ätä ìÕvßë PëäÉëÜë

RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	**8051**	BOGIE NO	**185187 / 185188**		DISPATCH DATE	**12-SEP-18**		
2.	RAILWAY	**CR**	TYPE OF COACH	**MEMUMC AS**		COACH NO	**188031**		
3.	BOOKED TO		**SSE/C&W/CSTM**						
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 ligth		3402 +0/-5	
	vi)	CBC/Shaku Coupler Height	Specified: 1104 +0/-10 mm (1035 +0/-5 mm for shaku coupler)	**1034**	**1104**
	vii)	CBC/Shaku Coupler (Make)		**ESCORTS**	**ESCORTS**
	viii)	Buffer Make		**HEPL**	**HEPL**

7.	Air Brake Testing:			
	Description			Specified
	7.1	Emergency Application	Time for 0 to 36 Kg/cm2 of BC	Less than 05 Sec
			Brake release time to reach 0.4 Kg/cm2	Less than 20 Sec
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 in 60 Sec	No brake application
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 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**	**GS**	**85 / 85**
	8.2	Application of PCN-123	**SATISFACTORY**		
	8.3	Insulation	**SATISFACTORY**		

9.	Traceability of Furnishing Items:		
	1	**FLOOR BOARD**	**TWPL**
	2	**PVC**	**RESPONSIVE**
	3	**EP BRAK / BRAKE EQUIPMENT**	**ESCORTS**
	4	**UIC VESTIBULES**	**CEMCON**
	5	**SEAT & BEARTH**	**CPF**
10.	10.1	**Modification/ Trial (If any): NIL**	
	10.2	**Deviations (If any): NIL**	

ãlä ìÕvßë PëäÉëÜë

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
		8051	**CR**	**MEMUMC AS**	**188031**	**12-SEP-18**

11.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: **CC00002 Alt "a"**								
11.2	**Wheel & Axle Details:**								
	i.	Bogie No.	**185187**				**185188**		
	ii.	Frame No.	**ECBT-194**				**ECBT-201**		
	iii	Bolster No.	**ECBT-5187**				**ECBT-5188**		
	iv.	Axle No.	**C-3440**		**F-1559**		**F-1811**		**B-1516**
	v.	Wheel Diameter	**953.00**	**953.00**	**954.00**	**954.00**	**954.00**	**954.00**	**954.00**	**954.00**
	vi.	Wheel Disc No.	**33188-03311-SAIL**	**28648-02488-SAIL**	**20571-16793-SAIL**	**28797-02738**	**20946-00349-SAIL**	**20993-00349-SAIL**	**37160-05130-SAIL**	**37262-05255-SAIL**
	vii	RB Nos	**Z0653**	**Z0649**	**Y293**	**Y277**	**Z0394**	**Z0439**	**Z0659**	**Z0409**
	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-F448,E1209,F898,E1204**	**PEW-E1014,E1023,E1060,E890**
	ii.	Secondary shock Absorber Make & NO.	**IAI-197987,197996**	**IAI-197967,197978**
	iii.	Lateral Shock Absorber Make & NO.	**IAI-198312,198901**	**IAI-198287,198140**
	iv.	Air Spring Make & NO.	**SI-1680,1677**	**SI-1667,1662**
11.4	i.	Modification/Trail(if any):	**NIL**	
	ii.	Deviations (if any):	**NIL**	

MEMUMC AS - 8051

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 : 8051** **COACH_NO : 188031**
RAILWAY CR **COUPLING TYPE : NONCBC** **DATE OF FITMENT: 12-SEP-18**

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*	*M.V ELECTRO SYSTEM PVT. LTD.*	*NIL*
Group Name	ABOVE ROOF			
2	*31760041-1, PANTOGRAPH FOR MEMU COACHES*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-4891*
3	*31760041-2, SERVO MOTOR FOR PANTOGRAPH*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-4891*
4	*31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH*	*COS-033-P-052/R5*	*INSULATOR & ELECTRICAL CO.*	*IEC*
5	*45970038-18, EARTHING SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*170204A115*
6	*45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR*	*RDSO EI/2/05 AND QUALITY PLAN NO :QEQ320 VER-01*	*CGL (ZINC OXIDE)*	*212825*
7	*47986104-1, VACCUM CIRCUIT BREAKER 25KV*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*VCB-44*
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-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
10	*42982855-2, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
11	*42982866-1, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
12	*42982866-2, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION 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.*	*CEC-R18E3452*
14	*45970038-19, CURRENT TRANSFORMER -1*	*EMP/BHEL/MEMU2*	*BHEL*	*2472953*
15	*45970038-20, CURRENT TRANSFORMER -2*	*EMP/BHEL/MEMU2*	*BHEL*	*2472932*
16	*45970038-21, CONSERVATOR TANK*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
17	*45970038-22, HT BUSHING*	*EMP/BHEL/MEMU2*	*BHEL*	*N.N.K.ENTERPERISES*

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 : 188031
RAILWAY CR DATE OF FITMENT: 12-SEP-18

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-2046217, DC-2046303, TC-2046389*
19	*45970622-1, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-540*
20	*45970622-2, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-582*
Group Name	**MLT PANEL**			
21	*42982662-5, CENTER ZERO METER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*INDOTECH MAKE*
22	*42982728-1, MLT PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*2018-04-0029*
23	*42982728-2, EARTH FAULT RELAY II*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MEGAWIN-18030005081*
24	*42982728-3, DIODE PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
25	*42982728-4, GOVERNOR CUT OUT SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
26	*42982728-6, BATTERY ISOLATING SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*L & T DN2-250D*
27	*45970038-2, LIGHT CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
28	*45970038-3, FAN CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
29	*45970038-4, AUX.COMP CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800248004*
30	*45970038-5, MAIN COMP. CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800249003*
31	*45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*1800255001*
32	*45970038-7, MT RELAY PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*1700258091*
33	*45970038-8, RESISTANCE PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*170299B002*
34	*45970038-25, KNIFE SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180299A001*
35	*47986104-2, RC DAMPING RESISTANCE 1*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9201*
36	*47986104-3, RC DAMPING RESISTANCE 2*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9586*
Group Name	**DRIVING SECTION**			
37	*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*
38	*42982662-1, INTEGRATED DRIVER DESK PANEL*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*06-06-2018*

ãlä ìÕvßë PëäÉëÜë

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 : 188031**

RAILWAY CR **DATE OF FITMENT: 12-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**DRIVING SECTION**			
39	*42982662-2, TRACTION AMMETER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AE MAKE*
40	*42982662-3, TRACTION VOLMETER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AE MAKE*
41	*42982662-4, BATTERY VOLTMETER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AE MAKE*
42	*42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*MAA LUXMI-3052*
43	*42982662-7, DRIVER INDICATION PANEL*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AECO-06-06/2018*
44	*45970038-1, PANTO OPERATING VALVE*	*EMP/BHEL/MEMU2*	*BHEL*	*ROTEX*
45	*45970038-9, ISOALTING SWITCH PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*NEC*
46	*45970038-11, MASTER CONTROLLER*	*EMP/BHEL/MEMU2*	*BHEL*	*1800269003*
47	*45970038-13, MOTOR SWITCH GROUP 1*	*EMP/BHEL/MEMU2*	*BHEL*	*17221AT091*
48	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
49	*47980050-5, P.T CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TPTU-1803209*
Group Name	**DRIVING END**			
50	*31726161-2, 24V DC TO DC CONVERTER*	*RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.*	*MITSUSHI POWER TECH.*	*MPT-15484*
51	*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-720*
52	*31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH*	*EM75005*	*NEC SW. GEARS & CONTROLS*	*2017-11-4538, 4698*
53	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
54	*47980050-1, PULSE GENERATOR*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*PGD-1803349*
Group Name	**NON-DRIVING END**			

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF

MEMU WITH AIR SPRING ICF TYPE BOGIE

TYPE OF COACH : MEMUASP COUPLING TYPE : NONCBC COACH_NO : 188031
RAILWAY CR DATE OF FITMENT: 12-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NON-DRIVING END			
55	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
56	45982697-0, SET OF INTERVEHICAL COUPLER	EDML003 REV-A WITH RCF ANNEXURE	S-INTERNATIONALS	S-INT.
Group Name	UNDER FRAME			
57	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	K.R.ENGG.YAMUNANAGAR	78 (08/2018)
58	33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE	RDSO/PE/Spec./AC/0009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)	AMARA RAJA BATTERIES LTD.	06/2018
59	35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR	ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.	NIPPON KUHLERS	2018-07-33
60	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.	LD2/04/3089/2018
61	45970038-10, HT EARTHING LINKS	EMP/BHEL/MEMU2	BHEL	1800263007,002,009
62	45970038-12, TRANSITION RESISTANCE	EMP/BHEL/MEMU2	BHEL	1700261120
63	45970038-14, MOTOR SWITCH GROUP 2	EMP/BHEL/MEMU2	BHEL	18221BT002
64	45970038-15, PFDR CUM FUSE BOX	EMP/BHEL/MEMU2	BHEL	17297AT093
65	45970038-16, TAP CHANGER	EMP/BHEL/MEMU2	BHEL	170207A122
66	45970038-17, MAIN TRANSFORMER	EMP/BHEL/MEMU2	BHEL	2046130
67	45970038-24, BUCHHOLZ RELAY	EMP/BHEL/MEMU2	BHEL	P&B 208M2
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.	ERCSQ 50056

