
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm ² in 60 Sec		No brake application	
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm ² in 6 Sec		Brakes "ON"	
	7.4	Passenger alarm by pulling chain			BP Blasts out, Brakes "ON"	
	7.5	Piston stroke for BMBC type coach only			19 +10/-0 mm	
8.	Painting Details:					
			Type of Paint		Make	Average Gloss Value
	8.1	Paint	PU PAINT		DEB PAINT	85 / 85
	8.2	Application of PCN-123		SATISFACTORY		
	8.3	Insulation		SATISFACTORY		
9.	Traceability of Furnishing Items:					
	1	FLOOR BOARD			SRI RAM	
	2	PVC			RESPONSIVE	
	3	EP BRAK / BRAKE EQUIPMENT			KBI	
	4	UIC VESTIBULES			BASANT	
	5	SEAT & BEARTH			CPF	
10.	10.1	Modification/ Trial (If any): NIL				
	10.2	Deviations (If any): NIL				



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RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

QMF 9828, VER:1.00

11.	Bogie Details:		Shell No.	Railway	Type	Coach No.		Dispatch Date		
			8126	CR	MEMUMC AS	198200		08-MAR-19		
11.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: CC00002 Alt "a"									
11.2	Wheel & Axle Details:									
	i.	Bogie No.	195045				195046			
	ii.	Frame No.	ECBT-53				KE-119			
	iii	Bolster No.	BI-5045				BI-5046			
	iv.	Axle No.	RWF-K-6270		RWF-G-6945		RWF-G-7016		RWF-H-1876	
	v.	Wheel Diameter	954.11	954.30	954.40	954.40	954.00	954.02	953.00	953.00
		Wheel Disc No.	27320-928406-30-SAIL	15718-16473-SAIL	43140-06554-SAIL	58037-10395-SAIL	28590-00366-SAIL	62961-11089-SAIL	65413-17365-SAIL	62685-10628-SAIL
	vi.	Disc No.	928406-30-SAIL	16473-SAIL	06554-SAIL	10395-SAIL	00366-SAIL	11089-SAIL	17365-SAIL	10628-SAIL
	vii	RB Nos	P334	P352	P381	P388	P340	P311	P346	P235
	viii	RB Make	FAG		FAG		FAG		FAG	
	ix	RB Type	Direct Mounted Spherical Roller Bearing							
11.3	Items traceability:									
	i.	Break Cylinder Make & No.	PEW-K5081,K8109,K8037,K8103				PEW-K8217,K8223,K5119,K5049			
	ii.	Secondary shock Absorber Make & NO.	ESCORTS-0044,0042				IAI-228422,228308			
	iii.	Lateral Shock Absorber Make & NO.	IAI-233804,233641				IAI-233858,233741			
	iv.	Air Spring Make & NO.	RESISTO-5002,5081				RESISTO-5017,5001			
11.4	i.	Modification/Trail(if any):	FIBA PNEUMATIC PIPING ARRGT. PROVIDED.							
	ii.	Deviations (if any):	NIL							

MEMUMC AS - 8126



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
MEMU WITH AIR SPRING ICF TYPE BOGIE**

