

Tender Item	Group/Activity Type	Material Name	Technical Specifications	Quantity
Panel Enclosure & Construction	Panel Fabrication [Design, Fabrication, Assembly, Supplying, Erection, Testing, Commissioning]	Cubicle Type Switchboard Panel	<ul style="list-style-type: none"> <li>• <b>Type:</b> Form 4B</li> <li>• <b>IP Rating:</b> IP42 (Dust/Vermin proof)</li> <li>• <b>Sheet:</b> 2 mm CRCA</li> <li>• <b>Compliance:</b> IS 8623/IEC 60439</li> <li>• <b>Fault Level:</b> 36 kA (Symmetrical)</li> <li>• <b>System:</b> 433V, 3-phase, 4-wire, 50Hz</li> <li>• <b>Doors:</b> Hinged, gasketed, lockable</li> <li>• <b>Accessories:</b> 3 mm Gland plates (top &amp; bottom), lifting hooks, structural reinforcement</li> <li>• <b>Earthing:</b> Earth bus, 2 terminals, 36 kA rated</li> <li>• <b>Finish:</b> 7-tank treated paint (approved shade)</li> </ul>	1 Set
	Circuit Breakers (MCCBs) [Supplying, Installing]	Incomer MCCBs	<ul style="list-style-type: none"> <li>• <b>Rating:</b> 400A, 4 Pole, 36 kA</li> <li>• <b>Trip Type:</b> Thermal Magnetic (O/L, S/C, E/F)</li> <li>• <b>Ics Rating:</b> 100% Icu</li> <li>• <b>Handle:</b> Rotary extended</li> <li>• <b>Accessories:</b> Spreader link</li> <li>• <b>Indications:</b> RYB lamp (2 sets), ON/OFF/TRIP lamps (2 sets)</li> <li>• <b>Control:</b> 2A SP MCB</li> <li>• <b>Metering:</b> Digital Multifunction Meter &amp; CTs (Class 1.0 accuracy)</li> </ul>	2 Nos.
		Bus-coupler MCCB	<ul style="list-style-type: none"> <li>• <b>Rating:</b> 400A, 4 Pole, 36 kA</li> <li>• <b>Trip Type:</b> Thermal Magnetic (O/L, S/C, E/F)</li> <li>• <b>Ics Rating:</b> 100% Icu</li> <li>• <b>Handle:</b> Rotary extended</li> <li>• <b>Accessories:</b> Spreader link</li> <li>• <b>Indications:</b> ON/OFF/TRIP lamps (1 set)</li> <li>• <b>Control:</b> 2A SP MCB</li> <li>• <b>Interlocking:</b> Mechanical with incomers</li> </ul>	1 No.
		Outgoing MCCBs	<ul style="list-style-type: none"> <li>• <b>Ratings:</b> 200A(2), 160A(2), 100A(4), 63A(12)</li> <li>• <b>Poles:</b> 4 Pole, 36 kA</li> <li>• <b>Trip Type:</b> Thermal Magnetic (O/L, S/C, E/F)</li> <li>• <b>Ics Rating:</b> 100% Icu</li> <li>• <b>Handle:</b> Rotary extended, spreader links</li> <li>• <b>Indications:</b> ON/OFF/TRIP lamps (20 sets), RYB LED lamps (all)</li> <li>• <b>Control:</b> 2A SP MCB</li> </ul>	As specified
	Busbar System [Supplying, Installing]	TPN Aluminum Alloy Busbar	<ul style="list-style-type: none"> <li>• <b>Rating:</b> 400A</li> <li>• <b>Short Circuit:</b> 36kA (1 sec)</li> <li>• <b>Material:</b> High-conductivity Aluminum Alloy</li> <li>• <b>Supports:</b> Properly insulated &amp; supported</li> </ul>	1 Set
	Internal Wiring & Interconnections [Supplying, Installing]	Internal Wiring	<ul style="list-style-type: none"> <li>• <b>Wire:</b> PVC insulated Copper FRLS</li> <li>• <b>Sizes:</b> 1.8 &amp; 2.6 sq.mm (for CT/control circuits)</li> <li>• <b>Termination:</b> Neatly dressed &amp; terminated</li> </ul>	As required
		Busbar & Cable Connections	<ul style="list-style-type: none"> <li>• <b>Connections:</b> Properly bolted &amp; secured</li> <li>• <b>Cable Alley:</b> Adequately sized &amp; neatly arranged</li> </ul>	Included
	Instrumentation & Accessories [Supplying, Installing]	Digital Multifunction Meter	<ul style="list-style-type: none"> <li>• <b>Type:</b> Digital</li> <li>• <b>Accuracy:</b> Class 1.0</li> <li>• <b>Application:</b> Metering for incomers</li> </ul>	2 Nos.
		Current Transformers (CTs)	<ul style="list-style-type: none"> <li>• <b>Accuracy:</b> Class 1.0</li> <li>• <b>Ratio:</b> Suitable for incomer &amp; bus coupler ratings</li> </ul>	As required
		LED Indication Lamps	<ul style="list-style-type: none"> <li>• <b>Phase Indication:</b> RYB</li> <li>• <b>Status Indication:</b> ON/OFF/TRIP LED lamps</li> </ul>	As required
		Control MCB	<ul style="list-style-type: none"> <li>• <b>Rating:</b> 2A SP, 10 kA breaking capacity</li> <li>• <b>Purpose:</b> Lamp &amp; meter control</li> </ul>	As required
		Labels, Signage & Accessories	<ul style="list-style-type: none"> <li>• <b>Labels:</b> Numbering, sign-writing, Danger plates</li> </ul>	1 Set
	Mechanical Interlocking [Supplying, Installing]	Mechanical Interlocking Mechanism	<ul style="list-style-type: none"> <li>• <b>Purpose:</b> Prevent simultaneous closure of incomer &amp; bus-coupler MCCBs</li> </ul>	1 Set
	Glands & Earthing Terminals [Supplying, Installing]	Gland Plates	<ul style="list-style-type: none"> <li>• <b>Material:</b> CRCA</li> <li>• <b>Thickness:</b> 3 mm</li> <li>• <b>Location:</b> Detachable, top &amp; bottom</li> </ul>	2 Nos.
			<ul style="list-style-type: none"> <li>• <b>Suitability:</b> Suitable for 36 kA fault level</li> </ul>	2 Nos.