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 : 188031**

RAILWAY CR **DATE OF FITMENT: 12-SEP-18**

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.*	*1806/1866/1882*
70	*45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR*	*EDTS 088 and Quality Plan No.QEQ:0333 VER:01*	*FLOW TECH. PUMPS & MOTORS*	*18070832*
Group Name	**COMPARTMENT**			
71	*42980963-3, SPEAKERS*	*EDTS 292*	*PUNJAB RADIOS*	*AHUJA MAKE*
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/0050(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.*	*MB & COMPANY*	*2018-05-010*
74	*42980963-1, PUBLIC ADDRESSING SYSTEM*	*EDTS 292*	*PUNJAB RADIOS*	*AHUJA-4387082*
75	*42980963-2, SPEAKERS*	*EDTS 292*	*PUNJAB RADIOS*	*AHUJA*
76	*42982728-5, FLASHER UNIT*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MPT-19766*
77	*42982789-1, SMOKE DETECTOR UNIT*	*EDTS087*	*AGNI INSTRUMENTS PVT LTD*	*AG500513*
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*	*AUTOMETERS ALLAINCE LTD.*	*MTAME 1803136*
80	*47980050-4, S.C.B CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TSCU-1803218*
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 & ELECTRIC CO*	*ITECO*
82	*47030003-1, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919171/185178*
83	*47030003-2, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919168/185178*
84	*47980050-2, PULSE GENERATOR JUNCTION BOX*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*AAL*
Group Name	**BOGIE NON-DRIVING END**			

ãlä ìÕvßë PëäÉëÜë

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 : 188031**

RAILWAY CR **DATE OF FITMENT: 12-SEP-18**

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 & ELECTRIC CO*	*ITECO*
86	*47030003-3, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4918870/185177*
87	*47030003-4, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919210/185177*

SSE/EL/QC	**AME/WM QC/DY CQM I**

ãlä ìÕvßë PëäÉëÜë

RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	**8052**	BOGIE NO	**185185 / 185186**		DISPATCH DATE	**12-SEP-18**		
2.	RAILWAY	**CR**	TYPE OF COACH	**MEMUMC AS**		COACH NO	**188030**		
3.	BOOKED TO		**SSE/C&W/CSTM**						
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 ligth		3402 +0/-5	
	vi)	CBC/Shaku Coupler Height	Specified: 1104 +0/-10 mm (1035 +0/-5 mm for shaku coupler)	**1035**	**1035**
	vii)	CBC/Shaku Coupler (Make)		**ESCORTS**	**ESCORTS**
	viii)	Buffer Make		**HEPL**	**HEPL**

7.	Air Brake Testing:			
	Description		Specified	
	7.1	Emergency Application	Time for 0 to 36 Kg/cm2 of BC	Less than 05 Sec
			Brake release time to reach 0.4 Kg/cm2	Less than 20 Sec
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 in 60 Sec	No brake application
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 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**	**GS**	**85 / 85**
	8.2	Application of PCN-123	**SATISFACTORY**		
	8.3	Insulation	**SATISFACTORY**		

9.	Traceability of Furnishing Items:		
	1	**FLOOR BOARD**	**TWPL**
	2	**PVC**	**RESPONSIVE**
	3	**EP BRAK / BRAKE EQUIPMENT**	**ESCORTS**
	4	**UIC VESTIBULES**	**CEMCON**
	5	**SEAT & BEARTH**	**AAR KAY FOAM**
10.	10.1	**Modification/ Trial (If any): NIL**	
	10.2	**Deviations (If any): NIL**	

ãää ìÕvßë PëäÉëÜë

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
		8052	**CR**	**MEMUMC AS**	**188030**	**12-SEP-18**

11.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: **CC00002 Alt "a"**									
11.2	**Wheel & Axle Details:**									
	i.	Bogie No.	**185185**				**185186**			
	ii.	Frame No.	**ECBT-226**				**ECBT-192**			
	iii	Bolster No.	**ECBT-5185**				**ECBT-5186**			
	iv.	Axle No.	**D-6786**		**F-1694**		**D-6716**		**F-1715**	
	v.	Wheel Diameter	**954.00**	**954.00**	**954.00**	**954.00**	**953.00**	**953.00**	**954.00**	**954.00**
	vi.	Wheel Disc No.	**31859-03377-SAIL**	**34269-03801-SAIL**	**15802-12751-SAIL**	**20784-00244-SAIL**	**33224-03511-SAIL**	**31868-03377-SAIL**	**28848-02738-SAIL**	**15057-15802-SAIL**
	vii	RB Nos	**Z0671**	**Z0629**	**Z0657**	**Z0654**	**Z0647**	**Z0681**	**Y295**	**Y284**
	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-E926,E1108,E1203,E1229**	**PEW-E998,E957,E1070,E1213**
	ii.	Secondary shock Absorber Make & NO.	**IAI-197985,198334**	**GABRIEL-0353,367**
	iii.	Lateral Shock Absorber Make & NO.	**IAI-198864,198271**	**IAI-198272,198269**
	iv.	Air Spring Make & NO.	**SI-1721,1736**	**SI-1643,1652**
11.4	i.	Modification/Trail(if any):	**NIL**	
	ii.	Deviations (if any):	**NIL**	

MEMUMC AS - 8052

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 : 8052** **COACH_NO : 188030**
RAILWAY CR **COUPLING TYPE : NONCBC** **DATE OF FITMENT: 12-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NO GROUP DEFINED			
88	42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.	EPTS-200	M.V ELECTRO SYSTEM PVT. LTD.	NIL
Group Name	ABOVE ROOF			
89	31760041-1, PANTOGRAPH FOR MEMU COACHES	MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01	CONTRANSYS PVT. LTD.	B-4888
90	31760041-2, SERVO MOTOR FOR PANTOGRAPH	MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01	CONTRANSYS PVT. LTD.	B-4888
91	31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH	COS-033-P-052/R5	INSULATOR & ELECTRICAL CO.	IEC
92	45970038-18, EARTHING SWITCH	EMP/BHEL/MEMU2	BHEL	180204A009
93	45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR	RDSO EI/2/05 AND QUALITY PLAN NO :QEQ320 VER-01	CGL (ZINC OXIDE)	212827
94	47986104-1, VACCUM CIRCUIT BREAKER 25KV	CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.	SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.	VCB-39
Group Name	H.T.CABIN			
95	42982789-3, SMOKE SENSOR	EDTS087	PRECISION SAFETY EQUIPMENTS	GST MARKED
96	42982855-1, RESISTER BOX	BHEL CAT NO. 05750030020 REV-OO	BHOPAL ELECTRICAL INSULATION LTD.	BEIL
97	42982855-2, RESISTER BOX	BHEL CAT NO. 05750030020 REV-OO	BHOPAL ELECTRICAL INSULATION LTD.	BEIL
98	42982866-1, CONTACTOR BOX WITH GP RELAY	BHEL CAT NO. 15730030044 REV-02	BHOPAL ELECTRICAL INSULATION LTD.	BEIL
99	42982866-2, CONTACTOR BOX WITH GP RELAY	BHEL CAT NO. 15730030044 REV-02	BHOPAL ELECTRICAL INSULATION LTD.	BEIL
**	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.	CEC-R18E3449
**	45970038-19, CURRENT TRANSFORMER -1	EMP/BHEL/MEMU2	BHEL	2472983
**	45970038-20, CURRENT TRANSFORMER -2	EMP/BHEL/MEMU2	BHEL	2472984
**	45970038-21, CONSERVATOR TANK	EMP/BHEL/MEMU2	BHEL	NIL
**	45970038-22, HT BUSHING	EMP/BHEL/MEMU2	BHEL	N.N.K.ENTERPERISES

