

Laboratory **Energypac Testing Laboratory, Baruipara, Ashulia, Savar, Dhaka, Bangladesh**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **TC-5119 (in lieu of T-3143)**

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Validity **19.10.2016 to 18.10.2018**

Last Amended on **29.12.2016**

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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**ELECTRICAL TESTING**

<b>I. TRANSFORMERS AND REACTORS</b>				
<b>1.</b>	<b>Power Transformer 415 V to 132 kV, 50 kVA to 75 MVA, 3 Phase Dry Type Transformer 415 V to 11 kV, 50 kVA to 3.15 MVA</b>	Winding Resistance	IEC 60076-1: 2011; Clause No.: 11.2	1000 $\mu\Omega$ to 2 k $\Omega$
		Voltage Ratio	IEC 60076-1: 2011; Clause No.: 11.3	0.8 to 200
		Phase Displacement	IEC 60076-1: 2011; Clause No.: 11.3	Qualitative All Phase Displacement
		No Load Loss & Current	IEC 60076-1: 2011; Clause No.: 11.5	0.5 A to 200 A, 15 V to 33 kV, 12 W to 250 kW
		Short Circuit Impedance & Load Loss	IEC 60076-1: 2011; Clause No.: 11.4	0.5 A to 1500 A, 15 V to 33 kV, 12 W to 800 kW, 3 % to 25% Impedance
		AC withstand Voltage Test	IEC 60076-3: 2013; Clause No.: 10.	10 kV to 275 kV, 1000 mA
		Induced AC Voltage Withstand Test	IEC 60076-3: 2013; Clause No.: 11.2	10 kV to 275 kV Frequency: Oil type: 150 Hz Dry type: 200 Hz
		Lightning Impulse Test	IEC 60076-4: 2002; Clause No.: 7	10 kV to 1600 kV
		Temperature Rise Test	IEC 60076-2: 2011; Clause No.: 7	1 K to 150 K
<b>2.</b>	<b>Dry Type Transformer (Single Phase) Upto 11 kV, 3.15 MVA</b>	Partial Discharge	IEC 60270: 2000; Clause No.: 8	3 pC to 150 nC
<b>II. LIQUID DIELECTRIC MATERIALS</b>				
<b>1.</b>	<b>Transformer Oil</b>	Breakdown Voltage at power frequency	IEC 60156: 1995	5 kV to 80 kV

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