

Supply, Installation, Testing & Commissioning of Set of items for modification in Switch Board Cabinet to Spec. No. RDSO/PE/SPEC/ AC/0184-2015, Rev-0 for LHB EOG RA Non-AC Coach

Supply, Installation, Testing & Commissioning (SITC) of Switchgears as per under-given details for modification in existing SBC to spec. no. RDSO/PE/SPEC/AC/0184-2015, Rev-0 for LHB EOG Non-AC RA Coaches for 25 KVA, 3-Phase Inverter & Battery Circuit and Provision of Safety Devices in 220VAC Circuits. The scope of supply shall be as under:

Scope of Supply:

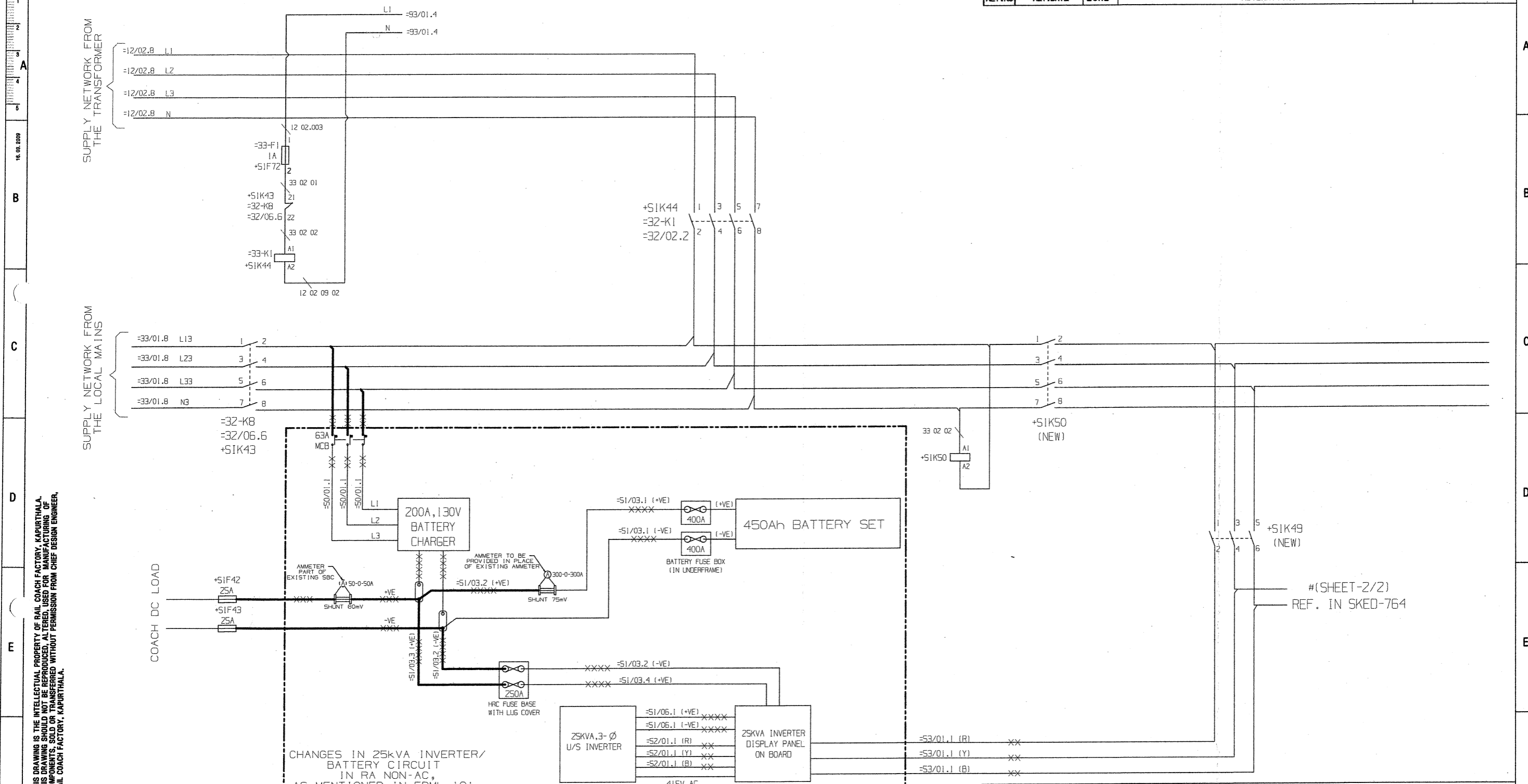
S.N.	Description	Spec. /Cat. no.	Equivalent Makes	QPC	Remarks
1.	Miniature Circuit Breaker 63A, 3-pole, 415V AC, C-Curve	S203MT-C63 of M/s ABB	ABB/Legrand/Schneider/L&T/Siemens/C&S/Eaton	01 no.	SBC (25kVA Inverter & Battery Circuit)
2.	Moving Coil Analog DC Ammeter 300-0-300A, DC with Shunt 300A, 75mV.	MR-72 of M/s Yokins	Yokins/AE/Muller-Zeigler/Rishabh/L&T	01 set	
3.	Shunt 100A, 60mV.	-	Yokins/AE/Muller-Zeigler/Rishabh/L&T	01 no.	
4.	Insulator	Part no. 05791 of M/s Wohner	Wohner/Eren/ RCF or RDSO Approved Make	02 nos.	
5.	Insulator	Part no. 05783 of M/s Wohner	Wohner/Eren/ RCF or RDSO Approved Make	02 nos.	
6.	Feed Through Terminal 250A	Part no. 03195 of M/s Wohner	Wohner/Wiedmuller/ Phoenix/WAGO/ RCF or RDSO Approved Make	02 nos.	
7.	Panel mounted 1 pole fuse base 250A, with shock protection cover	Part no. 03762 of M/s Wohner	Wohner/Siemens/ABB/ Ferraz/Eaton/L&T	02 nos.	
8.	HRC fuse link 250A Size1, NH type	Part no. 03561 of M/s Wohner	Wohner/Siemens/ABB/ Ferraz/Eaton/L&T	02 nos.	
9.	Grip lug cover for 250A, NH fuse base	79449 of M/s Wohner	Wohner/Siemens/ABB/ Ferraz/Eaton/L&T	02 nos.	
10.	Miniature circuit breaker 16A , 2-pole, 230V AC, C-Curve	S202MT-C16 of M/s ABB	ABB/Legrand/Schneider/L&T/Siemens/C&S/Eaton	06 nos.	
11.	Miniature circuit breaker 6A , 2-pole, 230V AC, C-Curve	S202MT-C6 of M/s ABB	ABB/Legrand/Schneider/L&T/Siemens/C&S/Eaton	02 nos.	