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 : 188030**

RAILWAY CR **DATE OF FITMENT: 12-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**H.T.CABIN**			
**	*45970038-23, CHOKE*	*EMP/BHEL/MEMU2*	*BHEL*	*SR-2046229, DC-2046315, TC-2046401*
**	*45970622-1, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1802-26-542*
**	*45970622-2, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1802-26-544*
Group Name	**MLT PANEL**			
**	*42982662-5, CENTER ZERO METER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*INDOTECH MAKE*
**	*42982728-1, MLT PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*2018-04-0021*
**	*42982728-2, EARTH FAULT RELAY II*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MEGAWIN-17110003969*
**	*42982728-3, DIODE PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
**	*42982728-4, GOVERNOR CUT OUT SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
**	*42982728-6, BATTERY ISOLATING SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*L & T DN2-250D*
**	*45970038-2, LIGHT CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-3, FAN CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-4, AUX.COMP CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800248001*
**	*45970038-5, MAIN COMP. CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800249002*
**	*45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*1700255092*
**	*45970038-7, MT RELAY PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*1700258094*
**	*45970038-8, RESISTANCE PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*180299B003*
**	*45970038-25, KNIFE SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180299A002*
**	*47986104-2, RC DAMPING RESISTANCE 1*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9099*
**	*47986104-3, RC DAMPING RESISTANCE 2*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9219*
Group Name	**DRIVING SECTION**			
**	*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*
**	*42982662-1, INTEGRATED DRIVER DESK PANEL*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*04-06-2018*

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 : 188030
RAILWAY CR DATE OF FITMENT: 12-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	DRIVING SECTION			
**	*42982662-2, TRACTION AMMETER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AE MAKE*
**	*42982662-3, TRACTION VOLMETER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AE MAKE*
**	*42982662-4, BATTERY VOLTMETER*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AE MAKE*
**	*42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*MAA LUXMI-3380*
**	*42982662-7, DRIVER INDICATION PANEL*	*EDTS-069 REV-B.*	*ABROL ENGG. CO.*	*AECO-04-06/2018*
**	*45970038-1, PANTO OPERATING VALVE*	*EMP/BHEL/MEMU2*	*BHEL*	*ROTEX*
**	*45970038-9, ISOALTING SWITCH PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*NEC*
**	*45970038-11, MASTER CONTROLLER*	*EMP/BHEL/MEMU2*	*BHEL*	*1800269092*
**	*45970038-13, MOTOR SWITCH GROUP 1*	*EMP/BHEL/MEMU2*	*BHEL*	*18221AT010*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
**	*47980050-5, P.T CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TPTU-1806042*
Group Name	DRIVING END			
**	*31726161-2, 24V DC TO DC CONVERTER*	*RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.*	*MITSUSHI POWER TECH.*	*MPT-15432*
**	*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-759*
**	*31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH*	*EM75005*	*NEC SW. GEARS & CONTROLS*	*2017-11-4534, 4722*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
**	*47980050-1, PULSE GENERATOR*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*PGD-1806051*
Group Name	NON-DRIVING END			

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 : 188030

RAILWAY CR DATE OF FITMENT: 12-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NON-DRIVING END			
**	*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*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
Group Name	UNDER FRAME			
**	*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*	*K.R.ENGG.YAMUNANAGAR*	*63 (08/2018)*
**	*33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE*	*RDSO/PE/Spec./AC/0009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)*	*AMARA RAJA BATTERIES LTD.*	*06/2018*
**	*35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR*	*ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.*	*NIPPON KUHLERS*	*2018-07-26*
**	*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.*	*LD2/04/3072/2018*
**	*45970038-10, HT EARTHING LINKS*	*EMP/BHEL/MEMU2*	*BHEL*	*1800263001,008,010*
**	*45970038-12, TRANSITION RESISTANCE*	*EMP/BHEL/MEMU2*	*BHEL*	*1800261002*
**	*45970038-14, MOTOR SWITCH GROUP 2*	*EMP/BHEL/MEMU2*	*BHEL*	*17221BT115*
**	*45970038-15, PFDR CUM FUSE BOX*	*EMP/BHEL/MEMU2*	*BHEL*	*17297AT103*
**	*45970038-16, TAP CHANGER*	*EMP/BHEL/MEMU2*	*BHEL*	*170207A115*
**	*45970038-17, MAIN TRANSFORMER*	*EMP/BHEL/MEMU2*	*BHEL*	*2045094*
**	*45970038-24, BUCHHOLZ RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*P&B 198M2*
**	*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.*	*ERCSQ 50045*

ãlä ìÕvßë PëäÉëÜë

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 : 188030
RAILWAY CR DATE OF FITMENT: 12-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	UNDER FRAME			
**	*45970634-0, MAIN SILICON RECTIFIER*	*ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311*	*RUTTONSHAH INTERNATIONAL RECTIFIER LTD.*	*1805/1866/1866*
**	*45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR*	*EDTS 088 and Quality Plan No.QEQ:0333 VER:01*	*FLOW TECH. PUMPS & MOTORS*	*18070.....*
Group Name	COMPARTMENT			
**	*42980963-3, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA MAKE*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
Group Name	MLT SECTION			
**	*31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER*	*ICF/ELECT/067 REV-A, CS-1.*	*MB & COMPANY*	*2018-05-021*
**	*42980963-1, PUBLIC ADDRESSING SYSTEM*	*EDTS 292*	*PROZONE*	*AHUJA-4549010*
**	*42980963-2, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*42982728-5, FLASHER UNIT*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MPT-18791*
**	*42982789-1, SMOKE DETECTOR UNIT*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*SR. NO.2074*
**	*42982789-2, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*47980050-3, RECORDING CUM INDICATION UNIT*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*MTAME 1803118*
**	*47980050-4, S.C.B CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TSCU-1806036*
Group Name	BOGIE DRIVING END			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-1, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919154/185185*
**	*47030003-2, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919160/185185*
**	*47980050-2, PULSE GENERATOR JUNCTION BOX*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*AAL*
Group Name	BOGIE NON-DRIVING END			

ãlä ìÕvßë PëäÉëÜë

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 : 188030

RAILWAY CR DATE OF FITMENT: 12-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**BOGIE NON-DRIVING END**			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-3, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4918839/185186*
**	*47030003-4, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919209/185186*

SSE/EL/QC	**AME/WM QC/DY CQM I**

ätä ìÕvßë PëäÉëÜë

RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	**8054**	BOGIE NO	**185189 / 185190**	DISPATCH DATE	**15-SEP-18**			
2.	RAILWAY	**CR**	TYPE OF COACH	**MEMUMC AS**	COACH NO	**188058**			
3.	BOOKED TO		**SSE/C&W/CST**						
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 ligth		3402 +0/-5	
	vi)	CBC/Shaku Coupler Height	Specified: 1104 +0/-10 mm (1035 +0/-5 mm for shaku coupler)	**1035**	**1094**
	vii)	CBC/Shaku Coupler (Make)		**ESCORTS**	**ESCORTS**
	viii)	Buffer Make		**HEPL**	**HEPL**

7.	Air Brake Testing:			
	Description			Specified
	7.1	Emergency Application	Time for 0 to 36 Kg/cm2 of BC	Less than 05 Sec
			Brake release time to reach 0.4 Kg/cm2	Less than 20 Sec
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 in 60 Sec	No brake application
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 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**	**GS**	**85 / 86**
	8.2	Application of PCN-123	**SATISFACTORY**		
	8.3	Insulation	**SATISFACTORY**		

9.	Traceability of Furnishing Items:		
	1	**FLOOR BOARD**	**TWPL**
	2	**PVC**	**RESPONSIVE**
	3	**EP BRAK / BRAKE EQUIPMENT**	**ESCORTS**
	4	**UIC VESTIBULES**	**CEMCON**
	5	**SEAT & BEARTH**	**AAR KAY FOAM**
10.	10.1	**Modification/ Trial (If any): NIL**	
	10.2	**Deviations (If any): NIL**	

ãlä ìÕvßë PëäÉëÜë

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
		8054	**CR**	**MEMUMC AS**	**188058**	**15-SEP-18**

11.1	BOGIE GENERAL ARRANGEMENT DRAWING NO.: **CC00002 Alt "a"**									
11.2	**Wheel & Axle Details:**									
	i.	Bogie No.	**185189**				**185190**			
	ii.	Frame No.	**ECBT-225**				**ECBT-210**			
	iii	Bolster No.	**ECBT-5189**				**RSM-5190**			
	iv.	Axle No.	**D-0601**		**Z-8766**		**D-6769**		**D-6724**	
	v.	Wheel Diameter	**954.00**	**954.00**	**953.00**	**953.00**	**954.00**	**954.00**	**954.00**	**954.00**
	vi.	Wheel Disc No.	**20792-00244-SAIL**	**28792-02738-SAIL**	**36652-01772-SAIL**	**28766-02510-SAIL**	**02510-28754-SAIL**	**33297-03525-SAIL**	**03525-33304-SAIL**	**33251-03511-SAIL**
	vii	RB Nos	**Z0662**	**Z0626**	**Z0648**	**Z0627**	**Z0633**	**Z0539**	**Z0663**	**Z0656**
	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-E986,E980,E1235,E1075**	**PEW-E876,E1085,E327,E1081**
	ii.	Secondary shock Absorber Make & NO.	**GABRIEL-376,371**	**GABRIEL-363,365**
	iii.	Lateral Shock Absorber Make & NO.	**IAI-198881,198871**	**IAI-198376,197931**
	iv.	Air Spring Make & NO.	**SI-1701,1684**	**SI-1665,1700**
11.4	i.	Modification/Trail(if any):	**NIL**	
	ii.	Deviations (if any):	**NIL**	

