

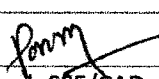
**Material list of Electrical items to be procured by RCF for manufacture of 16 car Vande Metro Trainset
(As per Medha Electrics for Vande Bharat as per RDSO specification RDSO/PE/SPEC/EMU/0196, Rev.0)**

SN	Description	Drawing/Specification	PL No.	Unit	Qty per Rake
1 (i)	Design, development, manufacture, supply, integration, testing and commissioning of IGBT based 3-phase propulsion, control and other equipment for train sets suitable for operation on 25KV AC OHE system conforming to RDSO specification along with latest addendum/corrigendum. Note: ICF PO no. 08220144D01393 dated 09.05.2022 on M/s Medha. PO items as per Table-1.	RDSO/PE/SPEC/ EMU/0196-2019 (rev.0)	31760697 (ICF)	16 car Rake set	01
(ii)	Fully Suspended Asynchronous Traction Motor (Underslung EMU) with all accessories, mounting hardware (without Gear drive and coupling arrangement) (Ref. drawing no. TSA016533, Rev. I) Note: The Traction motor shall be suitable for proposed 12/16 car Vande Metro rake planned with Medha Electrics as per RDSO specification RDSO/PE/SPEC/ EMU/0196-2019 (rev.0).	RDSO/PE/SPEC/EMU/00 96-2008(Rev.4) along with ICF Annexure- ICF/EMU/0096-01 (Rev.02)	--	No.	32
(iii)	Modification (upgradation) of Gear Box and coupling (against respective items of PO Sr. no. 004 of ICF PO no. 08220144D01393 dated 09.05.2022 on M/s Medha, PL No. 31711753) of Vande	RCF Desc-TS-05	ICF PO ref. 08235057 102986 dated 14.10.23	No.	32

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	Bharat Train set to make it compatible for Vande Metro Train suitable for Medha Electrics.				
2.	One coach set of RMPU & control unit consisting of 2 nos. of RMPU with 1 no. of microprocessor controller along with Meta-aramide supply air duct as per RDSO specification (latest). Note: Coordination with propulsion system supplier for interface (physical layout, communication protocol & algorithm) with TCMS & power supply system will be the responsibility of successful bidder.	RMPU generally conforming to but not limited to RDSO/PE/SPEC/AC/D/01 68-2012, Rev-(0) including complete accessories as per clause 2.2. OGA drawing no. ICF/SK3-7-6-040, alt 'ba'. Controller generally conforming to but not limited to RDSO/PE/SPEC/AC/0139-2009 (Rev- 1) with display unit and Auto/Manual changeover selection. OGA drawing no. ICF/SK3-7-5-026 Col. I & II.	30767441 (ICF)	Set	16
3.	Supply, Installation, Testing and Commissioning of TCAS (KAVACH) for use in Train set.	RCF Desc-TS-03	31711959 (ICF)	Set	02
4.	Panel mounting socket 63 Amps - 3 pin plus earth (6h) and suitable for mounting on bracket to ICF drg. No. AAB11964.	Socket similar to Cat.No-053823 of M/s Legrand.	36716352 (ICF)	No.	16
5.	Pump Monoblock Assembly	EDTS-186, Rev-A, AM-1&2, Corr.1 with ICF drg. No. ICF/SK3-7-1-089 (latest)	31711364 (ICF)	No.	16
6.	Pump Control Assembly	TRAIN18/TC/AC-7-5-003 (latest)	31759180 (ICF)	No.	16
7.	750 VA Inverter as per specification	ICF /Elec/172, Rev.0	31726495 (ICF)	No.	16

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8.	Set of Contactors, MCB's and Terminal Boards.	RCF Desc-TS-02	45014115 (ICF)	No.	16
9.	Hand Lamp Socket & Plug 10A, 250V AC	Cat No. AS10 & AP10 of M/s Schneider Elect. & equivalent make.	42984488 (RCF)	No.	32
10.	Silicone Sealant 300ml	similar to Grade 685 of grade 666 of M/s Anabond.	--	No.	84
11.	Cork Sheet 5X900X900	Compound of Granular cork with synthetic Rubber meeting the requirements of IS:4253 Part-II (Latest). The type and grade of cork composition shall be of RC 80-B of Table-1.	84134150 (ICF)	No.	20

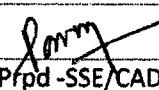
Note:

Works contract to be done by Electrical Production for:

"Complete wiring work in Vande Metro Trainset including Handling, Installation of Equipments, Cable Harness preparation, laying and connections at RCF"

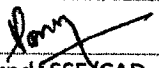
Table-1

SN	PO Sr. No.	PL NO.	Unit as per PO	Requirement for 1 Rake of Vande Metro
1	021	31760697	Set	1 Set
2	002	31711728	Set	4 set
3	031	31797090	Set	4 set
4	003	31711730	Set	4 set
5	004	31711741	Set	8 set
6	005	31711753	Nos.	32 Nos.
7	016	31720778	Set	1 set
8	017	31720780	Set	1 Set
9	026	31761112	Set	1 Set
10	039	31903678	Set	1 Set
11	035	31903629	Set	2 Set
12	023	31761057	Set	1 set
13	018	31720791	Set	2 Set
14	036	31903630	Set	1 set
15	043	31903812	Set	1 set

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16	037	31903642	Set	1 set
17	011	31711832	Set	4 set
18	006	31711765	Set	4 set
19	012	31711844	Set	1 set
20	001	31356898	Set	1 set
21	025	31761100	Set	16 sets
22	013	31711856	Set	2 set
23	014	31711881	Set	1 set
24	008	31711789	Set	1 set
25	009	31711790	Set	1 set
26	010	31711807	Set	Nil
27	015	31711893	Set	1 set
28	024	31761094	Set	4 set
29	020	31720833	Set	4 set
30	034	31903599	Set	2 set
31	038	31903666	Set	2 set
32	007	31711777	No.	16 No.
33	022	31761045	Set	1 No.
34	027	3176N033	Set	1 set
35	040	31903782	Set	Nil
36	032	31903563	No.	1 No.
37	033	31903575	Set	1 set
38	044	31903850	No.	1 No.
39	041	3176N038	Set	1 set
40	028	3176N039	Set	1 set
41	019	31720821	Set	Nil
42	042	31903800	Set	1set
43	029	3176N042	Set	Nil
44	030	3176N043	Set	Nil

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