

General Specification Of HT VCB panel

Note: Guideline / scheme for fire suppression system in Lift Control panels, LT panels, HVAC panel should be followed as per RDSO Letter No.- RDSO-EEM0LK0(GUID)/1/2026, Dated: 22.04.2026 or latest.

Incomer Panel

No.	Vacuum Circuit Breaker components details	Qty	Unit
VCB unit:			
1	11kV, 800A, 26.3kA for 3 sec, Cassette type, with spring charging motor rated 230VAC, tripping coil & closing coil suitable for 24VDC, Enclosed in IP-4X , 2mm thick MS sheet steel enclosure with RAL7032 powder coating. With inbuilt anti-pumping system. 6NO + 6NC contact.	1	Set
Current Transformer:			
2	300-150A/5+5A, CL-1+15VA, 5P10+15VA, double core, double ratio, STC 26.3 KA for 1sec. resign cast	3	Set
Line Potential Transformer:			
3	11000/V3/110/V3V, CL-1, 100VA, single core, fixed type. Potential transformer. With 3.15A 11kV fuse primary fuse protection.	1	Set
Protection equipments:			
4	IDMT relay 230VAC, 5A, 50, 50N, 51, 51N protection	1	Set
5	Master trip relay 86 protection, 24VDC	1	Set
6	Space heater	1	Set
7	Thermostat with "L" fixing bracket	1	Set
8	2A HG type fuse link IDMT relay auxiliary supply	2	Set
9	4A HG type fuse link PT Sec. Protection	3	Set
10	6A HG type fuse link for Closing, tripping, spring charge, AC DC indication, heater thermostat, plug socket	10	Set
11	10A HG type fuse link DC supply power pack	2	Set
12	16A HG type fuse link for auxiliary AC supply	1	Set
13	20A HD 20H Fuse base for HG fuse link	18	Set
Monitoring equipments:			
14	3PH,DigitalAmmeter,CL-1	1	Set
15	3PH,DigitalVoltmeter,CL-1	1	Set
16	Hooter,24VDC	1	No.
17	LED Indication lamp for breaker on-Red	1	Set
18	LED Indication lamp for breaker off-Green	1	Set
19	LED Indication lamp for breaker auto trip-Amber	1	Set
20	LED Indication lamp for breaker spring charge-Blue	1	Set
21	LED Indication lamp for trip circuit healthy-White	1	Set
22	LED Indication lamp for phase indication-Red, Yellow, blue	3	Set
Operation equipments:			
23	25A,Trip-Neutral-Closeswitch, spring return to Neutral	1	Set
24	16A,2P, 4 position, Local remote selector switch	1	Set
25	Emergency push button, push to stop turn to release.	1	Set
26	16A, 5Pin ,Plug & socket with toggle switch	1	Set
27	LV chamber 60Watt light fittings with door limit switch	1	Set
30	Push Button for Trip Circuit Healthy	1	Set
Enclosure:			

31	Indoor type,IP-4x, enclosure for LV compartment, PT chamber, Incoming & outgoing busbar compartment, dimension of entire VCB panel H 2080 x W 600 x D 1450 mm x thickness 1.6/2mm MS Sheet steel, color RAL-7032, Glossy finish, Incoming: back bottom entry, outgoing: front bottom exit.	1	Set
Cable:			
32	Internal connecting cable 1.5 sq mm & 2.5 sq mm Cu flexible cable	1	Set
Busbar:			
33	Main Busbar: 1x60x06 mm with PVC insulation sleeves & supporting insulator. PT Bus: 19X3mm Earth Busbar: 25x03 mm Cu. busbar. Current carrying capacity 800A.	1	Set

Outgoing Panel

No.	Vacuum Circuit Breaker components details	Qty	Unit
VCB unit:			
1	11kV, 800A, 26.3kA for 3 sec , Cassette type, with spring charging motor rated 230VAC, tripping coil & closing coil suitable for 24VDC, Enclosed in IP-4X, 2mm thick MS sheet steel enclosure with RAL7032 powder coating. With inbuilt anti-pumping system. 6NO+6N Ccontact.	2	Set
Current Transformer:			
2	50-100A/5+5A, CL-1+15VA, 5P10+15VA, double core, double ratio, STC 26.3KA for 1sec. resign cast	6	Set
Protection equipments:			
3	IDMT relay 230VAC, 5A, 50, 50N, 51, 51N protection	2	Set
4	Master trip relay 86 protection, 24VDC	2	Set
5	3 Elements Aux. Relay 63 protection, 24VDC	2	Set
6	Space heater	2	Set
7	Thermo stat with "L" fixing bracket	2	Set
8	2A HG type fuse link IDMT relay auxiliary supply	4	Set
9	4A HG type fuse link PT Sec. Protection	6	Set
10	6A HG type fuse link for Closing, tripping, spring charge, AC DC indication, heater thermostat, plug socket	20	Set
11	10A HG type fuse link DC supply power pack	4	Set
12	16A HG type fuse link for auxiliary AC supply	2	Set
13	20A HD 20H Fuse base for HG fuse link	36	Set
Monitoring equipments:			
13	3PH, Digital Ammeter, CL-1	2	Set
15	6 Windows Annunciator, 24VDC	2	No.
16	Hooter, 24VDC	2	No.
17	LED Indication lamp for breaker on-Red	2	Set
18	LED Indication lamp for breaker off-Green	2	Set
19	LED Indication lamp for breaker auto trip-Amber	2	Set
20	LED Indication lamp for breaker spring charge-Blue	2	Set
21	LED Indication lamp for trip circuit healthy-White	2	Set
Operation equipments:			
22	25A, Trip-Neutral-Closeswitch, spring return to Neutral	2	Set