MEMUMC AS - 8054

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 : 8054** **COACH_NO : 188058**
RAILWAY CR **COUPLING TYPE : NONCBC** **DATE OF FITMENT: 15-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NO GROUP DEFINED			
**	*42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.*	*EPTS-200*	*M.V ELECTRO SYSTEM PVT. LTD.*	*NIL*
Group Name	ABOVE ROOF			
**	*31760041-1, PANTOGRAPH FOR MEMU COACHES*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-5060*
**	*31760041-2, SERVO MOTOR FOR PANTOGRAPH*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-5060*
**	*31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH*	*COS-033-P-052/R5*	*INSULATOR & ELECTRICAL CO.*	*IEC*
**	*45970038-18, EARTHING SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180204A002*
**	*45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR*	*RDSO EI/2/05 AND QUALITY PLAN NO :QEQ320 VER-01*	*CGL (ZINC OXIDE)*	*212826*
**	*47986104-1, VACCUM CIRCUIT BREAKER 25KV*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*VCB-12*
Group Name	H.T.CABIN			
**	*42982789-3, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*42982855-1, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982855-2, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-1, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-2, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*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.*	*CEC-R18E3448*
**	*45970038-19, CURRENT TRANSFORMER -1*	*EMP/BHEL/MEMU2*	*BHEL*	*2471053*
**	*45970038-20, CURRENT TRANSFORMER -2*	*EMP/BHEL/MEMU2*	*BHEL*	*2471049*
**	*45970038-21, CONSERVATOR TANK*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-22, HT BUSHING*	*EMP/BHEL/MEMU2*	*BHEL*	*N.N.K.ENTERPERISES*

ãlä ìÕvßë PëäÉëÜë

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 : 188058

RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	H.T.CABIN			
**	*45970038-23, CHOKE*	*EMP/BHEL/MEMU2*	*BHEL*	*SR-2045182, DC-2045276, TC-2045370*
**	*45970622-1, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-553*
**	*45970622-2, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-590*
Group Name	MLT PANEL			
**	*42982662-5, CENTER ZERO METER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*INDOTECH MAKE*
**	*42982728-1, MLT PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*2017-12-5130*
**	*42982728-2, EARTH FAULT RELAY II*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MEGAWIN-17110003948*
**	*42982728-3, DIODE PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
**	*42982728-4, GOVERNOR CUT OUT SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
**	*42982728-6, BATTERY ISOLATING SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*L & T DN2-250D*
**	*45970038-2, LIGHT CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-3, FAN CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-4, AUX.COMP CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800248002*
**	*45970038-5, MAIN COMP. CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1700249114*
**	*45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*1700255112*
**	*45970038-7, MT RELAY PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*1700258111*
**	*45970038-8, RESISTANCE PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*180299B001*
**	*45970038-25, KNIFE SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180299A003*
**	*47986104-2, RC DAMPING RESISTANCE 1*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9693*
**	*47986104-3, RC DAMPING RESISTANCE 2*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9576*
Group Name	DRIVING SECTION			
**	*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*
**	*42982662-1, INTEGRATED DRIVER DESK PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2588*

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 : 188058
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	DRIVING SECTION			
**	*42982662-2, TRACTION AMMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-3, TRACTION VOLMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-4, BATTERY VOLTMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*MAA LUXMI-3366*
**	*42982662-7, DRIVER INDICATION PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2588*
**	*45970038-1, PANTO OPERATING VALVE*	*EMP/BHEL/MEMU2*	*BHEL*	*ROTEX*
**	*45970038-9, ISOALTING SWITCH PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*NEC*
**	*45970038-11, MASTER CONTROLLER*	*EMP/BHEL/MEMU2*	*BHEL*	*1700269113*
**	*45970038-13, MOTOR SWITCH GROUP 1*	*EMP/BHEL/MEMU2*	*BHEL*	*17221AT111*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
**	*47980050-5, P.T CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TPTU-1803212*
Group Name	DRIVING END			
**	*31726161-2, 24V DC TO DC CONVERTER*	*RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.*	*MITSUSHI POWER TECH.*	*MPT-15497*
**	*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-727*
**	*31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH*	*EM75005*	*NEC SW. GEARS & CONTROLS*	*2017-11-4648, 4616*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
**	*47980050-1, PULSE GENERATOR*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*PGD-1803351*
Group Name	NON-DRIVING END			

FOR ELECTRICAL ITEMS

ROLLING STOCK CERTIFICATE OF

MEMU WITH AIR SPRING ICF TYPE BOGIE

TYPE OF COACH : MEMUASP COUPLING TYPE : NONCBC COACH_NO : 188058
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NON-DRIVING END			
**	*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*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
Group Name	UNDER FRAME			
**	*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*	*K.R.ENGG.YAMUNANAGAR*	*83 (08/2018)*
**	*33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE*	*RDSO/PE/Spec./AC/0009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)*	*AMARA RAJA BATTERIES LTD.*	*06/2018*
**	*35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR*	*ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.*	*NIPPON KUHLERS*	*2018-08-29*
**	*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.*	*LD2/04/3093/2018*
**	*45970038-10, HT EARTHING LINKS*	*EMP/BHEL/MEMU2*	*BHEL*	*1800263003,006,011*
**	*45970038-12, TRANSITION RESISTANCE*	*EMP/BHEL/MEMU2*	*BHEL*	*1700261122*
**	*45970038-14, MOTOR SWITCH GROUP 2*	*EMP/BHEL/MEMU2*	*BHEL*	*17221BT112*
**	*45970038-15, PFDR CUM FUSE BOX*	*EMP/BHEL/MEMU2*	*BHEL*	*18297AT004*
**	*45970038-16, TAP CHANGER*	*EMP/BHEL/MEMU2*	*BHEL*	*170207A094*
**	*45970038-17, MAIN TRANSFORMER*	*EMP/BHEL/MEMU2*	*BHEL*	*2046135*
**	*45970038-24, BUCHHOLZ RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*P&B 345L2*
**	*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.*	*ERDSQ 50075*

ãlä ìÕvßë PëäÉëÜë

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 : 188058
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	UNDER FRAME			
**	*45970634-0, MAIN SILICON RECTIFIER*	*ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311*	*RUTTONSHAH INTERNATIONAL RECTIFIER LTD.*	*1806/1866/1884*
**	*45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR*	*EDTS 088 and Quality Plan No.QEQ:0333 VER:01*	*FLOW TECH. PUMPS & MOTORS*	*18070817*
Group Name	COMPARTMENT			
**	*42980963-3, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
Group Name	MLT SECTION			
**	*31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER*	*ICF/ELECT/067 REV-A, CS-1.*	*MB & COMPANY*	*2018-05-015*
**	*42980963-1, PUBLIC ADDRESSING SYSTEM*	*EDTS 292*	*PROZONE*	*AHUJA-*
**	*42980963-2, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*42982728-5, FLASHER UNIT*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MPT-18652*
**	*42982789-1, SMOKE DETECTOR UNIT*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*SR. NO.2173*
**	*42982789-2, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*47980050-3, RECORDING CUM INDICATION UNIT*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*MTAME 1806019*
**	*47980050-4, S.C.B CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TSCU-1803221*
Group Name	BOGIE DRIVING END			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-1, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919161/185189*
**	*47030003-2, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919195/185189*
**	*47980050-2, PULSE GENERATOR JUNCTION BOX*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*AAL*
Group Name	BOGIE NON-DRIVING END			

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 : 188058**

RAILWAY CR **DATE OF FITMENT: 15-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**BOGIE NON-DRIVING END**			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-3, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919152/185190*
**	*47030003-4, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919200/185190*

SSE/EL/QC	**AME/WM QC/DY CQM I**

ãlä ìÕvßë PëäÉëÜë

RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	**8053**	BOGIE NO	**185191 / 185192**		DISPATCH DATE	**17-SEP-18**		
2.	RAILWAY	**CR**	TYPE OF COACH	**MEMUMC AS**		COACH NO	**188060**		
3.	BOOKED TO		**SSE/C&W/CSTM**						
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 ligth		3402 +0/-5	
	vi)	CBC/Shaku Coupler Height	Specified: 1104 +0/-10 mm (1035 +0/-5 mm for shaku coupler)	**1035**	**1100**
	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/cm2 of BC	Less than 05 Sec
			Brake release time to reach 0.4 Kg/cm2	Less than 20 Sec
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 in 60 Sec	No brake application
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 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**	**GS**	**86 / 86**
	8.2	Application of PCN-123	**SATISFACTORY**		
	8.3	Insulation	**SATISFACTORY**		