Note:

1. The Switchgears shall be installed and commissioned by supplier in the switch board cabinet.
2. Necessary wiring modification in circuit shall be done as per SKED-860.
3. Crimping sockets, marking ferrules, hardware & other accessories required for installation/commissioning inside SBC at RCF shall be in the scope of supplier.
4. Supply of E-Beam cable will be in RCF scope; however Installation & Commissioning will be in firm's scope.

EDML-191	0	28/06/2022	<i>Woj</i>	<i>Blum</i>	<i>Suhani</i>	1 of 1
Document No.	Rev.	Date	SSE/CAD	SEE/D	DY.CEE/D&D	Page

1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----



THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RAIL COACH FACTORY, KAPURTHALA. THIS DRAWING SHOULD NOT BE REPRODUCED, ALTERED, USED FOR MANUFACTURE OF COMPONENTS, SOLD OR TRANSFERRED WITHOUT PERMISSION FROM CHIEF DESIGN ENGINEER, RAIL COACH FACTORY, KAPURTHALA.

CHANGES IN 25kVA INVERTER/ BATTERY CIRCUIT IN RA NON-AC, AS MENTIONED IN EDML-191.

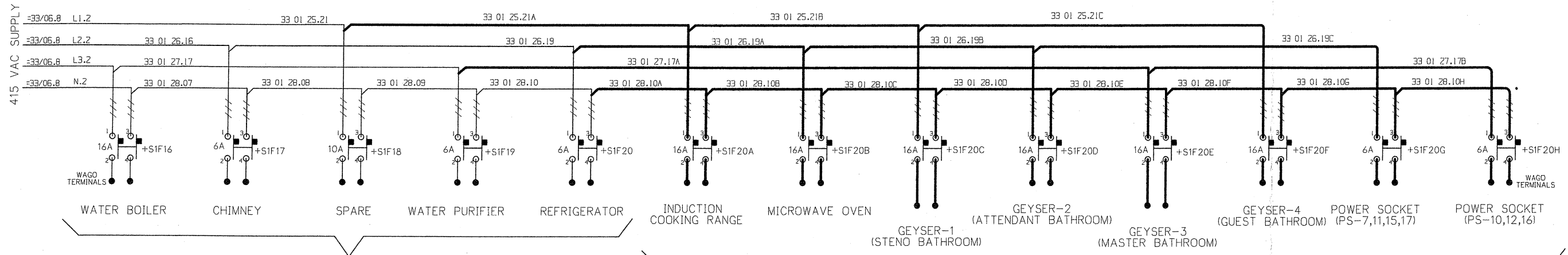
CABLE SIZE	50SQMM	25SQMM	16SQMM	10SQMM	6SQMM	4SQMM	2.5SQMM	1.5SQMM	THIN WALLED FLEXIBLE ELASTOMERIC CABLES WITH COPPER CONDUCTOR UPTO 750V TO RDSO SPEC. NO. ELRS/SPEC/ELC/0019,REV-4
SYMBOL	XXXX	XXX	XX	X	---	---	---	---	