TYPE OF COACH : MEMUASP	Shell No : 8126	COACH_NO : 198200
RAILWAY CR	COUPLING TYPE : NONCBC	DATE OF FITMENT: 07-MAR-19

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any)
Group Name NO GROUP DEFINED				
1	42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.	EPTS-200	LIGHT ENGG. CORP.	LEC
Group Name ABOVE ROOF				
2	31760041-1, PANTOGRAPH FOR MEMU COACHES	MEMU/DESC-I,REV.-A (QUALITY PLAN REQ 0331,VER.-01	CONCEPT RAIL ENGINEERS.	588
3	31760041-2, SERVO MOTOR FOR PANTOGRAPH	MEMU/DESC-I,REV.-A (QUALITY PLAN REQ 0331,VER.-01	CONCEPT RAIL ENGINEERS.	504
4	31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH	COS-033-P-052/R5	INSULATORS & ELECTRICALS CO.	IEC
5	45970038-18, EARTHING SWITCH	EMP/BHEL/MEMU2	BHEL	180204A090
6	45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR	RDSO EI/2/05 AND QUALITY PLAN NO :REQ320 VER-01	LDP ASSOCIATES DELHI	CG-227283
7	47986104-1, VACCUM CIRCUIT BREAKER 25KV	CLW/ES/C-47 AND QUALITY PLAN NO : REQ 0309 VER-01.	AUTOMETER ALLIANCE LTD.	1901386
Group Name H.T.CABIN				
8	42982789-3, SMOKE SENSOR	EDTS087	AGNI INSTRUMENTS PVT LTD	GST MARKED
9	42982855-1, RESISTER BOX	BHEL CAT NO. 05750030020 REV-00	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
10	42982855-2, RESISTER BOX	BHEL CAT NO. 05750030020 REV-00	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
11	42982866-1, CONTACTOR BOX WITH GP RELAY	BHEL CAT NO. 15730030044 REV-02	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
12	42982866-2, CONTACTOR BOX WITH GP RELAY	BHEL CAT NO. 15730030044 REV-02	BHOPAL ELECTRICAL INSULATION PVT. LTD.	BEIL
13	45211619-0, AUXILIARY COMPRESSOR WITH MOTOR	ICF/ELEC:050 DRG. NO :ICF/SK-9-O-565 ALT'F' AND QUALITY PLAN NO : Q	COIMBATORE COMPRESSOR ENGG. CO.	CEC-R18L-8202
14	45970038-19, CURRENT TRANSFORMER -1	EMP/BHEL/MEMU2	BHEL	2473067
15	45970038-20, CURRENT TRANSFORMER -2	EMP/BHEL/MEMU2	BHEL	2473079
16	45970038-21, CONSERVATOR TANK	EMP/BHEL/MEMU2	BHEL	NIL
17	45970038-22, HT BUSHING	EMP/BHEL/MEMU2	BHEL	N.N.K.ENTERPRISE S



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS				
ROLLING STOCK CERTIFICATE OF MEMU WITH AIR SPRING ICF TYPE BOGIE				
TYPE OF COACH : MEMUASP		COUPLING TYPE : NONCBC		COACH_NO : 198200
RAILWAY CR		DATE OF FITMENT: 07-MAR-19		Item Sr.No.(if any)
S.No	PL No & Item Description	Drawing No	Make	
Group Name H.T.CABIN				
18	45970038-23, CHOKE	EMP/BHEL/MEMU2	BHEL	SR-2046257,DC-2046343,TC-2046428
19	45970038-24, BUCHHOLZ RELAY	EMP/BHEL/MEMU2	BHEL	P&B 206 M2
20	45970622-1, ADDITIONAL SMOOTHING REACTOR	EDTS-126	RAMYAA ELECTROGEAR	1902-26-734
21	45970622-2, ADDITIONAL SMOOTHING REACTOR	EDTS-126	RAMYAA ELECTROGEAR	1812-26-717
Group Name MLT PANEL				
22	42982662-5, CENTER ZERO METER	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	INDOTECH MAKE
23	42982728-1, MLT PANEL	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	2019-02-6785
24	42982728-2, EARTH FAULT RELAY II	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	MEGAWIN-19010006039
25	42982728-3, DIODE PANEL	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	NEC
26	42982728-4, GOVERNOR CUT OUT SWITCH	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	NEC
27	42982728-6, BATTERY ISOLATING SWITCH	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	L&T DN2 250D
28	45970038-2, LIGHT CONTACTOR	EMP/BHEL/MEMU2	BHEL	NIL
29	45970038-3, FAN CONTACTOR	EMP/BHEL/MEMU2	BHEL	NIL
30	45970038-4, AUX.COMP CONTACTOR	EMP/BHEL/MEMU2	BHEL	1800248090
31	45970038-5, MAIN COMP. CONTACTOR	EMP/BHEL/MEMU2	BHEL	1800249090
32	45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY	EMP/BHEL/MEMU2	BHEL	1800255090
33	45970038-7, MT RELAY PANEL	EMP/BHEL/MEMU2	BHEL	1800258096
34	45970038-8, RESISTANCE PANEL	EMP/BHEL/MEMU2	BHEL	180299B096
35	45970038-25, KNIFE SWITCH	EMP/BHEL/MEMU2	BHEL	180299A090
36	47986104-2, RC DAMPING RESISTANCE 1	CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.	AUTOMETER ALLIANCE LTD.	1901505
37	47986104-3, RC DAMPING RESISTANCE 2	CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.	AUTOMETER ALLIANCE LTD.	1901512
Group Name DRIVING SECTION				
38	31726161-1, TWIN BEAM HEAD LIGHT WITH 24V HELOGEN LAMPS.	RDSO SPEC.NO.ELRS/SPE C/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.	MATSUSHI POWER TECH.	MPT