9.	Traceability of Furnishing Items:		
	1	**FLOOR BOARD**	**TWPL**
	2	**PVC**	**RESPONSIVE**
	3	**EP BRAK / BRAKE EQUIPMENT**	**ESCORTS**
	4	**UIC VESTIBULES**	**CEMCON**
	5	**SEAT & BEARTH**	**CPF**
10.	10.1	**Modification/ Trial (If any): NIL**	
	10.2	**Deviations (If any): NIL**	

ãlä ìÕvßë PëäÉëÜë

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
		8053	**CR**	**MEMUMC AS**	**188060**	**17-SEP-18**

11.1 BOGIE GENERAL ARRANGEMENT DRAWING NO.: **CC00002 Alt "a"**

11.2 **Wheel & Axle Details:**

i.	Bogie No.	**185191**				**185192**			
ii.	Frame No.	**ECBT-193**				**ECBT-215**			
iii	Bolster No.	**RSM-5191**				**RSM-5192**			
iv.	Axle No.	**D-0547**		**C-3435**		**F-1676**		**C-3439**	
v.	Wheel Diameter	**953.00**	**953.00**	**953.00**	**953.00**	**955.00**	**955.00**	**952.00**	**952.00**
vi.	Wheel Disc No.	**33169-03497-SAIL**	**33294-03525-SAIL**	**20791-00244-SAIL**	**20837-00244-SAIL**	**20990-00349-SAIL**	**28952-01791-SAIL**	**33256-03511-SAIL**	**33818-03511-SAIL**
vii	RB Nos	**Z0670**	**Z0631**	**Z0650**	**Z0660**	**Z0721**	**Z0453**	**Z0419**	**Z0679**
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-E923,E872,E423,E1013**	**PEW-E907,E899,E932,E1109**
ii.	Secondary shock Absorber Make & NO.	**GABRIEL-271,358**	**GABRIEL-234,369**
iii.	Lateral Shock Absorber Make & NO.	**IAI-198899,198296**	**IAI-198281,198264**
iv.	Air Spring Make & NO.	**SI-1697,1664**	**SI-1707,1686**

11.4	i.	Modification/Trail(if any):	**NIL**
	ii.	Deviations (if any):	**NIL**

MEMUMC AS - 8053

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 : 8053** **COACH_NO : 188060**
RAILWAY CR **COUPLING TYPE : NONCBC** **DATE OF FITMENT: 15-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NO GROUP DEFINED			
**	*42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.*	*EPTS-200*	*M.V ELECTRO SYSTEM PVT. LTD.*	*NIL*
Group Name	ABOVE ROOF			
**	*31760041-1, PANTOGRAPH FOR MEMU COACHES*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-5046*
**	*31760041-2, SERVO MOTOR FOR PANTOGRAPH*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-5046*
**	*31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH*	*COS-033-P-052/R5*	*INSULATOR & ELECTRICAL CO.*	*IEC*
**	*45970038-18, EARTHING SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180204A001*
**	*45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR*	*RDSO EI/2/05 AND QUALITY PLAN NO :QEQ320 VER-01*	*CGL (ZINC OXIDE)*	*212838*
**	*47986104-1, VACCUM CIRCUIT BREAKER 25KV*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*VCB-11*
Group Name	H.T.CABIN			
**	*42982789-3, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*42982855-1, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982855-2, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-1, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-2, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*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.*	*CEC-R18E3447*
**	*45970038-19, CURRENT TRANSFORMER -1*	*EMP/BHEL/MEMU2*	*BHEL*	*2473045*
**	*45970038-20, CURRENT TRANSFORMER -2*	*EMP/BHEL/MEMU2*	*BHEL*	*2473046*
**	*45970038-21, CONSERVATOR TANK*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-22, HT BUSHING*	*EMP/BHEL/MEMU2*	*BHEL*	*N.N.K.ENTERPERISES*

ãlä ìÕvßë PëäÉëÜë

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 : 188060
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**H.T.CABIN**			
**	*45970038-23, CHOKE*	*EMP/BHEL/MEMU2*	*BHEL*	*SR-2045201, DC-2045295, TC-2045389*
**	*45970622-1, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1802-26-533*
**	*45970622-2, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1802-26-532*
Group Name	**MLT PANEL**			
**	*42982662-5, CENTER ZERO METER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*INDOTECH MAKE*
**	*42982728-1, MLT PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*2017-08-2128*
**	*42982728-2, EARTH FAULT RELAY II*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MEGAWIN-17030001249*
**	*42982728-3, DIODE PANEL*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
**	*42982728-4, GOVERNOR CUT OUT SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*NEC*
**	*42982728-6, BATTERY ISOLATING SWITCH*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*L & T DN2-250D*
**	*45970038-2, LIGHT CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-3, FAN CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-4, AUX.COMP CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800248003*
**	*45970038-5, MAIN COMP. CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800249001*
**	*45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*1800255002*
**	*45970038-7, MT RELAY PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*1700258112*
**	*45970038-8, RESISTANCE PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*180299B031*
**	*45970038-25, KNIFE SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180299A004*
**	*47986104-2, RC DAMPING RESISTANCE 1*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9590*
**	*47986104-3, RC DAMPING RESISTANCE 2*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9015*
Group Name	**DRIVING SECTION**			
**	*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*
**	*42982662-1, INTEGRATED DRIVER DESK PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2586*

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 : 188060
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	DRIVING SECTION			
**	*42982662-2, TRACTION AMMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-3, TRACTION VOLMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-4, BATTERY VOLTMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*MAA LUXMI-3353*
**	*42982662-7, DRIVER INDICATION PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2586*
**	*45970038-1, PANTO OPERATING VALVE*	*EMP/BHEL/MEMU2*	*BHEL*	*ROTEX*
**	*45970038-9, ISOALTING SWITCH PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*NEC*
**	*45970038-11, MASTER CONTROLLER*	*EMP/BHEL/MEMU2*	*BHEL*	*1800269004*
**	*45970038-13, MOTOR SWITCH GROUP 1*	*EMP/BHEL/MEMU2*	*BHEL*	*18221AT015*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
**	*47980050-5, P.T CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TPTU-1803210*
Group Name	DRIVING END			
**	*31726161-2, 24V DC TO DC CONVERTER*	*RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.*	*MITSUSHI POWER TECH.*	*MPT-15479*
**	*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-744*
**	*31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH*	*EM75005*	*NEC SW. GEARS & CONTROLS*	*2017-11-4515, 4700*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
**	*47980050-1, PULSE GENERATOR*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*PGD-1803355*
Group Name	NON-DRIVING END			

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 : 188060
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NON-DRIVING END			
**	*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*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
Group Name	UNDER FRAME			
**	*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*	*K.R.ENGG.YAMUNANAGAR*	*79 (08/2018)*
**	*33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE*	*RDSO/PE/Spec./AC/0009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)*	*AMARA RAJA BATTERIES LTD.*	*06/2018*
**	*35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR*	*ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.*	*NIPPON KUHLERS*	*2018-07-27*
**	*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.*	*LD2/04/3092/2018*
**	*45970038-10, HT EARTHING LINKS*	*EMP/BHEL/MEMU2*	*BHEL*	*1800263083,087,096*
**	*45970038-12, TRANSITION RESISTANCE*	*EMP/BHEL/MEMU2*	*BHEL*	*1800261004*
**	*45970038-14, MOTOR SWITCH GROUP 2*	*EMP/BHEL/MEMU2*	*BHEL*	*17221BT111*
**	*45970038-15, PFDR CUM FUSE BOX*	*EMP/BHEL/MEMU2*	*BHEL*	*18297AT001*
**	*45970038-16, TAP CHANGER*	*EMP/BHEL/MEMU2*	*BHEL*	*170207A114*
**	*45970038-17, MAIN TRANSFORMER*	*EMP/BHEL/MEMU2*	*BHEL*	*2045117*
**	*45970038-24, BUCHHOLZ RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*P&B 214M2*
**	*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.*	*ERDSQ 50077*

