Technical Specifications Isolation Transformer:

1. Input :420 ±10% VAC, 3-phase
2. Output : 420 Volts, 3-phase, Ratio 1:1
3. Connection type: Star-Star
4. Isolation : 1. 350kV DC between secondary winding to primary winding
   2. 350 kV DC between secondary winding to core
   3. 3 kV DC between primary winding to core
5. Frequency : 50Hz ± 3Hz
6. Duty : Continuous
7. Power Rating : 15kVA, 3-phase
8. Regulation : <10 %
9. Leakage current: <200 μAmp
10. Efficiency : More than 90%
11. Maximum Temp rise : < 40 ^{0}C above ambient
12. Standard : IS 2026 as applicable
13. Design feature if transformer is Oil cooled: The transformer should be filled with high grade of transformer oil confirming to IEC-296 after drying under vacuum and moisture free environment. The flash point of oil shall be conforming to IEC-296, which is specified as 140^0 C (min). The transformer should be provided with specially designed breather filled with silica gel. The breather gel should be projected out
14. Dimension (L x W x H in m) : < 2.5m x 2.5m x 2m

Acceptance Criteria at Vendor Site:

1. IPR representative/ representatives should inspect the tests at manufacturer works and/or at test facility.
2. Following test should be conducted in the isolation transformer.

   a. Insulation resistance of transformer (megger test) : > 10 GOhm
   b. No load current test: < 25 mA
   c. High Voltage test between outputs and input terminals : >385 kV for 1 min and >350 kV for 10 min with leakage current measurement
   d. Max % regulation: < 10%
   e. Physical examination
   f. Efficiency at
      1. At full load > 90%
      2. 50 % load >90%
      3. 25 % load >90 %
   g. Temperature rise test

Acceptance Criteria at IPR Site:

3. Following test will be conducted in the isolation transformer by IPR personnel.
   a. Insulation resistance of transformer
   b. High Voltage test
   c. Physical examination
   d. Output voltage tests at no-load.

Compliance Table		
IPR Specification		**Vender Specification**
Input: 420 ±10% VAC, 3-phase		
Output: 420 Volts, 3-phase Ratio:- 1:1		
Connection type: Star-Star		
Isolation :	350 kV DC between secondary winding to Core	
	350kV DC between secondary winding to primary winding	
	3 kV DC between primary winding to core	
Frequency: 50Hz ± 3Hz		
Duty : Continuous		
Power Rating : 15kVA, 3-phase		
Regulation: <10 %		
Leakage current: <200 µAmp		
Efficiency: More than 90 %		
Maximum Temp rise: Less than 40^0C above ambient		
Standard : IS 2026 as applicable		
Dimension (LxWxH in m) : < 2.5 m x 2.5m x 2m		
Design feature if transformer is Oil cooled: The transformer will be filled with high grade of transformer oil confirming to IEC-296 after drying under vacuum and moisture free environment. The flash point of oil shall be conforming to IEC-296, which is specified as 140^0 C (min). The transformer will be provided with specially designed breather filled with silica gel. The breather gel will be projected out		
Acceptance Criteria: Following test shall be conducted in the isolation transformer.		
h. Insulation resistance test of transformer (megger test):> 10 Gohm		
i. No load current test : < 25 mA		
j. High Voltage test between outputs and input terminals : > 385 kV for 1min and >350 kV for 10 min with leakage current measurement.		
k. Max % Regulation : < 10%		
l. Physical examination		
m. Efficiency at		
1. At full load >90 %		
2. At 50 % load >90%		
3. At 25% load >90 %		
n. Temperature rise test		
Acceptance Criteria at IPR Site: 4. Following test shall be conducted in the isolation transformer. a. Insulation resistance of transformer b. High Voltage test c. Physical examination d. Output voltage tests at no-load.		