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS				
ROLLING STOCK CERTIFICATE OF MEMU WITH AIR SPRING ICF TYPE BOGIE				
TYPE OF COACH : MEMUASP		COUPLING TYPE : NONCBC		COACH_NO : 198200
RAILWAY CR		DATE OF FITMENT: 07-MAR-19		Item Sr.No.(if any)
S.No	PL No & Item Description	Drawing No	Make	
Group Name DRIVING SECTION				
39	42982662-1, INTEGRATED DRIVER DESK PANEL	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	2018-11-0017
40	42982662-2, TRACTION AMMETER	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	RISHAB MAKE
41	42982662-3, TRACTION VOLMETER	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	RISHAB MAKE
42	42982662-4, BATTERY VOLTMETER	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	RISHAB MAKE
43	42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	MAALUXMI-3647
44	42982662-7, DRIVER INDICATION PANEL	EDTS-069 REV-B.	INTERNATIONAL SWITCHGEARS PVT. LTD.	2018-11-0017
45	45970038-1, PANTO OPERATING VALVE	EMP/BHEL/MEMU2	BHEL	ROTEX
46	45970038-9, ISOALTING SWITCH PANEL	EMP/BHEL/MEMU2	BHEL	L & T BY NEC
47	45970038-11, MASTER CONTROLLER	EMP/BHEL/MEMU2	BHEL	1800269090
48	45970038-13, MOTOR SWITCH GROUP 1	EMP/BHEL/MEMU2	BHEL	18221AT095
49	45982752-0, RLY CARRIAGE FAN ,450MM SWEEP ,FIXED TYPE 140V, AC WITH FAN GUARD TO DRG NO ICF/SK3-7-6-026 ALT B.	RDSO/PE/SPEC/TL/0 050(2010,REV-1)	LIGHT ENGINEERING CORPORATION	CONCORDE
50	47980050-5, P.T CONTROL	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEM	587
Group Name DRIVING END				
51	31726161-2, 24V DC TO DC CONVERTER	RDSO SPEC.NO.ELRS/SPE C/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.	MITSHUSHI POWER TECH.	MPT-15821
52	31727232-0, LED BASED MARKER/TAIL LIGHT COMPLETE FOR EMU FOR LEFTAND RIGHT (TYPE-E).	ELRS/SPEC/PR/0022 (REV-1,OCT-2004)	MITSHUSHI POWER TECH.	MPT-1055
53	31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH	EM75005	NEC SW. GEARS & CONTROLS	2018-06-1164, 1134



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS

**ROLLING STOCK CERTIFICATE OF
MEMU WITH AIR SPRING ICF TYPE BOGIE**

TYPE OF COACH : MEMUASP COUPLING TYPE : NONCBC COACH_NO : 198200
RAILWAY CR DATE OF FITMENT: 07-MAR-19
S.No PL No & Item Description Drawing No Make Item Sr.No.(if any)

Group Name		DRIVING END		
54	45982697-0, SET OF INTERVEHICAL COUPLER	EDML003 REV-A WITH RCF ANNEXURE	MAA LUXMI INDUSTRIES	MLI
55	47980050-1, PULSE GENERATOR	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEMS	587
Group Name		NON-DRIVING END		
56	42027380-0, LIMIT SWITCH 10A,500V,1NO+1NC	LSRO M/S BOHMAN OR 3SE-2-100-0 OF M/S SIEMENS	GC CONTROL GEAR	NIL
57	45982697-0, SET OF INTERVEHICAL COUPLER	EDML003 REV-A WITH RCF ANNEXURE	MAA LUXMI INDUSTRIES	MLI
Group Name		UNDER FRAME		
58	31710025-0, BATTERY BOX ARRANGMENT FOR MEMU MOTOR COACH WITH MODIFIED TROLLEY AND PACKING ARRANGEMENT TO DRG NO	DRG.NO. EMU/M-7-1-001 ALT.'j' DULY PAINTED AS PER NOTE 6	ANKUR ENGG	SR. NO. NIL 29-11-18
59	33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE	RDSO/PE/Spec./AC/0 009/2008 (Rev.1 WITH AM-1,RCF ANNEX.-A)	AMARA RAJA BATTERIES LTD.	12/2018
60	35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR	ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.	NIPPON KUHLEERS	2019-02-93
61	43290007-0, AIR DRYER FOR MEMU COACHES	RDSO SPEC. NO. MP.0.01.00.09 (REV-0.00) MARCH 2001 WITH OVER ALL DIMENSION NOT TO EXCEED 750MM(L)X315MM(W)X660MM(H)	TRIDENT PNEUMATIC PVT.LTD.	LD2/11/3620/2018
62	45970038-10, HT EARTHING LINKS	EMP/BHEL/MEMU2	BHEL	1800263268,269,270
63	45970038-12, TRANSITION RESISTANCE	EMP/BHEL/MEMU2	BHEL	1800261090
64	45970038-14, MOTOR SWITCH GROUP 2	EMP/BHEL/MEMU2	BHEL	18221BT092
65	45970038-15, PFDR CUM FUSE BOX	EMP/BHEL/MEMU2	BHEL	18297AT090
66	45970038-16, TAP CHANGER	EMP/BHEL/MEMU2	BHEL	180207A093
67	45970038-17, MAIN TRANSFORMER	EMP/BHEL/MEMU2	BHEL	2047814



RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS				
ROLLING STOCK CERTIFICATE OF MEMU WITH AIR SPRING ICF TYPE BOGIE				
TYPE OF COACH : MEMUASP		COUPLING TYPE : NONCBC		COACH_NO : 198200
RAILWAY CR		DATE OF FITMENT: 07-MAR-19		Item Sr.No.(if any)
S.No	PL No & Item Description	Drawing No	Make	
Group Name UNDER FRAME				
68	45970610-0, MAIN COMPRESSOR WITH 110V DC MOTOR	RDSO SPEC. NO 70-B-M-41 AND QUALITY PLAN NO : QEQ 0312 VER-01.	ELGI EQUIPMENTS PVT. LTD.	ESJSQ 50186
69	45970634-0, MAIN SILICON RECTIFIER	ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311	RUTTONSHAH INTERNATIONAL RECTIFIER LTD.	1812-1866-2039
70	45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR	EDTS 088 and Quality Plan No.QEQ:0333 VER:01	FLOW WELL PUMPS & METERS	18111990
Group Name COMPARTMENT				
71	42980963-3, SPEAKERS	EDTS 292	PUNJAB RADIOS PVT. LTD.	AHUJA
72	45982752-0, RLY CARRIAGE FAN ,450MM SWEEP ,FIXED TYPE 140V, AC WITH FAN GUARD TO DRG NO ICF/SK3-7-6-026 ALT B.	RDSO/PE/SPEC/TL/0 050(2010,REV-1)	LIGHT ENGINEERING CORPORATION	CONCORDE
Group Name MLT SECTION				
73	31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER	ICF/ELECT/067 REV-A, CS-1.	RAMYAA ELECTRO GEAR	1705-24-1023
74	42980963-1, PUBLIC ADDRESSING SYSTEM	EDTS 292	PUNJAB RADIOS PVT. LTD.	AHUJA 4386836
75	42980963-2, SPEAKERS	EDTS 292	PUNJAB RADIOS PVT. LTD.	AHUJA
76	42982728-5, FLASHER UNIT	EDTS-053 REV-B CORG-1.	NEC SWITCHGEARS & CONTROLS	MITSUSHI-MPT-19690
77	42982789-1, SMOKE DETECTOR UNIT	EDTS087	AGNI INSTRUMENTS PVT LTD	AG-500564
78	42982789-2, SMOKE SENSOR	EDTS087	AGNI INSTRUMENTS PVT LTD	GST MARKED
79	47980050-3, RECORDING CUM INDICATION UNIT	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEM	587
80	47980050-4, S.C.B CONTROL	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVEN SYSTEM	587
Group Name BOGIE DRIVING END				
81	45981930-0, MOTOR CONNECTION BOX FOR EMU'S	DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01	INDIAN TELEPHONE & ELETRIC CO.	ITECO
82	47030003-1, TRACTION MOTOR/BOGIE 01	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL	4919498/195045



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RAIL COACH FACTORY, KAPURTHALA
ROLLING STOCK CERTIFICATE (NON-LHB)

FOR ELECTRICAL ITEMS			
ROLLING STOCK CERTIFICATE OF MEMU WITH AIR SPRING ICF TYPE BOGIE			
TYPE OF COACH : MEMUASP		COUPLING TYPE : NONCBC	COACH_NO : 198200
RAILWAY CR		DATE OF FITMENT: 07-MAR-19	
S.No	PL No & Item Description	Drawing No	Make Item Sr.No.(if any)
Group Name BOGIE DRIVING END			
83	47030003-2, TRACTION MOTOR/BOGIE 01	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL 4919473/195045
84	47980050-2, PULSE GENERATOR JUNCTION BOX	RDSO/PE/SPEC/EMU /003 -2002REV-0 OCT02	LAXVAN SYSTEMS LAXVEN SYSTEM
Group Name BOGIE NON-DRIVING END			
85	45981930-0, MOTOR CONNECTION BOX FOR EMU'S	DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01	INDIAN TELEPHONE & ELETRIC CO. ITECO
86	47030003-3, TRACTION MOTOR/BOGIE 02	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL 4919481/195046
87	47030003-4, TRACTION MOTOR/BOGIE 02	RDSO/PE/SPEC/D/E MU/0047-2003	BHEL 4919492/195046
SSE/EL/QC		AME/WM QC/DY CQM I	