ãlä ìÕvßë PëäÉëÜë

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 : 188060
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	UNDER FRAME			
**	*45970634-0, MAIN SILICON RECTIFIER*	*ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311*	*RUTTONSHAH INTERNATIONAL RECTIFIER LTD.*	*1806/1866/1883*
**	*45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR*	*EDTS 088 and Quality Plan No.QEQ:0333 VER:01*	*FLOW TECH. PUMPS & MOTORS*	*18070820*
Group Name	COMPARTMENT			
**	*42980963-3, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
Group Name	MLT SECTION			
**	*31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER*	*ICF/ELECT/067 REV-A, CS-1.*	*MB & COMPANY*	*2018-05-002*
**	*42980963-1, PUBLIC ADDRESSING SYSTEM*	*EDTS 292*	*PROZONE*	*AHUJA-*
**	*42980963-2, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*42982728-5, FLASHER UNIT*	*EDTS-053 REV-B CORG-1.*	*NEC SWITCHGEARS & CONTROLS*	*MPT-18516*
**	*42982789-1, SMOKE DETECTOR UNIT*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*SR. NO.2172*
**	*42982789-2, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*47980050-3, RECORDING CUM INDICATION UNIT*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*MTAME 1803144*
**	*47980050-4, S.C.B CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TSCU-1803219*
Group Name	BOGIE DRIVING END			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-1, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919205/185191*
**	*47030003-2, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919507/185191*
**	*47980050-2, PULSE GENERATOR JUNCTION BOX*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*AAL*
Group Name	BOGIE NON-DRIVING END			

ãtä ìÕvßë PëäÉëÜë

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 : 188060
RAILWAY CR DATE OF FITMENT: 15-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**BOGIE NON-DRIVING END**			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-3, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919166/185192*
**	*47030003-4, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919149/185192*

SSE/EL/QC	**AME/WM QC/DY CQM I**

ätä ìÕvßë PëäÉëÜë

RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	**8055**	BOGIE NO	**185193 / 185194**		DISPATCH DATE	**20-SEP-18**		
2.	RAILWAY	**CR**	TYPE OF COACH	**MEMUMC AS**		COACH NO	**188059**		
3.	BOOKED TO		**SSE/C&W/CSTM**						
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 ligth		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/cm2 of BC	Less than 05 Sec
			Brake release time to reach 0.4 Kg/cm2	Less than 20 Sec
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 in 60 Sec	No brake application
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 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**	**GS**	**85 / 85**
	8.2	Application of PCN-123	**SATISFACTORY**		
	8.3	Insulation	**SATISFACTORY**		

9.	Traceability of Furnishing Items:		
	1	**FLOOR BOARD**	**TWPL**
	2	**PVC**	**RESPONSIVE**
	3	**EP BRAK / BRAKE EQUIPMENT**	**ESCORTS**
	4	**UIC VESTIBULES**	**CEMCON**
	5	**SEAT & BEARTH**	**AAR KAY FOAM**
10.	10.1	**Modification/ Trial (If any): NIL**	
	10.2	**Deviations (If any): NIL**	

ãää ìÕvßë PëäÉëÜë

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
		8055	CR	MEMUMC AS	188059	20-SEP-18

11.1 BOGIE GENERAL ARRANGEMENT DRAWING NO.: **CC00002 Alt "a"**

11.2 **Wheel & Axle Details:**

i.	Bogie No.	185193				185194			
ii.	Frame No.	ECBT-227				ECBT-220			
iii	Bolster No.	RSM-5193				RSM-5194			
iv.	Axle No.	D-6800		F-1805		B-1533		D-6778	
v.	Wheel Diameter	954.00	954.00	954.00	954.00	953.00	953.00	953.00	953.00
vi.	Wheel Disc No.	36651-04772-SAIL	37146-05130-SAIL	34249-03801-SAIL	31874-03377-SAIL	34364-04127-SAIL	03360-03497-SAIL	20752-00244-SAIL	14283-15998-SAIL
vii	RB Nos	Z0573	Z0651	Z0412	Z0413	Z0646	Z0667	Y179	Y223
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-K1464,K1441,K1551,K1528	PEW-K1476,K1326,K1369,K1318
ii.	Secondary shock Absorber Make & NO.	GABRIEL-373,377	IAI-197983,198000
iii.	Lateral Shock Absorber Make & NO.	IAI-199016,198913	IAI-198302,198888
iv.	Air Spring Make & NO.	SI-1689,1683	SI-1722,1738

11.4	i.	Modification/Trail(if any):	NIL
	ii.	Deviations (if any):	NIL

MEMUMC AS - 8055

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 : 8055** **COACH_NO : 188059**
RAILWAY CR **COUPLING TYPE : NONCBC** **DATE OF FITMENT: 20-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NO GROUP DEFINED			
**	*42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.*	*EPTS-200*	*M.V ELECTRO SYSTEM PVT. LTD.*	*NIL*
Group Name	ABOVE ROOF			
**	*31760041-1, PANTOGRAPH FOR MEMU COACHES*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-4890*
**	*31760041-2, SERVO MOTOR FOR PANTOGRAPH*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-4890*
**	*31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH*	*COS-033-P-052/R5*	*INSULATOR & ELECTRICAL CO.*	*IEC*
**	*45970038-18, EARTHING SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180204A032*
**	*45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR*	*RDSO EI/2/05 AND QUALITY PLAN NO :QEQ320 VER-01*	*CGL (ZINC OXIDE)*	*212839*
**	*47986104-1, VACCUM CIRCUIT BREAKER 25KV*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*VCB-60*
Group Name	H.T.CABIN			
**	*42982789-3, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*42982855-1, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982855-2, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-1, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-2, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*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.*	*CEC-R18E3453*
**	*45970038-19, CURRENT TRANSFORMER -1*	*EMP/BHEL/MEMU2*	*BHEL*	*2471056*
**	*45970038-20, CURRENT TRANSFORMER -2*	*EMP/BHEL/MEMU2*	*BHEL*	*2473000*
**	*45970038-21, CONSERVATOR TANK*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-22, HT BUSHING*	*EMP/BHEL/MEMU2*	*BHEL*	*N.N.K.ENTERPERISES*

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 : 188059
RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**H.T.CABIN**			
**	*45970038-23, CHOKE*	*EMP/BHEL/MEMU2*	*BHEL*	*SR-2046208, DC-2046294, TC-2046381*
**	*45970622-1, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-594*
**	*45970622-2, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-576*
Group Name	**MLT PANEL**			
**	*42982662-5, CENTER ZERO METER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*INDOTECH MAKE*
**	*42982728-1, MLT PANEL*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*2018-06-0199*
**	*42982728-2, EARTH FAULT RELAY II*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*MEGAWIN-17110003958*
**	*42982728-3, DIODE PANEL*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*NEC*
**	*42982728-4, GOVERNOR CUT OUT SWITCH*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*NEC*
**	*42982728-6, BATTERY ISOLATING SWITCH*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*L & T DN2-250D*
**	*45970038-2, LIGHT CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-3, FAN CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-4, AUX.COMP CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1700248114*
**	*45970038-5, MAIN COMP. CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1700249092*
**	*45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*1700255071*
**	*45970038-7, MT RELAY PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*1800258013*
**	*45970038-8, RESISTANCE PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*170299B094*
**	*45970038-25, KNIFE SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*170299A094*
**	*47986104-2, RC DAMPING RESISTANCE 1*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9551*
**	*47986104-3, RC DAMPING RESISTANCE 2*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9232*
Group Name	**DRIVING SECTION**			
**	*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*
**	*42982662-1, INTEGRATED DRIVER DESK PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2590*

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 : 188059
RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	DRIVING SECTION			
**	*42982662-2, TRACTION AMMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-3, TRACTION VOLMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-4, BATTERY VOLTMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*MAA LUXMI-3352*
**	*42982662-7, DRIVER INDICATION PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2590*
**	*45970038-1, PANTO OPERATING VALVE*	*EMP/BHEL/MEMU2*	*BHEL*	*ROTEX*
**	*45970038-9, ISOALTING SWITCH PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*NEC*
**	*45970038-11, MASTER CONTROLLER*	*EMP/BHEL/MEMU2*	*BHEL*	*1800269031*
**	*45970038-13, MOTOR SWITCH GROUP 1*	*EMP/BHEL/MEMU2*	*BHEL*	*17221AT117*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
**	*47980050-5, P.T CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TPTU-1806045*
Group Name	DRIVING END			
**	*31726161-2, 24V DC TO DC CONVERTER*	*RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.*	*MITSUSHI POWER TECH.*	*MPT-15496*
**	*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-749*
**	*31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH*	*EM75005*	*NEC SW. GEARS & CONTROLS*	*2017-11-4576, 4746*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
**	*47980050-1, PULSE GENERATOR*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*PGD-1803347*
Group Name	NON-DRIVING END			