23	16A, 2P, 4position, Local remote selector switch	2	Set
24	Emergency push button, push to stop turn to release.	2	Set
25	16A, 5Pin, Plug & socket with toggle switch	2	Set
26	LV chamber 60Watt light fittings with door limit switch	2	Set
27	Push Button for Trip Circuit Healthy	2	Set
Enclosure:			
28	Indoor type, IP-4x, enclosure for LV compartment, PT chamber, Incoming & outgoing bus bar compartment, dimension of entire VCB panel H 2080 x W 600 x D 1450 mm x thickness 1.6 / 2mm MS Sheet steel, color RAL-7032, Glossy finish, Incoming: back bottom entry, outgoing: front bottom exit.	2	Set
Cable:			
29	Internal connecting cable 1.5 sq mm & 2.5 sq mm Cu flexible cable	2	Set
Busbar:			
30	Main Busbar: 1x60x06 mm with PVC insulation sleeves & supporting insulator. PT Bus: 19X3 mm Earth Busbar: 25x03 mm Cu. busbar. Current carrying capacity 800A.	2	Set

WARRANTY / SERVICES:

Warranty on Complete HT VCB Panel - 30 months from date of supply and 24 month from date of installation whichever is earlier.

TEST REPORTS: Agree to provide all relevant documents Test Report / supporting document /reports etc. (from authorized government designated agency) to the buyer at the time of bidding or on demand

DOCUMENTATION:

Detailed technical manuals, handbooks, warranty card and factory quality assurance checklist, test results and any other certifications, if any, shall be supplied along with the consignment.

Supplied manuals/handbooks must cover detailed technical specifications and installation, operation, maintenance and system safety procedures.

The receipts for taxes paid, if any, for the supplied equipment should also be submitted.

Any other relevant documents, instruction manual, specifications or data necessary for satisfactory installation, operation and maintenance to be submitted as & when required.

DRAWINGS :

General Arrangement Drawing, Foundation Drawing, Structural Drawing or any other required drawing (if any) must be got approved by Sr. DEE/G/ASN or AEE/G/ASN before inspection & supply of items. These Drawings should have proper spaces for signature of checking authority & approval authority.

INSPECTION:

1. Supply items (like P&M items, Luminaries and any special items included in LOA having bid value more than Rs. 5,00,000/- should be inspected / tested by RITES (as per Railway Board's Circular) with firm cost at manufacturer's premises / site as decided by Railway.

2. Material supplied should be as per the description, scope and specification in the tender document. Contractor will intimate in advance for readiness of materials for inspection.

3 Manufacturers test certificates for the different test carried out should be submitted by the tenderer.

The decision of Railway Administration for inspection of supply items by RITES / Consignee by firm own cost over the matter will be final.

The description of scheduled item is indicative. Entire Electrical Work is to be done in line of relevant RDSO's specification & Guideline / scheme for fire suppression system in Lift Control panels, LT panels, HVAC panel should be followed as per RDSO Letter No.- RDSO-EEM0LKO(GUID)/1/2026, Dated: 22.04.2026 or latest or IS or PCEE/ER's specification & design, **Electrical General Service Manual ,Volume-I (Power Supply) & latest** or OEM Standardisation or equivalent international standard for detail technical specification and all other clauses, terms & conditions for design, manufacture, testing, supply, installation and commissioning followed by statutory rules and common prudence and shall confirm to the rules & regulations of Railways.**The decision of Railway Administration over the standardisation & make for execution of the work will be final.**

The eligible contractor must furnish the detail of material which is proposed to be supplied or used inevitably got approved from Sr.DEE(G)/ASN or Sr.SE/Elect/G- the Supervision-in-charge of the work or authorized representative of Sr. SE/Elect/G before commencement of work. Decision of Railway administration over the standardisation& make of all the material for the items of work schedule will be final.

PUBLIC PROCUREMENT POLICY (MAKE IN INDIA):Bidder must follow Public Procurement Policy (Make in India) Order 2017, dated 15/06/2017, issued by Department of Industrial Promotion and Policy, Ministry of Commerce, circulated vide Railway Board letter no. 2015/RS(G)/779/5 dated 03/08/2017 and 27/12/2017.The definition and calculation of local content in accordance with the Make in India policy as approved by PCEE/ER is 50% of Minimum Local Content (MLC).

NOTE:-

These technical details / general specifications are indicative only. In case of any ambiguity in the General specification or Technical Details it may be collected from Sr. DEE (G)/Asansol's office if required. All items pertaining to Electrical should confirm to relevant IS or equivalent international standard. Any deviation must be got approved by Sr.DEE/G/ASN.

Any typographical error shall not be construed to be benefit of the Contractor; In all cases the interpretation and decision of Sr.DEE/G/ASN shall be final and binding upon the contractor.

The issues not covered under these tender documents shall be governed by General Conditions of Contract April-2022 or its time to time latest amendments if any.

**Sr. Divl. Electrical Engineer (Genl.)
Eastern Railway, Asansol**