WELD LENGTH	NIL	ITEM	NIL	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	NIL	MATL. & SPEC.	NIL	REMARKS	NIL	
NIL	M	GROUP	ELECTRICAL		SUPERSEDES: NIL							
WEIGHT	FILE	Z:\SKED-860s1.prt										
NIL	KG	MODIFICATION IN 25kVA INVERTER & BATTERY CIRCUIT AND PROVISION OF SAFETY DEVICES IN 220VAC CIRCUIT IN SBC FOR LHB NON-AC RA COACHES								SCALE	SSE/ED	
NIL	M ²									CHD		
LENGTH	-D+A									DRN		
NIL	M	RAIL COACH FACTORY, KAPURTHALA								REF.DRG.No.	NIL	
WIDTH	THICK	रेल कोच फेक्टरी कपूरथला								PL NO.	NIL	
NIL	M	SEE/D&D								DRG.NO.	SKED-860	
HEIGHT	M	SEE/D&D								ALT.	NIL	SIZE A2 SHEET 1/2
NIL	M	DY.CEE/D&D										

G
 DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE
 ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.
 FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 28/06/2022

1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----

ALT.NO	ALT.DATE	ZONE	ALTERATIONS	AUTHORITY
NIL	NIL	NIL	NIL	NIL



EXISTING MCB'S AVAILABLE IN SBC FOR PANTRY EQUIPMENTS AS PER RDSO/PE/SPEC/AC/0184-2015, REV-0

ADDITIONAL MCB'S TO BE PROVIDED IN SBC FOR PANTRY EQUIPMENTS/220V AC CIRCUIT

THIS DRAWING IS THE INTELLECTUAL PROPERTY OF RAIL COACH FACTORY, KAPURTHALA. THIS DRAWING SHOULD NOT BE REPRODUCED, ALTERED, USED FOR MANUFACTURING OF COMPONENTS, SOLD OR TRANSFERRED WITHOUT PERMISSION FROM CHIEF DESIGN ENGINEER, RAIL COACH FACTORY, KAPURTHALA.

6. WIRING MODIFICATION IN SBC WILL BE IN FIRM'S SCOPE AS SHOWN IN "BOLD" LINES, HOWEVER, E-BEAM CABLES WILL BE IN RCF SCOPE OF SUPPLY.
5. SWITCHGEARS REMOVED FROM SBC IN LIEU OF EDML-191 SHALL BE HANDED OVER TO CONCERNED SHOP.
4. SPACE FOR INSTALLING REMAINING SWITCHGEARS AS PER EDML-191 IS AVAILABLE IN LOWER PART OF SBC, THAT IS SPACE EARLIER PROVIDED FOR EBC'S. SUITABLE FIXING ARRANGEMENT FOR SWITCHGEARS AS PER AVAILABLE SPACE SHALL BE PROVIDED.
3. AMMETER 300-0-300A DC SHALL BE PROVIDED IN PLACE OF ONE NO. 50-0-50A DC AMMETER IN SBC.
2. ADDITIONAL MCB'S IN SWITCH BOARD CABINET SHALL BE INSTALLED ON DIN RAIL AVAILABLE FOR SECOND RMPU UNIT, AS ONLY SINGLE RMPU IS AVAILABLE IN NON-AC RA.
1. 1Ø 230V LOAD SHALL NOT BE OPERATED IN CASE OF 25KVA INVERTER SUPPLY.

NOTE:-

DETAIL DRGS STARTING WITH "LI" ARE INTERNAL REFERENCE LISTS ONLY AND ARE NOT FOR ISSUE
 ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID.

FOR UNTOLERANCED DIMENSIONS REFER MDG0008 DATE OF FIRST ISSUE 28/06/2022

NIL		NIL		NIL		NIL		NIL	
WELD LENGTH	ITEM	DESCRIPTION & DIMENSIONS	OPASSLY	DETAIL DRG	MATL. & SPEC.	REMARKS			
NIL	M	GROUP ELECTRICAL	SUPERSEDES: NIL						
WEIGHT	FILE	Z:\SKED-860s2.prt							
NIL	KG	MODIFICATION IN 25kVA INVERTER & BATTERY CIRCUIT AND PROVISION OF SAFETY DEVICES IN 220VAC CIRCUIT IN SBC FOR LHB NON-AC RA COACHES			SCALE	SSE/ED	[Signature]		
S. AREA	M ²					CHD	[Signature]		
LENGTH / DIA	M	RAIL COACH FACTORY, KAPURTHALA			REF.DRG.No.	NIL			
WIDTH / THICK	M	रेल कोच फैक्टरी कपूरथला		IRS	PL NO.	NIL			
HEIGHT	M	[Signature]		[Signature]	DRG.NO. SKED-860				
NIL	M	SEE/D&D	DY.CEE/D&D		ALT.	NIL	SIZE	A2	SHEET 2/2