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 : 188059

RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NON-DRIVING END			
**	*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*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
Group Name	UNDER FRAME			
**	*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*	*K.R.ENGG.YAMUNANAGAR*	*82 (08/2018)*
**	*33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE*	*RDSO/PE/Spec./AC/0009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)*	*AMARA RAJA BATTERIES LTD.*	*06/2018*
**	*35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR*	*ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.*	*NIPPON KUHLERS*	*2018-08-32*
**	*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.*	*LD2/04/3093/2018*
**	*45970038-10, HT EARTHING LINKS*	*EMP/BHEL/MEMU2*	*BHEL*	*1700263280,281,282*
**	*45970038-12, TRANSITION RESISTANCE*	*EMP/BHEL/MEMU2*	*BHEL*	*1800261003*
**	*45970038-14, MOTOR SWITCH GROUP 2*	*EMP/BHEL/MEMU2*	*BHEL*	*17221BT115*
**	*45970038-15, PFDR CUM FUSE BOX*	*EMP/BHEL/MEMU2*	*BHEL*	*18297AT003*
**	*45970038-16, TAP CHANGER*	*EMP/BHEL/MEMU2*	*BHEL*	*170207A111*
**	*45970038-17, MAIN TRANSFORMER*	*EMP/BHEL/MEMU2*	*BHEL*	*2046123*
**	*45970038-24, BUCHHOLZ RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*P&B 333L2*
**	*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.*	*ERCSQ 50053*

ãlä ìÕvßë PëäÉëÜë

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 : 188059

RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	UNDER FRAME			
**	*45970634-0, MAIN SILICON RECTIFIER*	*ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311*	*RUTTONSHAH INTERNATIONAL RECTIFIER LTD.*	*1806/1866/1886*
**	*45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR*	*EDTS 088 and Quality Plan No.QEQ:0333 VER:01*	*FLOW TECH. PUMPS & MOTORS*	*18070831*
Group Name	COMPARTMENT			
**	*42980963-3, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
Group Name	MLT SECTION			
**	*31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER*	*ICF/ELECT/067 REV-A, CS-1.*	*MB & COMPANY*	*2018-05-.....*
**	*42980963-1, PUBLIC ADDRESSING SYSTEM*	*EDTS 292*	*PROZONE*	*AHUJA-4387054*
**	*42980963-2, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*42982728-5, FLASHER UNIT*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*MPT-18782*
**	*42982789-1, SMOKE DETECTOR UNIT*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*2164*
**	*42982789-2, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*47980050-3, RECORDING CUM INDICATION UNIT*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*MTAME 1803134*
**	*47980050-4, S.C.B CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TSCU-1806039*
Group Name	BOGIE DRIVING END			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-1, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919209/185193*
**	*47030003-2, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919172/185193*
**	*47980050-2, PULSE GENERATOR JUNCTION BOX*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*AAL*
Group Name	BOGIE NON-DRIVING END			

ãlä ìÕvßë PëäÉëÜë

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 : 188059
RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**BOGIE NON-DRIVING END**			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-3, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919171/185194*
**	*47030003-4, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919211/185194*

SSE/EL/QC	**AME/WM QC/DY CQM I**

ätä ìÕvßë PëäÉëÜë

RAIL COACH FACTORY, KAPURTHALA

ROLLING STOCK CERTIFICATE (NON-LHB)

(FORM NO. QMF 4254 VER.1.00)

1.	SHELL NO	**8056**	BOGIE NO	**185195 / 185196**		DISPATCH DATE	**20-SEP-18**		
2.	RAILWAY	**CR**	TYPE OF COACH	**MEMUMC AS**		COACH NO	**188061**		
3.	BOOKED TO		**SSE/C&W/CSTM**						
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 ligth		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/cm2 of BC	Less than 05 Sec
			Brake release time to reach 0.4 Kg/cm2	Less than 20 Sec
	7.2	Insensitivity	BP dipped @ 0.30 Kg/cm2 in 60 Sec	No brake application
	7.3	Sensitivity	BP dipped @ 0.60 Kg/cm2 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**	**GS**	**85 / 85**
	8.2	Application of PCN-123	**SATISFACTORY**		
	8.3	Insulation	**SATISFACTORY**		

9.	Traceability of Furnishing Items:		
	1	**FLOOR BOARD**	**TWPL**
	2	**PVC**	**RESPONSIVE**
	3	**EP BRAK / BRAKE EQUIPMENT**	**ESCORTS**
	4	**UIC VESTIBULES**	**CEMCON**
	5	**SEAT & BEARTH**	**CPF**
10.	10.1	**Modification/ Trial (If any): NIL**	
	10.2	**Deviations (If any): NIL**	

ãlä ìÕvßë PëäÉëÜë

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
		8056	**CR**	**MEMUMC AS**	**188061**	**20-SEP-18**

11.1 BOGIE GENERAL ARRANGEMENT DRAWING NO.: **CC00002 Alt "a"**

11.2 **Wheel & Axle Details:**

i.	Bogie No.	**185195**				**185196**			
ii.	Frame No.	**KE-53**				**ECBT-198**			
iii	Bolster No.	**RSM-5195**				**BI-5196**			
iv.	Axle No.	**B-1488**		**D-0559**		**L-9994**		**D-6693**	
v.	Wheel Diameter	**953.00**	**953.00**	**953.00**	**953.00**	**954.00**	**954.00**	**954.00**	**954.00**
vi.	Wheel Disc No.	**34330-03801-SAIL**	**34362-04127-SAIL**	**14319-15998-SAIL**	**14312-15998-SAIL**	**14249-15998-SAIL**	**20768-00244-SAIL**	**14324-15998-SAIL**	**14323-15998-SAIL**
vii	RB Nos	**Z0669**	**Z0664**	**Y180**	**Y228**	**Y239**	**Y242**	**Y052**	**Y474**
viii	RB Make	**FAG**		**FAG**		**FAG**		**FAG**	
ix	RB Type	**Direct Mounted Spherical Roller Bearing**							

11.3 Items traceability:

i.	Break Cylinder Make & No.	**AJTECH-0230,0226,0186,0155**	**PEW-E1264,E426,E10006,E9963**
ii.	Secondary shock Absorber Make & NO.	**GABRIEL-359,370**	**GABRIEL-383,385**
iii.	Lateral Shock Absorber Make & NO.	**IAI-198845,198833**	**IAI-196825,198855**
iv.	Air Spring Make & NO.	**SI-1768,1764**	**SI-1590,1582**

11.4	i.	Modification/Trail(if any):	**NIL**
	ii.	Deviations (if any):	**NIL**

MEMUMC AS - 8056

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 : 8056** **COACH_NO : 188061**
RAILWAY CR **COUPLING TYPE : NONCBC** **DATE OF FITMENT: 20-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NO GROUP DEFINED			
**	*42983015-1, CABLE HARNESS LAYING & COMMISSIONING OF DMC COACH.*	*EPTS-200*	*M.V ELECTRO SYSTEM PVT. LTD.*	*NIL*
Group Name	ABOVE ROOF			
**	*31760041-1, PANTOGRAPH FOR MEMU COACHES*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-5045*
**	*31760041-2, SERVO MOTOR FOR PANTOGRAPH*	*MEMU/DESC-I,REV.-A (QUALITY PLAN QEQ 0331,VER.-01*	*CONTRANSYS PVT. LTD.*	*B-5045*
**	*31907210-0, ROOF FEET INSULATOR FOR PANTOGRAPH*	*COS-033-P-052/R5*	*INSULATOR & ELECTRICAL CO.*	*IEC*
**	*45970038-18, EARTHING SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180204A029*
**	*45970804-0, METAL OXIDE GAPLESS LIGHTNING ARRESTOR*	*RDSO EI/2/05 AND QUALITY PLAN NO :QEQ320 VER-01*	*CGL (ZINC OXIDE)*	*212837*
**	*47986104-1, VACCUM CIRCUIT BREAKER 25KV*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*VCB-25*
Group Name	H.T.CABIN			
**	*42982789-3, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*42982855-1, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982855-2, RESISTER BOX*	*BHEL CAT NO. 05750030020 REV-OO*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-1, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*42982866-2, CONTACTOR BOX WITH GP RELAY*	*BHEL CAT NO. 15730030044 REV-02*	*BHOPAL ELECTRICAL INSULATION LTD.*	*BEIL*
**	*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.*	*CEC-R18E3560*
**	*45970038-19, CURRENT TRANSFORMER -1*	*EMP/BHEL/MEMU2*	*BHEL*	*2471045*
**	*45970038-20, CURRENT TRANSFORMER -2*	*EMP/BHEL/MEMU2*	*BHEL*	*2471042*
**	*45970038-21, CONSERVATOR TANK*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-22, HT BUSHING*	*EMP/BHEL/MEMU2*	*BHEL*	*N.N.K.ENTERPERISES*

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 : 188061
RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**H.T.CABIN**			
**	*45970038-23, CHOKE*	*EMP/BHEL/MEMU2*	*BHEL*	*SR-2046236, DC-2046322, TC-2046408*
**	*45970622-1, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-558*
**	*45970622-2, ADDITIONAL SMOOTHING REACTOR*	*EDTS-126*	*RAMYAA ELECTROGEAR*	*1803-26-585*
Group Name	**MLT PANEL**			
**	*42982662-5, CENTER ZERO METER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*INDOTECH MAKE*
**	*42982728-1, MLT PANEL*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*2018-06-0224*
**	*42982728-2, EARTH FAULT RELAY II*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*MEGAWIN-18030005080*
**	*42982728-3, DIODE PANEL*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*IRES*
**	*42982728-4, GOVERNOR CUT OUT SWITCH*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*IRES*
**	*42982728-6, BATTERY ISOLATING SWITCH*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*L & T DN2-250D*
**	*45970038-2, LIGHT CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-3, FAN CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*NIL*
**	*45970038-4, AUX.COMP CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800248036*
**	*45970038-5, MAIN COMP. CONTACTOR*	*EMP/BHEL/MEMU2*	*BHEL*	*1800249031*
**	*45970038-6, PRIMARY OVER LOAD & EARTH FAULT RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*1800255029*
**	*45970038-7, MT RELAY PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*1800258031*
**	*45970038-8, RESISTANCE PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*180299B032*
**	*45970038-25, KNIFE SWITCH*	*EMP/BHEL/MEMU2*	*BHEL*	*180299A029*
**	*47986104-2, RC DAMPING RESISTANCE 1*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*9137*
**	*47986104-3, RC DAMPING RESISTANCE 2*	*CLW/ES/C-47 AND QUALITY PLAN NO : QEQ 0309 VER-01.*	*SCHNEIDER ELECTRIC INTRASTRUCTURE LTD.*	*830*
Group Name	**DRIVING SECTION**			
**	*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*
**	*42982662-1, INTEGRATED DRIVER DESK PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2589*

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 : 188061
RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	DRIVING SECTION			
**	*42982662-2, TRACTION AMMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-3, TRACTION VOLMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-4, BATTERY VOLTMETER*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*AE MAKE*
**	*42982662-6, DRIVER CONTROL SWITCH BOX (B.L.BOX)*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*MAA LUXMI-3355*
**	*42982662-7, DRIVER INDICATION PANEL*	*EDTS-069 REV-B.*	*NEC SWITCHGEARS & CONTROLS*	*2018-07-2589*
**	*45970038-1, PANTO OPERATING VALVE*	*EMP/BHEL/MEMU2*	*BHEL*	*ROTEX*
**	*45970038-9, ISOALTING SWITCH PANEL*	*EMP/BHEL/MEMU2*	*BHEL*	*IRES*
**	*45970038-11, MASTER CONTROLLER*	*EMP/BHEL/MEMU2*	*BHEL*	*1800269029*
**	*45970038-13, MOTOR SWITCH GROUP 1*	*EMP/BHEL/MEMU2*	*BHEL*	*17221AT118*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
**	*47980050-5, P.T CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TPTU-1803216*
Group Name	DRIVING END			
**	*31726161-2, 24V DC TO DC CONVERTER*	*RDSO SPEC.NO.ELRS/SPEC/PR/0024,WITH DC-DC CONVERTER TO SPEC.NO.*	*MITSUSHI POWER TECH.*	*MPT-15431*
**	*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-738*
**	*31750564-0, TERMINAL BOARDS END WALL FOR MEMU/DMC COACH*	*EM75005*	*NEC SW. GEARS & CONTROLS*	*2017-11-4696, 4570*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
**	*47980050-1, PULSE GENERATOR*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*PGD-1803348*
Group Name	NON-DRIVING END			

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 : 188061

RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	NON-DRIVING END			
**	*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*
**	*45982697-0, SET OF INTERVEHICAL COUPLER*	*EDML003 REV-A WITH RCF ANNEXURE*	*S-INTERNATIONALS*	*S-INT.*
Group Name	UNDER FRAME			
**	*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*	*K.R.ENGG.YAMUNANAGAR*	*77 (08/2018)*
**	*33614477-0, 110V, 120AH, VRLA, SMF BATTERY SET WITH 19 MONO BLOCKS (6V MONO BLOCK EACH) PRECHARGED WITH INTER CE*	*RDSO/PE/Spec./AC/0009/2008 (Rev.1 WITH AM-1,RCF ANNX.-A)*	*AMARA RAJA BATTERIES LTD.*	*06/2018*
**	*35981647-0, TRANSFORMER OIL COOLER WITH BLOWER MOTOR*	*ICF/ELEC:014 AND QUALITY PLAN NO : QEQ 0313 VER-01.*	*NIPPON KUHLERS*	*2018-08-47*
**	*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.*	*LD2/04/3082/2018*
**	*45970038-10, HT EARTHING LINKS*	*EMP/BHEL/MEMU2*	*BHEL*	*1800263005,004,012*
**	*45970038-12, TRANSITION RESISTANCE*	*EMP/BHEL/MEMU2*	*BHEL*	*1800261001*
**	*45970038-14, MOTOR SWITCH GROUP 2*	*EMP/BHEL/MEMU2*	*BHEL*	*17221BT116*
**	*45970038-15, PFDR CUM FUSE BOX*	*EMP/BHEL/MEMU2*	*BHEL*	*18297AT002*
**	*45970038-16, TAP CHANGER*	*EMP/BHEL/MEMU2*	*BHEL*	*170207A113*
**	*45970038-17, MAIN TRANSFORMER*	*EMP/BHEL/MEMU2*	*BHEL*	*2046138*
**	*45970038-24, BUCHHOLZ RELAY*	*EMP/BHEL/MEMU2*	*BHEL*	*P&B 218M2*
**	*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.*	*ERDSQ 50074*

ãlä ìÕvßë PëäÉëÜë

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 : 188061

RAILWAY CR DATE OF FITMENT: 20-SEP-18

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	UNDER FRAME			
**	*45970634-0, MAIN SILICON RECTIFIER*	*ICF/ELECT/21 REV.-A CORRECTION SLIP NO:2AND QUALITY PLAN NO : QEQ 0311*	*RUTTONSHAH INTERNATIONAL RECTIFIER LTD.*	*1805/1866/1868*
**	*45980822-0, OIL PUMP WITH MOTER AND STARTING CAPACITOR*	*EDTS 088 and Quality Plan No.QEQ:0333 VER:01*	*FLOW TECH. PUMPS & MOTORS*	*18070829*
Group Name	COMPARTMENT			
**	*42980963-3, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*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/0050(2010,REV-1)*	*LIGHT ENGINEERING CORPORATION*	*CONCORDE*
Group Name	MLT SECTION			
**	*31726239-0, BATTERY CHARGER WITH FILTER CHOKE & CONDENSER*	*ICF/ELECT/067 REV-A, CS-1.*	*MB & COMPANY*	*2018-05-07*
**	*42980963-1, PUBLIC ADDRESSING SYSTEM*	*EDTS 292*	*PROZONE*	*AHUJA-4387018*
**	*42980963-2, SPEAKERS*	*EDTS 292*	*PROZONE*	*AHUJA*
**	*42982728-5, FLASHER UNIT*	*EDTS-053 REV-B CORG-1.*	*INDO RAIL ENGG. SYSTEMS*	*MPT-19273*
**	*42982789-1, SMOKE DETECTOR UNIT*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*S.NO.2056*
**	*42982789-2, SMOKE SENSOR*	*EDTS087*	*PRECISION SAFETY EQUIPMENTS*	*GST MARKED*
**	*47980050-3, RECORDING CUM INDICATION UNIT*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*MTAME 1801072*
**	*47980050-4, S.C.B CONTROL*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*TSCU-1803225*
Group Name	BOGIE DRIVING END			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-1, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919176/185195*
**	*47030003-2, TRACTION MOTOR/BOGIE 01*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919175/185195*
**	*47980050-2, PULSE GENERATOR JUNCTION BOX*	*RDSO/PE/SPEC/EMU/003 -2002REV-0 OCT02*	*AUTOMETERS ALLAINCE LTD.*	*AAL*
Group Name	BOGIE NON-DRIVING END			

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 : 188061**

RAILWAY CR **DATE OF FITMENT: 20-SEP-18**

S.No	PL No & Item Description	Drawing No	Make	Item Sr.No.(if any
Group Name	**BOGIE NON-DRIVING END**			
**	*45981930-0, MOTOR CONNECTION BOX FOR EMU'S*	*DRG.NO.EM71007 & QUALITY PLAN QEQ 0322 VERSION-01*	*INDIAN TELEPHONE & ELECTRIC CO*	*ITECO*
**	*47030003-3, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919177/185196*
**	*47030003-4, TRACTION MOTOR/BOGIE 02*	*RDSO/PE/SPEC/D/EMU/0047-2003*	*BHEL*	*4919208/185196*

SSE/EL/QC	**AME/WM QC/DY CQM I**